CITY OF ONTARIO

Regular City Council/Housing Authority Meeting
NOVEMBER 4, 2025

City Hall
303 East B Street, Ontario, CA 91764

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

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

WELCOME TO A MEETING OF THE ONTARIO CITY COUNCIL

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

Anyone wishing to speak in person during public comment or on a particular item will be required to fill out a blue slip. Blue slips must be turned in prior to public comment beginning or before an agenda item is taken up. The Clerk will not accept blue slips after that time.

To submit written public comments by email, please send your name, the agenda item you are commenting on, and your comments to publiccomments@ontarioca.gov. The public comment submission window opens at the time the agenda is published and remains open until 4:00 p.m. on the day of the meeting. All comments received during this timeframe will be forwarded to the City Council for consideration before action is taken on the matter and will be entered into the record.

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

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

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

ACCOMMODATIONS

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

ORDER OF BUSINESS

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

CALL TO ORDER *(OPEN SESSION)*

ROLL CALL

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

PLEDGE OF ALLEGIANCE

Council Member Porada

INVOCATION

Pastor Alena Uhamaka, First United Methodist Church

INFORMATION RELATIVE TO POSSIBLE CONFLICT OF INTEREST

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

PUBLIC COMMENTS 6:30 P.M.

The Public Comment portion of the Council/Housing Authority meeting is limited to 30 minutes. An opportunity for further Public Comment may be given at the end of the meeting. Under provisions of the Brown Act, Council is prohibited from taking action on oral requests. As previously noted -- if you wish to address the Council, fill out one of the blue slips at the rear of the chambers and give it to the City Clerk.

To submit written public comments by email, please send your name, the agenda item you are commenting on, and your comments to publiccomments@ontarioca.gov. The public comment submission window opens at the time the agenda is published and remains open until 4:00 p.m. on the day of the meeting. All comments received during this timeframe will be forwarded to the City Council for consideration before action is taken on the matter and will be entered into the record.

AGENDA REVIEW/ANNOUNCEMENTS

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

CONSENT CALENDAR

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

1. APPROVAL OF MINUTES

Minutes for the regular meetings of the City Council and Housing Authority of October 7, 2025, and approving same as on file in the Records Management Department.

ATTACHMENT: 20251007 Meeting Minutes (Not Official Until Approved).docx

2. BILLS & PAYROLL

Bills October 3, 2025 through October 16, 2025, and Payroll September 21, 2025 through October 4, 2025.

3. FISCAL YEAR 2025-26 FIRST QUARTER BUDGET UPDATE REPORT

That the City Council approve the budget adjustments and recommendations as presented in the Fiscal Year 2025-26 First Quarter Budget Update Report (Exhibit A).

ATTACHMENT: FY 2025-26 First Quarter Budget Update Report_EXHIBIT A.pdf

4. A RESOLUTION AUTHORIZING A REQUEST TO THE STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION FOR CHANGES TO THE CALIFORNIA ROAD SYSTEM FUNCTIONAL CLASSIFICATION MAPS FOR THE CITY OF ONTARIO

That the City Council adopt a Resolution approving a request to the State of California

Department of Transportation for changes to the California Road System Functional Classification Maps.

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF ONTARIO, CALIFORNIA, APPROVING A REQUEST TO THE STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION FOR CHANGES TO THE CALIFORNIA ROAD SYSTEM FUNCTIONAL CLASSIFICATION MAPS.

ATTACHMENT: CRS MAP CHANGES 2025 RESO_RM
ATTACHMENT: CRS_MAP_CHANGES_2025_AND_ATTACHMENTS.pdf

5. FUNDING AGREEMENT WITH THE SAN BERNARDINO COUNTY TRANSPORTATION AUTHORITY FOR THE EUCLID AVENUE SMART CORRIDOR PROJECT

That the City Council approve a Funding Agreement between the City of Ontario and the San Bernardino County Transportation Authority (SBCTA) for the Euclid Avenue Smart Corridor Project and authorize the City Manager, or his designee, to execute said Agreement and future amendments or related documents within the City Council approved budget.

ATTACHMENT: Smart Corridor Funding Agreement Ontario and SBCTA
ATTACHMENT: Attachment A

6. A RESOLUTION APPROVING AN IMPROVEMENT AGREEMENT, IMPROVEMENT SECURITY AND FINAL TRACT MAP NO. 20281 LOCATED GENERALLY ON CHINO AVENUE BETWEEN NEWTON AVENUE AND ARCHIBALD AVENUE

That the City Council adopt a Resolution approving an Improvement Agreement, Improvement Security and Final Tract Map No. 20281, located generally on Chino Avenue between Newton Avenue and Archibald Avenue.

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF ONTARIO, CALIFORNIA, APPROVING AN IMPROVEMENT AGREEMENT, IMPROVEMENT SECURITY AND FINAL TRACT MAP NO. 20281 LOCATED GENERALLY ON CHINO AVENUE BETWEEN NEWTON AVENUE AND ARCHIBALD AVENUE.

ATTACHMENT: 20251104 TM-20281 01 EXH A
ATTACHMENT: 20251104 TM-20281 02 RESO_RM
ATTACHMENT: 20251104 TM-20281 03 SIA

7. A RESOLUTION APPROVING AN IMPROVEMENT AGREEMENT AND IMPROVEMENT SECURITY FOR DEVELOPMENT PLAN NO. PDEV22-033 LOCATED AT THE NORTHWEST CORNER OF 4TH STREET AND CORONA AVENUE

That the City Council adopt a Resolution approving an Improvement Agreement and Improvement Security for Project No. PDEV22-033, located at the northwest corner of 4th Street and Corona Avenue.

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF ONTARIO, CALIFORNIA, APPROVING AN IMPROVEMENT AGREEMENT AND IMPROVEMENT SECURITY FOR DEVELOPMENT PLAN NO. PDEV22-033 LOCATED AT THE NORTHWEST CORNER OF 4TH STREET AND CORONA AVE.

ATTACHMENT: 20251104 PDEV22-033 01 EX A
ATTACHMENT: 20251104 PDEV22-033 02 Reso RM
ATTACHMENT: 20251104 PDEV22-033 03 IA

8. AN AMENDMENT TO THE MAINTENANCE SERVICES AGREEMENT WITH EXCELSIOR ELEVATOR CORPORATION FOR ELEVATOR MAINTENANCE SERVICES AND ON-CALL EMERGENCY REPAIRS

That the City Council authorize the City Manager, or his designee, to execute Amendment No. 1 to the Maintenance Services Agreement with Excelsior Elevator Corporation, of Santa Ana, California, in the amount of $333,305 for elevator maintenance services and on-call emergency repairs at various City facilities, for a total not-to-exceed contract amount of $483,305, and authorize the option to extend the agreement for two additional one-year terms.

ATTACHMENT: Excelsior Elevator Corporation Amendment No 1

9. AN AMENDMENT TO THE PROFESSIONAL SERVICES AGREEMENT WITH KLEINFELDER, INC. FOR ON-CALL GEOTECHNICAL CONSULTING AND MATERIALS TESTING SERVICES FOR THE ONTARIO GRAND PARK PROJECT

That the City Council authorize the City Manager, or his designee, to execute Amendment No. 10 to the Professional Services Agreement with Kleinfelder, Inc., of Ontario, California, for on-call geotechnical consulting and materials testing services for the Grand Park Project in the amount of $1,168,253 for a total not-to-exceed contract amount of $2,907,138.

ATTACHMENT: 2. Kleinfelder, Inc. - Amendment No. 10.pdf

10. A RESOLUTION APPROVING A TEMPORARY CONSTRUCTION EASEMENT AGREEMENT AND A PERMANENT EXCLUSIVE EASEMENT AND ACCESS EASEMENT AGREEMENT WITH THE CHINO DESALTER AUTHORITY

That the City Council adopt a Resolution approving a Temporary Construction Easement and a Permanent Exclusive Easement and Access Easement with the Chino Desalter Authority for the development, operation and maintenance of a new groundwater well facility located at Grand Park, and authorizing the City Manager, or designee, to execute said agreements.

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF ONTARIO, CALIFORNIA, APPROVING THE GRANT OF A TEMPORARY CONSTRUCTION EASEMENT AGREEMENT AND A PERMANENT EXCLUSIVE EASEMENT AND ACCESS AGREEMENT WITH THE CHINO BASIN DESALTER AUTHORITY.

ATTACHMENT: Exhibit A.pdf
ATTACHMENT: 20251104 Grant of Temporary Construction Easement^01 AGRMT.pdf
ATTACHMENT: 20251104 Grant of Permanent Exclusive Easement & Access Easement Agreement^01AGMT.pdf
ATTACHMENT: CDA Easement 02 RESO_RM.docx

11. A DEVELOPMENT CODE AMENDMENT FILE NO. PDCA25-002 REVISING AND CLARIFYING

CERTAIN PROVISIONS OF THE CITY OF ONTARIO DEVELOPMENT CODE

That the City Council adopt an Ordinance approving File No. PDCA25-002, a Development Code Amendment revising and clarifying certain provisions of Chapters 2.0 (Administration and Procedures), 4.0 (Permits, Actions, and Decisions), and 6.0 (Development and Subdivision Regulations) of the City of Ontario Development Code.

AN ORDINANCE OF THE CITY COUNCIL OF THE CITY OF ONTARIO, CALIFORNIA, APPROVING FILE NO. PDCA25-002, A DEVELOPMENT CODE AMENDMENT REVISING AND CLARIFYING CERTAIN PROVISIONS OF CHAPTERS 2.0 (ADMINISTRATION AND PROCEDURES), 4.0 (PERMITS, ACTIONS, AND DECISIONS), AND 6.0 (DEVELOPMENT AND SUBDIVISION REGULATIONS) OF THE CITY OF ONTARIO DEVELOPMENT CODE, AND MAKING FINDINGS IN SUPPORT THEREOF.

ATTACHMENT: PDCA25-002 Dev Code Amendment_2_ORD_RM
ATTACHMENT: 20251021 PDCA25-002 Dev Code Amendment #2 - Redline Text.pdf

PUBLIC HEARINGS

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

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12. A PUBLIC HEARING TO CONSIDER THE ADOPTION OF AN ORDINANCE APPROVING A DEVELOPMENT AGREEMENT (FILE NO. PDA25-003) BETWEEN THE CITY OF ONTARIO AND GDC INVESTMENTS 13, L.P.

That the City Council introduce and waive further reading of an Ordinance Approving a Development Agreement (File No. PDA25-003) between the City of Ontario and GDC Investments 13 L.P.

AN ORDINANCE OF THE CITY COUNCIL OF THE CITY OF ONTARIO, CALIFORNIA, RECOMMENDING CITY COUNCIL APPROVE FILE NO. PDA25-003, A DEVELOPMENT AGREEMENT BETWEEN THE CITY OF ONTARIO AND GDC INVESTMENTS 13, LP TO ESTABLISH THE TERMS AND CONDITIONS ASSOCIATED WITH TENTATIVE TRACT MAP 20730 (FILE NO. PMTT24-008) LOCATED SOUTH OF CHATHAM STREET, WEST OF CLIFTON STREET, EAST OF AMHERST AVENUE, AND NORTH OF EUCALYPTUS AVENUE, WITHIN PLANNING AREA 11 (RD-7 / ROW TOWNHOMES) OF THE ESPERANZA SPECIFIC PLAN. (APN: 1073-101-05).

ATTACHMENT: File No. PDA25-003_GDC Investments 13 LP^01^EXH A&B&C.pdf
ATTACHMENT: File No. PDA25-003 GDC Investments 13 LP_02_ORD
ATTACHMENT: File No. PDA25-003_GDC Investments 13 LP^03^DEV^AGR.doc

13. A PUBLIC HEARING TO CONSIDER AN ADDENDUM TO THE ONTARIO PLAN 2050 SUPPLEMENTAL ENVIRONMENTAL IMPACT REPORT FOR A GENERAL PLAN AMENDMENT (FILE NO. PGPA24-003) AND SPECIFIC PLAN AMENDMENT (FILE NO. PSPA24-004) TO THE

ESPERANZA SPECIFIC PLAN

That the City Council consider and adopt the following:

1. A Resolution approving an Addendum to The Ontario Plan 2050 Supplemental Environmental Impact Report (State Clearinghouse No. 2021070364, certified by the City Council on August 16, 2022); and
2. Resolutions approving General Plan Amendment (File No. PGPA24-003) and Specific Plan Amendment (File No. PSPA24-004)

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF ONTARIO, CALIFORNIA, APPROVING THE USE OF AN ADDENDUM TO THE ONTARIO PLAN 2050 SUPPLEMENTAL ENVIRONMENTAL IMPACT REPORT, IN ACCORDANCE WITH THE CALIFORNIA ENVIRONMENTAL QUALITY ACT, AS AMENDED, FOR FILE NOS. PGPA24-003 AND PSPA24-004.

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF ONTARIO, CALIFORNIA, APPROVING FILE NO. PGPA24-003, AN AMENDMENT TO THE LAND USE ELEMENT OF THE POLICY PLAN (GENERAL PLAN), REVISING EXHIBIT LU-01 (OFFICIAL LAND USE PLAN) AND EXHIBIT LU-03 (FUTURE BUILDOUT), AFFECTING PROPERTY, LOCATED SOUTH OF CHATHAM STREET, WEST OF CLIFTON AVENUE, EAST OF AMHERST AVENUE, AND NORTH OF EUCALYPTUS AVENUE, FROM PUBLIC SCHOOL TO MEDIUM DENSITY RESIDENTIAL. AND MAKING FINDINGS IN SUPPORT THEREOF - APN: 1073-101-050. (SEE ATTACHMENTS 1 AND 2) (PART OF CYCLE 2 FOR THE 2025 CALENDAR YEAR).

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF ONTARIO, CALIFORNIA, APPROVING FILE NO. PSPA24-004, AN AMENDMENT TO THE ESPERANZA SPECIFIC PLAN TO REVISE THE SPECIFIC PLAN FOR CONSISTENCY WITH THE ONTARIO PLAN POLICY PLAN (GENERAL PLAN) LAND USE MAP. THE AMENDMENT INCLUDES [I] REVISING THE ALLOWED USES WITHIN PLANNING AREA 11 FROM SCHOOL TO RD-7/ROW TOWNHOMES; AND [II] MODIFYING THE SPECIFIC PLAN LAND USE MAP, DEVELOPMENT STANDARDS, EXHIBITS, AND TEXT TO REFLECT THE PROPOSED LAND USE CHANGES, AND MAKING FINDINGS IN SUPPORT THEREOF - APN: 1073-101-050.

ATTACHMENT: 20251104 File Nos. PGPA24-003 & PSPA24-004^01 PC Back-up.pdf
ATTACHMENT: 20251104 File Nos PGPA24-003_PSPA24-004_02_Addendum_Reso_RM
ATTACHMENT: 20251104 File Nos PGPA24-003 & PSPA24-004^03 Addendum.pdf
ATTACHMENT: 20251104 File Nos PGPA24-003 and PSPA24-004 04 GPA_Reso_RM
ATTACHMENT: 20251104 File Nos PGPA24-003 and PSPA24-004_05_SPA_Reso_RM

14. A PUBLIC HEARING TO CONSIDER A RESOLUTION REGARDING THE FORMATION OF THE CITY OF ONTARIO COMMUNITY FACILITIES DISTRICT NO. 76 (COMPASS POINTE); ADOPTION OF A RESOLUTION DEEMING IT NECESSARY TO INCUR BONDED INDEBTEDNESS; AND INTRODUCTION OF AN ORDINANCE LEVYING SPECIAL TAXES.

That the City Council consider and:

A. Adopt a Resolution of Formation of Community Facilities District No. 76 (Compass Pointe), proposing that the community facilities district be authorized to levy a special

tax and proposing that an appropriations limit of the community facilities district be established;

B. Adopt a Resolution deeming it necessary for the district to incur bonded indebtedness within Community Facilities District No. 76 (Compass Pointe);
C. Adopt a Resolution calling a special election for City of Ontario Community Facilities District No. 76 (Compass Pointe);
D. Adopt a Resolution declaring the results of the special election and directing the recording of a Notice of Special Tax Lien;
E. Introduce and waive further reading of an Ordinance levying special taxes within City of Ontario Community Facilities District No. 76 (Compass Pointe);
F. Adopt a Resolution authorizing the execution and delivery of an acquisition and funding agreement with KB Home Cal Management Services LLC; and
G. Adopt a Resolution making a declaration of official intent to reimburse facilities expenditures with bond proceeds and related actions.

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF ONTARIO, CALIFORNIA, OF FORMATION OF CITY OF ONTARIO COMMUNITY FACILITIES DISTRICT NO. 76 (COMPASS POINTE), PROPOSING THAT THE COMMUNITY FACILITIES DISTRICT BE AUTHORIZED TO LEVY A SPECIAL TAX AND PROPOSING THAT AN APPROPRIATIONS LIMIT OF THE COMMUNITY FACILITIES DISTRICT BE ESTABLISHED.

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF ONTARIO, CALIFORNIA, DEEMING IT NECESSARY FOR CITY OF ONTARIO COMMUNITY FACILITIES DISTRICT NO. 76 (COMPASS POINTE) TO INCUR BONDED INDEBTEDNESS.

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF ONTARIO, CALIFORNIA, CALLING SPECIAL ELECTION FOR CITY OF ONTARIO COMMUNITY FACILITIES DISTRICT NO. 76 (COMPASS POINTE).

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF ONTARIO, CALIFORNIA, DECLARING RESULTS OF SPECIAL ELECTION AND DIRECTING RECORDING OF NOTICE OF SPECIAL TAX LIEN.

AN ORDINANCE OF THE CITY COUNCIL OF THE CITY OF ONTARIO, CALIFORNIA, LEVYING A SPECIAL TAX WITHIN CITY OF ONTARIO COMMUNITY FACILITIES DISTRICT NO. 76 (COMPASS POINTE).

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF ONTARIO, CALIFORNIA, AUTHORIZING THE EXECUTION AND DELIVERY OF AN ACQUISITION AND FUNDING AGREEMENT WITH KB HOME CAL MANAGEMENT SERVICES, LLC.

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF ONTARIO, CALIFORNIA, MAKING A DECLARATION OF OFFICIAL INTENT TO REIMBURSE EXPENDITURES FOR COSTS OF FACILITIES WITH BOND PROCEEDS AND RELATED ACTIONS.

ATTACHMENT: CFD 76 Compass Pointe Reso-Formation_01_RM
ATTACHMENT: CFD 76 (Compass Pointe) RMA^01A EXHB.pdf
ATTACHMENT: CFD 76 Compass Pointe Reso Deeming Necessity 02_RM
ATTACHMENT: CFD 76 Compass Pointe Reso Calling Election 03_RM

ATTACHMENT: CFD 76 Compass Pointe Reso Declaring Results_04_RM
ATTACHMENT: CFD 76 Compass Pointe Ordinance_Lvy_Tax_05_RM
ATTACHMENT: CFD 76 Compass Pointe Reso Authorizing Acquisition Agmt_06_RM
ATTACHMENT: CFD 76 Compass Pointe Reimbursement Resolution 09 RM
ATTACHMENT: CFD 76 (Compass Pointe) Back-Up Acquisition Agr^15.pdf

15. A GENERAL PLAN AMENDMENT (FILE NO. PGPA23-003) PROPOSING TO AMEND THE ONTARIO PLAN 2050 POLICY PLAN (GENERAL PLAN) LAND USE MAP

That the City Council consider and adopt a Resolution approving File No. PGPA23-003, a General Plan Amendment to amend The Ontario Plan 2050 Policy Plan (General Plan) Land Use Map to change the land use designation of approximately 5.3 acres of land located on Euclid Avenue from Mixed Use to Business Park.

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF ONTARIO, CALIFORNIA, APPROVING FILE NO. PGPA23-003, AN AMENDMENT TO THE ONTARIO PLAN 2050 POLICY PLAN LAND USE MAP TO CHANGE THE LAND USE DESIGNATION OF APPROXIMATELY 5.3 ACRES OF LAND LOCATED ON EUCLID AVENUE FROM MIXED USE TO BUSINESS PARK, AND MAKING FINDINGS IN SUPPORT THEREOF—APN: 1053-281-08 (PART OF CYCLE 1 FOR THE 2025 CALENDAR YEAR).

ATTACHMENT: 20251104 File No. PGPA23-003^01 Attach A_ZA25-034.pdf
ATTACHMENT: 20251104 File No. PGPA23-003^02 PC Back-up.pdf
ATTACHMENT: 20251104 File No. PGPA23-003^03 CC Reso.docx

STAFF MATTERS

City Manager Ochoa

COUNCIL MATTERS

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

ADJOURNMENT

ONTARIO CITY COUNCIL/
ONTARIO HOUSING AUTHORITY
MINUTES
OCTOBER 7, 2025
(Not Official Until Approved)

JOINT MEETINGS

The regular meetings of the Ontario City Council and Housing Authority were held on Tuesday, October 7, 2025, at Ontario City Hall, 303 E. B Street Ontario, California.

OPEN MEETING CALLED TO ORDER

Mayor Leon called the joint meetings to order at 6:02 p.m.

ROLL CALL

PRESENT:	Mayor/Chairman:	Paul S. Leon
	Council/Authority Members:	Jim W. Bowman, Debra Porada, and Daisy Macias
ABSENT:	Mayor pro Tem/Vice Chair:	Alan D. Wapner

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

INFORMATION RELATIVE TO POSSIBLE CONFLICTS OF INTEREST

There were no conflicts of interest reported.

CLOSED SESSION

Mayor Leon inquired whether persons were present who wished to speak to the Closed Session items. Hearing no one, City Attorney Duran announced the matters for discussion as listed on the agenda. Mayor Leon recessed to Closed Session at 6:04 p.m.

GC 54956.8, CONFERENCE WITH REAL PROPERTY NEGOTIATORS
Property: APN: 0210-204-04; 3519 East Concours; City/Authority negotiator: Scott Ochoa or his designee; Negotiating parties: Merryland, LLC; Under negotiation: Price and terms of payment.

GC 54956.8, CONFERENCE WITH REAL PROPERTY NEGOTIATORS
Property: APNs: 1054-051-01, 1054-051-02, 1054-061-01, 1054-061-02, 1054-251-01, 1054-251-02, 1054-301-01, 1054-301-02; City/Authority negotiator: Scott Ochoa or his designee; Negotiating parties: County of San Bernardino; Under negotiation: Price and terms of payment GC 54956.9(d)(4)

CONFERENCE WITH LEGAL COUNSEL - ANTICIPATED LITIGATION
Initiation of litigation: One Case

OPEN MEETING CALLED TO ORDER

Mayor Leon reconvened the meetings at 6:31 p.m. for the regular session.

PLEDGE OF ALLEGIANCE

The Pledge of Allegiance was led by Council Member Bowman.

INVOCATION

Invocation was led by Pastor Enoch Zesati, Victory Outreach Ontario Bilingual Church.

REPORT ON CLOSED SESSION

City Attorney Duran announced there was no reportable action.

PUBLIC COMMENT

Assistant City Clerk Isbell announced there was one written communication:
Dystanie Flores, providing information from the California Department of Insurance.

Mayor Leon called upon the first speaker:
Ryan Castillo, spoke regarding oversize vehicle parking exemptions and permitting.
Roxanna Gracia, extended an invitation to a community event on behalf of Assemblymember Michelle Rodriguez.
Tina Silva, gave a land acknowledgement and spoke regarding immigration enforcement.
Henry Rodriguez, spoke regarding advocacy for people with disabilities.
Brandy, spoke regarding personal experiences.
Martha Aragon, spoke regarding several topics.
Hope Bilderain, extended an invitation to a fundraiser for the Relay for Life.
Kizzee, thanked the Ontario Police Department for addressing neighborhood concerns.
Michael Rios, extended an invitation to a community event.

AGENDA REVIEW/ANNOUNCEMENTS

City Manager Ochoa had no announcements.

CONSENT CALENDAR

Public Comment
Mayor Leon called upon the speaker:
Ryan Castillo, spoke in opposition to Item 7.

MOTION: Moved by Council Member Porada, seconded by Council Member Macias and carried by a unanimous vote of 4-0, with Mayor pro Tem Wapner absent, to approve the consent calendar as presented.

1. APPROVAL OF MINUTES

Approved minutes for the regular meetings of the City Council, Housing Authority and Ontario Public Financing Authority of September 2, 2025, approving same as on file in the Records Management Department.

2. BILLS & PAYROLL

Bills August 29, 2025 through September 18, 2025, in the amount of $63,679,069.69 and Payroll August 10, 2025 through September 6, 2025, in the amount of $12,771,240.36.

3. AN AMENDMENT TO THE PROFESSIONAL SERVICES AGREEMENT WITH 4LEAF, INC. FOR ON-CALL STRUCTURAL PLAN CHECKING SERVICES

The City Council authorized the City Manager, or his designee, to execute Amendment No. 1 to the Professional Services Agreement with 4Leaf, Inc., of Newport Beach, California, for on-call structural plan checking services, in the amount of $100,000 for a total not-to-exceed contract amount of $400,000 and exercising the two additional one-year terms.

4. AN AMENDMENT TO THE PROFESSIONAL SERVICES AGREEMENT WITH DANKEN, INC. FOR ON-CALL STRUCTURAL INSPECTION AND CONSTRUCTION MANAGEMENT SERVICES

The City Council authorized the City Manager, or his designee, to execute Amendment No. 1 to the Professional Services Agreement with Danken, Inc., of Ladera Ranch, California, for on-call structural inspection and construction management services in the amount of $500,000 for a total not-to-exceed contract amount of $2,100,000 and exercise the two additional one-year terms.

5. A RESOLUTION AUTHORIZING THE DESTRUCTION OF CERTAIN ELECTRONIC RECORDS RETAINED WITHIN SOFTWARE DATABASES IN ACCORDANCE WITH CITY RECORDS RETENTION SCHEDULES

The City Council adopted a Resolution allowing the approval for the automatic destruction of electronic records that have reached the end of their designated retention periods.

RESOLUTION NO. 2025-140 A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF ONTARIO, CALIFORNIA, APPROVING THE ONGOING DESTRUCTION OF CERTAIN ELECTRONIC RECORDS RETAINED WITHIN SOFTWARE DATABASES IN ACCORDANCE WITH CITY RECORDS RETENTION SCHEDULES.

6. AN ORDINANCE APPROVING FILE NO. PUD23-003, A PLANNED UNIT DEVELOPMENT ON 2.07 ACRES OF LAND LOCATED AT 1389 EAST HOLT BOULEVARD

The City Council adopted an Ordinance Approving File No. PUD23-003, the Holt Residential Planned Unit Development, establishing development standards, design guidelines, and infrastructure requirements to facilitate a residential development at 1389 East Holt Boulevard. First reading and introduction took place at the regular meeting on September 16, 2025.

ORDINANCE NO. 3314 AN ORDINANCE OF THE CITY COUNCIL OF THE CITY OF ONTARIO, CALIFORNIA, APPROVING FILE NO. PUD23-003, A PLANNED UNIT DEVELOPMENT TO ESTABLISH PLANNING AND DESIGN PRINCIPLES, DEVELOPMENT REGULATIONS, AND PERFORMANCE STANDARDS TO GOVERN FUTURE DEVELOPMENT OF 2.07 ACRES OF LAND, LOCATED AT 1389 EAST HOLT BOULEVARD, WITHIN THE MU-6 (EAST HOLT MIXED USE) ZONING DISTRICT, AND MAKING FINDINGS IN SUPPORT THEREOF—APN: 0110-071-02.

7. AN ORDINANCE AMENDING SECTION 4-6.1305 OF THE ONTARIO MUNICIPAL CODE RELATING TO PERMIT PARKING ZONES ON RESIDENTIAL STREETS

The City Council adopted an Ordinance amending Section 4-6.1305 of the Ontario Municipal Code relating to permit parking zones on residential streets. First reading and introduction took place at the regular meeting on September 16, 2025.

ORDINANCE NO. 3315 AN ORDINANCE OF THE CITY COUNCIL OF THE CITY OF ONTARIO, CALIFORNIA, AMENDING SECTION 4-6.1305 OF THE ONTARIO MUNICIPAL CODE RELATING TO PERMIT PARKING ZONES ON RESIDENTIAL STREETS.

8. A RESOLUTION AUTHORIZING THE EXECUTION AND DELIVERY OF AN AGREEMENT WITH REMINGTON APG LLC REGARDING COMMUNITY FACILITIES DISTRICT NO. 74 (REMINGTON APG LLC SERVICES) FOR ASSESSOR PARCEL NUMBER 1073-151-21 FOR FEE IN-LIEU

The City Council took the following actions:

A. Adopted a Resolution approving an agreement regarding Community Facilities District No. 74 (Remington APG LLC Services) for Assessor Parcel Number 1073-151-21 for Fee In-Lieu Agreement between the City of Ontario and Remington APG LLC (Developer); and

B. Authorized the City Manager, or his designee, to finalize, execute, and record said Agreement.

RESOLUTION NO. 2025-141 A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF ONTARIO, CALIFORNIA, AUTHORIZING THE EXECUTION AND DELIVERY OF AN AGREEMENT REGARDING ASSESSOR PARCEL NUMBER 1073-151-21 FOR FEE IN-LIEU BETWEEN THE CITY OF ONTARIO AND REMINGTON APG LLC.

9. A RESOLUTION RELATING TO REMOVING THE USE OF SUCCESSOR AGENCY FUNDS (FORMERLY REDEVELOPMENT AGENCY) FROM RESOLUTION NO. 2007-023

The City Council approved a Resolution to remove Section 7, Section 8, and Section 9 from prior Resolution No. 2007-023.

RESOLUTION NO. 2025-142 A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF ONTARIO, CALIFORNIA, CLARIFYING RESOLUTION 2025-010 AND TAKING OTHER ACTIONS RELATING THERETO 2007-023 TO REMOVE SECTIONS 7, 8, AND 9 PERTAINING TO REMOVING THE USE OF SUCCESSOR AGENCY FUNDS (FORMERLY REDEVELOPMENT AGENCY).

10. A CHANGE ORDER TO THE CONSTRUCTION CONTRACT WITH OPTIMA RPM, INC. FOR THE DEMOLITION OF THE MISSION MOTEL AT 1514 W. MISSION BOULEVARD FOR THE ONTARIO WELLNESS CAMPUS PROJECT

The City Council took the following actions:

A. Authorized the City Manager, or his designee, to execute Change Order No. 4 to the Construction Contract with Optima RPM, Inc., of Irvine, California, for demolition and site clearance activities on City-owned property located at 1514 W Mission Boulevard (the Mission Motel) for the Ontario Wellness Campus Project in the amount of $753,757 for a total not-to-exceed contract amount of $5,450,726; and
B. Authorized the City Manager, or his designee, to execute all documents required for the completion of the project which may include, but is not limited to, agreements, assessments, easements, reduction of retention accounts, contract amendments within the authorization limits, and filing a notice of completion at the conclusion of all construction-related activities.

11. A CONSTRUCTION CONTRACT WITH BOGH CONSTRUCTION, LLC AND AN AMENDMENT TO THE DESIGN SERVICES AGREEMENT WITH ARDURRA GROUP, INC. FOR THE SPORTS EMPIRE OFFSITE IMPROVEMENTS PHASE 2 PROJECT

The City Council took the following actions:

A. Authorized the City Manager, or his designee, to approve the plans and specifications and award Contract No. D&C23-025c Sports Empire Offsite Improvements Phase 2 to Bogh Construction, LLC, of Beaumont, California, for the construction of the Sports Empire Offsite Improvements Phase 2 Project in the amount of $23,187,700 plus a 15% contingency of $3,478,155, for a total amount of $26,665,855, and
B. Authorized the City Manager, or his designee, to execute Amendment No. 3 to the Design Services Agreement with Ardurra Group, Inc., of Newport Beach, California, to provide on-call design services for the Sports Empire Offsites Phase 2 Project in the amount of $588,842 for a revised not-to-exceed total amount of $3,046,054, and
C. Authorized the extension of working hours to be Monday through Saturday from 6:00 am to 11:00 pm and on Sunday from 8:00 am to 6:00 pm for the duration of the construction of the Sports Complex Offsite Improvements Project (Phase 1 and 2); and
D. Authorized the City Manager, or his designee, to execute all documents required for the completion of the project which may include, but is not limited to, agreements, assessments, easements, reduction of retention accounts, contract amendments within the authorization limits, and filing a notice of completion at the conclusion of all construction-related activities.

12. OPTING INTO A SETTLEMENT AGREEMENT WITH ALVOGEN, AMNEAL, APOTEX, HIKMA, INDIVIOR, MYLAN, SUN, AND ZYDUS

The City Council authorized the City Manager, or his designee, to opt into a Settlement Agreement with opioid distributors: Alvogen, Amneal, Apotex, Hikma, Indivior, Mylan, Sun, and Zydus and authorized the City Manager to execute any documents necessary to implement the action.

13. AN AMENDMENT TO THE PROFESSIONAL SERVICES AGREEMENT WITH INTERPERSONAL FREQUENCY, LLC, FOR WEBSITE REDESIGN SERVICES

The City Council approved and authorized the City Manager, or his designee, to execute Amendment No. 2 to the Professional Services Agreement with Interpersonal Frequency, LLC, of McLean, VA, for website translation services, increasing the contract amount by $54,769 for a total contract not-to-exceed amount of $1,100,357 and to extend the term to September 4, 2028.

14. AN AMENDMENT TO THE DESIGN SERVICES AGREEMENT WITH ALBERT A. WEBB ASSOCIATES INC. FOR WELL NO. 53 PROJECT

The City Council approved and authorized the City Manager, or designee, to execute Amendment No. 2 to the Design Services Agreement with Albert A. Webb Associates Inc. of Riverside, California, for additional design services for Well No. 53 Project, OMUC Contract No. UT1063 in the amount of $124,393 for a new total revised not-to-exceed amount of $690,399 and a term from August 16, 2022 to August 16, 2026.

15. AMERICORPS STATE CONTINUATION GRANT FOR 2025-26

The City Council authorized the City Manager, or his designee, to execute grant documents and accept a $368,000 AmeriCorps Continuation Grant for November 2025 through October 2026 to fund the Ontario Promise Corps project.

PUBLIC HEARINGS

16. A PUBLIC HEARING TO CONSIDER A RESOLUTION REGARDING THE FORMATION OF THE CITY OF ONTARIO COMMUNITY FACILITIES DISTRICT NO. 69 (SOUTH ONTARIO LOGISTICS CENTER SERVICES); AND INTRODUCTION OF AN ORDINANCE LEVYING SPECIAL TAXES

The City Council took the following actions:

A. Adopted a Resolution of Formation of Community Facilities District No. 69 (South Ontario Logistics Center Services), proposing that the community facilities district be authorized to levy a special tax and proposing that an appropriations limit of the community facilities district be established;
B. Adopted a Resolution calling a special election for City of Ontario Community Facilities District No. 69 (South Ontario Logistics Center Services);
C. Adopted a Resolution declaring the results of the special election and directing the recording of a Notice of Special Tax Lien; and
D. Introduced and waived further reading of an Ordinance levying special taxes within City of Ontario Community Facilities District No. 69 (South Ontario Logistics Center Services).

Notice of public hearing was duly given and affidavits of compliance are on file in the Records Management Department.

Mayor Leon opened the public hearing and inquired if anyone was interested in speaking to the item, there were no speakers.

RESOLUTION NO. 2025-143 A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF ONTARIO, CALIFORNIA, OF FORMATION OF CITY OF ONTARIO COMMUNITY FACILITIES DISTRICT NO. 69 (SOUTH ONTARIO LOGISITICS CENTER SERVICES), PROPOSING THAT THE COMMUNITY FACILITIES DISTRICT BE AUTHORIZED TO LEVY A SPECIAL TAX AND PROPOSING THAT AN APPROPRIATIONS LIMIT OF THE COMMUNITY FACILITIES DISTRICT BE ESTABLISHED.

RESOLUTION NO. 2025-144 A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF ONTARIO, CALIFORNIA, CALLING SPECIAL ELECTION FOR CITY OF ONTARIO COMMUNITY FACILITIES DISTRICT NO. 69 (SOUTH ONTARIO LOGISTICS CENTER SERVICES).

MOTION: Moved by Council Member Bowman, seconded by Council Member Porada, and carried by a unanimous vote of 4-0, with Mayor pro Tem Wapner absent, to approve

Resolution Nos. 2025-143 and 2025-144.

Assistant City Clerk Isbell announced that the ballots were in favor of the measure, resulting in all propositions passing.

RESOLUTION NO. 2025-145 A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF ONTARIO, CALIFORNIA, DECLARING RESULTS OF SPECIAL ELECTION AND DIRECTING RECORDING OF NOTICE OF SPECIAL TAX LIEN.

ORDINANCE NO. 3316 (FIRST READING) AN ORDINANCE OF THE CITY COUNCIL OF THE CITY OF ONTARIO, CALIFORNIA, LEVYING A SPECIAL TAX WITHIN CITY OF ONTARIO COMMUNITY FACILITIES DISTRICT NO. 69 (SOUTH ONTARIO LOGISTICS CENTER SERVICES).

MOTION: Moved by Council Member Porada, seconded by Council Member Bowman, and carried by a unanimous vote of 4-0, with Mayor pro Tem Wapner absent, to approve Resolution No. 2025-145 and introduce Ordinance No. 3316.

17. A PUBLIC HEARING TO CONSIDER A RESOLUTION RELATED TO THE RATES FOR WATER, SEWER AND SOLID WASTE SERVICES

The City Council conducted a public hearing to consider all written protests and objections against the proposed increases in the rates for water, sewer, and solid waste services in accordance with California Constitution, Article XIII D, Section 6(a), and Assembly Bill (AB) 2257 Government Code Section 53759.1 and 53759.2, and approved a Resolution related to the rates for water, sewer, and solid waste services.

RESOLUTION NO. 2025-146 A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF ONTARIO, CALIFORNIA, ADOPTING INCREASES OR MODIFICATIONS TO THE RATES FOR ITS WATER, SEWER, AND SOLID WASTE SERVICE CHARGES.

Notice of public hearing was duly given and affidavits of compliance are on file in the Records Management Department.

City Attorney Duran announced this public hearing was set in compliance with Prop 218 requirements. The City mailed a notice of the public hearing to the record owners of the properties subject to the imposition of the rate increases and to tenants and customers who are not property owners. The date and time of the public hearing was not less than 45 days after the City mailed the public hearing notice. The purpose of the hearing was for the City Council to hear all oral testimonies and consider all written protests and to determine whether there is a majority protest against the proposed water rate increases. Written protests were submitted during the public hearing and Mr. Duran noted oral comments were not counted as formal written protests.

Mayor Leon asked for a vote to open the public hearing.

MOTION: Moved by Council Member Porada, seconded by Council Member Macias, and carried by a unanimous vote of 4-0, with Mayor pro Tem Wapner absent, to open the public hearing.

Assistant City Clerk Isbell described the procedure for the hearing and Utilities General Manager Scott Burton provided a presentation.

Mayor Leon called upon the speakers:
Tina Silva, spoke in opposition of the item.
Martha Aragon, spoke in opposition of the item.
Chris Robles, spoke in opposition of the item.
Michael Rios, spoke in opposition of the item.
Tommy Mushegain, was not present.
Natalie Burge, spoke in opposition of the item.
Joaquin Castillejos, spoke in opposition of the item.

Mayor Leon inquired if there was anyone else wishing to speak on the matter prior to closing the public hearing and asked the City Manager to provide further clarification. City Manager Ochoa provided clarification and Council discussed the matter. Mayor Leon then called upon the City Clerk to announce the results of the written protests.

Assistant City Clerk Isbell announced that prior to the close of the public hearing, staff received a total of 39 written protest letters regarding the water rates. A majority protest did not exist for the proposed water rates. Prior to the close of the public hearing, staff received a total of 37 written protest letters regarding the sewer rates. A majority protest did not exist for the proposed sewer rates. Prior to the close of the public hearing, staff received a total of 37 written protest letters regarding the solid waste rates. A majority protest did not exist for the proposed solid waste rates.

MOTION: Moved by Council Member Porada, seconded by Council Member Bowman, and carried by a unanimous vote of 4-0, with Mayor pro Tem Wapner absent, to adopt Resolution No. 2025-146.

STAFF MATTERS

City Manager Ochoa made no announcements.

COUNCIL MATTERS

Council Member Porada announced the upcoming Ontario Heritage Cemetery Tour event, the Art Festival event, and murals in the Downtown area.

Council Member Macias announced the upcoming Community Cleanup event.

Council Member Bowman made no comments.

Mayor Leon announced an award presented to the City by Leaven Kids.

ADJOURNMENT

Mayor Leon adjourned the meetings of the Joint Agencies at 8:06 p.m., and announced the next regular meeting was scheduled for October 21, 2025.

Respectfully submitted,

_____
SHEILA MAUTZ, CITY CLERK/SECRETARY

APPROVED:

_____
PAUL S. LEON, MAYOR/CHAIRMAN

CITY OF ONTARIO *Agenda Report* **November 4, 2025**	**SECTION:** **CONSENT CALENDAR**
Department: Financial Services Prepared By: Evan Erickson Staff Member Presenting: Armen Harkalyan, Executive Director of Finance Approved By:	Submitted To: Council/OHA Approved: _____ Continued To: _____ Denied: _____ Item No: 3

SUBJECT: FISCAL YEAR 2025-26 FIRST QUARTER BUDGET UPDATE REPORT

RECOMMENDATION: That the City Council approve the budget adjustments and recommendations as presented in the Fiscal Year 2025-26 First Quarter Budget Update Report (Exhibit A).

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

FISCAL IMPACT: The recommended actions will affect several fund budgets as outlined in the Fiscal Year 2025-26 First Quarter Budget Update Report.

BACKGROUND & ANALYSIS: The First Quarter Budget Update Report for Fiscal Year 2025-26 reflects the Financial Services Agency's continued efforts to provide timely, accurate, and understandable financial information to assist the City Council with decision making and achievement of core goals. All Funds have been reviewed in preparing this report. The emphasis of this report is on the General Fund, which funds the majority of government services including public safety, recreation, library, museum, parks, building, and planning.

The primary purposes of this report are to:

Discuss Fiscal Year 2024-25 Year-End Results and Fiscal Year 2025-26 First Quarter Budget Update and provide a reconciliation of budgeted-to-actual financial data;

- Address annual carryforward obligations across all funds;
- Recognize budgetary carryforward amounts for the prior fiscal year's approved Capital Improvement Projects and Grant appropriations, which are ongoing;
- Revise the City's budget to reflect the City Council's actions taken since the beginning of the current fiscal year;
- Recommend personnel and organizational changes to enhance program operations and efficiencies;
- Recommend budget adjustments that are consistent with the City Council goals and

objectives; and

- Comment on significant budget and economic trends which may impact this fiscal year's budget development.

Fiscal Year 2024-25 General Fund Year-End Results (unaudited)

The General Fund activity for FY 2024-25 resulted in a net positive year-end balance of approximately $10.9 million. This is primarily due to higher than estimated Sales Tax for the Bradley-Burns (local tax) driven by the opening of the Amazon distribution center and increased License and Permit revenues due to increased volume of permits pulled before the future rate increases that went into effect July 1, 2025, as well as increased revenues for Use of Money and Property as a result of higher investment earnings than projected. The total sales tax revenues compared to the Current Budget were higher by $6.3 million or 2.7% and an increase of $19.1 million or 10.4% compared to the previous fiscal year actuals. Additionally, the actual expenditures as of June 30, 2025, slightly exceeded the current budget and reflected 101.4% of the total General Fund expenditure budget. An attributable factor to this variance included overages in safety overtime budgets, unanticipated City legal services, and increased sales tax incentive agreement expenses due to higher sales tax revenues generated in FY 2024-25.

Fiscal Year 2025-26 First Quarter Budget Update Recommendations

First Quarter Budget Update recommendations are routine in nature and comprised predominately by City Council actions taken since the beginning of the fiscal year, obligations carryforward items to rollover purchase orders that have not yet been expended, and Capital Improvement Program (CIP) and Grant carryforward appropriations on projects and grants that have not been completed or fully expended. In addition, First Quarter includes proposed new expenditure budget requests, as well as revised revenue estimates for FY 2025-26. For the General Fund, the net result of these actions will bring the General Fund estimated available and unencumbered ending fund balance to $84.2 million or 21.5% of total appropriations. This amount achieves the goal set by City Council as a reserve for specific and defined emergency events (such as an earthquake or pandemic) and to address immediate needs in resources without impacting City services. This goal was temporarily decreased to 15% during the COVID pandemic but has since been brought back up to the previous set goal of 20%, effective July 1, 2023, with the goal of increasing the reserves up to 25% in future fiscal years.

General Fund Highlights

$3.0 million transfer-out to Facilities Maintenance Internal Service Fund to shore up its fund balance

$433 thousand transfer-out to establish the City's Local Housing Trust Fund

$120 thousand in recommended personnel changes (add/deletes)

$120 thousand for maintenance service contract at Town Square Park

Other Funds (non-General Fund) Highlights

$209.7 million appropriations for the carryforward appropriations and obligations from FY 2024-25

$3.5 million Transfer-out from Information Technology Operating Fund to the new Information Technology - Capital Projects Fund to fund the FY 2024-25 Carryforward of CIP appropriations and obligations

$3.3 million for Downtown Euclid Ave. Corridor Project - Design for FY 2025-26 (offset by Euclid Relinquishment funds

$2.7 million for South Campus Avenue Property Acquisition

$2.0 million for Ontario Promise Corps Program Space and Mobility Hub Construction Costs (offset by insurance reimbursement)

$800 thousand for Broadband Fiber Network Expansion Service Area 05

$750 thousand for C-Block Parking Structure Guidance System

$729 thousand for Granada Theater - Property acquisition remaining balance (total acquisition cost of $3,875,000)

Interim budget updates also present recommendations for personnel and organizational changes necessary to enhance program operations and efficiencies. Current recommendations for this First Quarter Budget report include reclassification changes and adds/deletes to the authorized full-time positions which result in a net zero impact to the Citywide position total of 1,517. More detail is presented in the attached Exhibit A under Recommended Personnel Changes section, pages 18 through 20, of the FY 2025-26 First Quarter Budget Update Report.

Additionally, the City will continue borrowing from available fund balances in other City funds as interim financing source prior to bond issuance to offset the current Citywide capital project costs as referenced in Section 3.3 of the City's Debt Management Policy.

Economic Outlook

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

Gross Domestic Product (GDP): The broadest measure of economic output increased at an annual rate of 3.8% in the second quarter of 2025, according to the most recent released estimate as a result of increased consumer spending. This was a gain compared to the first quarter of 2025, in which the real GDP decreased by 0.6%. The increase in the second quarter primarily reflected a decrease in imports, which are a subtraction in the calculation of GDP, and an increase in consumer spending. However, imports, which are a subtraction in the calculation of GDP, increased. (Source: Bureau of Economic Analysis).

Unemployment Rate: Due to the ongoing shutdown of the federal government, the latest unemployment report reflects August 2025 data. The national unemployment rate slightly increased to 4.3% in August 2025 compared to the 4.2% reported for July 2025. Comparing the current national rate to the previous year rate of 4.2%, it is an increase of 0.1%. California's

unemployment rate decreased to 5.8% in August 2025 from 6.1% in July 2025 with a slight decrease compared to the prior year's rate of 5.9%. Locally, the Inland Empire's unemployment rate decreased to 6.1% compared to 6.4% in July 2025; however, it is slightly above the year-ago estimate of 6.0%. The Inland Empire's labor market has recovered from the COVID-19 pandemic and is still strong. The labor market continues to support economic growth and be the strongest driver in the economy. (Source: US Bureau of Labor Statistics).

Consumer Price Index (CPI): This rate is utilized to track changes in the prices of goods and services and is a useful tool for tracking inflation or the cost of living. Due to the ongoing shutdown of the federal government, the latest release reflects data for July 2025. For July 2025, the Riverside-San Bernardino-Ontario metropolitan area's CPI rate increased by 3.5% over the last 12-month period. However, this increase is minimal compared to the last two years CPI increase with a high of 3.4% in 2023. This increase in CPI mainly driven by increases in food costs. (Source: US Bureau of Labor Statistics).

Housing Market: A shortage of homes for sale and high costs of borrowing continues to have a negative impact on housing inventory and demand. With mortgage rates expected to begin to decline by the end of the calendar year and continue to decline in 2026, home sales will bounce back as buyers and sellers return to a more favorable housing market. Statewide sales for existing single-family homes in September 2025 were 1.8% higher than they were for the same period in the previous year. Overall, home sales in the Inland Empire for September 2025 decreased 1.1% compared to the previous quarter and increased 1.9% to the same time period in the previous year. (Source: HdL Coren and Cone).

Conclusion

As the City recovers from the last five years of economic disruption from the COVID pandemic, other challenges still exist with the continued war in Ukraine; rising consumer good prices, continued high interest rates even with recent rate cuts by the Federal Reserve; the possibility of a recession due to accelerated inflation levels not seen since the early 1980's; the unknown fiscal impacts from proposed tariffs by the new federal administration; the ongoing conflict in the middle east; and the continuing of the current Federal shutdown with no anticipated end date at the time of this report. Even with the anticipated additional resources, the City will need to continue to practice fiscal discipline and establish proactive measures to safely navigate the current and upcoming fiscal challenges, as well as deliver an unparalleled level of service and commitment to our community.

The Adopted Operating Budget for Fiscal Year 2025-26, as modified through this First Quarter Budget Update, reflects the City Council's continued commitment to support high quality public safety and municipal services, provides for the maintenance and expansion needs of the City's infrastructure and facilities, profiles an aggressive economic development strategy, and assures the investment and reinvestment of the City's resources into the community - all in the name of affording Ontario residents and businesses an exceptional quality of life. With the City Council's leadership and their prudent fiscal policies, the City's long-term financial health will further solidify its standing as the economic leader in the Inland Empire, and a formidable player in California and the nation.

Fiscal Year 2025-26
First Quarter Budget Update

November 4, 2025

City of Ontario
Fiscal Year 2025-26
First Quarter Budget Update Report

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FY 2024-25
General Fund Year-End Results
(unaudited)

CITY OF ONTARIO

City of Ontario
General Fund Year-End Results - Revenues by Category
Fiscal Year 2024-25

	FY 2023-24 Actuals	FY 2024-25 Adopted Budget	FY 2024-25 Current Budget[1]	FY 2024-25 Actuals[2]	FY 2024-25 Budget Variance	% Received
Sales Tax	$ 184,307,995	$ 194,375,000	$ 197,150,000	$ 203,410,213 [5]	$ 6,260,213	**103.2%**
Property Tax	98,742,225	106,025,000	106,275,000	105,249,239 [6]	(1,025,761)	**99.0%**
Transient Occupancy Tax	16,625,996	17,000,000	17,000,000	16,671,971 [7]	(328,029)	**98.1%**
Business License Tax	10,902,422	10,150,000	10,150,000	10,718,444	568,444	**105.6%**
Parking Tax	4,289,371	4,000,000	4,450,000	4,010,676 [8]	(439,324)	**90.1%**
Other Taxes	6,273,890	5,975,000	5,675,000	5,202,864 [9]	(472,136)	**91.7%**
License & Permits	7,879,656	7,057,000	7,057,000	11,200,263 [10]	4,143,263	**158.7%**
Intergovernmental	14,051,025	11,010,721	11,010,721	11,442,537	431,816	**103.9%**
Intergovernmental - ARPA[3]	8,774,045	7,250,000	6,537,868	6,537,868	-	**100.0%**
Charges for Services	33,173,015	30,494,370	30,673,714	30,933,896	260,182	**100.8%**
Charges for Services - OIAA[4]	22,723,451	24,500,591	23,866,579	23,866,579	-	**100.0%**
Use of Money & Property	3,201,340	1,480,000	1,480,000	6,175,342 [11]	4,695,342	**417.3%**
Fines & Forfeitures	1,140,828	901,000	901,000	1,419,576	518,576	**157.6%**
Miscellaneous	11,936,006	5,647,747	15,950,840	15,069,683 [12]	(881,157)	**94.5%**
Sub-Total	**$ 424,021,265**	**$ 425,866,429**	**$ 438,177,722**	**$ 451,909,151**	**$ 13,731,429**	**103.1%**
Transfers-In	17,000,000	2,000,000	3,459,374	3,459,374 [13]	-	**100.0%**
Total Resources	**$ 441,021,265**	**$ 427,866,429**	**$ 441,637,096**	**$ 455,368,525**	**$ 13,731,429**	**103.1%**

[1] Reflects adjustments made at First Quarter, Mid-Year, and Year-End.
[2] FY 2024-25 Actuals are unaudited.
[3] ARPA: American Rescue Plan Act.
[4] OIAA: Ontario International Airport Authority.
[5] Sales Tax came in higher than estimates mainly driven by the opening of the Amazon distribution center
[6] Property Tax was less than estimated due to county discrepancy between City of Ontario and City of Chino parcels, redistribution will occur until 2026. $364K projected revenue loss due to appeals.
[7] Transient Occupancy Tax was less than estimated due to the closure of two hotel/motel properties.
[8] Parking Tax was less then expected due to delay on remittance - Ontario Convention Center did not remit payment for 7 month of FY 2024-25.
[9] Other Taxes came in less then expected due to lower Transfer Tax revenues then anticipated.
[10] Licenses and Permits came in higher than expected due rate increase effective July 2025.
[11] Use of Money and Property is higher as a result of higher investment earnings than projected.
[12] Received half of Toyota Arena City share of revenues for FY 2024-25 before year-end cutoff ($1.6M)
[13] Transfers-In .includes Ontario Ranch Public Services Fund ($3.0M) and Facilities Maintenance for Parks Maintenance PO's moving to General Fund ($459K)

City of Ontario
General Fund Year-End Results - Expenditures by Category
Fiscal Year 2024-25

	FY 2024-25 Current Budget[1]	FY 2024-25 Actuals[2]	FY 2024-25 Budget Variance	% Received
Personnel Costs	$ 252,328,030	$ 259,065,613	$ (6,737,583)[3]	**102.7%**
Operating Expenditures	47,724,872	48,391,217	(666,345)[4]	**101.4%**
Contractual Services	27,007,258	27,171,653	(164,395)[5]	**100.6%**
Internal Service Allocations	50,577,311	48,229,000	2,348,311	**95.4%**
Reimbursement Agreements	10,719,656	11,126,626	(406,970)[6]	**103.8%**
Contribution Expense	20,000	14,302	5,698[7]	**71.5%**
Capital Expenditures	604,229	604,016	213	**100.0%**
Total Operating Expenditures	**$ 388,981,356**	**$ 394,602,427**	**$ (5,621,071)**	**101.4%**
Transfers-Out	49,338,582	49,877,385	(538,803)[8]	**101.1%**
Total Expenditures & Transfers-Out	**$ 438,319,938**	**$ 444,479,812**	**$ (6,159,874)**	**101.4%**

[1] Reflects adjustments made at First Quarter, Mid-Year, and Year-End.

[2] FY 2024-25 Actuals are unaudited.

[3] FY 2024-25 Personnel Costs were over budget due to Safety Agencies exceeding overtime budgets.

[4] Operating Expenditures exceeded budget mainly due to timing of the note forgiveness on 221 N Mountain Ave and increased purchases for police safety e

[5] Contractual Services increased due to unanticipated City matters for Legal Services and the City share of the Animal Resource Center Agreement, with sa

[6] Increase in sales tax incentive agreements due to higher sales tax revenues generated in FY 2025.

[7] General Fund contribution to OHA for their special tax assessment for downtown properties owned by OHA (DOIA).

[8] Transfers Out includes additional Year-End entry of $550K transfer to Capital Projects based on higher then expected Bradley Burnes Sales Tax reveneus.

City of Ontario
General Fund Year-End Results - Expenditures by Agency
Fiscal Year 2024-25

	FY 2023-24 Actuals	FY 2024-25 Adopted Budget	FY 2024-25 Current Budget[1]	FY 2024-25 Actuals[2]	FY 2024-25 Budget Variance	% Received
Community Development	$ 33,602,008	$ 21,983,454	$ 24,990,058	$ 26,247,552	$ (1,257,494)[3]	**105.0%**
Community Life & Culture	31,292,564	30,435,855	30,681,662	30,873,669	(192,007)[4]	**100.6%**
Economic Development	22,721,351	17,376,851	22,597,962	22,968,627	(370,665)[5]	**101.6%**
Financial Services	23,608,273	25,798,621	25,891,895	25,197,082	694,813	**97.3%**
Human Resources/Risk Management	5,906,900	6,432,579	6,532,638	6,385,654	146,984	**97.8%**
Management Services	10,811,719	10,137,836	10,409,656	12,967,468	(2,557,812)[6]	**124.6%**
Ontario Fire Department	94,651,958	102,590,549	100,404,349	99,463,547	940,802[7]	**99.1%**
Ontario Police Department	136,006,982	132,629,021	133,737,959	138,777,930	(5,039,971)[8]	**103.8%**
Public Works	9,459,093	32,898,905	33,735,177	31,720,898	2,014,279[9]	**94.0%**
Total General Fund Agencies	**$ 368,060,848**	**$ 380,283,671**	**$ 388,981,356**	**$ 394,602,427**	(5,621,071)	**101.4%**
Transfers-Out	60,311,783	47,146,250	49,338,582	49,877,385	(538,803)[10]	**101.1%**
Total Expenditures & Transfers-Out	**$ 428,372,631**	**$ 427,429,921**	**$ 438,319,938**	**$ 444,479,812**	**$ (6,159,874)**	**101.4%**

[1] Reflects adjustments made at First Quarter, Mid-Year, and Year-End.
[2] FY 2024-25 Actuals are unaudited.
[3] Community Development overages primarily due to the City share of the Animal Resource Center of the Inland Empire agreement.
[4] Community Life & Culture overage mainly due to increased part-time staffing.
[5] Economic Development overages primarily due to increases in sales tax incentive agreements as a result of higher sales tax revenues generated.
[6] City Attorney Legal services increase due to unanticipated City matters.
[7] Fire Department had budget savings mainly due to delays in equipment purchases.
[8] Police Department exceeded budget maInly due to increases in overtime costs and additional police safety equipment purchases.
[9] Public Works had lower than expected actuals in maintenance services contracts and other professional services.
[10] Transfers Out includes additional Year-End entry of $550K transfer to Capital Projects based on higher then expected Bradley Burnes Sales Tax reveneus.

City of Ontario General Fund Year-End Reconciliation (unaudited) Fiscal Year 2024-25		
Fiscal Year 2024-25 Current Budget:		
Beginning Fund Balance 7/01/2024		**$ 74,974,749**
Resources & Transfers-In[1]	455,368,525	
Appropriations & Transfers-Out	(444,479,812)	
Surplus/(Deficit)		***$ 10,888,713***
Estimated Ending Fund Balance 6/30/2025		**$ 85,863,462**
Assigned Fund Balance for 20% Stabilization Plan	$ 78,920,485	
FY 2024-25 Estimated General Fund Surplus	$ 6,942,977	
Fiscal Year 2024-25 Carryforward Obligations		(111,683)
Revised Estimated Fund Balance		**$ 85,751,779**
Revised General Fund Reserve %		**21.7%**

[1] Includes $6.5M in American Rescue Plan Act (ARPA) funding; FY 2025 is the last year for this funding.

[2] Council adopted the FY 2024-25 budget with a 20% reserve level. Reserve % excludes Transfers-Out.

City of Ontario General Fund Year-End Reserve Balances (unaudited) Fiscal Year 2024-25			
Fund	**Description**	**Balance**	**Comments**
1000 - General Fund	Assigned to Economic Uncertainties	$ 20,000,000	
1000 - General Fund	Assigned Fund Balance for 20% Stabilization Plan	78,920,485	Unaudited FY 2024-25 fund balance
1000 - General Fund	Estimated FY 2024-25 General Fund Surplus	6,942,977	Excess reserve over the 20% required
1000 - General Fund	Restricted for Denton Endowment	265,463	Interest restricted for Museum use; principal cannot be used
1000 - General Fund	Restricted for Barnes Trust	130,317	Museum use for donated family artifacts only
1000 - General Fund	Public Art Fee - Developers	550,000	Restricted use for the commission, acquisition, and/or development of Public Art; moved to Special Revenue Fund in FY 2025-26
6010 - Equipment Services	Fire Safety Equipment Reserve	500,000	Assigned for replacement of Firs safety equipment
6010 - Equipment Services	Police Helicopter Public Safety Reserve	5,127,310	Assigned for replacement of Police Helicopter

FY 2025-26
First Quarter
Budget Update

CITY OF ONTARIO

City of Ontario
General Fund Revenue by Category
Fiscal Year 2025-26
First Quarter Budget Update

	FY 2025-26 Adopted Budget	First Quarter Budget Update	FY 2025-26 Current Budget	Actuals as of 9/30/2025	% Received
Sales Tax	$ 204,715,000	$ -	$ 204,715,000	$ 301,764	0.1%
Property Tax	112,750,000	-	112,750,000	-	0.0%
Transient Occupancy Tax	18,000,000	-	18,000,000	1,796,383	10.0%
Business License Tax	11,500,000	-	11,500,000	2,209,933	19.2%
Parking Tax	4,700,000	-	4,700,000	779,909	16.6%
Other Taxes [1]	6,525,000	-	6,525,000	686,721	10.5%
Licenses and Permits	7,685,160	-	7,685,160	1,812,667	23.6%
Intergovernmental [2]	11,122,947	-	11,122,947	2,750,261	24.7%
Charges for Services [3]	33,897,117	20,000 [5]	33,917,117	3,542,798	10.4%
Charges for Services - OIAA [4]	24,821,242	-	24,821,242	4,136,874	16.7%
Use of Money & Property	1,615,000	-	1,615,000	95,501	5.9%
Fines and Forfeitures	996,000	-	996,000	304,103	30.5%
Miscellaneous	6,905,457	1,648,022 [6]	8,553,479	1,821,370	21.3%
Total General Fund Revenues	**$ 445,232,923**	**$ 1,668,022**	**$ 446,900,945**	**$ 20,238,284**	**4.5%**
Transfers-In	2,000,000	433,378 [7]	2,433,378	2,433,378	100.0%
TOTAL RESOURCES	**$ 447,232,923**	**$ 2,101,400**	**$ 449,334,323**	**$ 22,671,662**	**5.0%**

[1] Other Taxes includes Franchise Tax ($4.8M) and Property Transfer Tax ($1.5M).
[2] Intergovernmental includes Cost Allocation Plan Revenue, Disability, Worker's Compensation, & Unemployment Internal Service Allocation Revenue.
[3] Charges for Services includes Special Districts Service Charges ($13.7M).
[4] City Services including Police & Fire to Ontario International Airport Authority (OIAA).
[5] Includes Library Copier Deposit monies for self-service payment machine purchase.
[6] Includes FY 2024-25 portion of City share of Toyota Arena revenues ($1.6M).
[7] Includes transfer from Capital Projects Measure Q to General Fund for Housing Property acquisition.

City of Ontario
General Fund Expenditures by Category
Fiscal Year 2025-26
First Quarter Budget Update

	FY 2025-26 Adopted Budget	CIP/Grants/POs Carryforward	First Quarter Budget Update	FY2025-26 Current Budget	Actuals as of 9/30/2025[1]	% Expended
Personnel Costs	$ 269,279,604	-	$ 120,248 [2]	$ 269,399,852	$ 56,423,273	20.9%
Operating Expenditures	32,920,286	47,691	140,000 [3]	$ 33,107,977	9,328,347	28.2%
Contractual Services	26,405,460	-	-	$ 26,405,460	3,917,170	14.8%
Internal Service Allocations	51,400,418	-	1,378 [4]	$ 51,401,796	12,569,632	24.5%
Reimbursement Agreements	10,961,000	-	-	$ 10,961,000	8,114	0.1%
Contribution Expense	27,500	-	-	$ 27,500	-	0.0%
Capital Expenditures	-	63,947	-	$ 63,947	63,684	99.6%
Total Operating Expenditures	**$ 390,994,268**	**$ 111,638**	**$ 261,626**	**$ 391,367,532**	**$ 82,310,222**	**21.0%**
Transfers-Out	56,238,655 [5]	-	3,433,378 [5]	$ 59,672,033	56,238,655	94.2%
Total General Fund Appropriations	**$ 447,232,923**	**$ 111,638**	**$ 3,695,004**	**$ 451,039,565**	**$ 138,548,877**	**30.7%**

[1] Excludes obligations/PO's.

[2] Personnel Costs includes $120K for Recommended Personnel Changes (add/deletes).

[3] Operating Expenditures includes $120K for Maintenance service contract at Town Square park and $20K for self-service payment machine purchase utilizing Library Copier Machine Deposit.

[4] Internal Service Allocations includes a $1K for Recommended Personnel Changes.

[5] Transfers-Out includes $3M to Facilities Maintenance ISF Fund to shore up its fund balance and $433K to establish the City's Local Housing Trust Fund.

City of Ontario
General Fund Expenditures by Agency
Fiscal Year 2025-26
First Quarter Budget Update

	FY 2025-26 Adopted Budget	CIP/Grants/POs Carryforward	First Quarter Budget Update	FY2025-26 Current Budget	Actuals as of 9/30/2025[1]	% Expended
Community Development	$ 25,682,232	$ -	$ 42,974[2]	$ 25,725,206	$ 4,570,759	17.8%
Community Life & Culture	33,629,666	-	19,434[3]	33,649,100	7,650,504	22.7%
Economic Development	21,877,421	-	-	21,877,421	5,345,318	24.4%
Financial Services	11,913,846	-	(31,408)[4]	11,882,438	2,312,444	19.5%
Human Resources/Risk Management	7,267,500	-	(17,852)[5]	7,249,648	1,539,906	21.2%
Management Services	11,085,493	-	2,914[6]	11,088,407	2,947,432	26.6%
Ontario Fire Department	102,878,946	63,947	-	102,942,893	20,844,993	20.2%
Ontario Police Department	141,956,517	47,691	122,434[7]	142,126,642	31,058,162	21.9%
Public Works	34,702,647	-	123,130[8]	34,825,777	6,040,703	17.3%
Total General Fund Agencies	**$ 390,994,268**	**$ 111,638**	**$ 261,626**	**$ 391,367,532**	**$ 82,310,222**	**21.0%**
Transfers-Out	56,238,655	-	3,433,378[9]	59,672,033	56,238,655	94.2%
Total Appropriations & Transfers-Out	**$ 447,232,923**	**$ 111,638**	**$ 3,695,004**	**$ 451,039,565**	**$ 138,548,877**	**30.7%**

[1] Excludes obligations/PO's.

[2] Community Development includes includes $43K for Recommended Personnel Changes.

[3] Community Life & Culture includes $20K self-service payment machine purchase utilizing Library Copier Machine Deposit.

[4] Financial Services includes ($31K) for Recommended Personnel Changes (add/deletes).

[5] Human Resources / Risk Management includes ($18K) for Recommended Personnel Changes (add/deletes).

[6] Management Services includes $3K for Recommended Personnel Changes (add/deletes).

[7] Police Department includes $122K for Recommended Personnel Changes (add/deletes).

[8] Public Works includes $120K for Maintenance service contract at Town Square park.

[9] Transfers-Out includes $3M to Facilities Maintenane ISF Fund to shore up its fund balance and $433K to establish the City's Local Housing Trust Fund.

City of Ontario General Fund Budget Summary Fiscal Year 2025-26 First Quarter Budget Update		
Fiscal Year 2025-26 Current Budget:		
Estimated Beginning Fund Balance[1]		**$ 85,863,462**
Fiscal Year 2025-26 Adopted Budget:		
Resources & Transfers-In	447,232,923	
Appropriations & Transfers-Out	(447,232,923)	
First Quarter Budget Recommendations		
Resources & Transfers-In	2,101,400	
Appropriations & Transfers-Out	(3,695,004)	
Fiscal Year 2024-25 Carryforward Obligations	(111,638)	
Budget Surplus/(Deficit)		***$ (1,705,242)***
Estimated Ending Fund Balance		**$ 84,158,220**
Estimated General Fund Reserve 20%[2]		**21.5%**

[1] Estimated Beginning Fund Balance for 07/01/2025 is unaudited.

[2] For FY 2025-26, the Council approved reserve level is 20% with the goal of increasing the reserves up to 25% in future fiscal years.

City of Ontario Update on General Fund Reserve Balances Fiscal Year 2025-26 First Quarter Budget Update			
Fund	**Description**	**Balance**	**Comments**
1000 - General Fund	Assigned to Economic Uncertainties	$ 20,000,000	
1000 - General Fund	Assigned Fund Balance for Stabilization Plan	84,158,220	Estimated Fund Balance at FY 2025-26 First Quarter Budget Update
1000 - General Fund	Restricted for Denton Endowment	265,463	Interest restricted for Museum use; principal cannot be used
1000 - General Fund	Restricted for Barnes Trust	130,317	Museum use for donated family artifacts only
6010 - Equipment Services	Police Helicopter Public Safety Reserve	7,027,310	Assigned for replacement of Police Helicopter
6010 - Equipment Services	Police Safety Equipment Reserve	100,000	Assigned for replacement of Police Safety Equipment
6010 - Equipment Services	Fire Safety Equipment Reserve	500,000	Assigned for replacement of Fire Safety Equipment

City of Ontario
Citywide Expenditures by Category
Fiscal Year 2025-26
First Quarter Budget Update

	FY 2025-26 Adopted Budget	CIP/Grants/POs Carryforward	First Quarter Budget Update	FY2025-26 Current Budget	Actuals as of 9/30/2025 [1]	% Expended
Personnel Costs	$ 353,233,371	$ 3,983,290	$ 304,339 [2]	$ 357,521,000	$ 78,935,411	22.1%
Operating Expenditures	251,592,617	8,724,713	2,601,577 [3]	262,918,907	69,760,627	26.5%
Contractual Services	754,768,948	145,699,277	9,898,822 [4]	910,367,047	130,786,219	14.4%
Internal Service Allocations	91,703,448	5,300	1,278 [5]	91,710,026	22,641,369	24.7%
Reimbursement Agreements	12,220,900	5,606,776	298,813 [6]	18,126,489	1,339,594	7.4%
Debt Service	57,042,055	21,876,813	1,039,951 [7]	79,958,819	8,698,694	10.9%
Contribution Expense	19,200,503	-	-	19,200,503	129,178	0.7%
Capital Expenditures	29,651,530	23,847,507	2,913,892 [8]	56,412,929	11,365,250	20.1%
Total Operating Expenditures	**$ 1,569,413,372**	**$ 209,743,676**	**$ 17,058,672**	**$ 1,796,215,720**	**$ 323,656,344**	**18.0%**
Transfers-Out	84,332,536	-	7,352,095 [9]	91,684,631	83,199,414	90.7%
Total Citywide Appropriations	**$ 1,653,745,908**	**$ 209,743,676**	**$ 24,410,767**	**$ 1,887,900,351**	**$ 406,855,758**	**21.6%**

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

[2] Personnel Costs includes $155K for Police grant overtime and $125K for Recommended Personnel Changes (add/deletes).

[3] Operating Expenditures includes $860K for DIF credit Redemption of Bon View Ave Water main, $720K for new MDC for patrol units and police supplies with Asset Seisure funds, $305K for enterprise lease vehicles, $310K for Affordable Housing / Veteran Housing (Mission & Mountain) - Relocation Expense, $120K for Maintenance Service contract for Town Square, and $100K for Motel Voucher Project - SGVCG.

[4] Contractual Services includes $3.3M for Downtown Euclid Ave. Corridor Project - Design for FY 2025-26 (offset by Euclid Relinquishment funds), $2.0M for PF2604 - Ontario Promise Corps Program Space and Mobility Hub Construction Costs (offset by insurance reimbursement), $800K for MS2605 - Broadband Fiber Network Expansion Sevice Area 05, $750K for PF2605 - C-Block Parking Structure Guidance System.

[5] Internal Service Allocations includes $1K for Recommended Personnel Changes.

[6] Reimbursement Agreements includes $300K reimbursement for Bon View Industrial projects.

[7] Debt Service includes $720K for interest expense on MS2608 - South Campus Avenue Property Acquisition and $310K Contribution from Affordability In-Lieu Fund to OHA for PF2410 Affordable Housing / Veteran Housing (Mission & Mountain).

[8] Capital Expenditures includes $2.7M for MS2608 - South Campus Avenue Property Acquisition and $729K for PF2418 - Granada Theater - Real Property Purchase remaining balance.

[9] Transfers includes $3.5M Transfer from Information Technology Operating Fund to Information Technology - Capital Projects Fund for FY 2024-25 Carryforward of CIP Appropriations and Obligations, $3.0M Transfer from General Fund to Facilities Maintenancce fund to shore up its fund balance, $433K from Capital Projects - Measure Q fund to General Fund, and $433K transfer from General Fund to establish the City's Local Housing Trust Fund.

City of Ontario
Citywide Expenditures by Fund Type
Fiscal Year 2025-26
First Quarter Budget Update

	FY 2025-26 Adopted Budget	CIP/Grants/POs Carryforward	First Quarter Budget Update	FY2025-26 Current Budget	Actuals as of 9/30/2025[1]	% Expended
General Fund	$ 447,232,923	$ 111,638	$ 3,695,004[2]	$ 451,039,565	$ 138,548,877	30.7%
Special Revenue Fund	87,396,147	52,534,478	6,221,271[3]	146,151,896	21,334,653	14.6%
Debt Service Fund	26,290,509	-	-	26,290,509	3,861,366	14.7%
Capital Projects Fund	644,660,576	125,866,022	9,096,662[4]	779,623,260	125,122,604	16.0%
Enterprise Funds	290,964,819	20,029,624	1,093,626[5]	312,088,069	74,533,264	23.9%
Internal Service Funds	155,167,468	4,504,356	3,994,204[6]	163,666,028	42,488,367	26.0%
Total City Funds	**$ 1,651,712,442**	**$ 203,046,118**	**$ 24,100,767**	**$ 1,878,859,327**	**$ 405,889,130**	**21.6%**
Ontario Housing Authority	2,033,466	6,697,558	310,000	9,041,024	966,628	10.7%
Total All Funds	**$ 1,653,745,908**	**$ 209,743,676**	**$ 24,410,767**	**$ 1,887,900,351**	**$ 406,855,758**	**21.6%**

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

[2] General Fund includes $3M to Facilities Maintenance ISF Fund to shore up its fund balance and $433K to establish the City's Local Housing Trust Fund.

[3] Special Revenue Funds includes $2.7M for the South Campus Ave property acquisition, $800K for MS2605 - Broadband Fiber Network Expansion Sevice Area 05, $720K for MDC for Patrol Units/Admin Supplies, $360K for GR_ST2612 Safe Streets and Roads for All (SS4A) FY23, $300K for Professional Services for the administration of Community Facilities Districts (CC Approved 4/15/2025), $310K for GR2602 Cannabis Tax Fund Program FY 2025-26, $260K for GR_ST2608 CDBG Vineyard Avenue Pavement Rehabilitation Project.

[4] Capital Projects Funds includes $3.3M for Downtown Euclid Ave. Corridor Project - Design for FY 2025-26 (offset by Euclid Relinquishment funds), $2.0M for PF2604 - Ontario Promise Corps Program Space and Mobility Hub Construction Costs (offset by insurance reimbursement), $860K for DIF credit Redemption of Bon View Ave Water main, $750K for PF2605 - C-Block Parking Structure Guidance System, $720K for PF2418 - Granada Theater - Real Property Purchase remaining balance.

[5] Enterprise Funds includes ($126K) reduction for Recommended Personnel Changes.

[6] Internal Service Funds includes $3.5M transfer from Information Technology Operating Fund to Information Technology - Capital Projects Fund for FY 2024-25 Carryforwards, $305K for Enterprise lease vehicles, and $158K in recommended personnel changes

City of Ontario
General Fund Five-Year Financial Forecast
Fiscal Year 2025-26
First Quarter Budget Update

	FY 2024-25 Unaudited Year-End	FY 2025-26 Current Budget	FY 2026-27 Projected	FY 2027-28 Projected	FY 2028-29 Projected	FY 2029-30 Projected
Resources [1]	$ 455,368,525	$ 449,334,323	$ 464,193,520	$ 477,768,265	$ 495,709,864	$ 514,312,103
Appropriations [2]	(346,373,427)	(339,965,736)	(349,646,300)	(359,954,977)	(370,591,567)	(380,939,056)
Internal Service Funds (ISF) Allocations	(48,229,000)	(51,401,796)	(52,512,951)	(53,695,427)	(54,954,407)	(55,604,283)
CIP Transfers	(19,775,232)	(9,428,417) [3]	(7,095,296)	(7,379,108)	(7,674,272)	(7,981,243)
Debt Service	(20,987,300)	(44,178,238) [4]	(55,667,161)	(56,584,794)	(58,475,484)	(66,456,727)
Other Transfers	(9,114,853)	(6,065,378) [5]	(7,823,590)	(8,187,001)	(7,621,147)	(1,010,678)
Budget Surplus/(Deficit)	**$ 10,888,713**	**$ (1,705,242)**	**$ (8,551,778)**	**$ (8,033,042)**	**$ (3,607,013)**	**$ 2,320,116**
Estimated Beginning Fund Balance	$ 74,974,749	$ 85,863,462	$ 84,158,220	$ 75,606,442	$ 67,573,400	$ 63,966,387
Estimated Ending Fund Balance	$ 85,863,462	$ 84,158,220	$ 75,606,442	$ 67,573,400	$ 63,966,387	$ 66,286,503
Projected Percent of GF Reserve level	**21.8%**	**21.5%**	**18.8%**	**16.3%**	**15.0%**	**15.2%**

[1] Resources include Revenues & Transfers-In.

[2] Appropriations excludes Transfers-Out and ISF Allocations.

[3] CIP Transfers includes and $6.9M of Bradley Burns Revenues and $2.5M of Measure Q Revenues. Starting in FY 2026-27, only includes Bradley Burns Revenue

[4] Debt Service includes $26.3M for Lease Revenue Bonds (2017,2021,2022, 2023, and 2025) and $17.9M in property acquisition notes for the Sports Empire.

[5] Other Transfers includes $3.0M to Facilities Maintenance ISF Fund to shore up its fund balance, $1.9M for Police Helicopter Reserve, $500k for Fire Safety Equipment Reserve, $433K to establish the City's Local Housing Trust Fund, $120k for Parkway Maintenance, and $100k for Police Safety Equipment Reserve.

City of Ontario
Authorized Full-Time Positions
Fiscal Year 2025-26
First Quarter Budget Update

Agency	FY 2025-26 Adopted Budget	Recommended First Quarter Budget Update	Total Authorized Full-Time Positions
Community Development	84.00	-	84.00
Community Life & Culture	102.00	-	102.00
Economic Development	9.00	-	9.00
Financial Services	56.00	-	56.00
Human Resources	31.00	-	31.00
Information Technology	53.00	-	53.00
Management Services	42.00	-	42.00
Ontario Fire Department[1]	265.00	-	265.00
Ontario Municipal Utilities Company	139.00	-	139.00
Ontario Police Department[2]	429.00	-	429.00
Public Works	307.00	-	307.00
Total Authorized Full-Time Positions	**1,517.00**	**-**	**1,517.00**
General Fund	1,062.64	-	1,062.64
Other Funds	454.36	-	454.36
Total FTE All Funds	**1,517.00**	**-**	**1,517.00**
[1] OFD positions includes the following sworn positions	213.00	-	213.00
[2] OPD positions includes the following sworn positions	316.00	-	316.00

City of Ontario
Recommended Personnel Changes
Fiscal Year 2025-26
First Quarter Budget Update

Agency	Department	Proposed Change			Position	Action	Salary Range	
		General Fund	Other Fund	Total				
Community Development								
	Building	(1.00)	-	(1.00)	Permit Technician	Deletion	$ 6,202 -	$ 7,537
	Building	1.00	-	1.00	Building Plans Examiner	Addition	$ 10,159 -	$ 12,350
	Building	(1.00)	-	(1.00)	Building Manager	Deletion	$ 12,875 -	$ 15,650
	Building	1.00	-	1.00	Deputy Building Official	Addition	$ 13,735 -	$ 16,695
		-	-	-				
Community Life & Culture								
	Housing	(1.00)	-	(1.00)	Continnuum of Care Social Worker	Deletion	$ 8,180 -	$ 9,941
	Housing	1.00	-	1.00	Project Coordinator	Addition	$ 8,095 -	$ 9,835
		-	-	-				
Financial Services								
	Budget	(1.00)	-	(1.00)	Departmental Administrator	Deletion	$ 12,913 -	$ 17,181
	Budget	1.00	-	1.00	Deputy Finance Director	Addition	$ 13,558 -	$ 18,041
	Revenue and Grants Management	(1.00)	-	(1.00)	Revenue Manager	Deletion	$ 11,343 -	$ 13,790
	Revenue and Grants Management	1.00	-	1.00	Senior Financial Analyst	Addition	$ 10,475 -	$ 12,731
	Debt Management	(0.50)	(0.50)	(1.00)	Financial Analyst	Deletion	$ 9,532 -	$ 11,579
	DIF	0.50	0.50	1.00	Office Assistant	Addition	$ 4,115 -	$ 5,001
	Accounting	(1.00)	-	(1.00)	Departmental Administrator	Deletion	$ 12,298 -	$ 16,364
	Accounting	1.00	-	1.00	Deputy Finance Director	Addition	$ 13,558 -	$ 18,041
	Investments	(0.95)	(0.05)	(1.00)	Management Analyst	Deletion	$ 7,935 -	$ 9,644
	Investments	0.95	0.05	1.00	Senior Management Analyst	Addition	$ 9,343 -	$ 11,350
	Purchasing	(1.00)	-	(1.00)	Purchasing Supervisor	Salary Realignment	$ 10,052 -	$ 12,217
	Purchasing	1.00	-	1.00	Purchasing Supervisor	Salary Realignment	$ 9,677 -	$ 11,757
		-	-	-				
Human Resources/Risk Management								
	Human Resources Administration	(1.00)	-	(1.00)	Senior Human Resources Analyst	Deletion	$ 9,603 -	$ 11,667
	Human Resources Administration	1.00	-	1.00	Human Resources Analyst	Addition	$ 8,733 -	$ 10,608
		-	-	-				
Management Services								
	Office of the City Manager	(1.00)	-	(1.00)	Administrative Assistant	Deletion	$ 5,912 -	$ 7,185
	Office of the City Manager	1.00	-	1.00	Senior Administrative Assistant	Addition	$ 6,505 -	$ 7,902
		-	-	-				
Ontario Municipal Utilities								
	Operations	-	(0.35)	(0.35)	Utilities Operations Assistant Division Manager	Deletion	$ 9,677 -	$ 11,757
	Operations	-	(0.65)	(0.65)	Utilities Operations Assistant Division Manager	Addition	$ 9,677 -	$ 11,757
	Operations	-	0.35	0.35	Utilities Operations Assistant Manager	Deletion	$ 9,677 -	$ 11,757
	Operations	-	0.65	0.65	Utilities Operations Assistant Manager	Addition	$ 9,677 -	$ 11,757
		-	-	-				

City of Ontario
Recommended Personnel Changes
Fiscal Year 2025-26
First Quarter Budget Update

Agency	Department	Proposed Change General Fund	Other Fund	Total	Position	Action	Salary Range
Ontario Police Department							
	Police Dispatcher	(1.00)	-	(1.00)	Police Dispatcher	Deletion	$ 5,945 - $ 7,297
	Senior Police Dispatcher	1.00	-	1.00	Senior Police Dispatcher	Addition	$ 6,536 - $ 8,022
	Police Detective	(1.00)	-	(1.00)	Police Detective	Deletion	$ 10,150 - $ 12,336
	Police Lieutenant	1.00	-	1.00	Police Lieutenant	Addition	$ 14,043 - $ 17,059
	Digital Forensic Specialist	(1.00)	-	(1.00)	Digital Forensic Specialist	Deletion	$ 6,971 - $ 8,476
	Digital Investigative Analyst	1.00	-	1.00	Digital Investigative Analyst	Addition	$ 6,971 - $ 8,476
	Community Service Officer	(1.00)	-	(1.00)	Community Service Officer	Deletion	$ 5,408 - $ 6,571
	Departmental Administrator	1.00	-	1.00	Departmental Administrator	Addition	$ 11,938 - $ 15,885
		-	-	-			
Public Works							
	Engineering	(1.00)	-	(1.00)	Engineering Assistant	Deletion	$ 8,343 - $ 10,135
	Engineering	1.00	-	1.00	Assistant Engineer	Addition	$ 10,005 - $ 12,159
	Municipal Services Department	-	(1.00)	(1.00)	Integrated Waste Collector	Deletion	$ 4,779 - $ 5,808
	Municipal Services Department	-	1.00	1.00	Senior Equipment Mechanic	Addition	$ 6,566 - $ 7,979
	Municipal Services Department	-	(1.00)	(1.00)	Integrated Waste Collector	Deletion	$ 4,779 - $ 5,808
	Municipal Services Department	-	1.00	1.00	Senior Equipment Mechanic	Addition	$ 6,566 - $ 7,979
		-	-	-			
Total Additions/(Deletions)		-	-	-			

Net Change By Fund		First Quarter Adjustments	Net FTE Change
1000 General Fund	$	122,192	-
1011 Measure Q	$	(566)	-
2010 C.D.B.G.	$	-	-
2020 HOME Grants	$	-	-
2310 Ontario Housing Authority	$	-	-
2400 Grants Fund	$	-	-
2521 Broadband / Fiber	$	-	-
2530 Gas Tax	$	-	-
2600 Special Assessment Administration	$	(26,626)	-
2610 Parkway Maintenance	$	-	-
2630 Street Light Maintenance	$	-	-
2640 Storm Drain Maintenance	$	-	-
5010 Water Operating	$	-	-
5011 Water Capital	$	-	-
5110 Sewer Operating	$	-	-
5111 Sewer Capital	$	-	-
5210 Integrated Waste	$	(126,730)	-
6010 Equipment Services	$	158,450	-
6020 Information Technology	$	-	-
6030 Facility Maintenance	$	-	-
6110 Workers Compensation	$	-	-
6111 General Liability	$	-	-
Grand Total	**$**	**126,720**	**-**

City of Ontario
Budget Adjustment Highlights
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Agency	Description	Appropriation Adjustment	General Fund	Other Funds
Community Development				
	Recommended Personnel Changes	42,974	42,974	-
		42,974	**42,974**	**-**
Community Life & Culture				
	Self-service payment machine purchase utilizing Library Copier Machine Deposit	20,000	20,000	-
	Recommended Personnel Changes	(566)	(566)	-
	Carryforward CIP Appropriations from FY 2024-25	16,858,949	-	16,686,058
	Appropriate Public Art Fund budget for Public Art at the Fire Station Admin Building	18,100	-	18,100
	PF2410 - Affordable Housing / Veteran Housing (Mission & Mountain)	310,000	-	310,000
	PF2410 - Affordable Housing / Veteran Housing (Mission & Mountain) - Contribution to OHA	310,000	-	310,000
	MS2604 - Motel Voucher Project - SGVCG	100,000	-	100,000
	Public Art Micro-Grants pilot program and Downtown Ontario Mural walls/art showcase	55,000	-	55,000
	Carryforward Grant Appropriation from FY 2024-25	13,198,713	-	13,198,713
	GR2699_1 CDBG Grant Admin	3,718	-	3,718
	GR_ST2601 CDBG Rubber-Polymer Modified Slurry Seal (RPMSS) Project	30,000	-	30,000
	GR2655 CDBG Extreme Weather Motel Voucher Program	3,718	-	3,718
	GR_ST2608 CDBG Vineyard Avenue Pavement Rehabilitation Project	263,919	-	263,919
	GR2660 Emergency Rent Protection Program - adjustment to grant	(4,498)	-	(4,498)
	GR2699_2 ESG Admin - adjustment to grant	(1,447)	-	(1,447)
	GR2329 HOME-ARP Administration - adjustment to grant	607	-	607
	GR2328 HOME-ARP Rental Assistance Program - adjustment to grant	3,447	-	3,447
	GR2671 Housing Rehabilitation and New Construction - adjustment to grant	1,804	-	1,804
	GR2672 HOME TBRA - adjustment to grant	1,805	-	1,805
	GR2670 HOME CHDO - adjustment to grant	722	-	722
	GR2699_3 HOME Program Admin - adjustment to grant	435	-	435
		31,174,426	**19,434**	**30,982,101**

City of Ontario
Budget Adjustment Highlights
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Agency	Description	Appropriation Adjustment	General Fund	Other Funds
Economic Development				
	Carryforward CIP Appropriations from FY 2024-25	14,299,909	-	14,299,909
	MS2101 - Part 150 Management and Maintenance	245,000	-	245,000
	MS2305 - N. Mountain & D Street - Lproperty Acquisition remaining balance	46,529	-	46,529
	MS2608 - South Campus Avenue Property Acquisition	2,680,215	-	2,680,215
	PF2418 - Granada Theater Property Acquisition remaining balance	729,158	-	729,158
		18,000,811	**-**	**18,000,811**
Financial Services				
	Recommended Personnel Changes	(58,034)	(31,072)	(26,962)
	Carryforward CIP Appropriations from FY 2024-25 (DIF Contributions)	13,228,921	-	13,228,921
	DIF reimbursement for water main on Bon View Ave.(Cedar St. to S Francis St.).	859,305	-	859,305
	Professional Services for the administration of Community Facilities Districts (CC Approved 4/15/2025)	300,000	-	300,000
		14,330,192	**(31,072)**	**14,361,264**
Human Resources/Risk Management				
	Recommended Personnel Changes	(17,852)	(17,852)	-
		(17,852)	**-**	**-**
Information Technology				
	Carryforward CIP Appropriations from FY 2024-25	3,485,339	-	3,485,339
		3,485,339	**-**	**3,485,339**
Management Services				
	Recommended Personnel Changes	2,914	2,914	-
	PF2605 - C-Block Parking Structure Guidance System	800,000	-	800,000
	Carryforward Grant Appropriations from FY 2024-25	35,773	-	35,773
		838,687	**2,914**	**835,773**

City of Ontario
Budget Adjustment Highlights
Fiscal Year 2025-26
First Quarter Budget Update

Agency	Description	Appropriation Adjustment	General Fund	Other Funds
OMUC				
	Carryforward CIP Appropriations from FY 2024-25	7,679,875	-	7,679,875
	To cover costs of reimbursement for Bon View Industrial projects.	298,813	-	298,813
	To cover costs of reimbursement for Citywide Water Main Improvements	876,164	-	876,164
	Carryforward Grant Appropriations from FY 2024-25	8,874,053	-	8,874,053
		17,728,905	**-**	**17,728,905**
Ontario Fire Department				
	Carryforward Appropriations from FY 2024-25	239,708	63,947	175,761
	Carryforward Grant Appropriations from FY 2024-25	255,120	-	255,120
	GR2601 Emergency Mgmt Performance Grant (EMPG) FY24	21,626	-	21,626
		516,454	**63,947**	**452,507**
Ontario Police Department				
	Carryforward Appropriations from FY 2024-25	92,281	47,691	44,590
	Recommended Personnel Changes	122,434	122,434	-
	ASO Mounted Unit Trailer	57,941	-	57,941
	Carryforward CIP Appropriations from FY 2024-25	1,657,911	-	1,657,911
	New MDC for Patrol Units/Police Supplies	721,786	-	721,786
	GR2602 Cannabis Tax Fund Program FY 2025-26	309,692	-	309,692
	Carryforward Grant Appropriations from FY 2024-25	4,042,246	-	4,042,246
		7,004,291	**170,125**	**6,834,166**

City of Ontario
Budget Adjustment Highlights
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Agency	Description	Appropriation Adjustment	General Fund	Other Funds
Public Works				
	Landscape Maintenance Service contract for Town Square	120,000	120,000	-
	Recommended Personnel Changes	3,130	3,130	-
	Appropriate additional funding for the installation of Downtown Bollard Project	96,982	-	96,982
	John Galvin Park Snack Bar Renovation Project for construction costs and special inspection services	360,839	-	360,839
	Carryforward CIP Appropriations from FY 2024-25	114,621,222	-	114,621,222
	Carryforward Appropriations from FY 2024-25	77,442	-	77,442
	Downtown Euclid Ave. Corridor Project - Design for FY 2025-26	3,300,000	-	3,300,000
	Enterprise Leased vehicle costs for City fleet	350,415	-	350,415
	ST2612 & GR_ST2612 - Safe Streets and Roads for All Grant Match	90,000	-	90,000
	Appropriate Public Art Fund budget for Public Art at the Fire Station Admin Building	(18,100)	-	(18,100)
	PF2604 - Ontario Promise Corps Program Space and Mobility Hub Construction Costs	2,000,000	-	2,000,000
	PF2605 - C-Block Parking Structure Guidance System	750,000	-	750,000
	SM2601 - Campus Avenue Storm Drain Design	50,000	-	50,000
	Gas Tax funds neede for City's Pavement Management Program	50,000	-	50,000
	Recommended Personnel Changes	31,720	-	31,720
	Redistributing budget - MS_TCAH03 - Enhanced Pedestrian Crossings	(658,871)	-	(658,871)
	Redistributing budget - MS_TCAT12 - Mission Blvd. Bike and Pedestrian Improvements	658,871	-	658,871
	Redistributing budget - TR2301 - Traffic Signal Improvement - Campus/Mission	10,547	-	10,547
	Redistributing budget - TR2303 - Traffic Signal Improvement - San Antonio/Francis	(10,547)	-	(10,547)
	Appropriate funding for traffic signal system and traffic signal modifications due to higher than expected proposal costs	214,698	-	214,698
	PA2602 John Galvin, James Galanis, and Veterans Memorial Park Underground Conduit and Lights Replacement	107,000	-	107,000
	GR2527 Beverage Container Recycling Grant FY 24-25	45,379	-	45,379
	GR_ST2612 Safe Streets and Roads for All (SS4A) FY23	360,000	-	360,000
	TR2601 - Quiet Zone Analysis reallocation to Internal Circulator Planning Study	(120,000)	-	(120,000)
	TR2603 - Internal Circulator Planning Study appropriation, reallocation to Quiet Zone Analysis	120,000	-	120,000
	Carryforward Grant Appropriation from FY 2024-25	11,087,394	-	11,087,394
		133,698,121	**123,130**	**133,574,991**
	Total Expenditures	226,802,348	391,452	226,255,857
	Transfers-Out	7,352,095	-	7,352,095
	Grand Total	**$ 234,154,443**	**$ 391,452**	**$ 233,607,952**

City of Ontario
Detail of Recommended Budget Adjustments by Fund
Fiscal Year 2025-26
First Quarter Budget Update

Description	Appropriation Adjustments	Revenue Adjustments	Operating Transfers-In	Operating Transfers-Out	Fund Balance Impact
GENERAL FUND					
Fund 1000 - General Fund					
Carryforward Appropriations from FY 2024-25	111,638	-	-	-	(111,638.00)
Self-service payment machine purchase utilizing Library Copier Machine Deposit	20,000	20,000	-	-	-
Landscape Maintenance Service contract for Town Square	120,000	-	-	-	(120,000.00)
FY 24/25 Toyota Arena City's Share of Revenues (*50% received in FY 2024-25)	-	1,648,022	-	-	1,648,022.00
Recommended Personnel Changes	121,626	-	-	-	(121,626.00)
General Fund transfer to Facilities Maintenance Fund to shore up its fund balance	-	-	-	3,000,000	(3,000,000.00)
Transfer from Capital Projects Measure Q to General Fund	-	-	433,378	-	433,378.00
General Fund transfer to to establish the City's Local Housing Trust Fund	-	-	-	433,378	(433,378.00)
GENERAL FUND TOTAL	**373,264**	**1,668,022**	**433,378**	**3,433,378**	**(1,705,242.00)**
SPECIAL REVENUE FUNDS					
Fund 2010 - Community Development Block Grant					**-**
Budget Revision - GR2699_1 CDBG Grant Admin	3,718	3,718	-	-	-
GR_ST2601 CDBG Rubber-Polymer Modified Slurry Seal (RPMSS) Project	30,000	30,000	-	-	-
GR2655 CDBG Extreme Weather Motel Voucher Program	3,718	3,718	-	-	-
GR_ST2608 CDBG Vineyard Avenue Pavement Rehabilitation Project	263,919	263,919	-	-	-
Budget Revision - GR2660 Emergency Rent Protection Program	(4,498)	(4,498)	-	-	-
Budget Revision - GR2699_2 ESG Admin	(1,447)	(1,447)	-	-	-
Carryforward Grant Appropriation from FY 2024-25	1,872,781	1,872,781	-	-	-
	2,168,191	2,168,191	-	-	-
Fund 2020 - HOME Grants					**-**
GR2329 HOME-ARP Administration	607	607	-	-	-
GR2328 HOME-ARP Rental Assistance Program	3,447	3,447	-	-	-
GR2671 Housing Rehabilitation and New Construction	1,804	1,804	-	-	-
GR2672 HOME TBRA	1,805	1,805	-	-	-
GR2670 HOME CHDO	722	722	-	-	-
GR2699_3 HOME Program Admin	435	435	-	-	-
Carryforward Grant Appropriation from FY 2024-25	2,118,730	2,118,730	-	-	-
	2,127,550	2,127,550	-	-	-

City of Ontario
Detail of Recommended Budget Adjustments by Fund
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Description	Appropriation Adjustments	Revenue Adjustments	Operating Transfers-In	Operating Transfers-Out	Fund Balance Impact
Fund 2210 - Measure I					
Carryforward CIP Appropriations from FY 2024-25	5,674,598	-	-	-	(5,674,598.00)
ST2505 - Adjustment from Measure I to Road Maintenance and Rehabilitation Program	(200,000)	-	-	-	200,000.00
	5,474,598	-	-	-	(5,474,598.00)
Fund 2220 - Measure I Valley Major Project					
Carryforward CIP Appropriations from FY 2024-25	2,759,572	5,228,473	-	-	(2,759,572)
	2,759,572	5,228,473	-	-	(2,759,572.00)
Fund 2400 - General Fund Grants					-
GR2602 Cannabis Tax Fund Program FY 2025-26	309,692	309,692	-	-	-
GR_ST2612 Safe Streets and Roads for All (SS4A) FY23	360,000	360,000	-	-	-
GR2601 Emergency Mgmt Performance Grant (EMPG) FY24	21,626	21,626	-	-	-
Carryforward Grant Appropriation from FY 2024-25	17,282,752	17,282,752	-	-	-
	17,974,070	17,974,070	-	-	-
Fund 2510 - DOJ Asset Seizure					
New MDC for Patrol Units/Police Supplies	721,786	-	-	-	(721,786.00)
Trailer for Police Mounted Patrol Unit	57,941	-	-	-	(57,941.00)
	779,727	-	-	-	(779,727.00)
Fund 2513 - Fire Mutual Aid					
Carryforward Appropriations from FY 2024-25	175,761	-	-	-	(175,761.00)
	175,761	-	-	-	(175,761.00)
Fund 2520 - Cable Access Fund					
Carryforward CIP Appropriations from FY 2024-25	420,004	-	-	-	(420,004.00)
	420,004	-	-	-	(420,004.00)
Fund 2521 - Broadband / Fiber					
MS2605 - Broadband Fiber Network Expansion Sevice Area 05	800,000	-	-	-	(800,000.00)
Carryforward Grant Appropriation from FY 2024-25	35,773	35,773	-	-	-
	835,773	35,773	-	-	(800,000.00)
Fund 2530 - Gas Tax					
Additional appropriations for City's Pavement Management Program	50,000	-	-	-	(50,000.00)
	50,000	-	-	-	(50,000.00)

City of Ontario
Detail of Recommended Budget Adjustments by Fund
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Description	Appropriation Adjustments	Revenue Adjustments	Operating Transfers-In	Operating Transfers-Out	Fund Balance Impact
Fund 2531 - Road Maint & Rehab Acct (SB1)					
Carryforward CIP Appropriations from FY 2024-25	6,211,224	-	-	-	(6,211,224.00)
Budget Revision - MS_TCAT12 - Mission Blvd. Bike and Pedestrian Improvements	658,871	-	-	-	(658,871.00)
Budget Revision - MS_TCAH03 - Enhanced Pedestrian Crossings	(658,871)	-	-	-	658,871.00
ST2505 - Adjustment from Measure I to Road Maintenance and Rehabilitation Program	200,000	-	-	-	(200,000.00)
ST2612 & GR_ST2612 - Safe Streets and Roads for All Grant Match	90,000	-	-	-	(90,000.00)
Additional Appropriations for traffic signal system and traffic signal modifications	214,698	-	-	-	(214,698.00)
Budget Revision - TR2301 - Traffic Signal Improvement - Campus/Mission	10,547	-	-	-	(10,547.00)
Budget Revision - TR2303 - Traffic Signal Improvement - San Antonio/Francis	(10,547)	-	-	-	10,547.00
TR2601 - Quiet Zone Analysis reallocation to Internal Circulator Planning Study	(120,000)	-	-	-	120,000.00
TR2603 - Internal Circulator Planning Study appropriation, reallocation to Quiet Zone Analysis	120,000	-	-	-	(120,000.00)
	6,715,922	-	-	-	(6,715,922.00)
Fund 2570 - Economic Development Activities Fund					
Carryforward CIP Appropriations from FY 2024-25	413,471	-	-	-	(413,471.00)
MS2101 - Part 150 Property Management and Maintenance	245,000	-	-	-	(245,000.00)
MS2305 - N. Mountain & D Street - Property acquisition remaining balance	46,529	-	-	-	(46,529.00)
MS2608 - South Campus Avenue Property Acquisition	2,680,215	-	-	-	(2,680,215.00)
	3,385,215	-	-	-	(3,385,215.00)
Fund 2580 - Public Art Fee Fund					
Public Art Micro-Grants pilot program and Downtown Ontario Mural showcase	55,000	55,000	-	-	-
Carryforward CIP Appropriations from FY 2024-25	18,100	-	-	-	(18,100.00)
	73,100	55,000	-	-	(18,100.00)
Fund 2600 - Special Assessment Administration					
Community Facilities Districts administration agreement (CC Approved 4/15/2025)	300,000	-	-	-	(300,000.00)
Recommended Personnel Changes	(26,626)	-	-	-	26,626.00
	273,374	-	-	-	(273,374.00)
Fund 2650 - Park Impact/Quimby					
Carryforward CIP Appropriations from FY 2024-25	15,542,892	-	-	-	(15,542,892.00)
	15,542,892	-	-	-	(15,542,892.00)
SPECIAL REVENUE FUNDS TOTAL	**58,755,749**	**27,589,057**	**-**	**-**	**(36,395,165.00)**

City of Ontario
Detail of Recommended Budget Adjustments by Fund
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Description	Appropriation Adjustments	Revenue Adjustments	Operating Transfers-In	Operating Transfers-Out	Fund Balance Impact
CAPITAL PROJECT FUNDS					
Fund 4010 - Capital Projects					
Carryforward CIP Appropriations from FY 2024-25	89,071,101	11,108,978	-	-	(77,962,123.00)
Appropriate additional funding for the installation of Downtown Bollard Project	96,982	-	-	-	(96,982.00)
Additional appropriations for John Galvin Snack Bar Renovation Project construction costs	360,839	-	-	-	(360,839.00)
Downtown Euclid Ave. Corridor Project - Design for FY 2025-26	3,300,000	-	-	-	(3,300,000.00)
Appropriate fundst for Public Art at the Fire Station Admin Building	(18,100)	-	-	-	18,100.00
PF2418 - Granada Theater - Property Acquisition remaining balance	729,158	-	-	-	(729,158.00)
PF2604 - Ontario Promise Corps Program Space and Mobility Hub Construction Costs	2,000,000	-	-	-	(2,000,000.00)
PF2604 - Ontario Promise Corps Program Space and Mobility Hub Insurance Reimbursement	-	2,000,000	-	-	2,000,000.00
PF2605 - C-Block Parking Structure Guidance System	750,000	-	-	-	(750,000.00)
SM2601 - Campus Avenue Storm Drain Design	50,000	-	-	-	(50,000.00)
MS2604 - Motel Voucher Project - SGVCG	100,000	-	-	-	(100,000.00)
PA2602 John Galvin, James Galanis, and Veterans Memorial Park Underground Conduit and Lights Replacement	107,000	-	-	-	(107,000.00)
Transfer from Capital Projects Measure Q to General Fund	-	-	-	433,378	(433,378.00)
	96,546,980	13,108,978	-	433,378	(83,871,380.00)
Fund 4020 - Ground Access					
Carryforward CIP Appropriations from FY 2024-25	1,514,944	-	-	-	(1,514,944.00)
Carryforward Grant Appropriation from FY 2024-25	3,334,730	3,334,730	-	-	-
	4,849,674	3,334,730	-	-	(1,514,944.00)
Fund 4030 - Affordability In-Lieu					
Carryforward CIP Appropriations from FY 2024-25	9,808,295	-	-	-	(9,808,295.00)
PF2410 - Affordable Housing / Veteran Housing (Mission & Mountain) - Contribution to OHA	310,000	-	-	-	(310,000.00)
	10,118,295	-	-	-	(10,118,295.00)
Fund 4031 - Local Housing Trust Fund					
General Fund transfer to to establish the City's Local Housing Trust Fund	-	-	433,378	-	433,378.00
	-	-	433,378	-	433,378.00
Fund 4213 - Law Enforcement Impact					
Carryforward Appropriations from FY 2024-25	44,590	-	-	-	(44,590.00)
Carryforward CIP Appropriations from FY 2024-25	950,355	-	-	-	(950,355.00)
	994,945	-	-	-	(994,945.00)

City of Ontario
Detail of Recommended Budget Adjustments by Fund
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Description	Appropriation Adjustments	Revenue Adjustments	Operating Transfers-In	Operating Transfers-Out	Fund Balance Impact
Fund 4310 - Old Model Colony - Fire Impact					
Carryforward CIP Appropriations from FY 2024-25	304,132	-	-	-	(304,132.00)
	304,132	-	-	-	(304,132.00)
Fund 4311 - OMC - Local Adjacent Water					
Carryforward CIP Appropriations from FY 2024-25	10,500,549	-	-	-	(10,500,549.00)
	10,500,549	-	-	-	(10,500,549.00)
Fund 4312 - OMC - Local Adjacent Streets					
Carryforward CIP Appropriations from FY 2024-25	2,388,666	-	-	-	(2,388,666.00)
	2,388,666	-	-	-	(2,388,666.00)
Fund 4313 - OMC - Local Adjacent Storm Drain					
Carryforward Appropriations from FY 2024-25	77,442	-	-	-	(77,442.00)
	77,442	-	-	-	(77,442.00)
Fund 4314 - OMC - Local Adjacent Water					
DIF reimbursement for water main on Bon View Ave.(Cedar St. to S Francis St.).	859,305	-	-	-	(859,305.00)
Carryforward CIP Appropriations from FY 2024-25	944,518	-	-	-	(944,518.00)
	1,803,823	-	-	-	(1,803,823.00)
Fund 4317 - OMC - Regional Streets					
Carryforward CIP Appropriations from FY 2024-25	380,910	-	-	-	(380,910.00)
	380,910	-	-	-	(380,910.00)
Fund 4412 - Ontario Ranch - Local Adjacent Sewer					
Carryforward CIP Appropriations from FY 2024-25	165,048				(165,048.00)
	165,048	-	-	-	(165,048.00)
Fund 4415 - Ontario Ranch - Local Adjacent Storm Drain					
Carryforward CIP Appropriations from FY 2024-25	1,103,126	-	-	-	(1,103,126.00)
	1,103,126	-	-	-	(1,103,126.00)
Fund 4419 - Ontario Ranch - Regional Streets					
Carryforward CIP Appropriations from FY 2024-25	4,499,582				(4,499,582.00)
	4,499,582	-	-	-	(4,499,582.00)
Fund 4420 - Ontario Ranch - Regional Water					
Carryforward CIP Appropriations from FY 2024-25	796,134	-	-	-	(796,134.00)
	796,134	-	-	-	(796,134.00)
					-
CAPITAL PROJECT FUNDS TOTAL	**134,529,306**	**16,443,708**	**-**	**433,378**	**(118,518,976.00)**

City of Ontario
Detail of Recommended Budget Adjustments by Fund
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Description	Appropriation Adjustments	Revenue Adjustments	Operating Transfers-In	Operating Transfers-Out	Fund Balance Impact
ENTERPRISE FUNDS					
Fund 5011 - Water Capital					
Carryforward CIP Appropriations from FY 2024-25	4,491,497	2,902,921	-	-	(1,588,576.00)
Reimbursement Agreement for Bon View Industrial projects	298,813	-	-	-	(298,813.00)
Reimbursement Agreement for Citywide Water Main Improvements	876,164	-	-	-	(876,164.00)
Carryforward Grant Appropriation from FY 2024-25	8,874,053	8,874,053	-	-	-
	14,540,527	11,776,974	-	-	(2,763,553.00)
Fund 5111 - Sewer Capital					
Carryforward CIP Appropriations from FY 2024-25	2,907,924	10,665,597	-	-	7,757,673.00
	2,907,924	10,665,597	-	-	7,757,673.00
Fund 5210 - Integrated Waste					**13,769,438.00**
Recommended Personnel Changes	(126,730)	-	-	-	126,730.00
GR2527 Beverage Container Recycling Grant FY 24-25	45,379	45,379	-	-	-
Carryforward Grant Appropriation from FY 2024-25	3,756,150	3,756,150	-	-	-
	3,674,799	3,801,529	-	-	126,730.00
ENTERPRISE FUNDS TOTAL	**21,123,250**	**26,244,100**	**-**	**-**	**5,120,850.00**
INTERNAL SERVICE FUNDS					
Fund 6010 - Equipment Services					**9,886,966.00**
Leased Vehicle Costs for Fleet Vehicles	350,415	-	-	-	(350,415.00)
Recommended Personnel Changes	158,450	-	-	-	(97,108.00)
	508,865	-	-	-	(508,865.00)
Fund 6020 - Information Technology					**300,682.00**
Transfer to IT Capital Projects Fund for FY 2024-25 Carryforward of CIP Appropriations	-	-	-	3,485,339	(3,485,339.00)
	-	-	-	3,485,339	(3,485,339.00)

City of Ontario
Detail of Recommended Budget Adjustments by Fund
Fiscal Year 2025-26
First Quarter Budget Update

Description	Appropriation Adjustments	Revenue Adjustments	Operating Transfers-In	Operating Transfers-Out	Fund Balance Impact
Fund 6021 - Information Technology Capital Projects					
Transfer to IT Capital Projects Fund for FY 2024-25 Carryforward of CIP Appropriations		-	3,485,339		3,485,339.00
Carryforward CIP Appropriations from FY 2024-25	3,485,339	-	-	-	(3,485,339.00)
	3,485,339	-	3,485,339	-	-
Fund 6030 - Facilities & Parks Maintenance					**1,714,319.00**
SCE Reimbursement for PD Battery Energy Storage System	-	91,120	-	-	91,120.00
Carryforward CIP Appropriations from FY 2024-25	605,171	-	-	-	(605,171.00)
Carryforward Grant Appropriations from FY 2024-25	218,330	218,330	-	-	218,330.00
Transfer from General Fund to Facilities Maintenance Fund to shore up its fund balance	-	-	3,000,000	-	3,000,000.00
	823,501	309,450	3,000,000	-	2,704,279.00
Fund 6111 - General Liability					**307,617.00**
Carryforward CIP Appropriations from FY 2024-25	195,516	1,024,122	-	-	828,606.00
	195,516	1,024,122	-	-	828,606.00
					-
INTERNAL SERVICE FUNDS TOTAL	**5,013,221**	**1,333,572**	**3,000,000**	**3,485,339**	**(461,319.00)**
TOTAL CITY FUNDS BUDGET ADJUSTMENTS	**219,794,790**	**73,278,459**	**3,433,378**	**7,352,095**	**(151,959,852.00)**
Fund 2310 - Ontario Housing Authority					**7,086,851.00**
Carryforward CIP Appropriations from FY 2024-25	6,697,558	9,808,295	-	-	3,110,737.00
PF2410 - Affordable Housing / Veteran Housing (Mission & Mountain) - Relocation Expense	310,000	310,000	-	-	-
	7,007,558	10,118,295	-	-	3,110,737.00
					-
AGENCY FUNDS TOTAL	**7,007,558**	**10,118,295**	**-**	**-**	**3,110,737.00**
					-
TOTAL ALL FUNDS BUDGET ADJUSTMENTS	**226,802,348**	**83,396,754**	**3,433,378**	**7,352,095**	**(148,849,115.00)**

CITY OF ONTARIO *Agenda Report* **November 4, 2025**	**SECTION:** **CONSENT CALENDAR**
Department: Public Works Prepared By: Jay Bautista Department: Public Works Prepared By: Jay Bautista Staff Member Presenting: Tito Haes, Executive Director Public Works Reviewed By: Khoi Do, Bonnie Tam, Andrea Ampig Approved By:	Submitted To: Council/OHA Approved: _____ Continued To: _____ Denied: _____ Item No: 4

SUBJECT: **A RESOLUTION AUTHORIZING A REQUEST TO THE STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION FOR CHANGES TO THE CALIFORNIA ROAD SYSTEM FUNCTIONAL CLASSIFICATION MAPS FOR THE CITY OF ONTARIO**

RECOMMENDATION: That the City Council adopt a Resolution approving a request to the State of California Department of Transportation for changes to the California Road System Functional Classification Maps.

THE FOLLOWING COUNCIL GOALS ARE BEING ACHIEVED:
Pursue City's Goals and Objectives by Working with Other Governmental Agencies

FISCAL IMPACT: There is no direct fiscal impact associated with this action.

BACKGROUND & ANALYSIS: On January 27, 2010, the City Council approved a comprehensive update to the City's General Plan, The Ontario Plan (TOP). On August 16, 2022, the City Council certified the TOP 2050 Update which included an update to the Policy Plan and associated Environmental Impact Report. As part of that process, the Mobility Element of the TOP 2050 was updated.

The Mobility Element includes a Functional Roadway Classification Plan that defines the City's backbone street network by roadway type. These classifications - Other Principal Arterial, Minor Arterial and Collector Street - are based on the traffic service provided and align with those used on the California Road System (CRS) maps. However, updates made in the TOP 2050 revised several roadway classifications from previous versions, resulting in inconsistencies between the TOP 2050 Functional Roadway Classification Plan and the existing CRS maps.

In addition, several roadway segments have been improved since the original TOP was adopted. These changes are not yet shown on the existing CRS maps but are included in this update to reflect the current conditions more accurately.

The proposed changes are identified in Exhibit A of the Resolution.

To ensure consistency between the City's updated roadway classifications, recent improvements, and the CRS maps, the City must submit a City Council Resolution and the Functional Classification Change Request Form to the Southern California Association of Governments (SCAG) for review. Upon approval, SCAG will issue a concurrence letter supporting the requested CRS map updates.

For final approval, Caltrans requires the submission of the Functional Classification Change Request Form, the City Resolution, and SCAG's concurrence letter.

This action is only intended to align the CRS maps with the roadway classifications adopted in TOP 2050 and reflect completed roadway improvements. Because an Environmental Impact Report (EIR) was already certified with the TOP 2050 update, no additional environmental review is needed.

RESOLUTION NO. _____

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF ONTARIO, CALIFORNIA, APPROVING A REQUEST TO THE STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION FOR CHANGES TO THE CALIFORNIA ROAD SYSTEM FUNCTIONAL CLASSIFICATION MAPS.

WHEREAS, the State of California Department of Transportation in cooperation with the U.S. Department of Transportation and the Federal Highway Administration maintain roadway functional classification maps also known as California Road System (CRS) Maps; and

WHEREAS, incorporated cities are responsible for initiating requests to the Department of Transportation for changes to the functional classification of streets and roads within their jurisdictions; and

WHEREAS, the City of Ontario desires to amend the CRS maps to reflect consistency with the latest city street functional classifications as shown in The Ontario Plan general plan document; and

WHEREAS, the functional classification changes shown in Exhibit A attached hereto have been reviewed by the City Council of the City of Ontario.

NOW, THEREFORE, BE IT RESOLVED that the City Council of the City of Ontario approves the functional classification changes and requests that the State of California Department of Transportation amend the California Road System maps.

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

PASSED, APPROVED, AND ADOPTED this 4th day of November, 2025.

_____
PAUL S. LEON, MAYOR

ATTEST:

_____
SHEILA MAUTZ, CITY CLERK

APPROVED AS TO FORM:

_____
BEST BEST & KRIEGER LLP
CITY ATTORNEY

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

I, SHEILA MAUTZ, City Clerk of the City of Ontario, DO HEREBY CERTIFY that foregoing Resolution No. 2025- was duly passed and adopted by the City Council of the City of Ontario at their regular meeting held November 4, 2025 by the following roll call vote, to wit:

AYES: COUNCIL MEMBERS:

NOES: COUNCIL MEMBERS:

ABSENT: COUNCIL MEMBERS:

_____
SHEILA MAUTZ, CITY CLERK

(SEAL)

The foregoing is the original of Resolution No. 2025- duly passed and adopted by the Ontario City Council at their regular meeting held November 4, 2025.

_____
SHEILA MAUTZ, CITY CLERK

(SEAL)

EXHIBIT A

EXHIBIT A

Functional Classification Change Request Form

Functional Classification Codes	
Interstate	1
Other Freeways or Expressways	2
Other Principal Arterial	3
Minor Arterial	4
Major Collector	5
Minor Collector	6
Local	7

Submitted by: NATHAN KUAN, ASSISTANT ENGINEER, CITY OF ONTARIO

Date: 10-28-25

Please refer to page two for specific data entry for each column.

CRS Map Number	Coordinate	CT District	County	Jurisdiction	Change/ New/ Delete	Road	From	To	(From) Class	(To) New Class	Length (mi)	Number of Through Lanes	AADT
14V25/ 14V35	A8-A10/ A1-A2	8	SB	Ontario	Change	Archibald Avenue	Riverside Drive	South City Limits	5	3	2.88	4	34,547
14V24/ 14V25	F9-J9/ A9	8	SB	Ontario	Change	Chino Avenue	Euclid Avenue	Archibald Avenue	4	5	3.3	1	7,500
14V25	A9	8	SB	Ontario	Change	Chino Avenue	Archibald Avenue	Clover Place	7	5	0.65	2	3,901
14V25	B9-C9	8	SB	Ontario	New	Chino Avenue	Clover Place	Haven Avenue	New	5	0.35	2/1	4,052
14V35	B2-C2	8	SB	Ontario	Change	Eucalyptus Avenue	Archibald Avenue	Haven Avenue	7	5	1	2	5,322
14V35	D2	8	SB	Ontario	Change	Eucalyptus Avenue	Mill Creek Avenue	Hamner Avenue	7	5	0.6	2	1,514
14V25/ 14V35	E8-E10/ E1-E2	8	SB	Ontario	Change	Hamner Avenue	Riverside Drive	Bellegrave Avenue	4	3	2	2/3	23,664
14V25/ 14V35	C8-C10/ C1-C3	8	SB	Ontario	Change	Haven Avenue	Riverside Drive	Merrill Avenue	7	3	2.5	2	13,038
14V34	J2	8	SB	Ontario	New	Hellman Avenue	Eucalyptus Avenue	Merrill Avenue	New	5	0.5	2	1,419
14V34/ 14V35	F2-J2/ A3	8	SB	Ontario	Change	Merrill Avenue	Euclid Avenue	Archibald Avenue	6	5	3.25	2	11,284
14V35	B3-C3	8	SB	Ontario	Change	Merrill Avenue	Archibald Avenue	Haven Avenue	7	5	1	2	9,807
14V35	D1	8	SB	Ontario	New	Mill Creek Avenue	Ontario Ranch Road	Edison Avenue	New	5	0.25	1/2	4,466
14V35	D1-D2	8	SB	Ontario	Change	Mill Creek Avenue	Edison Avenue	Bellegrave Avenue	7	5	0.5	1/2	4,058
14V25/ 14V35	A1-C1/ C10-E10	8	SB	Ontario	Change	Ontario Ranch Road	Archibald Avenue	Hamner Avenue	4	3	1	2/4	25,306
14V25	A10-C10	8	SB	Ontario	Change	Schaefer Avenue	Archibald Avenue	Haven Avenue	7	5	1	2	1,929
14V34	F2	8	SB	Ontario	New	Sultana Avenue	Eucalyptus Avenue	Merrill Avenue	New	7	0.5	1	4,890
14V25	B8-B10	8	SB	Ontario	Change	Turner Avenue	Riverside Drive	Schaefer Avenue	7	5	1	2	9,203

HAVEN AVE FROM RIVERSIDE DR TO MERRILL AVE
EXISTING CLASSIFICATION: LOCAL
PROPOSED CLASSIFICATION: OTHER PRINCIPAL ARTERIAL

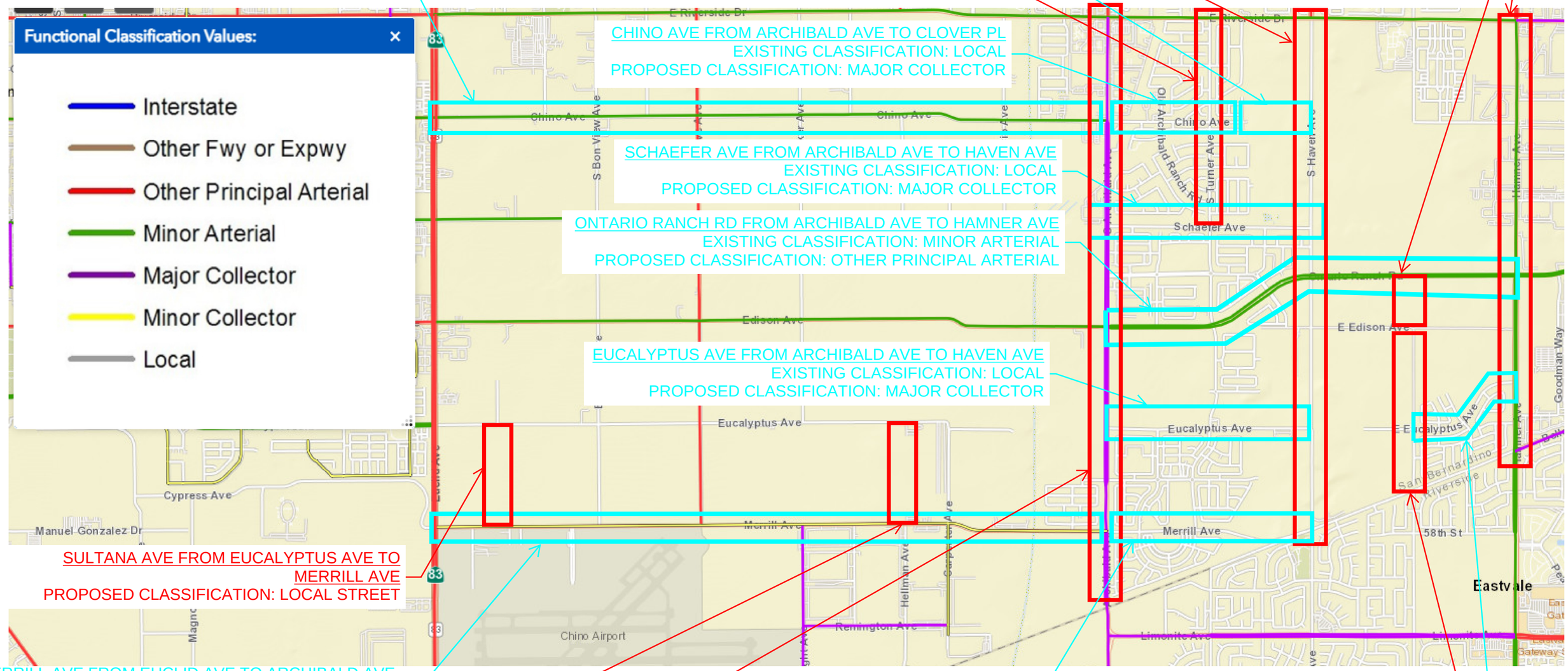
HAMNER AVE FROM RIVERSIDE DR TO BELLEGRAVE AVE
EXISTING CLASSIFICATION: MINOR ARTERIAL
PROPOSED CLASSIFICATION: OTHER PRINCIPAL ARTERIAL

CHINO AVE FROM CLOVER PL TO HAVEN AVE
PROPOSED CLASSIFICATION: MAJOR COLLECTOR

MILL CREEK AVE FROM ONTARIO RANCH RD TO EDISON AVE
PROPOSED CLASSIFICATION: MAJOR COLLECTOR

CHINO AVE FROM EUCLID AVE TO ARCHIBALD AVE
EXISTING CLASSIFICATION: MINOR ARTERIAL
PROPOSED CLASSIFICATION: MAJOR COLLECTOR

TURNER AVE FROM RIVERSIDE DR TO SCHAEFER AVE
EXISTING CLASSIFICATION: LOCAL
PROPOSED CLASSIFICATION: MAJOR COLLECTOR



CHINO AVE FROM ARCHIBALD AVE TO CLOVER PL
EXISTING CLASSIFICATION: LOCAL
PROPOSED CLASSIFICATION: MAJOR COLLECTOR

SCHAEFER AVE FROM ARCHIBALD AVE TO HAVEN AVE
EXISTING CLASSIFICATION: LOCAL
PROPOSED CLASSIFICATION: MAJOR COLLECTOR

ONTARIO RANCH RD FROM ARCHIBALD AVE TO HAMNER AVE
EXISTING CLASSIFICATION: MINOR ARTERIAL
PROPOSED CLASSIFICATION: OTHER PRINCIPAL ARTERIAL

EUCALYPTUS AVE FROM ARCHIBALD AVE TO HAVEN AVE
EXISTING CLASSIFICATION: LOCAL
PROPOSED CLASSIFICATION: MAJOR COLLECTOR

SULTANA AVE FROM EUCALYPTUS AVE TO MERRILL AVE
PROPOSED CLASSIFICATION: LOCAL STREET

MERRILL AVE FROM EUCLID AVE TO ARCHIBALD AVE
EXISTING CLASSIFICATION: MINOR COLLECTOR
PROPOSED CLASSIFICATION: MAJOR COLLECTOR

HELLMAN AVE FROM EUCALYPTUS AVE TO MERRILL AVE
PROPOSED CLASSIFICATION: MAJOR COLLECTOR

ARCHIBALD AVE FROM RIVERSIDE DR TO SOUTH CITY LIMITS
EXISTING CLASSIFICATION: MAJOR COLLECTOR
PROPOSED CLASSIFICATION: OTHER PRINCIPAL ARTERIAL

MERRILL AVE FROM ARCHIBALD AVE TO HAVEN AVE
EXISTING CLASSIFICATION: LOCAL
PROPOSED CLASSIFICATION: MAJOR COLLECTOR

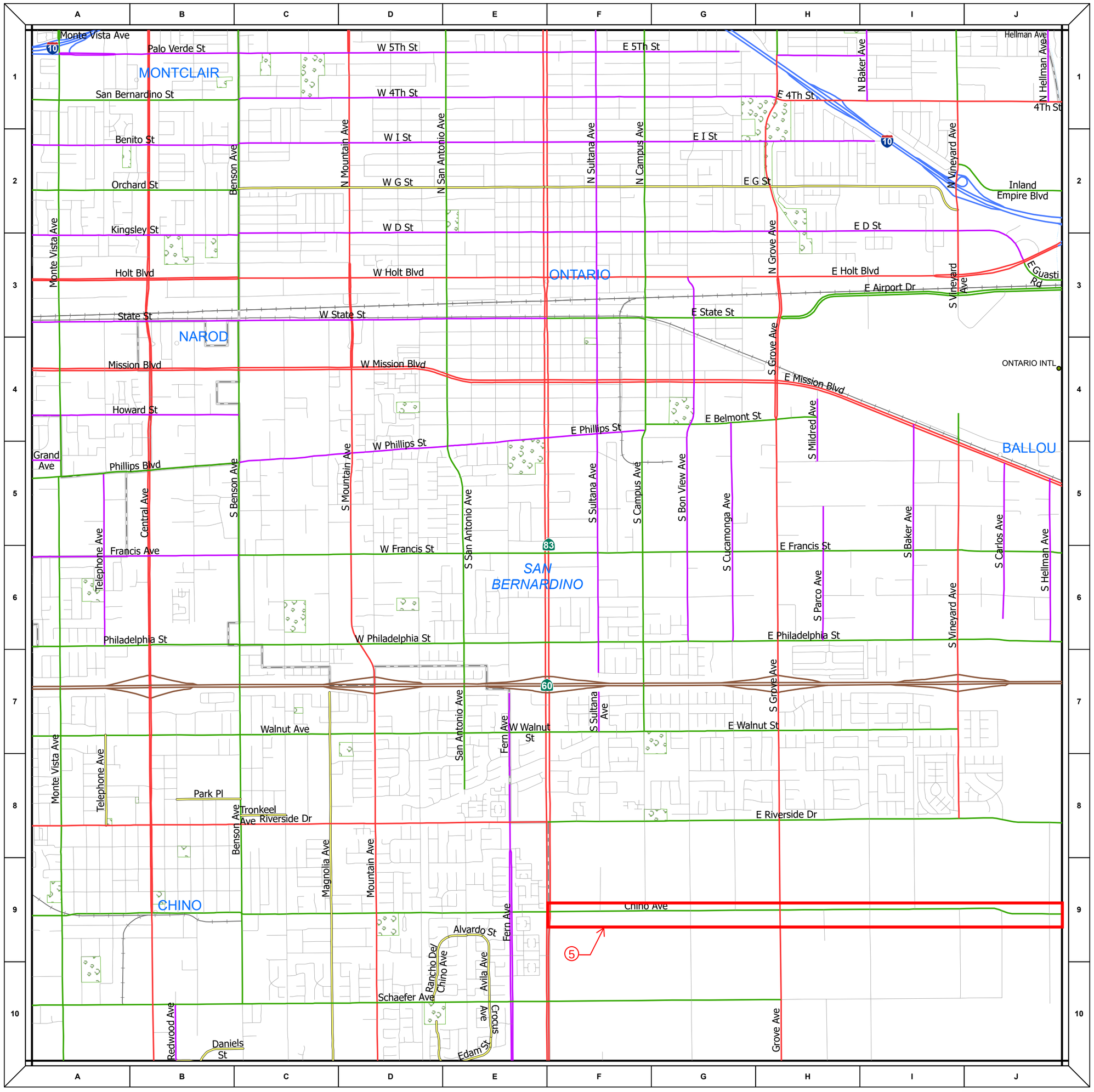
MILL CREEK AVE FROM EDISON AVE TO BELLEGRAVE AVE
EXISTING CLASSIFICATION: LOCAL
PROPOSED CLASSIFICATION: MAJOR COLLECTOR

EUCALYPTUS AVE FROM MILL CREEK AVE TO HAMNER AVE
EXISTING CLASSIFICATION: LOCAL
PROPOSED CLASSIFICATION: MAJOR COLLECTOR

SEE MAP 14V14

SEE MAP 14V23

SEE MAP 14V25



SEE MAP 14V34

APPROVED Date: 02/07/2023
FEDERAL HIGHWAY ADMINISTRATION

FOR: VINCENT P. MAMMANO
DIVISION ADMINISTRATOR

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION
In Cooperation With The
FEDERAL HIGHWAY ADMINISTRATION
AND LOCAL AGENCIES

0 0.25 0.5 0.75 1 Mile

N

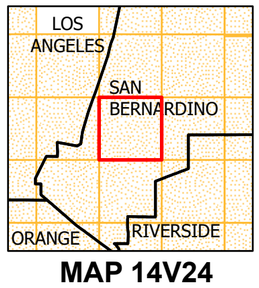
Caltrans

COUNTY BOUNDARY
CITY BOUNDARY
RAILROAD

SIGN ROUTES
INTERSTATE
U.S.
STATE

FUNCTIONAL CLASSIFICATION SYSTEM

INTERSTATE	1
OTHER FWY OR EXPWY	2
OTHER PRINCIPAL ARTERIAL	3
MINOR ARTERIAL	4
MAJOR COLLECTOR	5
MINOR COLLECTOR	6
LOCAL	7



San Bernardino County

MAP 14V24
CALIFORNIA ROAD SYSTEM

SEE MAP 14V15

SEE MAP 14V24

SEE MAP 15V21

SEE MAP 14V35

Archibald Ave
Hermosa Ave
Haven Ave
Cleveland Ave
Milliken Ave
Charles Smith Ave
Etiwanda Ave
4Th St
San Bernardino Ave
N Center Ave
N Archibald Ave
Inland Empire Blvd
N Haven Ave
Inland Empire Blvd
Ontario Mills Pkwy
N Etiwanda Ave
Valley Blvd
N Milliken Ave
10
GUASTI
E Guasti Rd
E Airport Dr
Slover Ave
S Commerce Pkwy
Doubleday Ave
S Dupont Ave
Santa Ana St
S Milliken Ave
S Rockefeller Ave
S Wanamaker Ave
Kettering Dr
Auto Center Dr
S Wineville Ave
Santa Ana St
Jasmine St
Santa Ana Ave
S Vintage Ave
SAN BERNARDINO
E Jurupa St
S Etiwanda Ave
Jurupa Ave
E Francis St
E Mission Blvd
E Francis St
S Haven Ave
15
Marlay Ave
Mulberry Ave
S Business Pkwy
E Cedar St
S Excise Ave
Rochester Ave
S Wineville Ave
Cherry Ave
CHAMPAGNE
E Philadelphia St
Philadelphia Ave
Mission Blvd
Country Village Rd
Milliken Ave
60
Archibald Ave
E Riverside Dr
Riverside Dr
RIVERSIDE
Etiwanda Ave
San Sevaine Way
Mission Blvd
Wineville Ave
Van Buren Blvd
Turner Ave
Haven Ave
Chino Ave
Hamner Ave
S Archibald Ave
Schaefer Ave
Cantu Galleano Ranch
Galena St
Bellegrave Ave
Marlatt St
Bain St
Ontario Ranch Rd

APPROVED Date: 02/07/2023
FEDERAL HIGHWAY ADMINISTRATION

FOR: VINCENT P. MAMMANO
DIVISION ADMINISTRATOR

0 0.25 0.5 0.75 1 Mile

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION
In Cooperation With The
FEDERAL HIGHWAY ADMINISTRATION
AND LOCAL AGENCIES

N

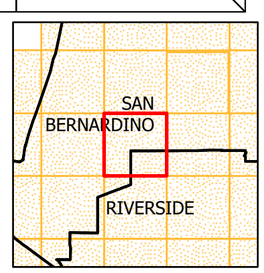
Caltrans

COUNTY BOUNDARY
CITY BOUNDARY
RAILROAD

SIGN ROUTES
5 INTERSTATE
3 U.S.
1 STATE

FUNCTIONAL CLASSIFICATION SYSTEM

INTERSTATE	1
OTHER FWY OR EXPWY	2
OTHER PRINCIPAL ARTERIAL	3
MINOR ARTERIAL	4
MAJOR COLLECTOR	5
MINOR COLLECTOR	6
LOCAL	7



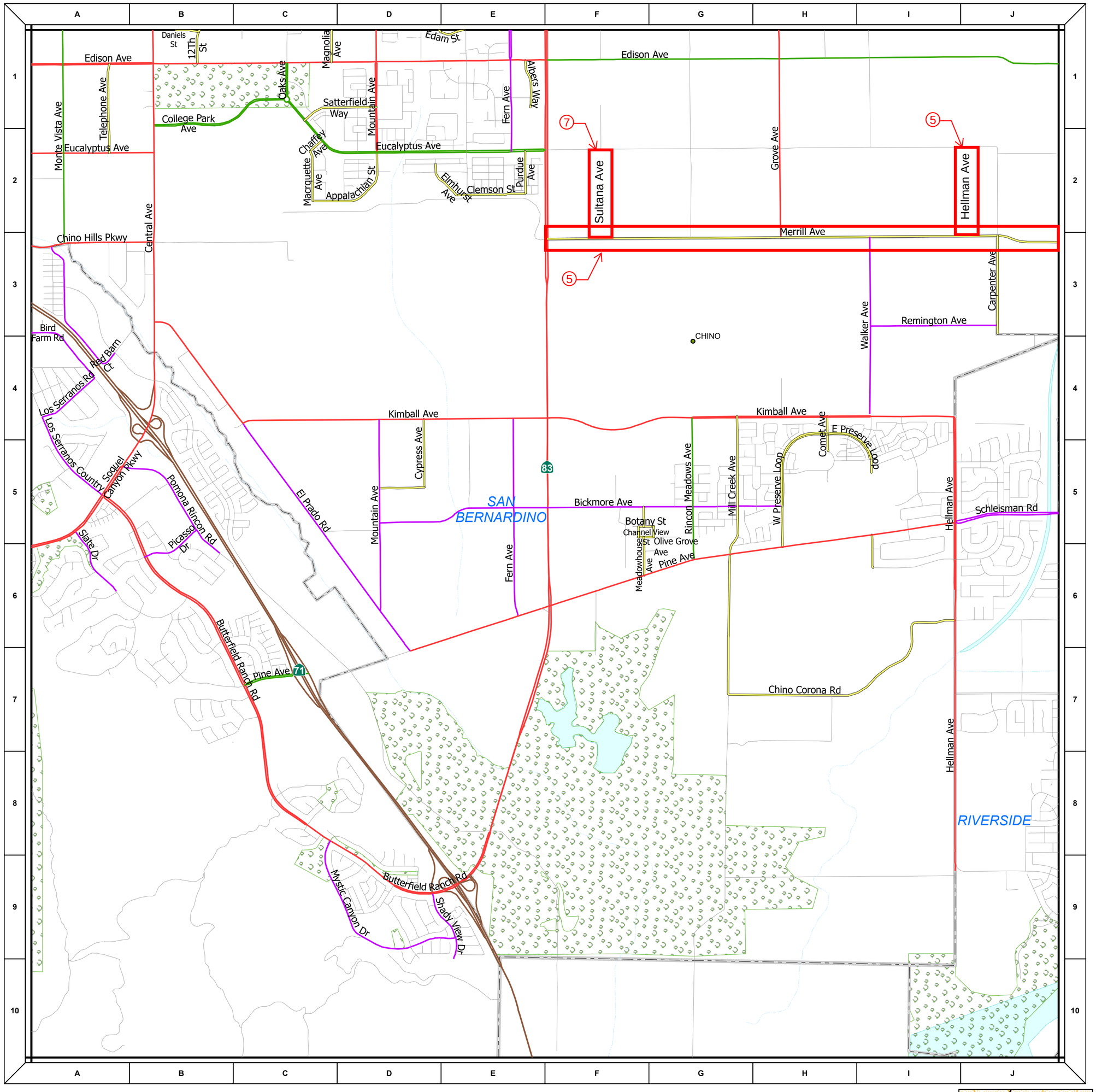
MAP 14V25
CALIFORNIA ROAD SYSTEM

San Bernardino - Riverside County

SEE MAP 14V24

SEE MAP 14V33

SEE MAP 14V35



SEE MAP 14V44

APPROVED Date: 02/07/2023
FEDERAL HIGHWAY ADMINISTRATION

FOR: VINCENT P. MAMMANO
DIVISION ADMINISTRATOR

0 0.25 0.5 0.75 1 Mile

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION
In Cooperation With The
FEDERAL HIGHWAY ADMINISTRATION
AND LOCAL AGENCIES

N

Caltrans

COUNTY BOUNDARY
CITY BOUNDARY
RAILROAD

SIGN ROUTES
INTERSTATE
U.S.
STATE

FUNCTIONAL CLASSIFICATION SYSTEM

INTERSTATE	1
OTHER FWY OR EXPWY	2
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MINOR ARTERIAL	4
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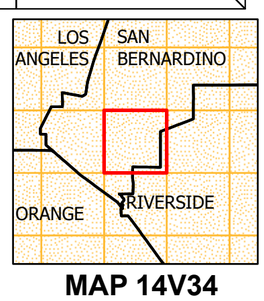
MINOR COLLECTOR	6
LOCAL	7



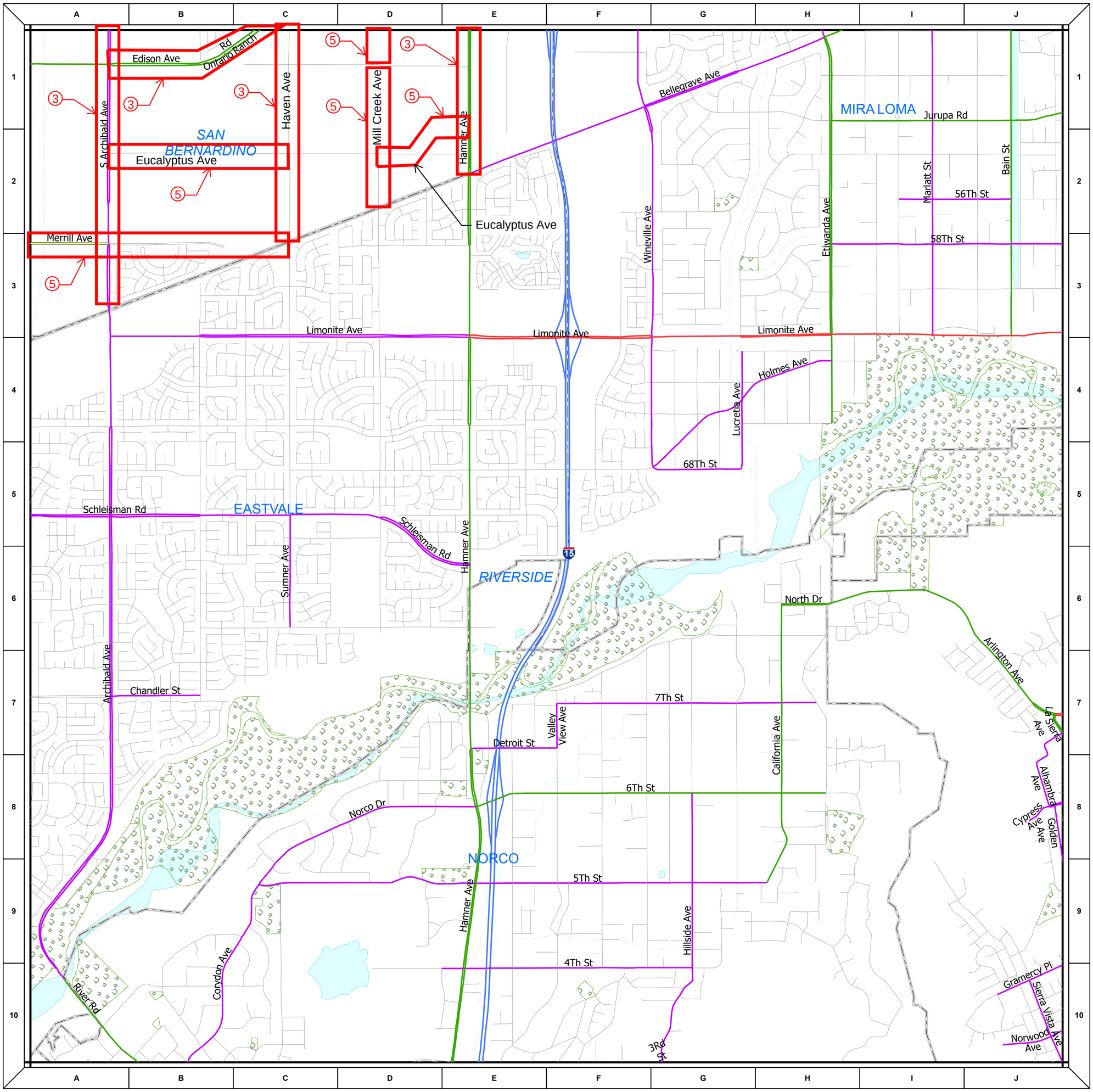
MAP 14V34
CALIFORNIA ROAD SYSTEM

San Bernardino - Riverside County

SEE MAP 14V25

SEE MAP 14V34

SEE MAP 15V31



SEE MAP 14V45

APPROVED Date: 02/07/2023
FEDERAL HIGHWAY ADMINISTRATION

FOR: VINCENT P. MAMMANO
DIVISION ADMINISTRATOR

0 0.25 0.5 0.75 1 Mile

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION
In Cooperation With The
FEDERAL HIGHWAY ADMINISTRATION
AND LOCAL AGENCIES

N

Caltrans

COUNTY BOUNDARY
CITY BOUNDARY
RAILROAD

SIGN ROUTES
INTERSTATE
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STATE

FUNCTIONAL CLASSIFICATION SYSTEM

INTERSTATE	1
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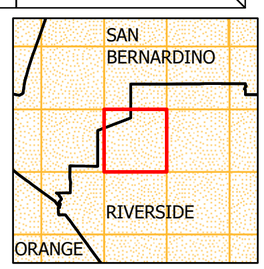

MAP 14V35
CALIFORNIA ROAD SYSTEM

San Bernardino - Riverside County

CITY OF ONTARIO *Agenda Report* **November 4, 2025**	**SECTION:** **CONSENT CALENDAR**
Department: Public Works Prepared By: Jay Bautista Department: Public Works Prepared By: Jay Bautista Staff Member Presenting: Tito Haes, Executive Director Public Works Reviewed By: Khoi Do, Bonnie Tam, Andrea Ampig Approved By:	Submitted To: Council/OHA Approved: _____ Continued To: _____ Denied: _____ Item No: 5

SUBJECT: FUNDING AGREEMENT WITH THE SAN BERNARDINO COUNTY TRANSPORTATION AUTHORITY FOR THE EUCLID AVENUE SMART CORRIDOR PROJECT

RECOMMENDATION: That the City Council approve a Funding Agreement between the City of Ontario and the San Bernardino County Transportation Authority (SBCTA) for the Euclid Avenue Smart Corridor Project and authorize the City Manager, or his designee, to execute said Agreement and future amendments or related documents within the City Council approved budget.

THE FOLLOWING COUNCIL GOALS ARE BEING ACHIEVED:
Pursue City's Goals and Objectives by Working with Other Governmental Agencies
Invest in the City's Infrastructure (Water, Streets, Sewers, Parks, Storm Drains and Public Facilities)

FISCAL IMPACT: The Funding Agreement with SBCTA will utilize Measure I Valley Traffic Management System Funds on a reimbursement basis. SBCTA's share will be 80% of the actual expenses, on a reimbursement basis, with a not-to-exceed amount of $943,000. The City's share is 20% of the actual expenses, estimated to be $236,000 from Road Maintenance and Rehabilitation Account (RMRA-SB1) funds. The funding split is in accordance with SBCTA's Smart Corridor Request for Proposal. The total estimated project cost is $1,179,900. If approved, appropriations will be included in a future quarterly budget update to City Council for approval as needed.

BACKGROUND & ANALYSIS: SBCTA completed a Smart County Master Plan in December 2024, which set aside $5,000,000 in Measure I Valley Traffic Management System funds for investment in traffic signal coordination upgrades through a competitive grant process.

The City submitted a proposal for Euclid Avenue and was awarded $943,000 of matching funds from SBCTA. The City's share is estimated to be $236,000. The project includes replacing outdated traffic signal controllers and vehicle detection systems with modern equipment compatible with the City's existing infrastructure. The upgrades will enable smart technologies such as

communications, transit priority, and real-time traffic signal timing, forming the foundation of a future smart corridor. As additional funding and grants become available, the City plans to implement further smart technologies including fiber optic cables, cameras, changeable message signs, and transit passenger information systems.

The main benefit for Euclid Avenue to be a smart corridor is improved safety. Real-time information on changeable message signs alerts drivers and provides more awareness. Safer roadway conditions occur with improved monitoring and maintenance through fiber optic communications infrastructure and cameras. Moving all modes of transportation efficiently increases ridership in transit, bicycle, and pedestrian facilities and lessens frustration, which ultimately improves safety. Other benefits include enhanced traffic flow and reduced congestion, increased real-time information, awareness, time savings, reliable commutes, predictable travel times, reduced fuel consumption, and lower emissions.

SBCTA AGREEMENT NO 26-1003386

FUNDING AGREEMENT

BETWEEN THE

SAN BERNARDINO COUNTY TRANSPORTATION AUTHORITY

AND CITY OF ONTARIO

FOR THE

EUCLID AVENUE SMART CORRIDOR

I. PARTIES AND TERM

A. This Funding Agreement ("AGREEMENT") is entered into by and between the San Bernardino County Transportation Authority ("SBCTA") and City of Ontario ("CITY") (each individually a "PARTY" and collectively, the "PARTIES") on the Effective Date (as defined herein). The PARTIES hereby mutually agree to all of the following terms and provisions of this AGREEMENT, including the Recitals in Section II.

B. This AGREEMENT shall be effective as of the last date of execution by SBCTA and CITY ("Effective Date") and shall terminate two years from "Effective Date", but may be extended for an additional year at the sole discretion of SBCTA or terminated earlier in accordance with the provisions of this AGREEMENT.

C. SBCTA may terminate this AGREEMENT if CITY fails to perform according to the terms of this AGREEMENT and if this jeopardizes the delivery of the PROJECT, as defined below, according to the terms herein.

II. RECITALS

A. WHEREAS, CITY desires to implement smart corridor improvements on Euclid Avenue (PROJECT).

B. WHEREAS, SBCTA has an interest in facilitating the upgrade of communications and controller technology to improve traffic flow and establish a foundation for implementation of transit signal priority (TSP) in the San Bernardino Valley.

C. WHEREAS, the CITY's scope of work attached hereto as Attachment "A" (Scope of Work) includes the smart corridor improvements, or PROJECT, to be undertaken in this AGREEMENT, and is currently estimated to cost a total of $1,179,900.

D. WHEREAS, SBCTA shall pay 79.922% of qualifying PROJECT expenditures, up to a maximum total amount of $943,000, to the CITY for performing the PROJECT in accordance with the Scope of Work included in ATTACHMENT A, on a cost reimbursement basis (SBCTA AWARD AMOUNT). The current estimated PROJECT cost, and each PARTY's estimated funding obligation, is shown in the FUNDING TABLE in ATTACHMENT B.

E. WHEREAS, the CITY is obligated to fund the difference between the actual PROJECT cost and the actual SBCTA AWARD AMOUNT.

F. WHEREAS, CITY is qualified to manage the project delivery of the PROJECT.

G. WHEREAS, SBCTA desires that CITY deliver the Scope of Work identified under this AGREEMENT, and CITY agrees to perform these services as set forth below.

III. RESPONSIBILITIES

A. CITY Responsibilities:

i. CITY shall be the lead agency for the PROJECT's Scope of Work and agrees to diligently undertake and complete the Scope of Work in a timely manner.

ii. CITY shall procure all consulting services, traffic control equipment and construction support necessary and required to deliver the PROJECT as generally described and as set forth in Attachment A to this AGREEMENT.

iii. CITY shall provide funding for the PROJECT in accordance with Section V. Fiscal Provisions.

iv. CITY shall submit an electronic copy of signed invoices for reimbursement of eligible PROJECT expenses as frequently as monthly but not less frequently than quarterly in accordance with Section V. Fiscal Provisions. The invoice shall include appropriate backup documentation to support and justify payment of invoices. No CITY staff time shall be charged to SBCTA under this AGREEMENT.

v. On a quarterly basis, the CITY shall submit to SBCTA progress reports and documentation of work performed on the PROJECT under this AGREEMENT, due not later than 30 days following the end of each calendar quarter.

vi. Upon completion of PROJECT, City shall provide a project completion memorandum with the final invoice that describes PROJECT benefits in accordance with Section V. Fiscal Provisions.

vii. CITY shall post signs, if feasible, at the boundaries of the PROJECT noting that PROJECT is funded with Measure I funds. Signs shall bear the logos of SBCTA and CITY.

viii. CITY shall protect from unauthorized use or disclosure of names and other Personally Identifiable Information (PII) concerning persons receiving services pursuant to this AGREEMENT, except for anonymous statistical information that

does not identify participants. PII is defined as any information that identifies or describes a person, including, but not limited to: name; social security number; date of birth; driver license number; home address; telephone number; billing address; e-mail address; credit card number and expiration date; bank account information; medical and health information, including digital copies of personal, or protected, health information (ePHI); health insurance; user name or email address, in combination with a password or security question and answer that would permit access to an online account; and other personally identifiable information as defined by California or federal law. CITY shall not use or disclose any PII for any purpose other than carrying out the obligations under this AGREEMENT, except as may be otherwise required by law. This provision will remain in the force even after the termination of the AGREEMENT.

B. SBCTA Responsibilities

i. SBCTA shall provide funding for the PROJECT in accordance with Section V. Fiscal Provisions.
ii. SBCTA shall provide payment of CITY invoice within 30 days after receiving an invoice determined to be complete and in accordance with the Scope of Work and general provisions provided under this AGREEMENT.
iii. SBCTA shall reimburse the CITY in an amount equal to the costs incurred and invoiced to SBCTA minus the CITY match percentage in accordance with Section V. Fiscal Provisions.
iv. SBCTA shall not reimburse CITY for any project cost overruns.

IV. MUTUAL RESPONSIBILITIES

A. SBCTA and CITY will establish mutually satisfactory methods for dispute resolution at the lowest possible level, with a procedure to mobilize dispute resolution up through the PARTIES' respective chains of command.

B. SBCTA and CITY will cooperate and coordinate with project delivery team and other parties in providing the services and responsibilities required under this AGREEMENT to the extent practicable with respect to the performance hereunder.

C. SBCTA and CITY will abide by all applicable federal, state, and local laws and regulations pertaining to the PROJECT's Scope of Work and this AGREEMENT.

V. FISCAL PROVISIONS

A. CITY shall fund the difference between the actual PROJECT cost and the actual SBCTA AWARD AMOUNT, as provided for in this AGREEMENT. SBCTA shall reimburse the CITY 79.922% of allowable PROJECT expenditures incurred by CITY, as the actual SBCTA AWARD AMOUNT. In no event shall SBCTA reimbursements, or the actual SBCTA AWARD AMOUNT, under this AGREEMENT, exceed

$943,000. If the actual PROJECT cost exceeds the current estimate of $1,179,900, then CITY shall pay the match of $236,900 plus 100% of the total PROJECT cost in excess of $1,179,900. Eligible reimbursements shall include only those costs incurred by CITY for PROJECT-specific work activities that are described in this AGREEMENT and shall not include escalation or interest.

B. CITY shall not more frequently than monthly and not less frequently than quarterly prepare and submit an electronic copy of signed invoices to SBCTA in a form satisfactory to SBCTA for reimbursement of eligible PROJECT expenses. SBCTA shall pay the invoice to the CITY within 30 days of receipt of CITY's invoice that is determined to be complete. At the conclusion of the PROJECT, CITY shall provide a project completion memorandum with the final invoice not later than 60 days following completion of the project summarizing total expenditures incurred and project benefits. The SBCTA ClearGuide system is available for quantifying traffic speed and delay benefits.

C. CITY shall include in its project completion memorandum to SBCTA a final summary of all funds expended on the PROJECT and provide documentation of all CITY funds used for the local match on the PROJECT. Should it be determined that the CITY spent less on its local match than identified in this AGREEMENT, the CITY shall reimburse SBCTA in an amount that brings the total PROJECT expenditures into compliance with the local match percentage established in the Recitals above.

D. CITY shall maintain all source documents, books and records connected with its performance under this AGREEMENT for a minimum of five (5) years from the date of the project completion memorandum submittal to SBCTA or until audit resolution is achieved, whichever is later, and to make all such supporting information available for inspection and audit by representatives of SBCTA during normal business hours at CITY Hall. Copies will be made and furnished by CITY upon written request by SBCTA.

E. CITY shall establish and maintain an accounting system conforming to Generally Accepted Accounting Principles to support CITY's requests for reimbursement, payment vouchers, or invoices which segregate and accumulate costs of PROJECT's Scope of WORK elements and produce monthly reports which clearly identify reimbursable costs, matching fund costs, indirect cost allocation, and other allowable expenditures by CITY.

VI. GENERAL PROVISIONS

A. No waiver of any of the provisions of the AGREEMENT shall be effective unless it is made in a writing which specifies the provision(s) so waived and which is executed by both PARTIES. No course of dealing and no delay or failure of a PARTY in exercising any right under any AGREEMENT shall affect any other or future exercise of that right or any exercise of any other right. A PARTY shall not be precluded from exercising a right by its having partially exercised that right or its having previously abandoned or

discontinued steps to enforce that right.

B. This AGREEMENT will be considered terminated upon reimbursement of all eligible costs by SBCTA or CITY, whichever is sooner, provided that the provisions of Section V and Section VII shall survive termination of this AGREEMENT.

C. Any modifications of any terms or conditions of this AGREEMENT shall be valid only when reduced to writing, duly signed and approved by the authorized representatives of all PARTIES.

D. This AGREEMENT constitutes the sole and entire agreement among the PARTIES governing the matters set forth herein and supersedes any prior understandings, negotiations, agreements, arrangements and undertakings, written or oral, between the PARTIES respecting the subject matter herein. All previous proposals, offers, and other communications, written or oral, relative to this AGREEMENT, are superseded to the extent that they are not incorporated into this AGREEMENT. It is the intent of the PARTIES that this AGREEMENT is an integrated agreement and that no evidence may be introduced to vary in any manner its terms and conditions. No representation, warranty, covenant, inducement or obligation not included in this AGREEMENT shall be binding.

E. Without the prior written consent of the other PARTY, the AGREEMENT is not assignable by either PARTY, in whole or in part.

F. If any legal action is instituted to enforce any PARTY's rights hereunder, each PARTY shall bear its own costs and attorney fees, regardless of who is the prevailing PARTY. This paragraph shall not apply to those costs and attorney fees directly arising from a third-party legal action against a PARTY hereto and payable under any indemnification or insurance requirements.

G. This AGREEMENT shall be governed by and construed according to the laws of the State of California.

H. The PARTIES acknowledge and agree that this AGREEMENT was entered into and intended to be performed in Ontario, California. The PARTIES agree that the venue of any action or claim brought by any PARTY to this AGREEMENT will be the Superior Court of California, San Bernardino County. Each PARTY hereby waives any law or rule of the court, which would allow them to request or demand a change of venue. If any action or claim concerning this AGREEMENT is brought by any third party and filed in another venue, the PARTIES hereto agree to use their best efforts to obtain a change of venue to the Superior Court of California, San Bernardino County.

VII. MUTUAL INDEMNIFICATION

A. Neither SBCTA, nor any officer, employee, or agent thereof, is responsible for any

injury, damage or liability occurring or arising by reason of anything done or omitted to be done by CITY under or in connection with any work, authority or jurisdiction assigned or delegated to CITY under this AGREEMENT. It is understood and agreed that, pursuant to Government Code Section 895.4, CITY shall fully defend, indemnify and save harmless SBCTA, its officers, employees, and agents, from all claims, suits or actions of every name, kind and description brought for or on account of injury (as defined by Government Code Section 810.8) occurring by reason of anything done or omitted to be done by CITY under or in connection with any work, authority or jurisdiction assigned or delegated to CITY under this AGREEMENT. CITY's indemnification obligation applies to SBCTA's "active" as well as "passive" negligence but does not apply to SBCTA's "sole negligence" or "willful misconduct" within the meaning of Civil Code Section 2782.

B. Neither CITY, nor any officer, employee, or agent thereof, is responsible for any injury, damage or liability occurring or arising by reason of anything done or omitted to be done by SBCTA under or in connection with any work, authority or jurisdiction assigned or delegated to SBCTA under this AGREEMENT. It is understood and agreed that, pursuant to Government Code Section 895.4, SBCTA shall fully defend, indemnify and save harmless CITY, its officers, employees, and agents, from all claims, suits or actions of every name, kind and description brought for or on account of injury (as defined by Government Code Section 810.8) occurring by reason of anything done or omitted to be done by SBCTA under or in connection with any work, authority or jurisdiction assigned or delegated to SBCTA under this AGREEMENT. SBCTA's indemnification obligation applies to CITY's "active" as well as "passive" negligence but does not apply to CITY's "sole negligence" or "willful misconduct" within the meaning of Civil Code Section 2782.

C. In the event the CITY and/or SBCTA is found to be comparatively at fault for any claim, action, loss or damage which results from their respective obligations under the AGREEMENT, the CITY and/or SBCTA shall indemnify the other to the extent of its comparative fault.

VIII. INSURANCE

A. CITY is a self-insured public entity for purposes of Professional Liability, General Liability, Automobile Liability and Workers' Compensation and warrants that through its program of self-insurance, it has adequate coverage or resources to protect against liabilities arising out of the performance of the terms, conditions or obligations of this AGREEMENT. CITY shall include in all contracts between CITY and contractors performing construction-related work in accordance with the Scope of Work that SBCTA be named as an additional insured under general liability insurance policies maintained by the contractor of the PROJECT.

B. SBCTA is insured for Commercial General Liability, Professional Liability, Auto Liability and Workers Compensation in amounts believed to be adequate to protect

against liabilities arising out of the performance of the terms, conditions or obligations of this AGREEMENT.

IX. CONCLUSION

A. This AGREEMENT, consisting of eleven (11) pages, including Attachment A, is the full and complete document including all covenants, conditions, and benefits.

B. The signatures of the PARTIES affixed to this AGREEMENT affirm that they are duly authorized to commit and bind them to the terms and conditions set forth in this document.

C. This AGREEMENT may be executed in any number of counterparts, each of which so executed shall be deemed to be an original, and such counterparts shall together constitute one and the same AGREEMENT. The PARTIES shall be entitled to sign and transmit an electronic signature of this AGREEMENT (whether by PDF or other mail transmission), which signature shall be binding on the PARTY whose name is contained therein. Each PARTY providing an electronic signature agrees to promptly execute and deliver to the other PARTY an original signed AGREEMENT upon request.

------ SIGNATURES ON FOLLOWING PAGE -----

In witness whereof the PARTIES have executed this AGREEMENT on the dates written below and this AGREEMENT is effective upon the last date of execution below.

SAN BERNARDINO COUNTY TRANSPORTATION AUTHORITY

By: _____
Carrie Schindler, Executive Director

Date: _____

APPROVED AS TO FORM:

By: _____
Iain MacMillan
Assistant General Counsel

CITY OF ONTARIO

By: _____
Scott Ochoa, City Manager

Date: _____

ATTEST:

By: _____
Sheila Mautz, City Clerk

APPROVED AS TO FORM:

By: _____
Ruben Duran, City Attorney

ATTACHMENT A
SCOPE OF WORK

City of Ontario Project Proposal

ATTACHMENT B

FUNDING TABLE FOR ONTARIO EUCLID AVENUE SMART CORRIDOR

A. Estimated Total Cost	$ 1,179,900
B. Maximum Award Amount	$ 943,000
C. Match commitment	$ 236,900
D. Match percentage of award amount	25.12%
E. Match percentage of total estimated cost	20.08%
F. Percentage of eligible costs billable with each invoice (B divided by A)	79.922%

INVOICING INSTRUCTIONS:

Invoices may be submitted to SBCTA as frequently as monthly
SBCTA reimbursement available at 79.922% of eligible expenses in each invoice
Jurisdiction is responsible for remainder of each invoice (local match share)
Maximum total SBCTA reimbursement (award amount) is $943,000
Jurisdiction is responsible for 100% of expenditures after maximum award amount is reached
If actual expenditures are less than Estimated Total Cost above, SBCTA is responsible only for 79.922% of actual expenditures
Invoices must document the work accomplished and expenses incurred for each period
Invoices must include cumulative totals for SBCTA reimbursement and local expenditures

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San Bernardino County Transportation Authority

Proposal

Development of Smart Arterial Corridors

CITY OF ONTARIO

Euclid Avenue

March 2025

Section I. Location

The smart corridor project is proposed to be Euclid Avenue from the northern City limits at the Interstate 10 freeway to the southern City limits at Riverside Drive. Riverside Drive at Euclid Avenue is the City limit between Ontario and Chino, who is also submitting a proposal for Euclid Avenue. If both projects are awarded funding, this can potentially create 11 miles of a continuous smart arterial corridor.

Section II. Jurisdictions Involved

Euclid Avenue from the Interstate 10 to Riverside Drive is under the jurisdiction of the City of Ontario. Discussions between Ontario and Chino have been on-going, which would make coordination for this project similar to the Haven Avenue Signal Optimization Project with Ontario and Rancho Cucamonga.

Section III. Project Description

Euclid Avenue is a 4 to 6 lane roadway with a median as wide as 70 feet, and it was part of the San Bernardino Valley Coordinated Signal Systems (SBVCSS) Tiers 1 &2 project. The proposed project includes 18 City-owned signalized intersections and 2 Caltrans-owned signalized intersections at the State Route 60 freeway. This project is proposed to replace existing traffic signal controllers and vehicle detection systems. 2070 controllers are in the existing traffic signal cabinets, and the age of the controllers is unknown since they were recently acquired from Caltrans. Regardless of the age, the project proposes to replace the existing controllers with the Econolite Cobalt. The Cobalt is the only controller used in Ontario and is compatible with Ontario's Traffic Management Center (TMC). With the capabilities of the Cobalt, Euclid Avenue would be Transit Signal Priority-ready and adaptive control-ready. Transit Signal Priority is a system that adjusts traffic signal timing to give priority to transit vehicles, and adaptive control is a system that optimizes traffic signal timing by using real-time data.

The existing vehicle detection utilizes inductance loops, and the project proposes to replace them with video detection. This would allow for lane-by-lane counts and detection, which is a requirement for adaptive control.

Section IV. Project Status

The City of Ontario acquired ownership of Euclid Avenue from the State in June 2024. The relinquishment provides opportunity to revitalize downtown through the Ontario Plan, which includes a potential road diet, enhanced multi-modal facilities, limited trucks, and safety measures. Euclid Avenue has a history of change, previously providing a streetcar in the center median before transitioning to a vehicle focused state highway, City Principal Arterial, and regional truck route. Now envisioned as a regional bicycle corridor and Bus Rapid Transit corridor as part of the Ontario Plan, the City hopes to redefine the corridor once again by building on the recently implemented buffered bike lanes south of the railroad tracks. By limiting trucks and providing a safer way to walk and bike in the downtown, the City hopes to create a more inviting downtown that will spur economic development.

Initial plans to create a smart corridor on Euclid Avenue are to upgrade all the communication infrastructure. Phase 1 proposes to replace the traffic signal controllers and vehicle detection. The controller replacement would provide compatibility with the City's TMC, and the video detection system

would provide improved lane-by-lane vehicle counts to enable adaptive control in the future. The next steps would be to replace traffic signal interconnect with fiber optic communications for a faster, higher bandwidth, and more reliable system. Currently, the traffic signals are interconnected with twisted pair. This work and the following items would be considered Phase 2 in no particular order:

- Install CCTV cameras at strategic intersections to enhance monitoring and maintenance. Some intersections already have CCTV cameras deployed.
- Install Changeable Message Signs to provide alerts, travel time, and real-time information.
- Install transit passenger information systems at the bus stops to increase awareness and ridership. Currently, a few stops on Euclid have them installed.
- Install Transit Signal Priority infrastructure to support the Ontario Plan for bus rapid transit.
- Install Connected Vehicle infrastructure for improved safety, mobility, and efficiency.

Section V. Benefits

The main benefit for Euclid Avenue to be a smart corridor is safety. Real-time information on Changeable Message Signs and connected vehicles alerts drivers and provides more awareness. Safer roadway conditions occur with improved monitoring and maintenance through fiber optic communications infrastructure and CCTV. Moving all modes of transportation more efficiently increases ridership in transit, bicycle, and pedestrian facilities and lessens frustration, which ultimately improves safety.

Other benefits include enhanced traffic flow and reduced congestion, increased real-time information, awareness, time savings, reliable commutes, predictable travel times, reduced fuel consumption, and lower emissions.

Section VI. Financial Plan

Please see below cost estimate for this proposed project:

Cost Estimate

DESCRIPTION	QTY.	UNIT	UNIT COST	TOTAL
Furnish and install Cobalt rackmount controller	18	EA	$7,000	$126,000
Furnish and install video detection system	18	EA	$50,000	$900,000
			SUBTOTAL	**$1,026,000**
			15% CONTINGENCY	$153,900
			GRAND TOTAL	**$1,179,900**

$943,000 is proposed to be paid with the smart corridor funds, and the remaining $236,900 would be covered with SB-1 funds. This equates to 20% matching funds from the City.

Section VII. Estimated Schedule

Board Approval	May 7, 2025
Execute Agreement	August 1, 2025
Prepare Plans, Specifications, & Estimates	February 1, 2026
Award Project	May 1, 2026
Notice to Proceed Construction	July 1, 2026
Equipment Procurement	November 1, 2026
Construction Completion	July 1, 2027

Section VIII. Transportation Data

The annual average daily traffic on Euclid Avenue is 34,000 vehicles, and the annual average daily traffic for trucks is 2,800. Truck traffic is anticipated to decrease as plans to revitalize downtown include rerouting the truck route on Euclid Avenue.

Omnitrans is the public transportation provider for Ontario via busses. Route 83 travels the entire Euclid Avenue corridor, and Route 87 travels approximately half a mile on Euclid Avenue from Holt Boulevard to Mission Boulevard.

Three schools have frontage along Euclid Avenue: Chaffey High School, Euclid Elementary School, and Ontario Christian Elementary School

Section IX. Maintenance

Similar to the Haven Avenue Signal Optimization Project, Ontario will utilize City staff and contracted technicians to monitor and maintain the smart corridor. The TMC allows City staff to remotely view intersections through the CCTV and video detection cameras, and it also provides alerts when intersections are offline, intersections go into flashing operation, and safety lighting is malfunctioning. The TMC also enables video detection zone adjustments and timing adjustments remotely. Fiber communications is handled by the City's own OntarioNet group, and they assist with technical and field support for any communications inquiries. Ontario currently has a contract with Bear Electrical Solutions, Inc. to provide technical support on all traffic signal operations.

CITY OF ONTARIO *Agenda Report* **November 4, 2025**	**SECTION:** **CONSENT CALENDAR**
Department: Public Works Prepared By: Angela Truong Staff Member Presenting: Tito Haes, Executive Director Public Works Reviewed By: Khoi Do, Bonnie Tam, Andrea Ampig Approved By:	Submitted To: Council/OHA Approved: _____ Continued To: _____ Denied: _____ Item No: 6

SUBJECT: **A RESOLUTION APPROVING AN IMPROVEMENT AGREEMENT, IMPROVEMENT SECURITY AND FINAL TRACT MAP NO. 20281 LOCATED GENERALLY ON CHINO AVENUE BETWEEN NEWTON AVENUE AND ARCHIBALD AVENUE**

RECOMMENDATION: That the City Council adopt a Resolution approving an Improvement Agreement, Improvement Security and Final Tract Map No. 20281, located generally on Chino Avenue between Newton Avenue and Archibald Avenue.

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

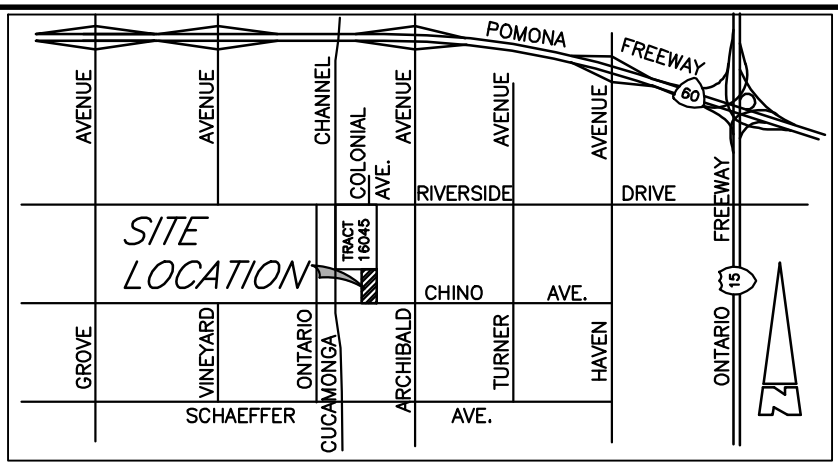
FISCAL IMPACT: There is no direct fiscal impact associated with this action. All public infrastructure improvements required for this project will be constructed by the Developer at its sole cost.

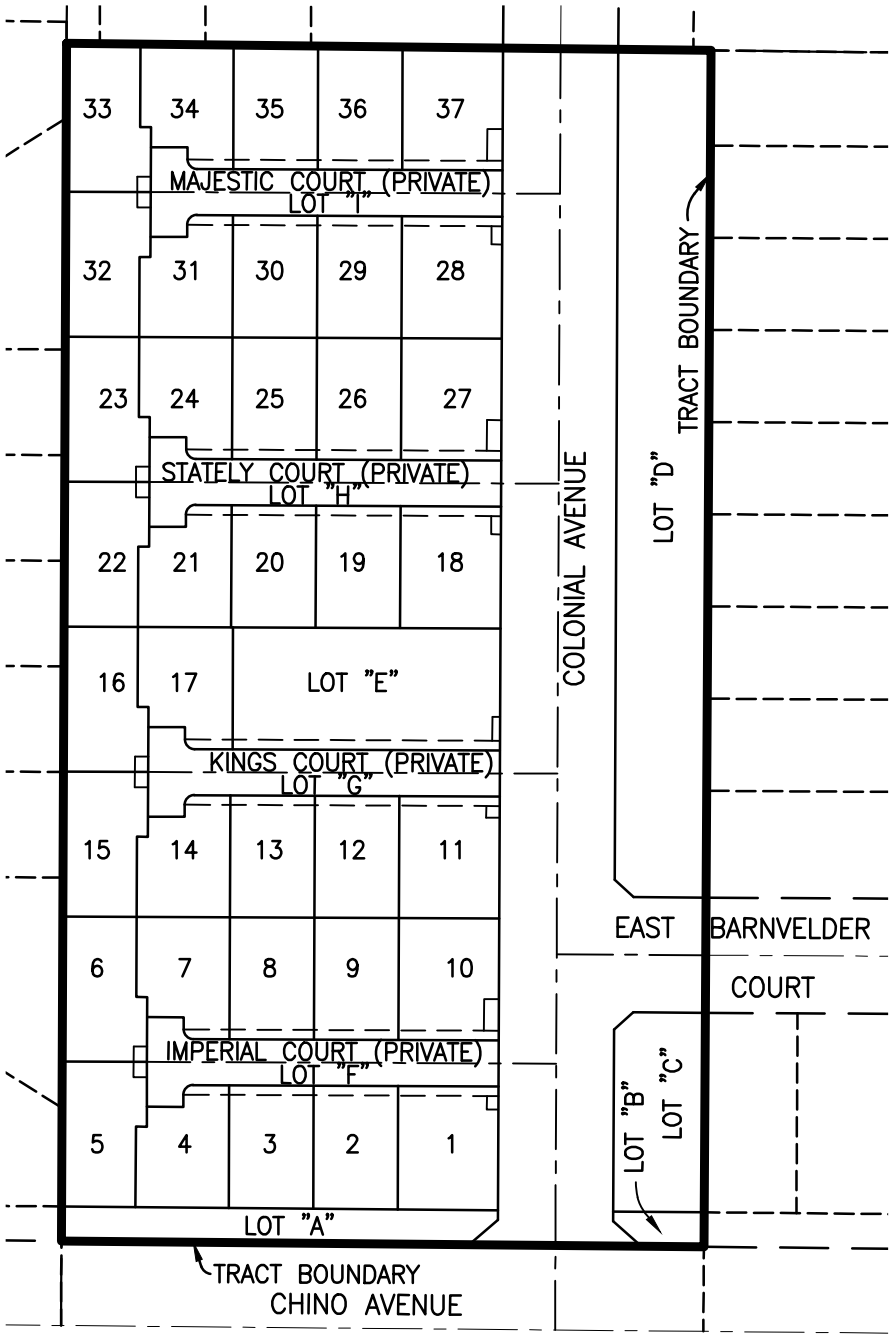
BACKGROUND & ANALYSIS: Chino Avenue, LLC. (Developer) has submitted Final Tract Map No. 20281, consisting of thirty-seven (37) numbered lots and nine (9) lettered lots on five (5) acres of land, as shown on Exhibit A. Tentative Tract Map No. 20281 was approved by the Planning Commission on October 26, 2021.

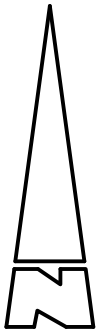
The Final Tract Map improvements will include streets, sewer main and lateral, water main and lateral, recycled water main and lateral, storm drain main and lateral, traffic signal modification, fiber optic conduits, and parkway landscape with irrigation. All landscape improvements will be consistent with the City's Landscape Development Guidelines and the Model Water Efficiency Landscape Ordinance.

The Developer has entered into an Improvement Agreement with the City for Final Tract Map No.

20281 and posted adequate security to ensure construction of the required improvements. This map meets all conditions of the Subdivision Map Act and the Ontario Municipal Code and has been reviewed and approved by the City Engineer.







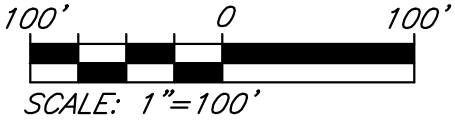


EXHIBIT A

TM - 20281

KWC ENGINEERS
CIVIL ENGINEERS • PLANNERS • SURVEYORS
1181 CALIFORNIA AVENUE, SUITE 235 • CORONA, CA. 92881 • 951-734-2130

RESOLUTION NO. _____

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF ONTARIO, CALIFORNIA, APPROVING AN IMPROVEMENT AGREEMENT, IMPROVEMENT SECURITY AND FINAL TRACT MAP NO. 20281 LOCATED GENERALLY ON CHINO AVENUE BETWEEN NEWTON AVENUE AND ARCHIBALD AVENUE.

WHEREAS, Tentative Tract Map No. 20281, submitted by Chino Avenue LLC., was approved by the Planning Commission of the City of Ontario on October 26, 2021; and

WHEREAS, Tentative Tract Map No. 20281 consists of 37 numbered lots and 9 lettered lots, in the City of Ontario, County of San Bernardino, State of California, being a Subdivision of Parcel 1 of Parcel Map 5923, in the City of Ontario, County of San Bernardino, State of California, as shown by Map on File in Book 61, Pages 71 and 72 of Parcel Maps, in the Office of the County Records of Said County, located in Section 10, Township 2 South, Range 7 West, S.B.M.; and

WHEREAS, to meet the requirements established as prerequisite to final approval of Tract Map No. 20281, Chino Avenue LLC. has offered the Improvement Agreement together with good and sufficient improvement security, in conformance with the City Attorney's approved format, for approval and execution by the City.

NOW, THEREFORE, BE IT RESOLVED, by the City Council of the City of Ontario, California, as follows:

1. That said Improvement Agreement be, and the same is, approved and the City Manager is authorized to execute same on behalf of said City, and the City Clerk is authorized to attest thereto; and

2. That said Improvement Security is accepted as good and sufficient, subject to approval as to form and content thereof by the City Attorney.

3. That Final Tract Map No. 20281 be approved and that the City Clerk be authorized to execute the statement thereon on behalf of said City.

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

PASSED, APPROVED, AND ADOPTED this 4th day of November 2025.

_____
PAUL S. LEON, MAYOR

ATTEST:

_____
SHEILA MAUTZ, CITY CLERK

APPROVED AS TO LEGAL FORM:

_____
BEST, BEST & KREIGER, LLP
CITY ATTORNEY

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

I, SHEILA MAUTZ, City Clerk of the City of Ontario, DO HEREBY CERTIFY that foregoing Resolution No. 2025- was duly passed and adopted by the City Council of the City of Ontario at their regular meeting held November 4, 2025 by the following roll call vote, to wit:

AYES: COUNCIL MEMBERS:

NOES: COUNCIL MEMBERS:

ABSENT: COUNCIL MEMBERS:

_____
SHEILA MAUTZ, CITY CLERK

(SEAL)

The foregoing is the original of Resolution No. 2025- duly passed and adopted by the Ontario City Council at their regular meeting held November 4, 2025.

_____
SHEILA MAUTZ, CITY CLERK

(SEAL)

DRAFTRECORDED AT THE REQUEST OF
AND WHEN RECORDED RETURN TO:

City of Ontario
303 East "B" Street
Ontario, CA 91764
Attn: City Engineer

(Exempt from Filing Fees – Government Code § 6103)

SPACE ABOVE THIS LINE FOR RECORDER'S USE

SUBDIVISION IMPROVEMENT AGREEMENT

FOR COMPLETION OF PUBLIC IMPROVEMENTS

TRACT MAP NO. 20281

between

THE CITY OF ONTARIO

a California municipal corporation

and

CHINO AVENUE, LLC.

a California limited liability company

SUBDIVISION IMPROVEMENT AGREEMENT
FOR COMPLETION OF PUBLIC IMPROVEMENTS

TRACT MAP NO. 20281

I. PARTIES AND DATE

This Subdivision Improvement Agreement for the Completion of Public Improvements ("Agreement") is entered into as of this ____ day of _____, 20__, by and between the City of Ontario, a California municipal corporation ("City") and Chino Avenue, LLC., a California limited liability company, with its principal office located at 12223 Highland Avenue, Suite 106-553, Rancho Cucamonga, CA 91739 ("Developer"). City and Developer are sometimes hereinafter individually referred to as "Party" and hereinafter collectively referred to as the "Parties."

II. RECITALS

A. Developer's tentative parcel map for real property located within City, a legal description of which is attached hereto as Exhibit "A" ("Property"), was conditionally approved by the Ontario Planning Commission on October 26, 2021. The tentative tract map is identified in City records as Tract Map No. 20281 ("Map").

B. Developer has not completed all of the work or made all of the public improvements required by the City's Municipal Code, the Subdivision Map Act (California Government Code section 66410, *et seq.*) ("Map Act"), the conditions of approval for the Map, or other ordinances, resolutions, or policies of City requiring construction of improvements in conjunction with the subdivision of land.

C. Pursuant to the City's Municipal Code and the applicable provisions of the Map Act, Developer and City enter into this Agreement for the timely construction and completion of the public improvements and the furnishing of the security therefor, acceptable to the City Engineer and City Attorney, for the Map.

D. Developer's execution of this Agreement and the provision of the security are made in consideration of City's approval of the final Map for the Property.

III. TERMS

1.0 Effectiveness. This Agreement shall not be effective unless and until all four of the following conditions are satisfied: (a) Developer provides City with security of the type and in the amounts required by this Agreement; (b) Developer executes and records this Agreement in the Recorder's Office of the County of San Bernardino; (c) the approving body per the Ontario Development Code approves the final map for the Property; and (d) Developer records the final map for the Property in the Recorder's Office of the County of San Bernardino. If any of the above described conditions are not satisfied, this Agreement shall automatically terminate without need of further action by either City or Developer, and Developer may not thereafter record the final map for the Property.

1.1 Definitions. For purposes of enforcing this Agreement, the term "City" shall include, but shall not be limited to, City Council, Public Works Director, City Engineer, Community Development Director, Building Official, or any of their authorized representatives. City shall have the sole and absolute discretion to determine which public body, public official, or public employee may act on behalf of City for any particular purpose.

2.0 Public Improvements. Developer shall construct or have constructed at its own cost, expense, and liability all improvements required by City as part of the approval of the Map, including, but not limited to, all grading, roads, paving, curbs and gutters, pathways, storm drains, sanitary sewers, utilities, drainage facilities, traffic controls, landscaping, street lights, and all other required facilities as shown in detail on the plans, profiles, and specifications which have been prepared by or on behalf of Developer for the Map ("Public Improvements"). The Public Improvements are more specifically described in Exhibit "B," which is attached hereto and incorporated herein by this reference. Construction of the Public Improvements shall include any transitions and/or other incidental work deemed necessary for drainage or public safety. Developer shall be responsible for the replacement, relocation, or removal of any component of any utility system or public improvement in conflict with the construction or installation of the Public Improvements. Such replacement, relocation, or removal shall be performed to the complete satisfaction of the City Engineer and the owner of such utility system or public improvement. Developer further promises and agrees to provide all equipment, tools, materials, labor, tests, design work, and engineering services necessary or required by City to fully and adequately complete the Public Improvements.

2.1 Prior Partial Construction of Public Improvements. Where construction of any Public Improvements has been partially completed prior to the execution of this Agreement, Developer agrees to complete such Public Improvements or assure their completion in accordance with this Agreement.

2.2 Permits; Notices; Utility Statements. Prior to commencing any work, Developer shall, at its sole cost, expense, and liability, obtain all necessary permits and licenses and give all necessary and incidental notices required for the lawful construction of the Public Improvements and performance of Developer's obligations under this Agreement. Developer shall conduct the work in full compliance with the regulations, rules, and other requirements contained in any permit or license issued to Developer. Prior to commencing any work, Developer shall file a written statement with the City Clerk and the City Engineer, signed by Developer and each utility that will provide utility service to the Property, attesting that Developer has made all deposits legally required by the utility for the extension and provision of utility service to the Property.

2.3 Pre-approval of Plans and Specifications. Developer is prohibited from commencing work on any Public Improvement until all plans, specifications, estimates, and bonds for such Public Improvement have been submitted to and approved by the City Engineer, or his/her authorized designee. Approval by the City Engineer shall not relieve Developer from ensuring that all Public Improvements conform with all other requirements and standards set forth in this Agreement.

2.4 Quality of Work; Compliance With Laws and Codes. The construction plans and specifications for the Public Improvements shall be prepared in accordance with all

applicable federal, state, and local laws, ordinances, regulations, codes, standards, and other requirements. The Public Improvements shall be completed in accordance with all approved maps, conditions, plans, specifications, standard drawings, and special amendments thereto on file with City, as well as all applicable federal, state, and local laws, ordinances, regulations, codes, standards, and other requirements applicable at the time work is actually commenced.

2.5 Standard of Performance. Developer and its contractors, if any, shall perform all work required to construct the Public Improvements under this Agreement in a skillful and workmanlike manner, and consistent with the standards generally recognized as being employed by professionals in the same discipline in the State of California. Developer represents and maintains that it or its contractors shall be skilled in the professional calling necessary to perform the work. Developer warrants that all of its employees and contractors shall have sufficient skill and experience to perform the work assigned to them, and that they shall have all licenses, permits, qualifications, and approvals of whatever nature that are legally required to perform the work, and that such licenses, permits, qualifications, and approvals shall be maintained throughout the term of this Agreement.

2.6 Alterations to Improvements. The Public Improvements in Exhibit "B" are understood to be only a general designation of the work and improvements to be done, and not a binding description thereof. All work shall be done and improvements made and completed as shown on approved plans and specifications, and any subsequent alterations thereto. If during the course of construction and installation of the Public Improvements it is determined that the public interest requires alterations in the Public Improvements, Developer shall undertake such design and construction changes as may be reasonably required by City. Any and all alterations in the plans and specifications and the Public Improvements to be completed may be accomplished without giving prior notice thereof to Developer's surety for this Agreement.

2.7 Superintendence by Developer. Developer shall require each contractor and subcontractor to have a competent foreperson on the job at all times when that contractor or subcontractor, or any employee or agent thereof, is performing work on the Public Improvements. Before starting work on the Public Improvements, each contractor and subcontractor shall submit in writing the name of the proposed foreperson, who shall be subject to the review and approval of City. Following approval by City, each foreperson shall be present at the work site at all times that any work is in progress and at any time that any employee of the contractor or subcontractor is present at the work site. The Developer shall employ a competent construction manager that is responsible for the entire work. Each contractor or subcontractor shall contractually report to the construction manager, either directly or through a subcontract. The construction manager shall be immediately available by phone during hours when construction is in progress and shall be available in person within two hours when requested by the City. The construction manager shall coordinate the work such that construction and the associated inspection happen in an efficient manner. Should a contractor or subcontractor desire to change its foreperson, it shall provide the information specified above and obtain City's prior written approval. City, in its sole and absolute discretion, may require any contractor or subcontractor to replace its foreperson provided that City gives the contractor or subcontractor at least forty-eight hours written notice.

Developer shall, at all times, enforce strict discipline and good order among its employees and those of its subcontractors and shall not employ any unfit person or anyone not skilled in the

assigned task. If any person employed by, the Developer, a contractor or subcontractor fails or refuses to carry out the directions of the City or appears to the City, in its sole and absolute discretion, to be incompetent or to act in a disorderly or improper manner, such person shall be removed from the project immediately upon request by the City, and such person shall not again be employed on the work. Such removal shall not be the basis for any claim of compensation or damages against the City.

In addition, Developer shall maintain an office with a telephone, and Developer or a person authorized to make decisions and to act on Developer's behalf in Developer's absence shall be available to be on the job within three (3) hours of being called at such office by the City, during the hours of 9:00 a.m. through 5:00 p.m., Monday through Friday, or any other day or time when work is being performed on the Public Improvements. Developer shall also provide City with a telephone number, at which Developer, or its representative, shall be available twenty-four (24) hours a day in the event of an emergency.

3.0 Maintenance of Public Improvements and Landscaping. City shall not be responsible or liable for the maintenance or care of the Public Improvements until City approves and accepts them. City shall exercise no control over the Public Improvements until accepted. Any use by any person of the Public Improvements, or any portion thereof, shall be at the sole and exclusive risk of Developer at all times prior to City's acceptance of the Public Improvements. Developer shall maintain all the Public Improvements in a state of good repair until they are completed by Developer and approved and accepted by City, and until the security for the performance of this Agreement is released.

Maintenance shall include, but shall not be limited to: repair of pavement, curbs, gutters, sidewalks, signals, parkways, water mains, and sewers; maintaining all landscaping in a vigorous and thriving condition reasonably acceptable to City; removal of debris from sewers and storm drains; and sweeping, repairing, and maintaining in good and safe condition all streets and street improvements. Developer shall cause the sweeping of streets to occur weekly at a minimum. Developer shall perform additional street sweeping work as necessary depending on construction activities or as required by, and at the direction of, the City Engineer. It shall be Developer's responsibility to initiate all maintenance work, but if it shall fail to do so, it shall promptly perform such maintenance work when notified to do so by City. If Developer fails to properly prosecute its maintenance obligation under this Section, City may do all work necessary for such maintenance and the cost thereof shall be the responsibility of Developer and its surety under this Agreement. City shall not be responsible or liable for any damages or injury of any nature in any way related to or caused by the Public Improvements or their condition prior to acceptance.

3.1 Landscaping and Existing Irrigation Systems. Developer shall plant and maintain parkway trees and landscaping as provided in Section 10-2.07 of the City Municipal Code, and as directed by the Public Facilities Department. The Developer shall also be responsible for the replacement, relocation or removal of any component of any irrigation water system in conflict with the construction or installation of the Public Improvements. Such replacement, relocation or removal shall be performed to the complete satisfaction of the City Engineer and the owner of such water system.

4.0 Construction Schedule. Unless extended pursuant to Section 4.1 of this Agreement, Developer shall fully and adequately complete or have completed the Public Improvements within twelve (12) months following approval of the final Map. At least fifteen (15) days prior to the commencement of such work, Developer shall notify the City Engineer in writing of the date fixed by Developer for commencement of the work.

4.1 Extensions. Time is of the essence with regard to this Agreement. The City may, in its sole and absolute discretion, provide Developer with additional time within which to complete the Public Improvements. Requests for extension of time shall be in writing and shall be delivered to City in the manner hereinafter specified for service of notices. An extension of time, if any, shall be granted only in writing, and an oral extension shall not be valid or binding on City. It is understood that by providing the security required by this Agreement, Developer and its surety consent in advance to any extension of time as may be given by City to Developer and waive any and all right to notice of such extension(s). Developer's acceptance of an extension of time granted by City shall constitute a waiver by Developer and its surety of all defenses of laches, estoppel, statutes of limitations, and other limitations of action in any action or proceeding filed by City following the date on which the Public Improvements were to have been completed hereunder. In addition, as consideration for granting such extension to Developer, City reserves the right to review the provisions of this Agreement, including, but not limited to, the construction standards, the cost estimates approved by City, and the sufficiency of the improvement security provided by Developer, and to require adjustments thereto when warranted according to City's reasonable discretion.

4.2 Accrual of Limitations Period. Any limitations period provided by law related to breach of this Agreement or the terms thereof shall not accrue until Developer has provided the City Engineer with written notice of Developer's intent to abandon or otherwise not complete required or agreed upon Public Improvements.

5.0 Grading. Developer agrees that any and all grading done or to be done in conjunction with construction of the Public Improvements or development of the Property shall conform to all federal, state, and local laws, ordinances, regulations, and other requirements including, without limitation, City's grading regulations, the National Pollutant Discharge Elimination Systems (NPDES), and stormwater regulations thereunder as administered by the State Water Resources Control Board and Regional Water Quality Control Boards. In order to prevent damage to the Public Improvements by improper drainage or other hazards, the grading shall be completed in accordance with the time schedule for completion of the Public Improvements established by this Agreement, and prior to City's approval and acceptance of the Public Improvements and release of the Security as set forth in this Agreement. Developer further agrees that the indemnification as set forth in this Agreement shall extend to and include any and all grading contemplated by this Agreement, including but not limited to, any partial or rough grading work.

6.0 Encroachment Permit. Developer shall obtain any necessary encroachment permits from the office of the City Engineer prior to start of any work within the public rights-of-way, and the Developer shall conduct such work in full compliance with the regulations and other requirements contained therein. The Developer shall be responsible for the removal of all loose rock and other debris from the public rights-of-way resulting from work done on adjacent property

or within said rights-of-way. Work done within existing public rights-of-way shall be diligently pursued to completion with minimal obstruction or inconvenience to the public and pursuant to the terms of the encroachment permit and any applicable federal, state or local laws, rules or regulations. The City shall have the right to complete any and all work in the event of unjustified delay in completion, and to recover all costs and expenses incurred from the Developer or its surety by any lawful means. Non-compliance with the terms of the encroachment permit or any applicable federal, state or local laws, rules or regulations may result in the City's cessation of the work and assessment of any applicable penalties or other remedies. Prior to, and as a condition precedent to, the issuance of any required encroachment permit(s), Developer shall provide to the City evidence satisfactory to the City of: (1) the certificate(s), endorsement(s), or policy(ies) of insurance as required by this Agreement; and (2) any and all licenses, permits, qualifications and approvals of whatever nature that are legally required to perform the work.

7.0 Utilities. Developer shall assume all costs for and shall provide utility services, including water, power, gas, and telephone service to serve each parcel, lot, or unit of land within the Property in accordance with all applicable federal, state, and local laws, rules, and regulations, including, but not limited to, the regulations, schedules, and fees of the utilities or agencies providing such services. Except for commercial or industrial properties, Developer shall also provide cable television facilities to serve each parcel, lot, or unit of land in accordance with all applicable federal, state, and local laws, rules, and regulations, including, but not limited to, the requirements of the cable company possessing a valid franchise with City to provide such service within City's jurisdictional limits. All utilities shall be installed underground, unless otherwise approved by the City Council or the Planning Commission of the City, or by any other state or federal laws or regulations.

8.0 Fees and Charges. Developer shall, at its sole cost, expense, and liability, pay all fees, charges, and taxes arising out of construction of the Public Improvements, including, but not limited to fees for the checking, filing, and processing of improvement plans and specifications and for inspecting the construction of the Public Improvements. These fees must be paid in full prior to approval of the final map and improvement plans. The fees referred to above are not necessarily the only City fees, charges, or other costs that have been or will be imposed on the subdivision and its development, and this Agreement shall in no way exonerate or relieve Developer from paying such other applicable fees, charges, and/or costs.

9.0 City Inspection of Public Improvements. Developer shall, at its sole cost, expense, and liability, and at all times during construction of the Public Improvements, maintain reasonable and safe facilities and provide safe access for inspection by City of the Public Improvements and areas where construction of the Public Improvements is occurring or will occur.

10.0 Acceptance of Improvements; As-Built or Record Drawings. If the Public Improvements are properly completed by Developer and approved by the City Engineer, and if they comply with all applicable federal, state and local laws, ordinances, regulations, codes, standards, and other requirements, the City Council shall be authorized to accept the Public Improvements. The City Council may, in its sole and absolute discretion, accept fully completed portions of the Public Improvements prior to such time as all of the Public Improvements are complete, which shall not release or modify Developer's obligation to complete the remainder of the Public Improvements within the time required by this Agreement. Upon the total or partial

acceptance of the Public Improvements by City, the City Clerk shall file with the Recorder's Office of the County of San Bernardino, a notice of completion for the accepted Public Improvements in accordance with California Civil Code Section 9204, at which time the accepted Public Improvements shall become the sole and exclusive property of City without payment therefor. Title to and ownership of the Public Improvements constructed under this Agreement shall vest absolutely in City upon completion and acceptance in writing of such Public Improvements by City. Issuance by City of occupancy permits for any buildings or structures located on the Property shall not be construed in any manner to constitute City's acceptance or approval of any Public Improvements. Notwithstanding the foregoing, City may not accept any Public Improvements unless and until Developer provides one (1) set of "as-built" or record drawings or plans to the City Engineer for all such Public Improvements. The drawings shall be certified and shall reflect the condition of the Public Improvements as constructed, with all changes incorporated therein.

11.0 Default; Notice; Remedies.

11.1 Notice. If Developer neglects, refuses, or fails to fulfill or timely complete any obligation, term, or condition of this Agreement, or if City determines there is a violation of any federal, state, or local law, ordinance, regulation, code, standard, or other requirement, City may at any time thereafter declare Developer to be in default or violation of this Agreement and make written demand upon Developer or its surety, or both, to immediately remedy the default or violation ("Notice"). Developer shall substantially commence the work required to remedy the default or violation within ten (10) days of the Notice. If the default or violation constitutes an immediate threat to the public health, safety, or welfare, City may provide the Notice verbally, and Developer shall substantially commence the required work within twenty-four (24) hours thereof. Immediately upon City's issuance of the Notice, Developer and its surety shall be liable to City for all costs of construction and installation of the Public Improvements and all other administrative costs and expenses.

11.2 Failure to Remedy; City Action. If the work required to remedy the noticed default or violation is not diligently prosecuted to a completion acceptable to City within the time frame contained in the Notice, City may complete all remaining work, arrange for the completion of all remaining work, and/or conduct such remedial activity as in its sole and absolute discretion it believes is required to remedy the default or violation. All such work or remedial activity shall be at the sole and absolute cost, expense, and liability of Developer and its surety, without the necessity of giving any further notice to Developer or surety. City's right to take such actions shall in no way be limited by the fact that Developer or its surety may have constructed any, or none, of the required or agreed upon Public Improvements at the time of City's demand for performance. In the event City elects to complete or arrange for completion of the remaining work and improvements, City may require all work by Developer or its surety to cease in order to allow adequate coordination by City. Notwithstanding the foregoing, if conditions precedent for reversion to acreage can be met and if the interests of City will not be prejudiced thereby, City may also process a reversion to acreage and thereafter recover from Developer or its surety the full cost and expense incurred.

11.3 Notice of Violation; Stop Work Order. If City determines that there is a violation of applicable federal, state or local laws, ordinances, regulations or other requirements, or the terms and conditions of this Agreement, the City and/or City Engineer may issue a Notice

of Violation and Demand for Compliance and/or a Stop Work Order. The City may declare the Developer to be in default or violation of this Agreement and make written demand upon Developer or its surety, or both, to immediately remedy the default or violation. Developer shall comply with the Notice of Violation and/or Stop Work Order and shall substantially commence the work required to remedy the default or violation with the time specified in the Notice of Violation. If the default or violation constitutes an immediate threat to the public health, safety, or welfare, City and/or City Engineer may provide the Notice of Violation verbally, and Developer shall substantially commence the required work within twenty-four (24) hours thereof.

11.4 Other Remedies. No action by City pursuant to this Section of this Agreement shall prohibit City from exercising any other right or pursuing any other legal or equitable remedy available under this Agreement or any federal, state, or local law. City may exercise its rights and remedies independently or cumulatively, and City may pursue inconsistent remedies. City may institute an action for damages, injunctive relief, or specific performance.

11.5 Administrative Costs. If Developer fails to construct and install all or any part of the Public Improvements within the time required by this Agreement, or if Developer fails to comply with any other obligation contained herein, Developer and its surety shall be jointly and severally liable to City for all administrative expenses, fees, and costs, including reasonable attorney's fees and costs, incurred in obtaining compliance with this Agreement or in processing any legal action or for any other remedies permitted by law.

12.0 Warranty and Guarantee. Developer hereby warrants and guarantees all Public Improvements against any defective work or labor done, or defective materials furnished in the performance of this Agreement, including the maintenance of all landscaping within the Property in a vigorous and thriving condition reasonably acceptable to City, for a period of one (1) year following completion of the work and acceptance by City ("Warranty"). During the Warranty, Developer shall repair, replace, or reconstruct any defective or otherwise unsatisfactory portion of the Public Improvements, in accordance with the current ordinances, resolutions, regulations, codes, standards, or other requirements of City, and to the approval of the City Engineer. All repairs, replacements, or reconstruction during the Warranty shall be at the sole cost, expense, and liability of Developer and its surety. As to any Public Improvements which have been repaired, replaced, or reconstructed during the Warranty, Developer and its surety hereby agree to extend the Warranty for an additional one (1) year period following City's acceptance of the repaired, replaced, or reconstructed Public Improvements. Nothing herein shall relieve Developer from any other liability it may have under federal, state, or local law to repair, replace, or reconstruct any Public Improvement following expiration of the Warranty or any extension thereof. Developer's warranty obligation under this section shall survive the expiration or termination of this Agreement.

13.0 Security.

13.1 Prior to execution of this Agreement, Developer shall provide City with sufficient security in the amounts and under the terms set forth below ("Security"), in the form of a surety bond or cash deposit. Nothing in this Section is intended to prevent City, in its sole discretion, from requiring Developer to submit, or prevent Developer from submitting, security in a form other than bonds that may be allowed under California Government Code Section 66499,

et seq. and the City's Municipal Code, and acceptable to City. The amount of the Security shall be based on the City Engineer's approximation of the actual cost to construct the Public Improvements, including the replacement cost for all public landscaping ("Estimated Costs"). If City determines, in its sole and absolute discretion, that the Estimated Costs have changed, Developer shall adjust the Security in the amount requested by City. Developer's compliance with this Section shall in no way limit or modify Developer's indemnification obligation under this Agreement. Security shall be on forms approved by the City for the purposes and amounts as follows:

13.1.1 Performance Bond. To guarantee the faithful performance of the Public Improvements and all the provisions of this Agreement, to protect City if Developer is in default as set forth in this Agreement, and to secure Developer's one-year guarantee and warranty of the Public Improvements, including the maintenance of all landscaping in a vigorous and thriving condition, Developer shall provide City security in the amount of **Nine Hundred Twelve Thousand, Eight Hundred Seventy-Seven Dollars and Ninety-Three Cents ($912,877.93)**, which sum shall be not less than one hundred percent (100%) of the Estimated Costs (Bonds attached in Exhibit "C" and Engineering Cost Estimate attached in Exhibit "B"). The City may, in its sole and absolute discretion, partially release a portion or portions of the security provided under this section as the Public Improvements are accepted by City, as provided herein, provided that Developer is not in default on any provision of this Agreement or condition of approval for the Map, and the total remaining security is not less than twenty-five percent (25%) of the Estimated Costs. All security provided under this section shall be released at the end of the Warranty period (as defined above), or any extension thereof as provided in this Agreement, provided that Developer is not in default on any provision of this Agreement or condition of approval for the Map.

13.1.2 Labor & Material Bond. To secure payment to the contractor and subcontractors, laborers, material men and other persons furnishing labor, materials, or equipment for performance of the Public Improvements and this Agreement, Developer shall provide City security in the amount of **Nine Hundred Twelve Thousand, Eight Hundred Seventy-Seven Dollars and Ninety-Three Cents ($912,877.93)**, which sum shall not be less than one hundred percent (100%) of the Estimated Costs (Bonds attached in Exhibit "C" and Engineering Cost Estimate attached in Exhibit "B").. The security provided under this subsection may be released by written authorization of the City Engineer after one (1) year or within the time limits established in California Government Code section 66499.7 from the date City accepts the final Public Improvements at the discretion of City. The amount of such security shall be reduced by the total of all stop notice or mechanic's lien claims of which City is aware, plus an amount equal to twenty percent (20%) of such claims for reimbursement of City's anticipated administrative and legal expenses arising out of such claims.

13.1.3 Monument Security. To guarantee payment by the Developer to the engineer or surveyor whose certificate appears on the final map for the setting of all subdivision boundaries, lot corners and street centerline monuments, as well as the furnishing of all centerline tie notes to the City, prior to the City's execution of this Agreement, Developer shall deposit cash with the City in the amount of **One Thousand Dollars ($1,000.00)**. Said cash deposit may be released after receipt by the City of the centerline tie notes and written acknowledgment of payment in full from the engineer or surveyor.

13.1.4 Warranty Bond. To provide in the amount of ten percent (10%) of the Estimated Costs of the Work to guarantee and warrant the Work, for a period of one year following its completion and acceptance, against any defective work or labor done, or defective materials furnished, as required by California Government Code Section 66499.3(d). Any unused portion of the guarantee and warranty security shall be released one year after acceptance of the required improvements by the City Council.

13.2 Bond/Surety Requirements. The surety for any surety bonds provided as Security shall have a current A.M. Best rating of no less than A:VIII, shall be authorized to do business in the State of California, and shall be satisfactory to City. As part of the obligation secured by the Security and in addition to the face amount of the Security, Developer or its surety shall secure the costs and reasonable expenses and fees, including reasonable attorneys' fees and costs, incurred by City in enforcing the obligations of this Agreement. Developer and its surety stipulate and agree that no change, extension of time, alteration, or addition to the terms of this Agreement, the Public Improvements, or the plans and specifications for the Public Improvements shall in any way affect its obligation on the Security. In lieu of the purchase of a bond from a surety, Developer may deposit cash with the City in the amount required for the Performance Bond required in Section 13.1.1, or the Labor and Material Bond required in Section 13.1.2.

13.3 Evidence and Incorporation of Security. Evidence of the Security shall be provided on the forms set forth in Exhibit "C," unless other forms are deemed acceptable by the City Engineer and the City Attorney, and when such forms are completed to the satisfaction of City, the forms and evidence of the Security shall be attached hereto as Exhibit "C" and incorporated herein by this reference.

14.0 Lien. To secure the timely performance of Developer's obligations under this Agreement, including those obligations for which security has been provided pursuant to this Agreement, Developer hereby creates in favor of City a lien against all portions of the Property not dedicated to City or some other governmental agency for a public purpose. As to Developer's default on those obligations for which security has been provided pursuant to this Agreement, City shall first attempt to collect against such security prior to exercising its rights as a contract lienholder under this Section.

15.0 Indemnification. Developer shall defend (with counsel reasonably satisfactory to the City Attorney), indemnify, and hold harmless City, its elected officials, officers, employees, agents, and volunteers from any and all actual or alleged claims, demands, causes of action, liability, loss, damage, or injury, to property or persons, including wrongful death, whether imposed by a court of law or by administrative action of any federal, state, or local governmental body or agency, arising out of or incident to any acts, omissions, negligence, or willful misconduct of Developer, its personnel, employees, agents, or contractors in connection with or arising out of construction or maintenance of the Public Improvements, or performance of this Agreement. This indemnification includes, without limitation, the payment of all penalties, fines, judgments, awards, decrees, attorneys' fees, and related costs or expenses, and the reimbursement of City, its elected officials, officers, employees, and/or agents for all legal expenses and costs incurred by each of them. This indemnification excludes only such portion of any claim, demand, cause of action, liability, loss, damage, penalty, fine, or injury, to property or persons, including wrongful death, which is caused solely and exclusively by the negligence or willful misconduct of City as

determined by a court or administrative body of competent jurisdiction. Developer's obligation to indemnify shall survive the expiration or termination of this Agreement and shall not be restricted to insurance proceeds, if any, received by City, its elected officials, officers, employees, agents, or volunteers.

16.0 Insurance.

16.1 Time for Compliance. Developer shall not commence work under this Agreement until it has provided evidence satisfactory to the City that it has secured all insurance required under this section. In addition, Developer shall not allow any contractor to commence work on any contract until it has provided evidence satisfactory to the City that the contractor has secured all insurance required under this section. Failure to provide and maintain all required insurance shall be grounds for the City to terminate this Agreement for cause.

16.2 Types of Insurance Required. As a condition precedent to the effectiveness of this Agreement for work to be performed hereunder, and without limiting the indemnity provisions of the Agreement, the Developer, in partial performance of its obligations under such Agreement, shall procure and maintain in full force and effect during the term of the Agreement the following policies of insurance. If the existing policies do not meet the insurance requirements set forth herein, Developer agrees to amend, supplement or endorse the policies to do so.

16.2.1 Commercial General Liability: Commercial General Liability Insurance which affords coverage at least as broad as Insurance Services Office "occurrence" form CG 00 01, or the exact equivalent, with limits of not less than $2,000,000 per occurrence and no less than $4,000,000 in the general aggregate. Defense costs shall be paid in addition to the limits. The policy shall contain no endorsements or provisions (1) limiting coverage for contractual liability; (2) excluding coverage for claims or suits by one insured against another (cross-liability); (3) products/completed operations liability; or (4) containing any other exclusion(s) contrary to the terms or purposes of this Agreement.

16.2.2 Automobile Liability Insurance: Automobile Liability Insurance with coverage at least as broad as Insurance Services Office Form CA 00 01 covering "Any Auto" (Symbol 1), or the exact equivalent, covering bodily injury and property damage for all activities with limits of not less than $2,000,000 combined limit for each occurrence.

16.2.3 Workers' Compensation: Workers' Compensation Insurance, as required by the State of California and Employer's Liability Insurance with a limit of not less than $1,000,000 per accident for bodily injury and disease.

16.3 Insurance Endorsements. Required insurance policies shall contain the following provisions, or Developer shall provide endorsements on forms approved by the City to add the following provisions to the insurance policies:

16.3.1 Commercial General Liability: (1) Additional Insured: The City, its officials, officers, employees, agents, and volunteers shall be additional insureds with regard to liability and defense of suits or claims arising out of the performance of the Agreement. Additional Insured Endorsements shall not (1) be restricted to "ongoing operations"; (2) exclude "contractual liability"; (3) restrict coverage to "sole" liability of Developer; or (4) contain any other exclusions

contrary to the terms or purposes of this Agreement. For all policies of Commercial General Liability insurance, Developer shall provide endorsements in the form of ISO CG 20 10 10 01 and 20 37 10 01 (or endorsements providing the exact same coverage) to effectuate this requirement. (2) Cancellation: Required insurance policies shall not be canceled or the coverage reduced until a thirty (30) day written notice of cancellation has been served upon the City except ten (10) days shall be allowed for non-payment of premium.

16.3.2 Automobile Liability: (1) Cancellation: Required insurance policies shall not be canceled or the coverage reduced until a thirty (30) day written notice of cancellation has been served upon the City except ten (10) days shall be allowed for non-payment of premium.

16.3.3 Workers' Compensation: (1) Cancellation: Required insurance policies shall not be canceled or the coverage reduced until a thirty (30) day written notice of cancellation has been served upon the City except ten (10) days shall be allowed for non-payment of premium. (2) Waiver of Subrogation: A waiver of subrogation stating that the insurer waives all rights of subrogation against the City, its officials, officers, employees, agents, and volunteers.

16.4 Primary and Non-Contributing Insurance. All policies of Commercial General Liability and Automobile Liability insurance shall be primary and any other insurance, deductible, or self-insurance maintained by the City, its officials, officers, employees, agents, or volunteers shall not contribute with this primary insurance. Policies shall contain or be endorsed to contain such provisions.

16.5 Waiver of Subrogation. All required insurance coverages, except for the professional liability coverage, shall contain or be endorsed to waiver of subrogation in favor of the City, its officials, officers, employees, agents, and volunteers or shall specifically allow Developer or others providing insurance evidence in compliance with these specifications to waive their right of recovery prior to a loss. Developer hereby waives its own right of recovery against City, and shall require similar written express waivers and insurance clauses from each of its contractors.

16.6 Deductibles and Self-Insured Retentions. Any deductible or self-insured retention must be approved in writing by the City and shall protect the City, its officials, officers, employees, agents, and volunteers in the same manner and to the same extent as they would have been protected had the policy or policies not contained a deductible or self-insured retention.

16.7 Evidence of Insurance. The Developer, concurrently with the execution of the Agreement, and as a condition precedent to the effectiveness thereof, shall deliver either certified copies of the required policies, or original certificates on forms approved by the City, together with all endorsements affecting each policy. Required insurance policies shall not be in compliance if they include any limiting provision or endorsement that has not been submitted to the City for approval. The certificates and endorsements for each insurance policy shall be signed by a person authorized by that insurer to bind coverage on its behalf. At least fifteen (15 days) prior to the expiration of any such policy, evidence of insurance showing that such insurance coverage has been renewed or extended shall be filed with the City. If such coverage is cancelled or reduced and not replaced immediately so as to avoid a lapse in the required coverage, Developer

shall, within ten (10) days after receipt of written notice of such cancellation or reduction of coverage, file with the City evidence of insurance showing that the required insurance has been reinstated or has been provided through another insurance company or companies.

16.8 Acceptability of Insurers. Each such policy shall be from a company or companies with a current A.M. Best's rating of no less than A:VII and authorized to transact business of insurance in the State of California, or otherwise allowed to place insurance through surplus line brokers under applicable provisions of the California Insurance Code or any federal law.

16.9 Enforcement of Agreement Provisions (non estoppel). Developer acknowledges and agrees that actual or alleged failure on the part of the City to inform Developer of non-compliance with any requirement imposes no additional obligation on the City nor does it waive any rights hereunder.

16.10 Requirements Not Limiting. Requirement of specific coverage or minimum limits contained in this Section are not intended as a limitation on coverage, limits, or other requirement, or a waiver of any coverage normally provided by any insurance.

16.11 Additional Insurance Provisions

16.11.1 The foregoing requirements as to the types and limits of insurance coverage to be maintained by Developer, and any approval of said insurance by the City, is not intended to and shall not in any manner limit or qualify the liabilities and obligations otherwise assumed by the Developer pursuant to this Agreement, including but not limited to, the provisions concerning indemnification.

16.11.2 If at any time during the life of the Agreement, any policy of insurance required under this Agreement does not comply with these specifications or is canceled and not replaced, City has the right but not the duty to obtain the insurance it deems necessary and any premium paid by City will be promptly reimbursed by Developer.

16.11.3 The City may require the Developer to provide complete copies of all insurance policies in effect for the duration of the Project.

16.11.4 Neither the City nor any of its officials, officers, employees, agents or volunteers shall be personally responsible for any liability arising under or by virtue of this Agreement.

16.11.5 The limits set forth herein shall apply separately to each insured against whom claims are made or suits are brought, except with respect to the limits of liability. Further the limits set forth herein shall not be construed to relieve the Developer from liability in excess of such coverage, nor shall it limit the Developer's indemnification obligations to the City and shall not preclude the City from taking such other actions available to the City under other provisions of the Agreement or law.

16.11.6 Developer shall report to the City, in addition to Developer's insurer, any and all insurance claims submitted by Developer in connection with this Agreement.

17.0 Signs and Advertising. Developer understands and agrees to City's ordinances, regulations, and requirements governing signs and advertising structures. Developer hereby agrees with and consents to the removal by City of all signs or other advertising structures erected, placed, or situated in violation of any City ordinance, regulation, or other requirement. Removal shall be at the expense of Developer. Developer shall indemnify and hold City free and harmless from any claim or demand arising out of or incident to signs, advertising structures, or their removal.

18.0 Relationship Between the Parties. The Parties hereby mutually agree that neither this Agreement, any map related to the Property, nor any other related entitlement, permit, or approval issued by City for the Property shall operate to create the relationship of partnership, joint venture, or agency between City and Developer. Developer's contractors and subcontractors are exclusively and solely under the control and dominion of Developer. Nothing herein shall be deemed to make Developer, its contractors, or its subcontractors an agent, contractor or subcontractor of City.

19.0 General Provisions.

19.1 Authority to Enter Agreement. Each Party warrants that the individuals who have signed this Agreement have the legal power, right, and authority to make this Agreement and bind each respective Party.

19.2 Cooperation; Further Acts. The Parties shall fully cooperate with one another, and shall take any additional acts or sign any additional documents as may be necessary, appropriate, or convenient to attain the purposes of this Agreement.

19.3 Construction; References; Captions. It being agreed the Parties or their agents have participated in the preparation of this Agreement, the language of this Agreement shall be construed simply, according to its fair meaning, and not strictly for or against any Party. Any term referencing time, days, or period for performance shall be deemed calendar days and not work days. All references to Developer include all personnel, employees, agents, and contractors and subcontractors of Developer, except as otherwise specified in this Agreement. All references to City include its elected officials, officers, employees, agents, and volunteers except as otherwise specified in this Agreement. The captions of the various articles and paragraphs are for convenience and ease of reference only, and do not define, limit, augment, or describe the scope, content, or intent of this Agreement.

19.4 Notices. All notices to be given hereunder shall be in writing and may be made either by personal delivery or by registered or certified mail, postage prepaid, return receipt requested. Mailed notices shall be addressed to the parties at the addresses listed below, but each party may change the address by written notice in accordance with this Section. Notices delivered personally will be deemed communicated as of actual receipt; mailed notices will be deemed communicated as of two (2) days after mailing.

CITY:
City of Ontario
Engineering Department
303 East "B" Street

DEVELOPER:
Chino Avenue, LLC.
12223 Highland Avenue, Suite 106-553

Ontario, CA 91764 Attn: City Engineer	Rancho Cucamonga, CA 91739 Attn: Nefertiti Long

19.5 Amendment; Modification. No supplement, modification, or amendment of this Agreement shall be binding unless executed in writing and signed by both Parties.

19.6 Entire Agreement. This Agreement contains the entire Agreement of the parties with respect to the subject matter hereof, and supersedes all prior negotiations, understandings or agreements, either written or oral, express or implied. The invalidity in whole or in part of any provision of this Agreement shall not void or affect the validity of any other provision of this Agreement.

19.7 Successors and Assigns. This Agreement shall be binding on the successors and assigns of the parties, and shall not be assigned by the Developer without the prior written consent of the City.

19.8 Waiver. City's failure to insist upon strict compliance with any provision of this Agreement or to exercise any right or privilege provided herein, or City's waiver of any breach of this Agreement, shall not relieve Developer of any of its obligations under this Agreement, whether of the same or similar type. The foregoing shall be true whether City's actions are intentional or unintentional. Developer agrees to waive, as a defense, counterclaim or set off, any and all defects, irregularities or deficiencies in the authorization, execution or performance of the Public Improvements or this Agreement, as well as the laws, rules, regulations, ordinances or resolutions of City with regards to the authorization, execution, or performance of the Public Improvements or this Agreement.

19.9 Assignment or Transfer of Agreement. Developer shall not assign, hypothecate, or transfer, either directly or by operation of law, this Agreement or any interest herein without prior written consent of City. Any attempt to do so shall be null and void, and any assignee, hypothecate, or transferee shall acquire no right or interest by reason of such attempted assignment, hypothecation, or transfer. Unless specifically stated to the contrary in City's written consent, any assignment, hypothecation, or transfer shall not release or discharge Developer from any duty or responsibility under this Agreement. In the event that City consents in writing to such an assignment, any assignee, hypothecate, or transferee shall expressly assume Developer's obligations hereunder by a written agreement in a form, and containing such security, as is reasonably acceptable to City.

The agreement, hypothecation, or transfer shall be to the satisfaction of the City Attorney and shall include provisions requiring the assignee to post bonds or submit another form of financial security, satisfactory to City and approved by the City Attorney, to guarantee construction of the Public Improvements. The agreement shall survive the recordation of the Final Map and shall be recorded against each of the proposed lots to inform successors and assigns of the required Public Improvements to be constructed and their time frame for construction.

Following any permitted assignment, hypothecation, or transfer of the Public Improvements as set forth in this Section, City shall release Developer from its obligations so

assigned and shall release to Developer any bonds or other security posted to secure the Public Improvements so assigned; provided, however, that City shall not release any security or undertakings given to secure the performance of any of the Public Improvements not assigned, hypothecated, or transferred.

19.10 Binding Effect. Each and all of the covenants and conditions shall be binding on and shall inure to the benefit of the Parties, and their successors, heirs, personal representatives, or assigns. This Section shall not be construed as an authorization for any Party to assign any right or obligation.

19.11 No Third-Party Beneficiaries. There are no intended third-party beneficiaries of any right or obligation assumed by the Parties.

19.12 Invalidity; Severability. If any portion of this Agreement is declared invalid, illegal, or otherwise unenforceable by a court of competent jurisdiction, the remaining provisions shall continue in full force and effect.

19.13 Consent to Jurisdiction and Venue. This Agreement shall be construed in accordance with and governed by the laws of the State of California. Any legal action or proceeding brought to interpret or enforce this Agreement, or which in any way arises out of the Parties' activities undertaken pursuant to this Agreement, shall be filed and prosecuted in the appropriate California State Court in the County of San Bernardino, California. Each Party waives the benefit of any provision of state or federal law providing for a change of venue to any other court or jurisdiction including, without limitation, a change of venue based on the fact that a governmental entity is a party to the action or proceeding, or that a federal right or question is involved or alleged to be involved in the action or proceeding. Without limiting the generality of the foregoing waiver, Developer expressly waives any right to have venue transferred pursuant to California Code of Civil Procedure Section 394.

19.14 Attorneys' Fees and Costs. If any arbitration, lawsuit, or other legal action or proceeding is brought by one Party against the other Party in connection with this Agreement or the Property, the prevailing party, whether by final judgment or arbitration award, shall be entitled to and recover from the other party all costs and expenses incurred by the prevailing party, including actual attorneys' fees ("Costs"). Any judgment, order, or award entered in such legal action or proceeding shall contain a specific provision providing for the recovery of Costs. This Section shall survive the termination or expiration of this Agreement.

19.15 Acquisition and Dedication of Easements or Rights-of-Way. If any of the Public Improvements required by this Agreement are to be constructed on land not within the subdivision or an already-existing public right-of-way, no construction or installation shall be commenced before:

19.15.1 The irrevocable offer of dedication or conveyance to City of appropriate rights-of-way, easements, or other interests in real property, and appropriate authorization from the property owner to allow construction or installation of the Public Improvements or work; or

19.15.2 The issuance of an order of possession by a court of competent jurisdiction pursuant to California's Eminent Domain Law. Developer shall comply in all respects with any such order of possession.

Nothing in this paragraph shall be construed as authorizing or granting an extension of time to Developer for completion of the Public Improvements.

19.16 Prevailing Wages. Developer has been alerted to the requirements of California Labor Code sections 1720 et seq. and 1770 et seq., which require the payment of prevailing wage rates and the performance of other requirements if it is determined that this Agreement constitutes a public works contract. It shall be the sole responsibility of Developer to determine whether to pay prevailing wages for any or all work required by this Agreement. As a material part of this Agreement, Developer agrees to assume all risk of liability arising from any decision not to pay prevailing wages for work required by this Agreement.

19.17 Counterparts. This Agreement may be executed in counterpart originals, which taken together, shall constitute one and the same instrument.

[SIGNATURE PAGE FOLLOWS]

CITY OF ONTARIO

By: _____
Scott Ochoa, City Manager

Chino Avenue, LLC.

By: _____
Jose Cardenas, Manager
Alta Loma Enterprises, LLC,
Managing Member of Chino Avenue, LLC.

APPROVED AS TO FORM:

By: _____
Best Best & Krieger, City Attorney

NOTE: DEVELOPER'S AND SURETY'S SIGNATURES SHALL BE DULY NOTARIZED, AND APPROPRIATE ATTESTATIONS SHALL BE INCLUDED AS MAY BE REQUIRED BY THE BYLAWS, ARTICLES OF INCORPORATION, OR OTHER RULES OR REGULATIONS APPLICABLE TO DEVELOPER'S BUSINESS ENTITY.

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

STATE OF CALIFORNIA)
COUNTY OF California)

On September 25th, 2025 before me, Elizabeth Velazquez, Notary Public, personally appeared Jose Cardenas, who proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that ~~he/she/they~~ executed the same in ~~his/her/their~~ authorized capacity(ies), and that by ~~his/her/their~~ signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

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

WITNESS my hand and official seal.

ELIZABETH VELAZQUEZ
COMM. # 2397847
NOTARY PUBLIC - CALIFORNIA
SAN BERNARDINO COUNTY
My Comm. Expires March 20, 2026

Signature: Elizabeth Velazquez (seal)

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

STATE OF CALIFORNIA)
COUNTY OF _____)

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

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

WITNESS my hand and official seal.

Signature:_____ (seal)

EXHIBIT "A"

LEGAL DESCRIPTION OF PROPERTY

TRACT NO. 20281

Being a Subdivision of Parcel 1 of Parcel Map 5923, in the City of Ontario, County of San Bernardino, State of California, as shown by Map on file in Book 61, Pages 71 and 72 of Parcel Maps, in the Office of the County Records of Said County, located in Section 10, Township 2 South, Range 7 West, S.B.M.

EXHIBIT "B"

LIST OF PUBLIC IMPROVEMENTS

TRACT NO. 20281

Developer shall perform all work and furnish all materials necessary, in the opinion of the City Engineer and on his/her order, to complete the following Public Improvements in accordance with the plans and specifications on file with City or with any changes required or ordered by the City Engineer which, in his/her opinion, are necessary or required to complete this work.

Developer is required to perform the following Public Improvements under this Agreement:

[ENGINEERING COST ESTIMATE ATTACHED BEHIND THIS PAGE]

CITY OF ONTARIO

ENGINEERING DEPARTMENT

Project Cost Estimate

Offsite Street Improvements

Date	7/29/2025
Project Number	TM 20281
Plancheck Number	PC 6
Location	Chino Avenue, Ontario
Computed By	KWC Engineers
Contact Phone	(951) 734-2130
Contact Email	tom.caseldine@kwcengineers.c

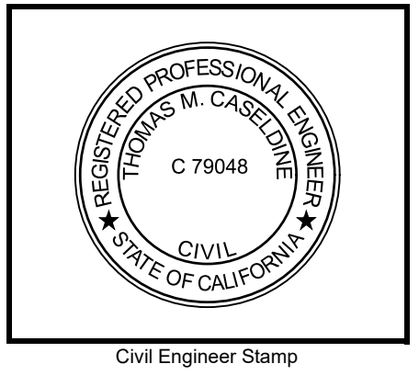
Attached Project Cost Estimate prepared by (or under the direction of)

Thomas Caseldine

Signature of Registered Civil Engineer

79048
RCE No.

03/31/2026
Exp. Date:



Civil Engineer Stamp

ACCEPTED
09/09/2025
CITY OF ONTARIO
ENGINEERING DEPARTMENT

Approved for bonding purposes only

Approved By: Thomas M. Caseldine
Date: 07/29/2025

CITY OF ONTARIO

ENGINEERING DEPARTMENT

Summary of Estimated Construction Cost in Public Right-Of-Way
For Encroachment Permit Fee Calculation

Date	7/29/2025
Project Number	TM 20281
Plancheck Number	PC 6
Location	Chino Avenue, Ontario
Computed By	KWC Engineers
Contact Phone	(951) 734-2130
Contact Email	tom.caseldine@kwcengineers.c

A.	STREET (Excludes Fiber Optic, Landscape, Utility Poles)	Sub-Total	$ 168,279.96
B.	POTABLE WATER	Sub-Total	$ -
C.	RECYCLED WATER	Sub-Total	$ -
D.	SANITARY SEWER	Sub-Total	$ -
E.	STORM DRAIN	Sub-Total	$ -
F.	FIBER OPTIC	Sub-Total	$ -

TOTAL ESTIMATED CONSTRUCTION COST (Excludes Landscape, Utility Poles)	$ 168,279.96
CONSTRUCTION INSPECTION FEE (Excludes Landscape, Utility Poles)	$ 9,335.26 (164 Base Fee)
SECURITY DEPOSIT	$ 168,279.96
Check box if posting Refundable Cash Deposit ☐	$500 Min
See Page 4 for posting of Security Bonds	
PERMIT FEE	$ 116.00
TRAFFIC CONTROL PERMIT FEE	$ 103.00
ENCROACHMENT PERMIT FEE TOTAL	$ 9,554.26

ENGINEERING DEPARTMENT

Summary of Estimated Construction Cost in Public Right-Of-Way
For Plan Check Fee Calculation

Date	7/29/2025
Project Number	TM 20281
Plancheck Number	PC 6
Location	Chino Avenue, Ontario
Computed By	KWC Engineers
Contact Phone	(951) 734-2130
Contact Email	tom.caseldine@kwcengineers.c

A.	STREET (Excludes Fiber Optic, Landscape, Utility Poles)	Sub-Total	**$ 168,279.96**
B.	POTABLE WATER	Sub-Total	**$ -**
C.	RECYCLED WATER	Sub-Total	**$ -**
D.	SANITARY SEWER	Sub-Total	**$ -**
E.	STORM DRAIN	Sub-Total	**$ -**
F.	FIBER OPTIC	Sub-Total	**$ -**
G.	LANDSCAPE	Sub-Total	**$ 38,309.91**
	TOTAL ESTIMATED CONSTRUCTION COST (Excludes Utility Poles)		**$ 206,589.87**
	PLAN CHECK FEE TOTAL		**$ 9,606.43**

CITY OF ONTARIO

ENGINEERING DEPARTMENT

Summary of Estimated Construction Cost in Public Right-Of-Way
For Security Bond Amount
(Subdivision Maps Only)

Date	7/29/2025
Project Number	TM 20281
Plancheck Number	PC 6
Location	Chino Avenue, Ontario
Computed By	KWC Engineers
Contact Phone	(951) 734-2130
Contact Email	tom.caseldine@kwcengineers.cc

A.	STREET	Sub-Total	$ 206,589.87
B.	POTABLE WATER	Sub-Total	$ -
C.	RECYCLED WATER	Sub-Total	$ -
D.	SANITARY SEWER	Sub-Total	$ -
E.	STORM DRAIN	Sub-Total	$ -

TOTAL ESTIMATED CONSTRUCTION COST	$ 206,589.87
CONTINGENCY FOR UNSIGNED PLANS (10%)	$ 20,658.99
Check box if plans are unsigned	
TOTAL SECURITY BOND AMOUNT	$ 206,589.87

SECURITY BOND AMOUNTS

Performance Bond (100% of Total Estimated Construction Cost)	$ 206,589.87
Labor and Material Bond (100% of Total Estimated Construction Cost)	$ 206,589.87
Maintenance Bond * (10% of Performance Bond)	$ 20,658.99
Monumentation Cash Deposit **	$ 1,000.00

No. of Monuments to set:

* To be provided prior to release of Performance Bond

** To be provided if monumentation is not complete by the time of Final Map approval

CITY OF ONTARIO

ENGINEERING DEPARTMENT

Summary of Total Length of Utility Mains in Public Right-Of-Way
Provided to Fiscal Services Department

Date	7/29/2025
Project Number	TM 20281
Plancheck Number	PC 6
Location	Chino Avenue, Ontario
Computed By	KWC Engineers
Contact Phone	(951) 734-2130
Contact Email	tom.caseldine@kwcengineers.cc

		Total Length (LF)
B.	POTABLE WATER MAIN	
C.	RECYCLED WATER MAIN	
D.	SANITARY SEWER MAIN	
E.	STORM DRAIN MAIN	
F.	FIBER OPTIC CONDUIT	

CITY OF ONTARIO

ENGINEERING DEPARTMENT

Construction Cost Estimate Form
Street Improvements

Date	7/29/2025
Project Number	TM 20281
Plancheck Number	PC 6
Location	Chino Avenue, Ontario
Computed By	KWC Engineers
Contact Phone	(951) 734-2130
Contact Email	tom.caseldine@kwcengineers.c

CONSTRUCTION ITEM DESCRIPTION	QTY	UNIT	COST	TOTAL
ASPHALT CONCRETE (AC) ($0.39/IN/S.F. AC & $0.19/IN/S.F. CAB)				
AC BASE PAVE (MINIMUM 4") THICKNESS: 6"	1286	S.F.	$ 2.34	$ 3,009.24
CRUSHED AGREGGATE BASE THICKNESS: 8"	1286	S.F.	$ 1.52	$ 1,954.72
AC PAVEMENT		TON	$ 65.00	$ -
AC BERM		L.F.	$ 13.00	$ -
2" GRIND	3085	S.F.	$ 0.40	$ 1,234.00
SAWCUT	185	L.F.	$ 3.50	$ 647.50
IMPORT FILL (INCLUDING COMPACTION)		C.Y.	$ 25.00	$ -
PREPARATION OF SUBGRADE	1286	S.F.	$ 0.50	$ 643.00
AC PAVEMENT REMOVAL	773	S.F.	$ 3.50	$ 2,705.50
SLURRY SEAL (RPM TYPE II)		S.F.	$ 0.17	$ -
TRENCH BACKFILL AND COMPACTION		S.F.	$ 3.50	$ -
PORTLAND CEMENT CONCRETE (PCC)				
CURB & GUTTER	175	L.F.	$ 15.00	$ 2,625.00
CURB ONLY		L.F.	$ 12.00	$ -
CROSS GUTTER/SPANDREL		S.F.	$ 7.00	$ -
SIDEWALK	1050	S.F.	$ 4.75	$ 4,987.50
WHEELCHAIR RAMP	2	EA.	$ 2,200.00	$ 4,400.00
TRAFFIC ISLAND		S.F.	$ 9.50	$ -
CONCRETE PAVEMENT (PCC - REINFORCED, UP TO 10" THICKNESS)		S.F.	$ 7.80	$ -
DRIVE APPROACHES				
RESIDENTIAL		S.F.	$ 6.50	$ -
COMMERCIAL		S.F.	$ 8.50	$ -
REMOVAL				
REMOVAL OF CONCRETE	1662	S.F.	$ 3.50	$ 5,817.00
REMOVAL OF BERM, A.C. OR P.C.C.	90	L.F.	$ 6.50	$ 585.00
ADJUSTMENT TO GRADE				
MANHOLE	1	EA.	$ 600.00	$ 600.00
WATER VALVE	4	EA.	$ 325.00	$ 1,300.00
CLEANOUT		EA.	$ 265.00	$ -
DRAINAGE				
PARKWAY DRAIN		EA.	$ 1,800.00	$ -

ENGINEERING DEPARTMENT

Construction Cost Estimate Form
Street Improvements

SIGNS				
REFLECTOR SIGN AND POST		EA.	$ 175.00	$ -
STREET NAME SIGN		EA.	$ 475.00	$ -
TRAFFIC SIGN AND POST		EA.	$ 300.00	$ -
LIGHTING				
STREET LIGHT				
- 70, 100 WATT (INCLUDING CONDUIT & PULL BOXES)		EA.	$ 6,200.00	$ -
- 150, 250 WATT (INCLUDING CONDUIT & PULL BOXES)	3	EA.	$ 6,500.00	$ 19,500.00
STREET LIGHT SERVICE PEDESTAL		EA.	$ 4,100.00	$ -
STREET LIGHT SERVICE DUAL PEDESTAL		EA.	$ 5,900.00	$ -
STRIPING				
SIGNING & STRIPING LOCAL STREET		L.F.	$ 4.50	$ -
SIGNING & STRIPING COLLECTOR STREET		L.F.	$ 8.75	$ -
SIGNING & STRIPING ARTERIAL STREET		L.F.	$ 12.75	$ -
PAINTED LEGEND		EA.	$ 80.00	$ -
THERMOPLASTIC LEGEND		EA.	$ 165.00	$ -
TRAFFIC SIGNALS				$ -
NEW TRAFFIC SIGNAL		EA.	$ 355,600.00	$ -
MODIFY EXISTING SIGNAL (STREET WIDENING, PER CORNER)	1	EA.	$ 88,900.00	$ 88,900.00
REMOVE EXISTING SIGNAL		EA.	$ 25,000.00	$ -
REPLACE/RESTORE T.S. DETECTION LOOP		EA.	$ 425.00	$ -
TRAFFIC SIGNAL INTERCONNECT CONDUIT		L.F.	$ 17.00	$ -
TRAFFIC SIGNAL INTERCONNECT CONDUIT & CABLE		L.F.	$ 20.00	$ -
ADD LEFT TURN PHASING		L.S.	$ 30,000.00	$ -
ADD LEFT TURN PHASING		L.S.	$ 30,000.00	$ -
LANDSCAPE				$ -
PARKWAY TREE WITH IRRIGATION		EA.	$ 525.00	$ -
PARKWAY LANDSCAPING		S.F.	$ 6.00	$ -
(INCLUDING IRRIGATION FACILITIES)				$ -
NEIGHBORHOOD EDGE AND/OR MEDIAN LANDSCAPING	3950	S.F.	$ 6.00	$ 23,700.00
(INCLUDING IRRIGATION FACILITIES)				$ -
NEIGHBORHOOD EDGE AND/OR MEDIAN TREE	17	EA.	$ 525.00	$ 8,925.00
(INCLUDING IRRIGATION FACILITIES)				$ -
UTILITY POLES				$ -
RELOCATION OF POLE		EA.	$ 18,000.00	$ -
UNDERGROUNDING OF POWER LINES		L.F.	$ 350.00	$ -
UNDERGROUNDING OF COMMUNICATION LINES		L.F.	$ 90.00	$ -
				$ -
FIBER OPTIC				$ -
CONDUIT PLACEMENT TRENCH/BORE (INCLUDES HANDHOLES)		L.F.	$ 45.00	$ -
(ARTERIAL/COLLECTOR STREETS - MAIN BACKBONE)				$ -
IN-TRACT LOCAL STREETS				$ -
FIBER CONDUIT PLACEMENT		L.F.	$ 5.70	$ -
FIBER TRENCH		L.F.	$ 6.50	$ -

CITY OF ONTARIO

ENGINEERING DEPARTMENT

Construction Cost Estimate Form
Street Improvements

HANDHOLE - FLOWER POT (FP)		EA.	$ 125.00	$ -
HANDHOLE - HH-3		EA.	$ 250.00	$ -
HANDHOLE - HH-4		EA.	$ 375.00	$ -
				$ -
DRY UTILITY TRENCHING				$ -
BORE - AC PAVEMENT		L.F.	$ 20.00	$ -
BORE - PARKWAY		L.F.	$ 10.00	$ -
MICRO TRENCHING		L.F.	$ 8.15	$ -
DRY UTILITY TRENCH - AC PAVEMENT		L.F.	$ 56.00	$ -
DRY UTILITY TRENCH - PARKWAY		L.F.	$ 8.00	$ -
OTHER				
REMOVE & DISPOSE OF EXIST. RIP RAP	170	S.F.	$ 25.00	$ 4,250.00
REMOVE & DISPOSE OF EXIST. MAILBOXRIP RAP	1	EA.	$ 150.00	$ 150.00
				$ -
				$ -
STREET IMPROVEMENTS SUB-TOTAL				**$ 175,933.46**
10% CONTINGENCY				$ 17,593.35
TRAFFIC CONTROL	1	L.S.	$ 5,321.99	$ 5,321.99
MOBILIZATION, SWPPP, EROSION CONTROL	1	L.S.	$ 7,741.07	$ 7,741.07
STREET IMPROVEMENTS TOTAL				**$ 206,589.87**

CITY OF ONTARIO

ENGINEERING DEPARTMENT

Construction Cost Estimate Form
Potable Water Improvements

Date	7/29/2025
Project Number	TM 20281
Plancheck Number	PC 6
Location	Chino Avenue, Ontario
Computed By	KWC Engineers
Contact Phone	(951) 734-2130
Contact Email	tom.caseldine@kwcengineers.cc

CONSTRUCTION ITEM DESCRIPTION	QTY	UNIT	COST	TOTAL
WATER / FIRE MAIN				
6" IN EASEMENT AREA ONLY (NOT IN PAVED STREET)		L.F.	$ 30.00	$ -
8" IN EASEMENT AREA ONLY (NOT IN PAVED STREET)		L.F.	$ 40.00	$ -
10" IN EASEMENT AREA ONLY (NOT IN PAVED STREET)		L.F.	$ 45.00	$ -
8" INC. EXC., BACKFILL & PVMT RESTORATION		L.F.	$ 90.00	$ -
10" INC. EXC., BACKFILL & PVMT RESTORATION		L.F.	$ 95.00	$ -
12" INC. EXC., BACKFILL & PVMT RESTORATION		L.F.	$ 105.00	$ -
16" INC. EXC., BACKFILL & PVMT RESTORATION		L.F.	$ 115.00	$ -
WATER SERVICE (EXCLUDES AC REMOVAL AND REPLACEMENT)				
1" WATER SERVICE WITH METER BOX		EA.	$ 1,000.00	$ -
2" WATER SERVICE WITH METER BOX		EA.	$ 2,200.00	$ -
FIRE HYDRANT (EXCLUDES AC REMOVAL AND REPLACEMENT)				
BREAK-OFF TYPE FIRE HYDRANT (INC. CONNECTION)		EA.	$ 5,400.00	$ -
AIR RELEASE / BLOW-OFF				
(EXCLUDES AC REMOVAL AND REPLACEMENT)				
AIR RELEASE VALVE (INC. CONNECTION)		EA.	$ 4,600.00	$ -
BLOW-OFF VALVE (INC. CONNECTION)		EA.	$ 4,500.00	$ -
BACKFLOW ($1000/IN)				
RP 2" AND SMALLER		EA.	$ 3,000.00	$ -
DDC ABOVE GROUND (UP TO 6" DIAMETER)		EA.	$ 7,000.00	$ -
GATE VALVE				
6"		EA.	$ 550.00	$ -
8"		EA.	$ 850.00	$ -
10"		EA.	$ 1,250.00	$ -
12"		EA.	$ 1,375.00	$ -
16"		EA.	$ 3,425.00	$ -
HOT TAP				
HOT TAP WITH VALVE		EA.	$ 1,750.00	$ -
CONNECTION TO EXISTING 6" MAIN		EA.	$ 3,500.00	$ -
CONNECTION TO EXISTING 8" MAIN		EA.	$ 3,750.00	$ -
CONNECTION TO EXISTING 12" MAIN		EA.	$ 4,100.00	$ -
INSTALL TEE		EA.	$ 300.00	$ -

CITY OF ONTARIO

ENGINEERING DEPARTMENT

Construction Cost Estimate Form
Potable Water Improvements

REMOVE EXISTING BLIND FLANGE		EA.	$ 475.00	$ -
CONCRETE THRUST BLOCK		EA.	$ 585.00	$ -
OTHER				
				$ -
				$ -
				$ -
				$ -
POTABLE WATER IMPROVEMENTS SUB-TOTAL				**$ -**
10% CONTINGENCY				$ -
TRAFFIC CONTROL	1	L.S.	$ -	$ -
MOBILIZATION, SWPPP, EROSION CONTROL	1	L.S.	$ -	$ -
POTABLE WATER IMPROVEMENTS TOTAL				**$ -**

CITY OF ONTARIO

ENGINEERING DEPARTMENT

Construction Cost Estimate Form
Recycled Water Improvements

Date	7/29/2025
Project Number	TM 20281
Plancheck Number	PC 6
Location	Chino Avenue, Ontario
Computed By	KWC Engineers
Contact Phone	(951) 734-2130
Contact Email	tom.caseldine@kwcengineers.cc

CONSTRUCTION ITEM DESCRIPTION	QTY	UNIT	COST	TOTAL
WATER / FIRE MAIN				
6" IN EASEMENT AREA ONLY (NOT IN PAVED STREET)		L.F.	$ 30.00	$ -
8" IN EASEMENT AREA ONLY (NOT IN PAVED STREET)		L.F.	$ 40.00	$ -
10" IN EASEMENT AREA ONLY (NOT IN PAVED STREET)		L.F.	$ 45.00	$ -
8" INC. EXC., BACKFILL & PVMT RESTORATION		L.F.	$ 90.00	$ -
10" INC. EXC., BACKFILL & PVMT RESTORATION		L.F.	$ 95.00	$ -
12" INC. EXC., BACKFILL & PVMT RESTORATION		L.F.	$ 105.00	$ -
16" INC. EXC., BACKFILL & PVMT RESTORATION		L.F.	$ 115.00	$ -
WATER SERVICE (EXCLUDES AC REMOVAL AND REPLACEMENT)				
1" WATER SERVICE WITH METER BOX		EA.	$ 1,000.00	$ -
2" WATER SERVICE WITH METER BOX		EA.	$ 2,200.00	$ -
FIRE HYDRANT (EXCLUDES AC REMOVAL AND REPLACEMENT)				
BREAK-OFF TYPE FIRE HYDRANT (INC. CONNECTION)		EA.	$ 5,400.00	$ -
AIR RELEASE / BLOW-OFF				
(EXCLUDES AC REMOVAL AND REPLACEMENT)				
AIR RELEASE VALVE (INC. CONNECTION)		EA.	$ 4,600.00	$ -
BLOW-OFF VALVE (INC. CONNECTION)		EA.	$ 4,500.00	$ -
BACKFLOW ($1000/IN)				
RP 2" AND SMALLER		EA.	$ 3,000.00	$ -
DDC ABOVE GROUND (UP TO 6" DIAMETER)		EA.	$ 7,000.00	$ -
GATE VALVE				
6"		EA.	$ 550.00	$ -
8"		EA.	$ 850.00	$ -
10"		EA.	$ 1,250.00	$ -
12"		EA.	$ 1,375.00	$ -
16"		EA.	$ 3,425.00	$ -
HOT TAP				
HOT TAP WITH VALVE		EA.	$ 1,750.00	$ -
CONNECTION TO EXISTING 8" MAIN		EA.	$ 3,750.00	$ -
CONNECTION TO EXISTING 12" MAIN		EA.	$ 4,100.00	$ -
INSTALL TEE		EA.	$ 300.00	$ -
REMOVE EXISTING BLIND FLANGE		L.S.	$ 475.00	$ -

CITY OF ONTARIO

ENGINEERING DEPARTMENT

Construction Cost Estimate Form
Recycled Water Improvements

CONCRETE THRUST BLOCK		EA.	$ 585.00	$ -
OTHER				
				$ -
				$ -
				$ -
				$ -
RECYCLED WATER IMPROVEMENTS SUB-TOTAL				**$ -**
10% CONTINGENCY				$ -
TRAFFIC CONTROL	1	L.S.	$ -	$ -
MOBILIZATION, SWPPP, EROSION CONTROL	1	L.S.	$ -	$ -
RECYCLED WATER IMPROVEMENTS TOTAL				**$ -**

CITY OF ONTARIO

ENGINEERING DEPARTMENT

Construction Cost Estimate Form
Sanitary Sewer Improvements

Date	7/29/2025
Project Number	TM 20281
Plancheck Number	PC 6
Location	Chino Avenue, Ontario
Computed By	KWC Engineers
Contact Phone	(951) 734-2130
Contact Email	tom.caseldine@kwcengineers.cc

CONSTRUCTION ITEM DESCRIPTION	QTY	UNIT	COST	TOTAL
SEWER MAIN (VCP ONLY)				
8" & SMALLER IN EASEMENT AREA ONLY		L.F.	$ 40.00	$ -
(NOT IN PAVED STREET)				
10" IN EASEMENT AREA ONLY		L.F.	$ 60.00	$ -
(NOT IN PAVED STREET)				
12" & LARGER IN EASEMENT AREA ONLY		L.F.	$ 63.00	$ -
(NOT IN PAVED STREET)				
8" INC. EXC., BACKFILL & PVMT RESTORATION		L.F.	$ 70.00	$ -
10" INC. EXC., BACKFILL & PVMT RESTORATION		L.F.	$ 75.00	$ -
12" INC. EXC., BACKFILL & PVMT RESTORATION		L.F.	$ 80.00	$ -
15" INC. EXC., BACKFILL & PVMT RESTORATION		L.F.	$ 90.00	$ -
18" INC. EXC., BACKFILL & PVMT RESTORATION		L.F.	$ 95.00	$ -
21" INC. EXC., BACKFILL & PVMT RESTORATION		L.F.	$ 105.00	$ -
24" INC. EXC., BACKFILL & PVMT RESTORATION		L.F.	$ 115.00	$ -
MANHOLE				
MANHOLE		EA.	$ 4,050.00	$ -
DROP MANHOLE		EA.	$ 4,100.00	$ -
VAULT		EA.	$ 3,500.00	$ -
MONITORING FACILITY / NON TRAFFIC AREA		EA.	$ 1,750.00	$ -
MONITORING MANHOLE		EA.	$ 4,100.00	$ -
CLEANOUT		EA.	$ 1,750.00	$ -
REMOVE/ABANDON EXISTING MANHOLE		EA.	$ 1,200.00	$ -
REMOVE EXISTING SEWER				
UP TO 12" DIAMETER		L.F.	$ 55.00	$ -
GREATER THAN 12" DIAMETER		L.F.	$ 70.00	$ -
LATERAL				
4" HOUSE CONNECTION TO SEWER MAIN IN STREET		L.S.	$ 2,925.00	$ -
6" & SMALLER VCP SEWER LATERAL / EASEMENT		L.F.	$ 42.00	$ -
6" & SMALLER VCP SEWER LATERAL / PAVED STREET		L.F.	$ 70.00	$ -
SEWER CHIMNEY		EA.	$ 1,170.00	$ -
SEWER SADDLE		EA.	$ 1,170.00	$ -
WYE 4" x 8" TYPICAL		EA.	$ 115.00	$ -
OIL/GREASE INTERCEPTOR NOT IN STREET		EA.	$ 1,750.00	$ -

CITY OF ONTARIO

ENGINEERING DEPARTMENT

Construction Cost Estimate Form
Sanitary Sewer Improvements

OTHER				
				$ -
				$ -
				$ -
				$ -
SANITARY SEWER IMPROVEMENTS SUB-TOTAL				
10% CONTINGENCY				
TRAFFIC CONTROL	1	L.S.	$ -	$ -
MOBILIZATION, SWPPP, EROSION CONTROL	1	L.S.	$ -	$ -
SANITARY SEWER IMPROVEMENTS TOTAL				

CITY OF ONTARIO

ENGINEERING DEPARTMENT

Construction Cost Estimate Form
Storm Drain Improvements

Date	7/29/2025
Project Number	TM 20281
Plancheck Number	PC 6
Location	Chino Avenue, Ontario
Computed By	KWC Engineers
Contact Phone	(951) 734-2130
Contact Email	tom.caseldine@kwcengineers.cc

CONSTRUCTION ITEM DESCRIPTION	QTY	UNIT	COST	TOTAL
RCP STORM DRAIN				
RCP SIZE X $3.25 / INCH OF I.D. UP TO 60" DIAMETER				
18" INC. EXC., BACKFILL & PVMT RESTORATION		L.F.	$ 58.50	$ -
INC. EXC., BACKFILL & PVMT RESTORATION		L.F.	$ -	$ -
INC. EXC., BACKFILL & PVMT RESTORATION		L.F.	$ -	$ -
INC. EXC., BACKFILL & PVMT RESTORATION		L.F.	$ -	$ -
66" INC. EXC., BACKFILL & PVMT RESTORATION		L.F.	$ 260.00	$ -
72" INC. EXC., BACKFILL & PVMT RESTORATION		L.F.	$ 290.00	$ -
78" INC. EXC., BACKFILL & PVMT RESTORATION		L.F.	$ 305.00	$ -
84" INC. EXC., BACKFILL & PVMT RESTORATION		L.F.	$ 330.00	$ -
90" INC. EXC., BACKFILL & PVMT RESTORATION		L.F.	$ 350.00	$ -
96" INC. EXC., BACKFILL & PVMT RESTORATION		L.F.	$ 365.00	$ -
102" INC. EXC., BACKFILL & PVMT RESTORATION		L.F.	$ 470.00	$ -
108" INC. EXC., BACKFILL & PVMT RESTORATION		L.F.	$ 480.00	$ -
LATERAL				
18" RCP OR SMALLER		L.F.	$ 45.00	$ -
INC. EXC., BACKFILL & PVMT RESTORATION				
MANHOLE		EA.	$ 4,500.00	$ -
CATCH BASIN				
CATCH BASIN LESS THAN 7' IN WIDE		L.F.	$ 409.50	$ -
7' WIDE - CB WITH SCREEN INLET		E.A.	$ 3,900.00	$ -
10' WIDE- CB WITH SCREEN INLET		E.A.	$ 4,200.00	$ -
14' WIDE - CB WITH SCREEN INLET		E.A.	$ 4,700.00	$ -
21' WIDE - CB WITH SCREEN INLET		E.A.	$ 4,900.00	$ -
LOCAL DEPRESSION FOR UP TO 10' WIDE CB		L.S.	$ 585.00	$ -
LOCAL DEPRESSION FOR > 10' WIDE CB		L.S.	$ 1,200.00	$ -
REINFORCED CONCRETE BOX				
INC. EXC., BACKFILL & PVMT RESTORATION				
4' X 6' RCB		L.F.	$ 400.00	$ -
7' X 6' RCB		L.F.	$ 470.00	$ -
7' X 8.5' RCB		L.F.	$ 560.00	$ -
7' X 9.5' RCB		L.F.	$ 575.00	$ -
8' X 11' RCB		L.F.	$ 585.00	$ -
8' X 13' RCB		L.F.	$ 600.00	$ -

CITY OF ONTARIO

ENGINEERING DEPARTMENT

Construction Cost Estimate Form
Storm Drain Improvements

9' X 9' RCB		L.F.	$ 610.00	$ -
9' X 12' RCB		L.F.	$ 650.00	$ -
OUTLET STRUCTURE		EA.	$ 700.00	$ -
INLET STRUCTURE		EA.	$ 700.00	$ -
TRANSITION STRUCTURE		EA.	$ 1,700.00	$ -
OTHER				
				$ -
				$ -
				$ -
				$ -
STORM DRAIN IMPROVEMENTS SUB-TOTAL				**$ -**
10% CONTINGENCY				$ -
TRAFFIC CONTROL	1	L.S.	$ -	$ -
MOBILIZATION, SWPPP, EROSION CONTROL	1	L.S.	$ -	$ -
STORM DRAIN IMPROVEMENTS TOTAL				

CITY OF ONTARIO

ENGINEERING DEPARTMENT

Project Cost Estimate

Date 10/9/2023
Project Number Tract 20281
Location Chino Avenue / Colonial Avenue
Computed By USSI
Contact Phone No. 949-564-6328

Attached project estimate prepared by (or under the direction of)

Signature of Registered Civil Engineer

RCE No. 86558 Exp. Date: 11/15/23

REGISTERED PROFESSIONAL ENGINEER
KIRK R. MEDEIROS
No. 86558
Exp. 3/31/25
CIVIL
STATE OF CALIFORNIA

Civil Engineer Stamp

Recommended by HARRIS
for APPROVAL by City
By: 11/21/2023

Approved By:
Date:

S:\Engineering\Forms\Land Forms\ Engineering Cost Estimate\Engineering Project Cost Estimate 03-23-23

Last Update: 03-23-23

ONTARIO

ENGINEERING DEPARTMENT

Summary of Estimated Cost of Construction in Public Right-Of-Way
For Encroachment Permit Fee Calculation

Date 10/9/2023
Project Number Tract 20281
Location Chino Avenue / Colonial Avenue
Computed By USSI
Contact Phone No. 949-564-6328

A.	STREET	Sub-Total	
B.	WATER	Sub-Total	
C.	RECYCLED WATER	Sub-Total	
D.	SEWER	Sub-Total	
E.	STORM DRAIN	Sub-Total	
F.	FIBER OPTIC	Sub-Total	**$63,490.52**
	TOTAL ESTIMATED CONSTRUCTION COST		**$63,490.52**

Construction Inspection Fee **$3,624.23**
(Exc. Landscape & Utility Poles Sections)
(Inc. $164 Inspection Base Fee)

Refundable Cash Deposit
(Collect only if security not posted with Final Map)
= **$63,490.52**

$500.00 Min

PERMIT FEE **$116.00**

TRAFFIC CONTROL PERMIT FEE **$103.00**

ENCROACHMENT PERMIT FEE TOTAL **$67,333.75**

CITY OF ONTARIO

ENGINEERING DEPARTMENT

Summary of Estimated Cost of Construction in Public Right-Of-Way

For Plan Check Fee Calculation

Date 10/9/2023
Project Number Tract 20281
Location Chino Avenue / Colonial Avenue
Computed By USSI
Contact Phone No. 949-564-6328

A.	STREET (Exc. Utility Poles Section)	Sub-Total	
B.	WATER	Sub-Total	
C.	RECYCLED WATER	Sub-Total	
D.	SEWER	Sub-Total	
E.	STORM DRAIN	Sub-Total	
F.	FIBER OPTIC	Sub-Total	**$63,490.52**
G.	LANDSCAPING (Inc. Neighborhood Edge and Median)	Sub-Total	

TOTAL ESTIMATED CONSTRUCTION COST (A+B+C+D+E+F+G) **$63,490.52**

Plan Check Fee **$2,952.31**

For Office Use Only

TOTAL ESTIMATED CONSTRUCTION COST (A+B+C+D+E)

Plan Check Fee **FALSE**

CITY OF
ONTARIO
ENGINEERING DEPARTMENT

Summary of Estimated Cost of Construction in Public Right-Of-Way

For Security (i.e. Bond) Amount

(For Subdivision Maps Only)

Date 10/9/2023
Project Number Tract 20281
Location Chino Avenue / Colonial Avenue
Computed By USSI
Contact Phone No. 949-564-6328

A. STREET	Sub-Total	$63,490.52
B. WATER	Sub-Total	
C. RECYCLED WATER	Sub-Total	
D. SEWER	Sub-Total	
E. STORM DRAIN	Sub-Total	
CONTINGENCY FOR UNSIGNED PLANS (10%)		$6,349.05
TOTAL SECURITY (i.e. BOND) ESTIMATE AMOUNT		$69,839.57

SECURITY (BOND) AMOUNTS

Performance Bond (100% of estimated cost)	$69,839.57
Labor and Material Bond (100% of estimated cost)	$69,839.57
Maintenance Bond* (10% of Performance Bond)	$6,983.96
Monumentation Cash Deposit** (No. of Monmuments to set:)	$1,000.00

* To be provided prior to release of Performance Bond

**To be provided if monumentation is not completed by the time of Final (Parcel) Map approval

CITY OF ONTARIO

ENGINEERING DEPARTMENT

Date 10/9/2023
Project Number Tract 20281

		Total Length in feet to be constructed
A.	WATER MAIN	
B.	SEWER MAIN	
C.	STORM DRAIN MAIN	
D.	RECYCLED WATER	
E.	FIBER OPTIC	4520

* To be provided to the Fiscal Services Department

CITY OF ONTARIO

ENGINEERING DEPARTMENT

Construction Cost Estimate Form
Street Improvements

Date 10/9/2023
Project Number Tract 20281
Location Chino Avenue / Colonial Avenue
Computed By USSI
Contact Phone No. 949-564-6328

CONSTRUCTION ITEM DESCRIPTION	QTY	UNIT	COST	TOTAL
PAVING *A.C. PAVEMENT ($0.39/IN/S.F. A.C. & $0.19/IN/S.F. CAB)				
A.C. UP TO 6" THICKNESS		S.F.	$2.34	
CRUSHED AGREGGATE BASE UP TO 8" THICKNESS		S.F.	$1.52	
A.C. PAVEMENT		Ton	$65.00	
A.C. BERM		L.F.	$13.00	
2" GRIND UP TO 5' IN WIDTH		L.F.	$2.00	
SAWCUT		L.F.	$3.50	
IMPORT FILL (INCLUDING COMPACTION)		C.Y.	$25.00	
PREPARATION OF SUBGRADE		S.F.	$0.50	
A.C. PAVEMENT REMOVAL		S.F.	$3.50	
SLURRY SEAL (RPM TYPE II)		S.F.	$0.17	
TRENCH BACKFILL AND COMPACTION		S.F.	$3.50	
CONCRETE				
CURB & GUTTER		L.F.	$15.00	
P.C.C. CURB ONLY		L.F.	$12.00	
CROSS GUTTER/SPANDREL		S.F.	$7.00	
SIDEWALK		S.F.	$4.75	
WHEELCHAIR RAMP		EA.	$2,200.00	
TRAFFIC ISLAND		S.F.	$9.50	
CONCRETE PAVEMENT (PCC - REINFORCED, UP TO 10" THICKNESS)		S.F.	$7.80	
10% Contingency				
Street Improvements Sub-Total				

Construction Cost Estimate Form

Street Improvements

DRIVE APPROACHES				
RESIDENTIAL		S.F.	$6.50	
COMMERCIAL		S.F.	$8.50	
REMOVAL				
REMOVAL OF CONCRETE		S.F.	$3.50	
REMOVAL OF BERM, A.C. OR P.C.C.		L.F.	$6.50	
ADJUSTMENT TO GRADE				
MANHOLE		EA.	$600.00	
WATER VALVE		EA.	$325.00	
CLEANOUT		EA.	$265.00	
DRAINAGE				
PARKWAY DRAIN		EA.	$1,800.00	
SIGNS				
REFLECTOR SIGN AND POST		EA.	$175.00	
STREET NAME SIGN		EA.	$475.00	
TRAFFIC SIGN AND POST		EA.	$300.00	
LIGHTING				
STREET LIGHT - 70, 100 WATT (INCLUDING CONDUIT & PULL BOXES)		EA.	$6,200.00	
- 150, 250 WATT (INCLUDING CONDUIT & PULL BOXES)		EA.	$6,500.00	
STREET LIGHT SERVICE PEDESTAL		EA.	$4,100.00	
STREET LIGHT SERVICE DUAL PEDESTAL		EA.	$5,900.00	
STRIPING				
SIGNING & STRIPING LOCAL STREET		L.F.	$4.50	
SIGNING & STRIPING COLLECTOR STREET		L.F.	$8.75	
SIGNING & STRIPING ARTERIAL STREET		L.F.	$12.75	
PAINTED LEGEND		EA.	$80.00	
THERMOPLASTIC LEGEND		EA.	$165.00	
			10% Contingency	
			Street Improvements Sub-Total	

Construction Cost Estimate Form

Street Improvements

TRAFFIC SIGNALS				
NEW TRAFFIC SIGNAL		EA.	$355,600.00	
MODIFY EXISTING SIGNAL (STREET WIDENING, PER CORNER)		EA.	$88,900.00	
REMOVE EXISTING SIGNAL		EA.	$25,000.00	
REPLACE/RESTORE T.S. DETECTION LOOP		EA.	$425.00	
TRAFFIC SIGNAL INTERCONNECT CONDUIT		L.F.	$17.00	
TRAFFIC SIGNAL INTERCONNECT CONDUIT & CABLE		L.F.	$20.00	
ADD LEFT TURN PHASING		L.S.	$30,000.00	
ADD LEFT TURN PHASING		L.S.	$30,000.00	
LANDSCAPE				
PARKWAY TREE WITH IRRIGATION		EA.	$525.00	
PARKWAY LANDSCAPING		S.F.	$6.00	
(INCLUDING IRRIGATION FACILITIES)				
NEIGHBORHOOD EDGE AND/OR MEDIAN LANDSCAPING		S.F.	$6.00	
(INCLUDING IRRIGATION FACILITIES)				
NEIGHBORHOOD EDGE AND/OR MEDIAN TREE		EA.	$525.00	
(INCLUDING IRRIGATION FACILITIES)				
UTILITY POLES				
RELOCATION OF POLE		EA.	$18,000.00	
UNDERGROUNDING OF POWER LINES		L.F.	$350.00	
UNDERGROUNDING OF COMMUNICATION LINES		L.F.	$90.00	
FIBER OPTIC				
CONDUIT PLACEMENT TRENCH/BORE (INCLUDES HANDHOLES)		L.F.	$45.00	
(ARTERIAL/COLLECTOR STREETS - MAIN BACKBONE)				
IN-TRACT LOCAL STREETS				
FIBER CONDUIT PLACEMENT	4520	L.F.	$5.70	$25,764.00
FIBER TRENCH	3970	L.F.	$6.50	$25,805.00
HANDHOLE - FLOWER POT (FP)		EA.	$125.00	
HANDHOLE - HH-3	10	EA.	$250.00	$2,500.00
HANDHOLE - HH-4		EA.	$375.00	
OTHER				
BORE (AC PAVEMENT)		L.F.	$20.00	
BORE (PARKWAY)		L.F.	$10.00	
MICRO TRENCHING		L.F.	$8.15	
DRY UTILITY TRENCH (AC PAVEMENT)		L.F.	$56.00	
DRY UTILITY TRENCH (PARKWAY)		L.F.	$8.00	
			10% Contingency	$5,406.90
			Street Improvements Sub-Total	$59,475.90
TRAFFIC CONTROL		L.S.	$1,635.59	$1,635.59
MOBILIZATION, SWPPP, EROSION CONTROL		L.S.	$2,379.04	$2,379.04
(Sub-Total Transferred to Item "A" on Summary Sheet)				$63,490.52

CITY OF ONTARIO

Construction Cost Estimate form
Water Improvements

Date 10/9/2023
Project Number Tract 20281
Location Chino Avenue / Colonial Avenue
Computed By USSI
Contact Phone No. 949-564-6328

CONSTRUCTION ITEM DESCRIPTION	QTY	UNIT	COST	TOTAL
WATER / FIRE MAIN				
6" IN EASEMENT AREA ONLY (NOT IN PAVED STREET)		L.F.	$30.00	
8" IN EASEMENT AREA ONLY (NOT IN PAVED STREET)		L.F.	$40.00	
10" IN EASEMENT AREA ONLY (NOT IN PAVED STREET)		L.F.	$45.00	
8" INC. EXC., BACKFILL & PVMT RESTORATION		L.F.	$90.00	
10" INC. EXC., BACKFILL & PVMT RESTORATION		L.F.	$95.00	
12" INC. EXC., BACKFILL & PVMT RESTORATION		L.F.	$105.00	
16" INC. EXC., BACKFILL & PVMT RESTORATION		L.F.	$115.00	
WATER SERVICE				
(EXCLUDES AC REMOVAL AND REPLACEMENT)				
1" WATER SERVICE WITH METER BOX		EA.	$1,000.00	
2" WATER SERVICE WITH METER BOX		EA.	$2,200.00	
FIRE HYDRANT				
(EXCLUDES AC REMOVAL AND REPLACEMENT)				
BREAK-OFF TYPE FIRE HYDRANT (INC. CONNECTION)		EA.	$5,400.00	
RELEASE / BLOW-OFF				
(EXCLUDES AC REMOVAL AND REPLACEMENT)				
AIR RELEASE VALVE (INC. CONNECTION)		EA.	$4,600.00	
BLOW-OFF VALVE (INC. CONNECTION)		EA.	$4,500.00	
10% Contingency				
Water Improvements Sub-Total				

Construction Cost Estimate form

Water Improvements

BACKFLOW ($1000/IN)				
RP 2" AND SMALLER		EA.	$3,000.00	
DDC ABOVE GROUND (UP TO 6" DIAMETER)		EA.	$7,000.00	
GATE VALVE				
6"		EA.	$550.00	
8"		EA.	$850.00	
10"		EA.	$1,250.00	
12"		EA.	$1,375.00	
16"		EA.	$3,425.00	
HOT TAP				
HOT TAP WITH VALVE		EA.	$1,750.00	
CONNECTION TO EXISTING 6" MAIN		EA.	$3,500.00	
CONNECTION TO EXISTING 8" MAIN		EA.	$3,750.00	
CONNECTION TO EXISTING 12" MAIN		EA.	$4,100.00	
INSTALL TEE		EA.	$300.00	
REMOVE EXISTING BLIND FLANGE		EA.	$475.00	
CONCRETE THRUST BLOCK		EA.	$585.00	
OTHER				
			10% Contingency	
			Water Improvements Sub-Total	
TRAFFIC CONTROL		L.S.		
MOBILIZATION, SWPPP, EROSION CONTROL		L.S.		
(Sub-Total Transferred to Item "B" on Summary Sheet)				

CITY OF ONTARIO

Construction Cost Estimate form

Recycled Water Improvements

Date 10/9/2023
Project Number Tract 20281
Location Chino Avenue / Colonial Avenue
Computed By USSI
Contact Phone No. 949-564-6328

CONSTRUCTION ITEM DESCRIPTION	QTY	UNIT	COST	TOTAL
WATER / FIRE MAIN				
6" IN EASEMENT AREA ONLY (NOT IN PAVED STREET)		L.F.	$30.00	
8" IN EASEMENT AREA ONLY (NOT IN PAVED STREET)		L.F.	$40.00	
10" IN EASEMENT AREA ONLY (NOT IN PAVED STREET)		L.F.	$45.00	
8" INC. EXC., BACKFILL & PVMT RESTORATION		L.F.	$90.00	
10" INC. EXC., BACKFILL & PVMT RESTORATION		L.F.	$95.00	
12" INC. EXC., BACKFILL & PVMT RESTORATION		L.F.	$105.00	
16" INC. EXC., BACKFILL & PVMT RESTORATION		L.F.	$115.00	
WATER SERVICE				
(EXCLUDES AC REMOVAL AND REPLACEMENT)				
1" WATER SERVICE WITH METER BOX		EA.	$1,000.00	
2" WATER SERVICE WITH METER BOX		EA.	$2,200.00	
FIRE HYDRANT				
(EXCLUDES AC REMOVAL AND REPLACEMENT)				
BREAK-OFF TYPE FIRE HYDRANT (INC. CONNECTION)		EA.	$5,400.00	
RELEASE / BLOW-OFF				
(EXCLUDES AC REMOVAL AND REPLACEMENT)				
AIR RELEASE VALVE		EA.	$4,600.00	
BLOW-OFF VALVE		EA.	$4,500.00	
			10% Contingency	
			Water Improvements Sub-Total	

Construction Cost Estimate form

Recycled Water Improvements

BACKFLOW ($1000/IN)				
RP 2" AND SMALLER		EA.	$3,000.00	
DDC ABOVE GROUND (UP TO 6" DIAMETER)		EA.	$7,000.00	
GATE VALVE				
6"		EA.	$550.00	
8"		EA.	$850.00	
10"		EA.	$1,250.00	
12"		EA.	$1,375.00	
16"		EA.	$3,425.00	
HOT TAP				
HOT TAP WITH VALVE		EA.	$1,750.00	
CONNECTION TO 8" MAIN		EA.	$3,750.00	
CONNECTION TO 12" MAIN		EA.	$4,100.00	
INSTALL TEE		EA.	$300.00	
REMOVE EXISTING BLIND FLANGE		L.S.	$475.00	
CONCRETE THRUST BLOCK		EA.	$585.00	
OTHER				
10% Contingency				
Water Improvements Sub-Total				
TRAFFIC CONTROL		L.S.		
MOBILIZATION, SWPPP, EROSION CONTROL		L.S.		
(Sub-Total Transferred to Item "C" on Summary Sheet)				

CITY OF ONTARIO

ENGINEERING DEPARTMENT

Construction Cost Estimate Form

Sewer Improvements

Date 10/9/2023
Project Number Tract 20281
Location Chino Avenue / Colonial Avenue
Computed By USSI
Contact Phone No. 949-564-6328

CONSTRUCTION ITEM DESCRIPTION	QTY	UNIT	COST	TOTAL
SEWER MAIN (VCP ONLY)				
8" & SMALLER IN EASEMENT AREA ONLY (NOT IN PAVED STREET)		L.F.	$40.00	
10" IN EASEMENT AREA ONLY (NOT IN PAVED STREET)		L.F.	$60.00	
12" & LARGER IN EASEMENT AREA ONLY (NOT IN PAVED STREET)		L.F.	$63.00	
8" INC. EXCAVATION, BACKFILL & PAVEMENT RESTORATION		L.F.	$70.00	
10" INC. EXCAVATION, BACKFILL & PAVEMENT RESTORATION		L.F.	$75.00	
12" INC. EXCAVATION, BACKFILL & PAVEMENT RESTORATION		L.F.	$80.00	
15" INC. EXCAVATION, BACKFILL & PAVEMENT RESTORATION		L.F.	$90.00	
18" INC. EXCAVATION, BACKFILL & PAVEMENT RESTORATION		L.F.	$95.00	
21" INC. EXCAVATION, BACKFILL & PAVEMENT RESTORATION		L.F.	$105.00	
24" INC. EXCAVATION, BACKFILL & PAVEMENT RESTORATION		L.F.	$115.00	
MANHOLE				
MANHOLE		EA.	$4,050.00	
DROP MANHOLE		EA.	$4,100.00	
VAULT		EA.	$3,500.00	
MONITORING FACILITY / NON TRAFFIC AREA		EA.	$1,750.00	
MONITORING MANHOLE		EA.	$4,100.00	
CLEANOUT		EA.	$1,750.00	
REMOVE/ABANDON EXISTING MANHOLE		EA.	$1,200.00	
REMOVE EXISTING SEWER				
UP TO 12" DIAMETER		L.F.	$55.00	
GREATER THAN 12" DIAMETER		L.F.	$70.00	
			10% Contingency	
			Sewer Improvements Sub-Total	

Construction Cost Estimate Form
Sewer Improvements

LATERAL				
4" HOUSE CONNECTION TO SEWER MAIN IN STREET		L.S.	$2,925.00	
6" & SMALLER VCP SEWER LATERAL / EASEMENT		L.F.	$42.00	
6" & SMALLER VCP SEWER LATERAL / PAVED STREET		L.F.	$70.00	
SEWER CHIMNEY		EA.	$1,170.00	
SEWER SADDLE		EA.	$1,170.00	
WYE 4" x 8" TYPICAL		EA.	$115.00	
OIL/GREASE INTERCEPTOR NOT IN STREET		EA.	$1,750.00	
OTHER				

ONTARIO

ENGINEERING DEPARTMENT

Construction Cost Estimate form

Storm Drain Improvements

Date 10/9/2023
Project Number Tract 20281
Location Chino Avenue / Colonial Avenue
Computed By USSI
Contact Phone No. 949-564-6328

CONSTRUCTION ITEM DESCRIPTION	QTY	UNIT	COST	TOTAL
STORM DRAIN (RCP SIZE X $3.25 / INCH OF I.D. UP TO 60" DIAMETER)				
63" RCP INC. EXC., BACKFILL & PAVEMENT RESTORATION		L.F.	$210.00	
66" RCP INC. EXC., BACKFILL & PAVEMENT RESTORATION		L.F.	$260.00	
72" RCP INC. EXC., BACKFILL & PAVEMENT RESTORATION		L.F.	$290.00	
78" RCP INC. EXC., BACKFILL & PAVEMENT RESTORATION		L.F.	$305.00	
81" RCP INC. EXC., BACKFILL & PAVEMENT RESTORATION		L.F.	$320.00	
84" RCP INC. EXC., BACKFILL & PAVEMENT RESTORATION		L.F.	$330.00	
90" RCP INC. EXC., BACKFILL & PAVEMENT RESTORATION		L.F.	$350.00	
96" RCP INC. EXC., BACKFILL & PAVEMENT RESTORATION		L.F.	$365.00	
102" RCP INC. EXC., BACKFILL & PAVEMENT RESTORATION		L.F.	$470.00	
108" RCP INC. EXC., BACKFILL & PAVEMENT RESTORATION		L.F.	$480.00	
24" X 36" CMPA (10 GUAGE)		L.F.	$140.00	
27" X 43" CMPA (10 GUAGE)		L.F.	$150.00	
LATERAL				
18" RCP OR SMALLER		L.F.	$45.00	
(INC. EXC., BACKFILL & PAVEMENT RESTORATION)				
MANHOLE		EA.	$4,500.00	
			10% Contingency	
			Storm Drain Improvements Sub-Total	

Construction Cost Estimate form
Storm Drain Improvements

CATCH BASIN				
CATCH BASIN LESS THAN 7' IN WIDE		L.F.	$409.50	
7' WIDE - CB WITH SCREEN INLET		E.A.	$3,900.00	
10' WIDE- CB WITH SCREEN INLET		E.A.	$4,200.00	
14' WIDE - CB WITH SCREEN INLET		E.A.	$4,700.00	
21' WIDE - CB WITH SCREEN INLET		E.A.	$4,900.00	
LOCAL DEPRESSION FOR UP TO 10' WIDE CB		L.S.	$585.00	
LOCAL DEPRESSION FOR > 10' WIDE CB		L.S.	$1,200.00	
REINFORCED CONCRETE BOX				
(INC. EXCAVATION, BACKFILL & PAVEMENT RESTORATION)				
4' X 6' RCB		L.F.	$400.00	
7' X 6' RCB		L.F.	$470.00	
7' X 8.5' RCB		L.F.	$560.00	
7' X 9.5' RCB		L.F.	$575.00	
8' X 11' RCB		L.F.	$585.00	
8' X 13' RCB		L.F.	$600.00	
9' X 9' RCB		L.F.	$610.00	
9' X 12' RCB		L.F.	$650.00	
OUTLET STRUCTURE		EA.	$700.00	
INLET STRUCTURE		EA.		
TRANSITION STRUCTURE		L.S.	$1,700.00	
OTHER				
10% Contingency				
Storm Drain Improvements Sub-Total				
TRAFFIC CONTROL		L.S.		
MOBILIZATION, SWPPP, EROSION CONTROL		L.S.		
(Sub-Total Transferred to Item "E" on Summary Sheet)				

CITY OF ONTARIO

ENGINEERING DEPARTMENT

Project Cost Estimate

Onsite Str, Wat, Rec Wat, Sewer, and SD Improvement Plans

Date	9/5/2025
Project Number	TM 20281
Plancheck Number	PC 7
Location	Chino Ave, Ontario
Computed By	KWC Engineers
Contact Phone	(951) 734-2130
Contact Email	tom.caseldine@kwcengineers.c

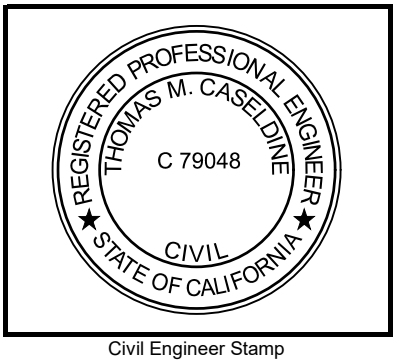
Attached Project Cost Estimate prepared by (or under the direction of)

Thomas Caseldine

Signature of Registered Civil Engineer

79048
RCE No.

03/31/2026
Exp. Date:



Civil Engineer Stamp

ACCEPTED
09/09/2025
CITY OF ONTARIO
ENGINEERING DEPARTMENT

Approved for bonding purposes only

Approved By: Thomas M. Caseldine
Date: 09/5/2025

CITY OF ONTARIO

ENGINEERING DEPARTMENT

Summary of Estimated Construction Cost in Public Right-Of-Way
For Encroachment Permit Fee Calculation

Date	9/5/2025
Project Number	TM 20281
Plancheck Number	PC 7
Location	Chino Ave, Ontario
Computed By	KWC Engineers
Contact Phone	(951) 734-2130
Contact Email	tom.caseldine@kwcengineers.co

A.	STREET (Excludes Fiber Optic, Landscape, Utility Poles)	Sub-Total	**$ 216,506.16**
B.	POTABLE WATER	Sub-Total	**$ 115,276.12**
C.	RECYCLED WATER	Sub-Total	**$ 38,597.60**
D.	SANITARY SEWER	Sub-Total	**$ 124,646.64**
E.	STORM DRAIN	Sub-Total	**$ 141,421.97**
F.	FIBER OPTIC	Sub-Total	**$ -**

TOTAL ESTIMATED CONSTRUCTION COST (Excludes Landscape, Utility Poles)	**$ 636,448.49**
CONSTRUCTION INSPECTION FEE (Excludes Landscape, Utility Poles)	**$ 27,149.42** $164 Base Fee
SECURITY DEPOSIT Check box if posting Refundable Cash Deposit See Page 4 for posting of Security Bonds	**$ 636,448.49** $500 Min
PERMIT FEE	**$ 116.00**
TRAFFIC CONTROL PERMIT FEE	**$ 103.00**
ENCROACHMENT PERMIT FEE TOTAL	**$ 27,368.42**

CITY OF ONTARIO

ENGINEERING DEPARTMENT

Summary of Estimated Construction Cost in Public Right-Of-Way
For Plan Check Fee Calculation

Date	9/5/2025
Project Number	TM 20281
Plancheck Number	PC 7
Location	Chino Ave, Ontario
Computed By	KWC Engineers
Contact Phone	(951) 734-2130
Contact Email	tom.caseldine@kwcengineers.c

A.	STREET (Excludes Fiber Optic, Landscape, Utility Poles)	Sub-Total	**$ 216,506.16**
B.	POTABLE WATER	Sub-Total	**$ 115,276.12**
C.	RECYCLED WATER	Sub-Total	**$ 38,597.60**
D.	SANITARY SEWER	Sub-Total	**$ 124,646.64**
E.	STORM DRAIN	Sub-Total	**$ 141,421.97**
F.	FIBER OPTIC	Sub-Total	**$ -**
G.	LANDSCAPE	Sub-Total	**$ -**
	TOTAL ESTIMATED CONSTRUCTION COST (Excludes Utility Poles)		**$ 636,448.49**
	PLAN CHECK FEE TOTAL		**$ 23,039.44**

CITY OF ONTARIO

ENGINEERING DEPARTMENT

Summary of Estimated Construction Cost in Public Right-Of-Way
For Security Bond Amount
(Subdivision Maps Only)

Date	9/5/2025
Project Number	TM 20281
Plancheck Number	PC 7
Location	Chino Ave, Ontario
Computed By	KWC Engineers
Contact Phone	(951) 734-2130
Contact Email	tom.caseldine@kwcengineers.co

A.	STREET	Sub-Total	**$ 216,506.16**
B.	POTABLE WATER	Sub-Total	**$ 115,276.12**
C.	RECYCLED WATER	Sub-Total	**$ 38,597.60**
D.	SANITARY SEWER	Sub-Total	**$ 124,646.64**
E.	STORM DRAIN	Sub-Total	**$ 141,421.97**

TOTAL ESTIMATED CONSTRUCTION COST	**$ 636,448.49**
CONTINGENCY FOR UNSIGNED PLANS (10%) Check box if plans are unsigned	**$ 63,644.85**
TOTAL SECURITY BOND AMOUNT	**$ 636,448.49**

SECURITY BOND AMOUNTS

Performance Bond (100% of Total Estimated Construction Cost)	**$ 636,448.49**
Labor and Material Bond (100% of Total Estimated Construction Cost)	**$ 636,448.49**
Maintenance Bond * (10% of Performance Bond)	**$ 63,644.85**
Monumentation Cash Deposit ** No. of Monuments to set:	**$ 1,000.00**

* To be provided prior to release of Performance Bond

** To be provided if monumentation is not complete by the time of Final Map approval

CITY OF ONTARIO

ENGINEERING DEPARTMENT

Summary of Total Length of Utility Mains in Public Right-Of-Way
Provided to Fiscal Services Department

Date	9/5/2025
Project Number	TM 20281
Plancheck Number	PC 7
Location	Chino Ave, Ontario
Computed By	KWC Engineers
Contact Phone	(951) 734-2130
Contact Email	tom.caseldine@kwcengineers.c

		Total Length (LF)
B.	POTABLE WATER MAIN	**463**
C.	RECYCLED WATER MAIN	**343**
D.	SANITARY SEWER MAIN	**667**
E.	STORM DRAIN MAIN	**786**
F.	FIBER OPTIC CONDUIT	

CITY OF ONTARIO

ENGINEERING DEPARTMENT

Construction Cost Estimate Form
Street Improvements

Date	9/5/2025
Project Number	TM 20281
Plancheck Number	PC 7
Location	Chino Ave, Ontario
Computed By	KWC Engineers
Contact Phone	(951) 734-2130
Contact Email	tom.caseldine@kwcengineers.c

CONSTRUCTION ITEM DESCRIPTION		QTY	UNIT	COST	TOTAL
ASPHALT CONCRETE (AC) ($0.39/IN/S.F. AC & $0.19/IN/S.F. CAB)					
AC BASE PAVE (MINIMUM 4")	THICKNESS: 6"	23100	S.F.	$ 2.34	$ 54,054.00
CRUSHED AGREGGATE BASE	THICKNESS: 8"	23100	S.F.	$ 1.52	$ 35,112.00
AC PAVEMENT			TON	$ 65.00	$ -
AC BERM			L.F.	$ 13.00	$ -
2" GRIND		160	S.F.	$ 0.40	$ 64.00
SAWCUT		35	L.F.	$ 3.50	$ 122.50
IMPORT FILL (INCLUDING COMPACTION)			C.Y.	$ 25.00	$ -
PREPARATION OF SUBGRADE		23100	S.F.	$ 0.50	$ 11,550.00
AC PAVEMENT REMOVAL			S.F.	$ 3.50	$ -
SLURRY SEAL (RPM TYPE II)			S.F.	$ 0.17	$ -
TRENCH BACKFILL AND COMPACTION			S.F.	$ 3.50	$ -
PORTLAND CEMENT CONCRETE (PCC)					
CURB & GUTTER		1250	L.F.	$ 15.00	$ 18,750.00
CURB ONLY			L.F.	$ 12.00	$ -
CROSS GUTTER/SPANDREL			S.F.	$ 7.00	$ -
SIDEWALK		2575	S.F.	$ 4.75	$ 12,231.25
WHEELCHAIR RAMP		3	EA.	$ 2,200.00	$ 6,600.00
TRAFFIC ISLAND			S.F.	$ 9.50	$ -
CONCRETE PAVEMENT (PCC - REINFORCED, UP TO 10" THICKNESS)			S.F.	$ 7.80	$ -
DRIVE APPROACHES					
RESIDENTIAL		1003	S.F.	$ 6.50	$ 6,519.50
COMMERCIAL			S.F.	$ 8.50	$ -
REMOVAL					
REMOVAL OF CONCRETE			S.F.	$ 3.50	$ -
REMOVAL OF BERM, A.C. OR P.C.C.			L.F.	$ 6.50	$ -
ADJUSTMENT TO GRADE					
MANHOLE		8	EA.	$ 600.00	$ 4,800.00
WATER VALVE		4	EA.	$ 325.00	$ 1,300.00
CLEANOUT			EA.	$ 265.00	$ -
DRAINAGE					
PARKWAY DRAIN			EA.	$ 1,800.00	$ -

ENGINEERING DEPARTMENT

Construction Cost Estimate Form
Street Improvements

SIGNS				
REFLECTOR SIGN AND POST		EA.	$ 175.00	$ -
STREET NAME SIGN	2	EA.	$ 475.00	$ 950.00
TRAFFIC SIGN AND POST	9	EA.	$ 300.00	$ 2,700.00
LIGHTING				
STREET LIGHT				
- 70, 100 WATT (INCLUDING CONDUIT & PULL BOXES)		EA.	$ 6,200.00	$ -
- 150, 250 WATT (INCLUDING CONDUIT & PULL BOXES)	4	EA.	$ 6,500.00	$ 26,000.00
STREET LIGHT SERVICE PEDESTAL		EA.	$ 4,100.00	$ -
STREET LIGHT SERVICE DUAL PEDESTAL		EA.	$ 5,900.00	$ -
STRIPING				
SIGNING & STRIPING LOCAL STREET	50	L.F.	$ 4.50	$ 225.00
SIGNING & STRIPING COLLECTOR STREET		L.F.	$ 8.75	$ -
SIGNING & STRIPING ARTERIAL STREET		L.F.	$ 12.75	$ -
PAINTED LEGEND		EA.	$ 80.00	$ -
THERMOPLASTIC LEGEND		EA.	$ 165.00	$ -
TRAFFIC SIGNALS				$ -
NEW TRAFFIC SIGNAL		EA.	$ 355,600.00	$ -
MODIFY EXISTING SIGNAL (STREET WIDENING, PER CORNER)		EA.	$ 88,900.00	$ -
REMOVE EXISTING SIGNAL		EA.	$ 25,000.00	$ -
REPLACE/RESTORE T.S. DETECTION LOOP		EA.	$ 425.00	$ -
TRAFFIC SIGNAL INTERCONNECT CONDUIT		L.F.	$ 17.00	$ -
TRAFFIC SIGNAL INTERCONNECT CONDUIT & CABLE		L.F.	$ 20.00	$ -
ADD LEFT TURN PHASING		L.S.	$ 30,000.00	$ -
ADD LEFT TURN PHASING		L.S.	$ 30,000.00	$ -
LANDSCAPE				$ -
PARKWAY TREE WITH IRRIGATION		EA.	$ 525.00	$ -
PARKWAY LANDSCAPING		S.F.	$ 6.00	$ -
(INCLUDING IRRIGATION FACILITIES)				$ -
NEIGHBORHOOD EDGE AND/OR MEDIAN LANDSCAPING		S.F.	$ 6.00	$ -
(INCLUDING IRRIGATION FACILITIES)				$ -
NEIGHBORHOOD EDGE AND/OR MEDIAN TREE		EA.	$ 525.00	$ -
(INCLUDING IRRIGATION FACILITIES)				$ -
UTILITY POLES				$ -
RELOCATION OF POLE		EA.	$ 18,000.00	$ -
UNDERGROUNDING OF POWER LINES		L.F.	$ 350.00	$ -
UNDERGROUNDING OF COMMUNICATION LINES		L.F.	$ 90.00	$ -
				$ -
FIBER OPTIC				$ -
CONDUIT PLACEMENT TRENCH/BORE (INCLUDES HANDHOLES)		L.F.	$ 45.00	$ -
(ARTERIAL/COLLECTOR STREETS - MAIN BACKBONE)				$ -
IN-TRACT LOCAL STREETS				$ -
FIBER CONDUIT PLACEMENT		L.F.	$ 5.70	$ -

ENGINEERING DEPARTMENT

Construction Cost Estimate Form
Street Improvements

	FIBER TRENCH		L.F.	$	6.50	$ -
	HANDHOLE - FLOWER POT (FP)		EA.	$	125.00	$ -
	HANDHOLE - HH-3		EA.	$	250.00	$ -
	HANDHOLE - HH-4		EA.	$	375.00	$ -
						$ -
DRY UTILITY TRENCHING						$ -
	BORE - AC PAVEMENT		L.F.	$	20.00	$ -
	BORE - PARKWAY		L.F.	$	10.00	$ -
	MICRO TRENCHING		L.F.	$	8.15	$ -
	DRY UTILITY TRENCH - AC PAVEMENT		L.F.	$	56.00	$ -
	DRY UTILITY TRENCH - PARKWAY		L.F.	$	8.00	$ -
OTHER						
	LOCAL DEPRESSION PER CITY STD.	2	E.A.	$	1,200.00	$ 2,400.00
	BLUE RAISED PAVEMENT MARKER	4	E.A.	$	250.00	$ 1,000.00
						$ -
						$ -
				STREET IMPROVEMENTS SUB-TOTAL		**$ 184,378.25**
				10% CONTINGENCY		$ 18,437.83
TRAFFIC CONTROL		1	L.S.	$	5,577.44	$ 5,577.44
MOBILIZATION, SWPPP, EROSION CONTROL		1	L.S.	$	8,112.64	$ 8,112.64
				STREET IMPROVEMENTS TOTAL		**$ 216,506.16**

CITY OF ONTARIO

ENGINEERING DEPARTMENT

Construction Cost Estimate Form
Potable Water Improvements

Date	9/5/2025
Project Number	TM 20281
Plancheck Number	PC 7
Location	Chino Ave, Ontario
Computed By	KWC Engineers
Contact Phone	(951) 734-2130
Contact Email	tom.caseldine@kwcengineers.co

CONSTRUCTION ITEM DESCRIPTION	QTY	UNIT	COST	TOTAL
WATER / FIRE MAIN				
6" IN EASEMENT AREA ONLY (NOT IN PAVED STREET)		L.F.	$ 30.00	$ -
8" IN EASEMENT AREA ONLY (NOT IN PAVED STREET)	463	L.F.	$ 40.00	$ 18,520.00
10" IN EASEMENT AREA ONLY (NOT IN PAVED STREET)		L.F.	$ 45.00	$ -
8" INC. EXC., BACKFILL & PVMT RESTORATION		L.F.	$ 90.00	$ -
10" INC. EXC., BACKFILL & PVMT RESTORATION		L.F.	$ 95.00	$ -
12" INC. EXC., BACKFILL & PVMT RESTORATION		L.F.	$ 105.00	$ -
16" INC. EXC., BACKFILL & PVMT RESTORATION		L.F.	$ 115.00	$ -
WATER SERVICE (EXCLUDES AC REMOVAL AND REPLACEMENT)				
1" WATER SERVICE WITH METER BOX	39	EA.	$ 1,000.00	$ 39,000.00
2" WATER SERVICE WITH METER BOX		EA.	$ 2,200.00	$ -
FIRE HYDRANT (EXCLUDES AC REMOVAL AND REPLACEMENT)				
BREAK-OFF TYPE FIRE HYDRANT (INC. CONNECTION)	4	EA.	$ 5,400.00	$ 21,600.00
AIR RELEASE / BLOW-OFF				
(EXCLUDES AC REMOVAL AND REPLACEMENT)				
AIR RELEASE VALVE (INC. CONNECTION)		EA.	$ 4,600.00	$ -
BLOW-OFF VALVE (INC. CONNECTION)		EA.	$ 4,500.00	$ -
BACKFLOW ($1000/IN)				
RP 2" AND SMALLER		EA.	$ 3,000.00	$ -
DDC ABOVE GROUND (UP TO 6" DIAMETER)		EA.	$ 7,000.00	$ -
GATE VALVE				
6"		EA.	$ 550.00	$ -
8"	3	EA.	$ 850.00	$ 2,550.00
10"		EA.	$ 1,250.00	$ -
12"		EA.	$ 1,375.00	$ -
16"		EA.	$ 3,425.00	$ -
HOT TAP				
HOT TAP WITH VALVE	1	EA.	$ 1,750.00	$ 1,750.00
CONNECTION TO EXISTING 6" MAIN		EA.	$ 3,500.00	$ -
CONNECTION TO EXISTING 8" MAIN		EA.	$ 3,750.00	$ -
CONNECTION TO EXISTING 12" MAIN		EA.	$ 4,100.00	$ -
INSTALL TEE	1	EA.	$ 300.00	$ 300.00

CITY OF ONTARIO

ENGINEERING DEPARTMENT

Construction Cost Estimate Form
Potable Water Improvements

	REMOVE EXISTING BLIND FLANGE	2	EA.	$	475.00	$ 950.00
	CONCRETE THRUST BLOCK		EA.	$	585.00	$ -
OTHER						
	8" 45 DEGREE BEND	2	EA.	$	250.00	$ 500.00
	REMOVE EXIST. BLOW-OFF	1	EA.	$	1,500.00	$ 1,500.00
	REMOVE EXIST. 8" CROSS	1	EA.	$	1,500.00	$ 1,500.00
	CONNECT WATER SERVICE LATERAL TO EXIST.WATER	10	EA.	$	1,000.00	$ 10,000.00
	POTABLE WATER IMPROVEMENTS SUB-TOTAL					**$ 98,170.00**
	10% CONTINGENCY					$ 9,817.00
TRAFFIC CONTROL		1	L.S.	$	2,969.64	$ 2,969.64
MOBILIZATION, SWPPP, EROSION CONTROL		1	L.S.	$	4,319.48	$ 4,319.48
	POTABLE WATER IMPROVEMENTS TOTAL					**$ 115,276.12**

CITY OF ONTARIO

ENGINEERING DEPARTMENT

Construction Cost Estimate Form
Recycled Water Improvements

Date	9/5/2025
Project Number	TM 20281
Plancheck Number	PC 7
Location	Chino Ave, Ontario
Computed By	KWC Engineers
Contact Phone	(951) 734-2130
Contact Email	tom.caseldine@kwcengineers.co

CONSTRUCTION ITEM DESCRIPTION	QTY	UNIT	COST	TOTAL
WATER / FIRE MAIN				
6" IN EASEMENT AREA ONLY (NOT IN PAVED STREET)		L.F.	$ 30.00	$ -
8" IN EASEMENT AREA ONLY (NOT IN PAVED STREET)	343	L.F.	$ 40.00	$ 13,720.00
10" IN EASEMENT AREA ONLY (NOT IN PAVED STREET)		L.F.	$ 45.00	$ -
8" INC. EXC., BACKFILL & PVMT RESTORATION		L.F.	$ 90.00	$ -
10" INC. EXC., BACKFILL & PVMT RESTORATION		L.F.	$ 95.00	$ -
12" INC. EXC., BACKFILL & PVMT RESTORATION		L.F.	$ 105.00	$ -
16" INC. EXC., BACKFILL & PVMT RESTORATION		L.F.	$ 115.00	$ -
WATER SERVICE (EXCLUDES AC REMOVAL AND REPLACEMENT)				
1" WATER SERVICE WITH METER BOX	2	EA.	$ 1,000.00	$ 2,000.00
2" WATER SERVICE WITH METER BOX		EA.	$ 2,200.00	$ -
FIRE HYDRANT (EXCLUDES AC REMOVAL AND REPLACEMENT)				
BREAK-OFF TYPE FIRE HYDRANT (INC. CONNECTION)		EA.	$ 5,400.00	$ -
AIR RELEASE / BLOW-OFF				
(EXCLUDES AC REMOVAL AND REPLACEMENT)				
AIR RELEASE VALVE (INC. CONNECTION)	1	EA.	$ 4,600.00	$ 4,600.00
BLOW-OFF VALVE (INC. CONNECTION)	2	EA.	$ 4,500.00	$ 9,000.00
BACKFLOW ($1000/IN)				
RP 2" AND SMALLER		EA.	$ 3,000.00	$ -
DDC ABOVE GROUND (UP TO 6" DIAMETER)		EA.	$ 7,000.00	$ -
GATE VALVE				
6"		EA.	$ 550.00	$ -
8"	3	EA.	$ 850.00	$ 2,550.00
10"		EA.	$ 1,250.00	$ -
12"		EA.	$ 1,375.00	$ -
16"		EA.	$ 3,425.00	$ -
HOT TAP				
HOT TAP WITH VALVE		EA.	$ 1,750.00	$ -
CONNECTION TO EXISTING 8" MAIN		EA.	$ 3,750.00	$ -
CONNECTION TO EXISTING 12" MAIN		EA.	$ 4,100.00	$ -
INSTALL TEE	1	EA.	$ 300.00	$ 300.00
REMOVE EXISTING BLIND FLANGE		L.S.	$ 475.00	$ -

CITY OF ONTARIO

ENGINEERING DEPARTMENT

Construction Cost Estimate Form
Recycled Water Improvements

	CONCRETE THRUST BLOCK		EA.	$	585.00	$ -
OTHER						
	45 DEGREE BEND & RESTRAINED JOINT	2	E.A.	$	350.00	$ 700.00
						$ -
						$ -
						$ -
					RECYCLED WATER IMPROVEMENTS SUB-TOTAL	**$ 32,870.00**
					10% CONTINGENCY	$ 3,287.00
TRAFFIC CONTROL		1	L.S.	$	994.32	$ 994.32
MOBILIZATION, SWPPP, EROSION CONTROL		1	L.S.	$	1,446.28	$ 1,446.28
					RECYCLED WATER IMPROVEMENTS TOTAL	**$ 38,597.60**

CITY OF ONTARIO

ENGINEERING DEPARTMENT

Construction Cost Estimate Form
Sanitary Sewer Improvements

Date	9/5/2025
Project Number	TM 20281
Plancheck Number	PC 7
Location	Chino Ave, Ontario
Computed By	KWC Engineers
Contact Phone	(951) 734-2130
Contact Email	tom.caseldine@kwcengineers.co

CONSTRUCTION ITEM DESCRIPTION	QTY	UNIT	COST	TOTAL
SEWER MAIN (VCP ONLY)				
8" & SMALLER IN EASEMENT AREA ONLY	667	L.F.	$ 40.00	$ 26,680.00
(NOT IN PAVED STREET)				
10" IN EASEMENT AREA ONLY		L.F.	$ 60.00	$ -
(NOT IN PAVED STREET)				
12" & LARGER IN EASEMENT AREA ONLY		L.F.	$ 63.00	$ -
(NOT IN PAVED STREET)				
8" INC. EXC., BACKFILL & PVMT RESTORATION		L.F.	$ 70.00	$ -
10" INC. EXC., BACKFILL & PVMT RESTORATION		L.F.	$ 75.00	$ -
12" INC. EXC., BACKFILL & PVMT RESTORATION		L.F.	$ 80.00	$ -
15" INC. EXC., BACKFILL & PVMT RESTORATION		L.F.	$ 90.00	$ -
18" INC. EXC., BACKFILL & PVMT RESTORATION		L.F.	$ 95.00	$ -
21" INC. EXC., BACKFILL & PVMT RESTORATION		L.F.	$ 105.00	$ -
24" INC. EXC., BACKFILL & PVMT RESTORATION		L.F.	$ 115.00	$ -
MANHOLE				
MANHOLE	4	EA.	$ 4,050.00	$ 16,200.00
DROP MANHOLE		EA.	$ 4,100.00	$ -
VAULT		EA.	$ 3,500.00	$ -
MONITORING FACILITY / NON TRAFFIC AREA		EA.	$ 1,750.00	$ -
MONITORING MANHOLE		EA.	$ 4,100.00	$ -
CLEANOUT	4	EA.	$ 1,750.00	$ 7,000.00
REMOVE/ABANDON EXISTING MANHOLE	1	EA.	$ 1,200.00	$ 1,200.00
REMOVE EXISTING SEWER				
UP TO 12" DIAMETER	125	L.F.	$ 55.00	$ 6,875.00
GREATER THAN 12" DIAMETER		L.F.	$ 70.00	$ -
LATERAL				
4" HOUSE CONNECTION TO SEWER MAIN IN STREET	4	L.S.	$ 2,925.00	$ 11,700.00
6" & SMALLER VCP SEWER LATERAL / EASEMENT		L.F.	$ 42.00	$ -
6" & SMALLER VCP SEWER LATERAL / PAVED STREET		L.F.	$ 70.00	$ -
SEWER CHIMNEY		EA.	$ 1,170.00	$ -
SEWER SADDLE		EA.	$ 1,170.00	$ -
WYE 4" x 8" TYPICAL		EA.	$ 115.00	$ -
OIL/GREASE INTERCEPTOR NOT IN STREET		EA.	$ 1,750.00	$ -

CITY OF ONTARIO

ENGINEERING DEPARTMENT

Construction Cost Estimate Form
Sanitary Sewer Improvements

OTHER						
	CONNECT TO EXIST. 60" MANHOLE	1	EA.	$	4,500.00	$ 4,500.00
	REMOVE & REPLACE EXIST. 4" SEWER LATERAL	72	L.F.	$	60.00	$ 4,320.00
	CONSTRUCT EXCAVATION / BACKFILL & PAVING	745	S.F.	$	15.00	$ 11,175.00
	PROTECTION CASING FOR MAINLINE & HOUSE SEWER	3	EA.	$	5,500.00	$ 16,500.00
					SANITARY SEWER IMPROVEMENTS SUB-TOTAL	**$106,150.00**
					10% CONTINGENCY	$10,615.00
TRAFFIC CONTROL		1	L.S.	$	3,211.04	$ 3,211.04
MOBILIZATION, SWPPP, EROSION CONTROL		1	L.S.	$	4,670.60	$ 4,670.60
					SANITARY SEWER IMPROVEMENTS TOTAL	**$124,646.64**

CITY OF ONTARIO

ENGINEERING DEPARTMENT

Construction Cost Estimate Form
Storm Drain Improvements

Date	9/5/2025
Project Number	TM 20281
Plancheck Number	PC 7
Location	Chino Ave, Ontario
Computed By	KWC Engineers
Contact Phone	(951) 734-2130
Contact Email	tom.caseldine@kwcengineers.c

CONSTRUCTION ITEM DESCRIPTION	QTY	UNIT	COST	TOTAL
RCP STORM DRAIN				
RCP SIZE X $3.25 / INCH OF I.D. UP TO 60" DIAMETER				
12" INC. EXC., BACKFILL & PVMT RESTORATION	45	L.F.	$ 39.00	$ 1,755.00
18" INC. EXC., BACKFILL & PVMT RESTORATION	248	L.F.	$ 58.50	$ 14,508.00
24" INC. EXC., BACKFILL & PVMT RESTORATION	493	L.F.	$ 78.00	$ 38,454.00
INC. EXC., BACKFILL & PVMT RESTORATION		L.F.	$ -	$ -
66" INC. EXC., BACKFILL & PVMT RESTORATION		L.F.	$ 260.00	$ -
72" INC. EXC., BACKFILL & PVMT RESTORATION		L.F.	$ 290.00	$ -
78" INC. EXC., BACKFILL & PVMT RESTORATION		L.F.	$ 305.00	$ -
84" INC. EXC., BACKFILL & PVMT RESTORATION		L.F.	$ 330.00	$ -
90" INC. EXC., BACKFILL & PVMT RESTORATION		L.F.	$ 350.00	$ -
96" INC. EXC., BACKFILL & PVMT RESTORATION		L.F.	$ 365.00	$ -
102" INC. EXC., BACKFILL & PVMT RESTORATION		L.F.	$ 470.00	$ -
108" INC. EXC., BACKFILL & PVMT RESTORATION		L.F.	$ 480.00	$ -
LATERAL				
18" RCP OR SMALLER		L.F.	$ 45.00	$ -
INC. EXC., BACKFILL & PVMT RESTORATION				
MANHOLE	5	EA.	$ 4,500.00	$ 22,500.00
CATCH BASIN				
CATCH BASIN LESS THAN 7' IN WIDE	2	L.F.	$ 409.50	$ 819.00
7' WIDE - CB WITH SCREEN INLET	1	E.A.	$ 3,900.00	$ 3,900.00
10' WIDE- CB WITH SCREEN INLET		E.A.	$ 4,200.00	$ -
14' WIDE - CB WITH SCREEN INLET		E.A.	$ 4,700.00	$ -
21' WIDE - CB WITH SCREEN INLET		E.A.	$ 4,900.00	$ -
LOCAL DEPRESSION FOR UP TO 10' WIDE CB		L.S.	$ 585.00	$ -
LOCAL DEPRESSION FOR > 10' WIDE CB		L.S.	$ 1,200.00	$ -
REINFORCED CONCRETE BOX				
INC. EXC., BACKFILL & PVMT RESTORATION				
4' X 6' RCB		L.F.	$ 400.00	$ -
7' X 6' RCB		L.F.	$ 470.00	$ -
7' X 8.5' RCB		L.F.	$ 560.00	$ -
7' X 9.5' RCB		L.F.	$ 575.00	$ -
8' X 11' RCB		L.F.	$ 585.00	$ -
8' X 13' RCB		L.F.	$ 600.00	$ -

ENGINEERING DEPARTMENT

Construction Cost Estimate Form
Storm Drain Improvements

9' X 9' RCB		L.F.	$	610.00	$	-
9' X 12' RCB		L.F.	$	650.00	$	-
OUTLET STRUCTURE		EA.	$	700.00	$	-
INLET STRUCTURE		EA.	$	700.00	$	-
TRANSITION STRUCTURE		EA.	$	1,700.00	$	-
OTHER						
REMOVE TEMP. 30" C.M.P. RISER	1	EA.	$	3,500.00	$	3,500.00
JUNCTION STRUCTURE NO. 2	3	EA.	$	5,000.00	$	15,000.00
FIRST FLUSH MANHOLE NO. 1	1	EA.	$	5,000.00	$	5,000.00
PROTECTION FOR MAIN LINE SEWER	3	EA.	$	5,000.00	$	15,000.00
STORM DRAIN IMPROVEMENTS SUB-TOTAL					**$**	**120,436.00**
10% CONTINGENCY					$	12,043.60
TRAFFIC CONTROL	1	L.S.	$	3,643.19	$	3,643.19
MOBILIZATION, SWPPP, EROSION CONTROL	1	L.S.	$	5,299.18	$	5,299.18
STORM DRAIN IMPROVEMENTS TOTAL						**$141,421.97**

EXHIBIT "C"

SURETY BONDS AND OTHER SECURITY

TRACT NO. 20281

As evidence of understanding the provisions contained in this Agreement, and of Developer's intent to comply with same, Developer has submitted the below described security in the amounts required by this Agreement, and has affixed the appropriate signatures thereto:

CASH FAITHFUL PERFORMANCE SECURITY: **$912,877.93**
Company: Chino Avenue, LLC.
Attn: Nefertiti Long, Chief Operating Officer
Address: 12223 Highland Ave, Suite 106-553
Rancho Cucamonga, CA 91739
Cash Receipt No.: CV - 20250925-8
Date: _____

CASH SECURITY: **$912,877.93**
Company: Chino Avenue, LLC.
Attn: Nefertiti Long, Chief Operating Officer
Address: 12223 Highland Ave, Suite 106-553
Rancho Cucamonga, CA 91739
Cash Receipt No.: CV - 20250925-8
Date: _____

GUARANTEE AND WARRANTY SECURITY BOND: **$91,287.79**
To be posted upon completion of the Public Improvements by Developer and approval and acceptance by the City.

CASH MONUMENT SECURITY: **$1,000.00**
Amount deposited per Cash Receipt No. mv-20250911-19
Date: 9-11-2025

RECEIPT

CITY OF ONTARIO
REVENUE DEPARTMENT
303 E. B STREET
(909) 395-2050
ONTARIO, CA 91764

Application: E202200064
Application Type: Permits/Engineering/Engineering/Plan Check
Address: 9510 E CHINO AV, ONTARIO, CA

Receipt No. 372999

Payment Method	Ref Number	Amount Paid	Payment Date	Cashier ID	Cash Drawer ID	Received	Comments
Check	ev-20250925-8.1	$1,825,755.86	09/25/2025	21230			

Owner Info.: Chino Avenue LLC
12223 Highland Avenue, Suite 106-553
Rancho Cucamonga, CA 91739

Work Description: A Tentative Tract Map to subdivide 4.79 acres of land into 37 lots and 1 lettered lot, located at 9510 East Chino Avenue, within the Neighborhood 3 land use district of the Countryside Specific Plan (APN: 0218-111-56). Related Files: PDEV19-023 and PSPA19-001. Project ID: 752-931-577

CITY OF ONTARIO *Agenda Report* **November 4, 2025**	**SECTION:** **CONSENT CALENDAR**
Department: Engineering Prepared By: Frederick Addison Staff Member Presenting: Tito Haes, Executive Director Public Works Reviewed By: Khoi Do, Bonnie Tam, Andrea Ampig Approved By:	Submitted To: Council/OHA Approved: _____ Continued To: _____ Denied: _____ Item No: 7

SUBJECT: **A RESOLUTION APPROVING AN IMPROVEMENT AGREEMENT AND IMPROVEMENT SECURITY FOR DEVELOPMENT PLAN NO. PDEV22-033 LOCATED AT THE NORTHWEST CORNER OF 4TH STREET AND CORONA AVENUE**

RECOMMENDATION: That the City Council adopt a Resolution approving an Improvement Agreement and Improvement Security for Project No. PDEV22-033, located at the northwest corner of 4th Street and Corona Avenue.

THE FOLLOWING COUNCIL GOALS ARE BEING ACHIEVED:
Invest in the Growth and Evolution of the City's Economy
Focus Resources in Ontario's Commercial and Residential Neighborhoods
Invest in the City's Infrastructure (Water, Streets, Sewers, Parks, Storm Drains and Public Facilities)

FISCAL IMPACT: There is no direct fiscal impact associated with this action. All public infrastructure improvements required for this project will be constructed by the Developer at its sole cost.

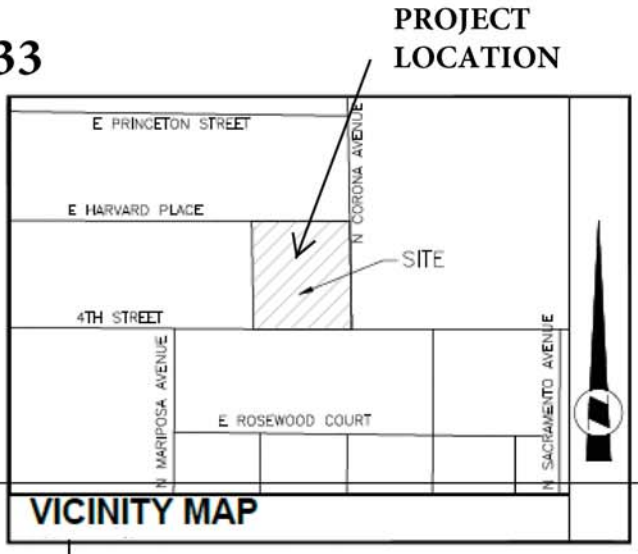
BACKGROUND & ANALYSIS: Ambitus-Ontario 1 LP has submitted Development Plan No. PDEV22-033, consisting of 77 multi-family dwellings constructed on approximately one (1) acre of land, as shown on Exhibit A. This project was approved by the Planning Commission on November 28, 2023.

The Development Plan improvements will include streets, sidewalk, parkway landscaping, sewer, water, recycled water, traffic signal, signing and striping, streetlight, and fiber optic. All landscape improvements will be consistent with current City's Landscape Development Guidelines and the Model Water Efficient Landscape Ordinance.

The Developer has entered into an Improvement Agreement with the City for this project and posted adequate security to ensure construction of the required improvements. The project meets all conditions of the Ontario Municipal Code and has been reviewed and approved by the City Engineer.

EXHIBIT A

PDEV22-033



INDEX MAP

SCALE: 1" = 60'

APN: 0108-551-62-0-000

CORONA AVE

0 60 120

(IN FEET)

1 inch = 60ft.

PREPARED BY

CALLAND ENGINEERING & ASSOCIATES, INC.

574 E. LAMBERT ROAD, BREA, CA 92821

TEL: (714) 671-1050 FAX: (714) 671-1090

APPLICANT/OWNER

AMBITUS-ONTARIO 1 LP

9336 DAINES DRIVE

TEMPLE CITY, CA 91780

(626) 340-8338

EXHIBIT A
PDEV22-033

DATE: 09-18-25

PROJECT ID :
PDEV22-(164

RESOLUTION NO. _____

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF ONTARIO, CALIFORNIA, APPROVING AN IMPROVEMENT AGREEMENT AND IMPROVEMENT SECURITY FOR DEVELOPMENT PLAN NO. PDEV22-033 LOCATED AT THE NORTHWEST CORNER OF 4TH STREET AND CORONA AVE.

WHEREAS, Development Plan No. PDEV22-033, submitted for approval by Ambitus-Ontario 1, LP, was approved by the Planning Commission of the City of Ontario on November 28, 2023; and

WHEREAS, Development Plan No. PDEV22-033, a development consisting of 77 multi-family dwellings in the City of Ontario, County of San Bernardino, State of California being Lot 'A' as described in Lot Line Adjustment No. LLA23-015, recorded on September 22, 2023 in the Office of the County Recorder of San Bernardino County; and

WHEREAS, to meet the requirements established as prerequisite to final approval of Development Plan No. PDEV22-033, Ambitus-Ontario 1, LP, has offered the Improvement Agreement together with good and sufficient improvement security, in conformance with the City Attorney's approved format, for approval and execution by the City.

NOW, THEREFORE, BE IT RESOLVED, by the City Council of the City of Ontario, California, as follows:

1. That said Improvement Agreement be, and the same is, approved and the City Manager is authorized to execute same on behalf of said City, and the City Clerk is authorized to attest thereto; and

2. That said Improvement Security is accepted as good and sufficient, subject to approval as to form and content thereof by the City Attorney.

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

PASSED, APPROVED, AND ADOPTED this 4th day of November 2025.

_____
PAUL S. LEON, MAYOR

ATTEST:

_____
SHEILA MAUTZ, CITY CLERK

APPROVED AS TO LEGAL FORM:

_____
BEST, BEST & KREIGER, LLP
CITY ATTORNEY

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

I, SHEILA MAUTZ, City Clerk of the City of Ontario, DO HEREBY CERTIFY that foregoing Resolution No. 2025- was duly passed and adopted by the City Council of the City of Ontario at their regular meeting held November 4, 2025 by the following roll call vote, to wit:

AYES: COUNCIL MEMBERS:

NOES: COUNCIL MEMBERS:

ABSENT: COUNCIL MEMBERS:

_____
SHEILA MAUTZ, CITY CLERK

(SEAL)

The foregoing is the original of Resolution No. 2025- duly passed and adopted by the Ontario City Council at their regular meeting held November 4, 2025.

_____
SHEILA MAUTZ, CITY CLERK

(SEAL)

`RECORDED AT THE REQUEST OF
AND WHEN RECORDED RETURN TO:

City of Ontario
303 E. B St.
Ontario, CA 91764
Attn: City Engineer

(Exempt from Filing Fees – Government Code § 6103)

SPACE ABOVE THIS LINE FOR RECORDER'S USE

AGREEMENT FOR COMPLETION OF PUBLIC IMPROVEMENTS BETWEEN THE CITY OF ONTARIO AND AMBITUS-ONTARIO 1 LP

1. PARTIES AND DATE.

This Agreement for Completion of Public Improvements ("Agreement") is entered into as of this __ day of _____, 20__ by and between the **City of Ontario**, a municipal corporation (hereinafter referred to as "City") and Ambitus-Ontario 1 LP, a California limited partnership with its principal office located at 9336 Daines Dr, Temple City, CA 91780 (hereinafter referred to as "Developer"). City and Developer are sometimes hereinafter individually referred to as "Party" and hereinafter collectively referred to as the "Parties."

2. RECITALS.

2.1 Developer's owns real property located within City, a legal description of which is attached hereto as Exhibit "A" ("Property"), was approved in accordance with the Ontario Development Code on November 28, 2023 to allow 77 multiple-family dwelling Construction Project. ("Project")

2.2 Developer is the owner of Property, and Developer proposes to do and perform certain work of improvement thereon as set forth in this Agreement.

2.3 Developer has not completed all of the work or made all of the public improvements required by Chapter 2 of Title 9 of the City of Ontario Municipal Code, or such other ordinances, resolutions or policies of the City requiring construction of improvements in conjunction with City entitlements (hereinafter collectively referred to as "City Ordinances") or

by conditions to the approval of PDEV22-033 ("Project Entitlements") in accordance with the City Ordinances.

2.4 Developer and City desire to enter into this Agreement for the timely construction and completion of the public improvements and the furnishing of security acceptable to the City Engineer and City Attorney.

3. TERMS.

3.1 Effectiveness. This Agreement shall not be effective unless and until all three of the following conditions are satisfied: (a) Developer provides City with security of the type and in the amounts required by this Agreement; (b) Developer executes and records this Agreement in the Recorder's Office of the County of San Bernardino; and (c) the approving body per the Ontario Development Code approves the "Project Entitlements" for the Property. If any of the above described conditions are not satisfied, this Agreement shall automatically terminate without need of further action by either City or Developer, and Developer may not thereafter proceed with the Project Entitlements without modification to the Project Entitlements.

3.2 Public Improvements. Developer shall construct or have constructed at its own cost, expense, and liability all roads, curbing, pavement and other improvements required by the City as part of the approval of Project Entitlements, including, but not limited to, the following: street, sidewalk, landscaping, water, sewer, recycled water, traffic signing and striping, street light and fiber (hereinafter referred to as the "Public Improvements"). The Public Improvements are more specifically described in Exhibit "B" attached hereto and incorporated herein by this reference. Construction of the Public Improvements shall include any transitions and/or other incidental work deemed necessary for drainage or public safety. Developer shall be responsible for the replacement, relocation, or removal of any component of any utility system or public improvement in conflict with the construction or installation of the Public Improvements. Such replacement, relocation, or removal shall be performed to the complete satisfaction of the City Engineer and the owner of such utility system or public improvement. Developer further promises and agrees to provide all equipment, tools, materials, labor, tests, design work, and engineering services necessary or as required by the City to fully and adequately complete the Public Improvements.

3.3 Partially Completed Public Improvements. Where construction of any Public Improvements has been partially completed prior to this Agreement, Developer agrees to complete such Public Improvements or assure their completion in accordance with this Agreement.

3.4 Pre-approval of Plans and Specifications. Developer is prohibited from commencing work on any Public Improvement until all plans, specifications, estimates, and bonds for such Public Improvement have been submitted to and approved by the City Engineer, or his/her authorized designee. Approval by the City Engineer shall not relieve Developer from ensuring that all Public Improvements conform with all other requirements and standards set forth in this Agreement.

3.5 Quality of Work. The Public Improvements shall be constructed and installed pursuant to City review and approval. The construction plans and specifications for the Public

Improvements shall be prepared in accordance with all applicable federal, state and local laws, ordinances, regulations and other requirements. In addition, the Public Improvements shall be completed in accordance with all approved maps, plans, specifications, standard drawings and special amendments thereto on file with City, as well as all applicable federal, state and local laws, ordinances, regulations and other requirements. It is understood and agreed that all work and improvements done pursuant to this Agreement shall conform to the standards applicable at the time work is actually commenced.

3.6 Standard of Performance. Developer and its contractors, if any, shall perform all work required to construct the Public Improvements under this Agreement in a skillful and workmanlike manner, and consistent with the standards generally recognized as being employed by professionals in the same discipline in the State of California. Developer represents and maintains that it or its contractors shall be skilled in the professional calling necessary to perform the work. Developer warrants that all of its employees and contractors shall have sufficient skill and experience to perform the work assigned to them, and that they shall have all licenses, permits, qualifications and approvals of whatever nature that are legally required to perform the work, and that such licenses, permits, qualifications and approvals shall be maintained throughout the term of this Agreement.

3.7 Alterations to Improvements; Notice to Surety. The Public Improvements in Exhibit "B" are understood to be only a general designation of the work and improvements to be done, and not a binding description thereof. All work shall be done and improvements made and completed as shown on approved plans and specifications, and any subsequent alterations thereto. If during the course of construction and installation of the Public Improvements it is determined that the public interest requires alterations in the Public Improvements, Developer shall undertake such design and construction changes as may be reasonably required by City. Any and all alterations in the plans and specifications and the Public Improvements to be completed may be accomplished without giving prior notice thereof to Developer's surety for this Agreement.

3.8 Superintendence by Developer. Developer shall require each contractor and subcontractor to have a competent foreperson on the job at all times when that contractor or subcontractor, or any employee or agent thereof, is performing work on the Public Improvements. Before starting work on the Public Improvements, each contractor and subcontractor shall submit in writing the name of the proposed foreperson, who shall be subject to the review and approval of City. Following approval by City, each foreperson shall be present at the work site at all times that any work is in progress and at any time that any employee of the contractor or subcontractor is present at the work site. The Developer shall employ a competent construction manager that is responsible for the entire work. Each contractor or subcontractor shall contractually report to the construction manager, either directly or through a subcontract. The construction manager shall be immediately available by phone during hours when construction is in progress and shall be available in person within two hours when requested by the City. The construction manager shall coordinate the work such that construction and the associated inspection happen in an efficient manner. Should a contractor or subcontractor desire to change its foreperson, it shall provide the information specified above and obtain City's prior written approval. City, in its sole and absolute discretion, may require any contractor or subcontractor to replace its foreperson provided that City gives the contractor or subcontractor at least forty-eight hours written notice.

Developer shall, at all times, enforce strict discipline and good order among its employees and those of its subcontractors and shall not employ any unfit person or anyone not skilled in the assigned task. If any person employed by, the Developer, a contractor or subcontractor fails or refuses to carry out the directions of the City or appears to the City, in its sole and absolute discretion, to be incompetent or to act in a disorderly or improper manner, such person shall be removed from the project immediately upon request by the City, and such person shall not again be employed on the work. Such removal shall not be the basis for any claim of compensation or damages against the City.

In addition, Developer shall maintain an office with a telephone, and Developer or a person authorized to make decisions and to act on Developer's behalf in Developer's absence shall be available to be on the job within three (3) hours of being called at such office by the City, during the hours of 9:00 a.m. through 5:00 p.m., Monday through Friday, or any other day or time when work is being performed on the Public Improvements. Developer shall also provide City with a telephone number, at which Developer, or its representative, shall be available twenty-four (24) hours a day in the event of an emergency.

3.9 Maintenance of Public Improvements and Landscaping. City shall not be responsible or liable for the maintenance or care of the Public Improvements until City approves and accepts them. City shall exercise no control over the Public Improvements until accepted. Any use by any person of the Public Improvements, or any portion thereof, shall be at the sole and exclusive risk of Developer at all times prior to City's acceptance of the Public Improvements. Developer shall maintain all the Public Improvements in a state of good repair until they are completed by Developer and approved and accepted by City, and until the security for the performance of this Agreement is released.

Maintenance shall include, but shall not be limited to, repair of pavement, curbs, gutters, sidewalks, street trees, signals, parkways, water mains and sewers; maintaining all landscaping in a vigorous and thriving condition reasonably acceptable to City; removal of debris from sewers and storm drains; and sweeping, repairing and maintaining in good and safe condition all streets and street improvements. Developer shall cause the sweeping of streets to occur weekly at a minimum. Developer shall perform additional street sweeping work as necessary depending on construction activities or as required by, and at the direction of, the City Engineer. It shall be Developer's responsibility to initiate all maintenance work, but if it shall fail to do so, it shall promptly perform such maintenance work when notified to do so by City. If Developer fails to properly prosecute its maintenance obligation under this Section, City may do all necessary work and the cost thereof shall be the responsibility of Developer and its surety under this Agreement. City shall not be responsible or liable for any damages or injury of any nature in any way related to or caused by the Public Improvements or their condition prior to acceptance.

3.9.1 Landscaping and Existing Irrigation Systems. Developer shall plant and maintain parkway trees and landscaping as provided in Section 10-2.07 of the City Municipal Code, and as directed by the Public Facilities Department. The Developer shall also be responsible for the replacement, relocation or removal of any component of any irrigation water system in conflict with the construction or installation of the Public Improvements. Such replacement, relocation or removal shall be performed to the complete satisfaction of the City Engineer and the owner of such water system.

3.10 Construction Schedule. Unless extended pursuant to this Section 3.10, Developer shall fully and adequately complete or have completed the Public Improvements within twelve (12) months following approval of the Project Entitlements. At least fifteen (15) days prior to the commencement of such work, Developer shall notify the City Engineer in writing of the date fixed by Developer for commencement of the work.

3.10.1 Extensions of Schedule. Time is of the essence with regard to this Agreement. The City may in its sole and absolute discretion, provide Developer with additional time within which to complete the Public Improvements. Requests for extension of time shall be in writing and shall be delivered to City in the manner hereinafter specified for service of notices. An extension of time, if any, shall be granted only in writing, and an oral extension shall not be valid or binding on City. It is understood that by providing the security required by this Agreement, Developer and its surety consent in advance to any extension of time as may be given by City to Developer, and waive any and all right to notice of such extension(s). Developer's acceptance of an extension of time granted by City shall constitute a waiver by Developer and its surety of all defenses of laches, estoppel, statutes of limitations, and other limitations of action in any action or proceeding filed by City following the date on which the Public Improvements were to have been completed hereunder. In addition, as consideration for granting such extension to Developer, City reserves the right to review the provisions of this Agreement, including, but not limited to, the construction standards, the cost estimates approved by the City, and the sufficiency of the improvement security provided by Developer, and to require adjustments thereto when warranted according to City's reasonable discretion.

3.10.2 Accrual of Limitations Period. Any limitations period provided by law related to breach of this Agreement or the terms thereof shall not accrue until Developer has provided the City Engineer with written notice of Developer's intent to abandon or otherwise not complete required or agreed upon Public Improvements.

3.11 Grading. Developer agrees that any and all grading done or to be done in conjunction with construction of the Public Improvements or development of Project shall conform to all federal, state and local laws, ordinances, regulations and other requirements, including without limitation, City's grading regulations, the National Pollutant Discharge Elimination Systems (NPDES), and stormwater regulations thereunder as administered by the State Water Resources Control Board and Regional Water Quality Control Boards and City's grading regulations. In order to prevent damage to the Public Improvements by improper drainage or other hazards, the grading shall be completed in accordance with the above time schedule for completion of the Public Improvements, and prior to City's approval and acceptance of the Public Improvements and release of Security as set forth in this Agreement. Developer further agrees that the indemnification as set forth in this Agreement shall extend to and include any and all grading contemplated by this Agreement, including but not limited to, any partial or rough grading work. Developer agrees that any and all grading done or to be done in conjunction with of the Property shall conform to all federal, state, and local laws, ordinances, regulations, and other requirements including, In order to prevent damage to the Public Improvements by improper drainage or other hazards, the grading shall be completed in accordance with the time schedule for completion of the Public Improvements established by this Agreement, and prior to City's approval and acceptance of the Public Improvements.

3.12 Encroachment Permit. Developer shall obtain any necessary encroachment permits from the office of the City Engineer prior to start of any work within the public rights-of-way, and the Developer shall conduct such work in full compliance with the regulations and other requirements contained therein. The Developer shall be responsible for the removal of all loose rock and other debris from the public rights-of-way resulting from work done on adjacent property or within said rights-of-way. Work done within existing public rights-of-way shall be diligently pursued to completion with minimal obstruction or inconvenience to the public and pursuant to the terms of the encroachment permit and any applicable federal, state or local laws, rules or regulations. The City shall have the right to complete any and all work in the event of unjustified delay in completion, and to recover all costs and expenses incurred from the Developer or its surety by any lawful means. Non-compliance with the terms of the encroachment permit or any applicable federal, state or local laws, rules or regulations may result in the City's cessation of the work and assessment of any applicable penalties or other remedies. Prior to, and as a condition precedent to, the issuance of any required encroachment permit(s), Developer shall provide to the City evidence satisfactory to the City of: (1) the certificate(s), endorsement(s), or policy(ies) of insurance as required by this Agreement; and (2) any and all licenses, permits, qualifications and approvals of whatever nature that are legally required to perform the work.

3.13 City Inspection of Public Improvements. Developer shall, at its sole cost, expense, and liability, and at all times during construction of the Public Improvements, maintain reasonable and safe facilities and provide safe access for inspection by City of the Public Improvements and areas where construction of the Public Improvements is occurring or will occur.

3.13.1 Acceptance of Improvements; As-Built or Record Drawings. If the Public Improvements are properly completed by Developer and approved by City, and if they comply with all applicable federal, state and local laws, ordinances, regulations and other requirements, City shall be authorized to accept the Public Improvements. Notwithstanding the foregoing, the City may not accept any Public Improvements unless and until the Developer provides reproducible "As-Built" or record drawings or plans to the City Engineer for all such Public Improvements.

3.13.2 Demand to Perform; City Remedies. Upon default of any obligation hereunder, and at any time after any such default, City may make written demand upon Developer or its surety, or both, to immediately remedy the default or complete the Public Improvements. If the required work is not substantially commenced within ten (10) days of such demand, or if it is not thereafter diligently prosecuted to a completion acceptable to City within the time frame contained in the demand, City may then complete all remaining work, arrange for the completion of all remaining work, and/or conduct such remedial activity as in its sole and absolute discretion it believes is required. All such work or remedial activity shall be at the sole and absolute expense and obligation of Developer and its surety, without the necessity of giving any further notice to Developer or surety. City's right to take such actions shall in no way be limited by the fact that Developer or its surety may have constructed any of the required Public Improvements at the time of City's demand for performance. In the event City elects to complete or arrange for completion of the remaining work and improvements, City may require all work by Developer or its surety to cease in order to permit adequate coordination by City. Notwithstanding the foregoing, if the conditions precedent for reversion to acreage can be met

and if the interests of the City will not be prejudiced thereby, the City may also process a reversion to acreage and thereafter recover from the Developer's surety the full cost and expense incurred.

3.13.3 Default; Notice of Violation; Stop Work Order. If City determines that there is a violation of applicable federal, state or local laws, ordinances, regulations or other requirements, or the terms and conditions of this Agreement, the City and/or City Engineer may issue a Notice of Violation and Demand for Compliance and/or a Stop Work Order. The City may declare the Developer to be in default or violation of this Subdivision Agreement and make written demand upon Developer or its surety, or both, to immediately remedy the default or violation. Developer shall comply with the Notice of Violation and/or Stop Work Order and shall substantially commence the work required to remedy the default or violation with the time specified in the Notice of Violation. If the default or violation constitutes an immediate threat to the public health, safety, or welfare, City and/or City Engineer may provide the Notice of Violation verbally, and Developer shall substantially commence the required work within twenty-four (24) hours thereof.

3.13.4 Failure to Remedy Violation; City Action. If the work required to remedy the notices of default or violation is not diligently prosecuted to a completion acceptable to City within the time frame contained in the Notice of Violation, City may complete all remaining work, arrange for the completion of all remaining work, and/or conduct such remedial activity at its sole and absolute discretion it believes is required to remedy the default or violation. All such work or remedial activity shall be at the sole and absolute cost, expense, and liability of Developer or surety. City's right to take such actions shall in no way be limited by the fact that Developer or its surety may have constructed any, or none of the required or agreed upon Public Improvements at the time of City's demand for performance. In the event City elects to complete or arrange for completion of the remaining work and improvements, City may require all work by Developer or its surety to cease in order to allow adequate coordination by City. Notwithstanding the foregoing, if conditions precedent for reversion to acreage can be met and if the interests of City will not be prejudiced thereby, City may also process a reversion to acreage and thereafter recover from Developer or its surety the full cost and expense incurred.

3.13.5 Other Remedies. No action by City pursuant to this Section of this Agreement shall prohibit City from exercising any other right or pursuing any other legal or equitable remedy available under this Agreement or any federal, state, or local law. City may exercise it rights and remedies independently or cumulatively, and City may pursue inconsistent remedies. City may institute an action for damages, injunctive relief, or specific performance.

3.13.6 Administrative Costs. If Developer fails to construct and install all or any part of the Public Improvements required by this Agreement within the time set forth herein, or if Developer fails to comply with any other obligation contained herein, Developer and its surety shall be jointly and severally liable to City for all administrative expenses, fees and costs, including reasonable attorney's fees and costs, incurred in obtaining compliance with this Agreement or in processing any legal action or for any other remedies permitted by law.

3.14 Indemnification. Developer shall defend (with Counsel acceptable to City), indemnify and hold harmless City, its elected officials, officers, employees ,agents and volunteers from any and all actual or alleged claims, demands, causes of action, liability, loss,

damage, or injury to property or persons, including wrongful death, whether imposed by a court of law or by administrative action of any federal, state, or local governmental body or agency, arising out of or incident to any acts, omissions or willful misconduct of Developer, its officers, employees, agents or contractors in connection with or arising out of or in connection with Developer's maintenance or construction of the Public Improvements, or its performance of this Agreement. This indemnification includes, without limitation, the payment of all penalties, fines, judgments, awards, decrees, attorneys' fees and related costs or expenses, and the reimbursement of City, its elected officials, officers, employees, and/or agents for all legal expenses and costs incurred by each of them. This indemnification excludes only such portion of any claim, demand, cause of action, liability, loss, damage, penalty, fine, or injury, to property or persons, including wrongful death, which is caused solely and exclusively by the negligence or willful misconduct of City as determined by a court or administrative body of competent jurisdiction. Developer's obligation to indemnify shall survive the expiration or termination of this Agreement and shall not be restricted to insurance proceeds, if any, received by Agency, its elected officials, officers, employees, agents, or volunteers

3.15 Security.

3.15.1 Prior to execution of this Agreement, Developer shall provide City with sufficient security in the amounts and under the terms set forth below ("Security"). Nothing in this Section is intended to prevent City, in its sole discretion, from requiring Developer to submit, or prevent Developer from submitting, security in a form other than bonds that may be allowed under California Government Code Section 66499, et seq. and the City's Municipal Code, and acceptable to City. The amount of the Security shall be based on the City Engineer's approximation of the actual cost to construct the Public Improvements, including the replacement cost for all public landscaping ("Estimated Costs"). If City determines, in its sole and absolute discretion, that the Estimated Costs have changed, Developer shall adjust the Security in the amount requested by City. Developer's compliance with this Section shall in no way limit or modify Developer's indemnification obligation under this Agreement. Security shall be on forms approved by the City for the purposes and amounts as follows:

3.15.2 To guarantee the faithful performance of the Public Improvements and all the provisions of this Agreement, to protect City if Developer is in default as set forth in this Agreement, and to secure Developer's one-year guarantee and warranty of the Public Improvements, including the maintenance of all landscaping in a vigorous and thriving condition, Developer shall provide City security in the amount of **FOUR HUNDRED NINTY - ONE THOUSAND FOUR HUNDRED EIGHTY-NINE AND 97/100 DOLLARS ($491,489.97)**, which sum shall be not less than one hundred percent (100%) of the Estimated Costs. The City may, in its sole and absolute discretion, partially release a portion or portions of the security provided under this section as the Public Improvements are accepted by City, as provided herein, provided that Developer is not in default on any provision of this Agreement or condition of approval for the Project, and the total remaining security is not less than twenty-five percent (25%) of the Estimated Costs. All security provided under this section shall be released at the end of the Warranty period (as defined above), or any extension thereof as provided in this Agreement, provided that Developer is not in default on any provision of this Agreement or condition of approval for the Project.

3.15.3 To provide in the amount of ten percent (10%) of the Estimated Costs of the Work to guarantee and warrant the Work, for a period of one year following its completion and acceptance, against any defective work or labor done, or defective materials furnished, as required by California Government Code Section 66499.3(d). Any unused portion of the guarantee and warranty security shall be released one year after acceptance of the required improvements by the City Council.

3.15.4 Bond/Surety Requirements. The surety for any surety bonds provided as Security shall have a current A.M. Best rating of no less than A:VIII, shall be authorized to do business in the State of California, and shall be satisfactory to City. As part of the obligation secured by the Security and in addition to the face amount of the Security, Developer or its surety shall secure the costs and reasonable expenses and fees, including reasonable attorneys' fees and costs, incurred by City in enforcing the obligations of this Agreement. Developer and its surety stipulate and agree that no change, extension of time, alteration, or addition to the terms of this Agreement, the Public Improvements, or the plans and specifications for the Public Improvements shall in any way affect its obligation on the Security.

3.15.5 Evidence of Bonds and Security. Evidence and Incorporation of Security. Evidence of the Security shall be provided on the forms set forth in Exhibit "C," unless other forms are deemed acceptable by the City Engineer and the City Attorney, and when such forms are completed to the satisfaction of City, the forms and evidence of the Security shall be attached hereto as Exhibit "C" and incorporated herein by this reference.

3.16 Insurance.

3.16.1 Time for Compliance. Developer shall not commence work under this Agreement until it has provided evidence satisfactory to the City that it has secured all insurance required under this section. In addition, Developer shall not allow any contractor to commence work on any contract until it has provided evidence satisfactory to the City that the contractor has secured all insurance required under this section. Failure to provide and maintain all required insurance shall be grounds for the City to terminate this Agreement for cause.

3.16.2 Types of Insurance Required. As a condition precedent to the effectiveness of this Agreement for work to be performed hereunder, and without limiting the indemnity provisions of the Agreement, the Developer, in partial performance of its obligations under such Agreement, shall procure and maintain in full force and effect during the term of the Agreement the following policies of insurance. If the existing policies do not meet the insurance requirements set forth herein, Developer agrees to amend, supplement or endorse the policies to do so.

(a) Commercial General Liability: Commercial General Liability Insurance which affords coverage at least as broad as Insurance Services Office "occurrence" form CG 00 01, or the exact equivalent, with limits of not less than $2,000,000 per occurrence and no less than $4,000,000 in the general aggregate. Defense costs shall be paid in addition to the limits. The policy shall contain no endorsements or provisions (1) limiting coverage for contractual liability; (2) excluding coverage for claims or suits by one insured against another (cross-liability); (3) products/completed operations liability; or (4) containing any other exclusion(s) contrary to the terms or purposes of this Agreement.

(b) Automobile Liability Insurance: Automobile Liability Insurance with coverage at least as broad as Insurance Services Office Form CA 00 01 covering "Any Auto" (Symbol 1), or the exact equivalent, covering bodily injury and property damage for all activities with limits of not less than $2,000,000 combined limit for each occurrence.

(c) Workers' Compensation: Workers' Compensation Insurance, as required by the State of California and Employer's Liability Insurance with a limit of not less than $1,000,000 per accident for bodily injury and disease.

3.16.3 Insurance Endorsements. Required insurance policies shall contain the following provisions, or Developer shall provide endorsements on forms approved by the City to add the following provisions to the insurance policies:

(a) Commercial General Liability: (1) Additional Insured: The City, its officials, officers, employees, agents, and volunteers shall be additional insureds with regard to liability and defense of suits or claims arising out of the performance of the Agreement. Additional Insured Endorsements shall not (1) be restricted to "ongoing operations"; (2) exclude "contractual liability"; (3) restrict coverage to "sole" liability of Developer; or (4) contain any other exclusions contrary to the terms or purposes of this Agreement. For all policies of Commercial General Liability insurance, Developer shall provide endorsements in the form of ISO CG 20 10 10 01 and 20 37 10 01 (or endorsements providing the exact same coverage) to effectuate this requirement. (2) Cancellation: Required insurance policies shall not be canceled or the coverage reduced until a thirty (30) day written notice of cancellation has been served upon the City except ten (10) days shall be allowed for non-payment of premium.

(b) Automobile Liability. (1) Cancellation: Required insurance policies shall not be canceled or the coverage reduced until a thirty (30) day written notice of cancellation has been served upon the City except ten (10) days shall be allowed for non-payment of premium.

(c) Workers' Compensation: (1) Cancellation: Required insurance policies shall not be canceled or the coverage reduced until a thirty (30) day written notice of cancellation has been served upon the City except ten (10) days shall be allowed for non-payment of premium. (2) Waiver of Subrogation: A waiver of subrogation stating that the insurer waives all rights of subrogation against the City, its officials, officers, employees, agents, and volunteers.

3.16.4 Primary and Non-Contributing Insurance. All policies of Commercial General Liability and Automobile Liability insurance shall be primary and any other insurance, deductible, or self-insurance maintained by the City, its officials, officers, employees, agents, or volunteers shall not contribute with this primary insurance. Policies shall contain or be endorsed to contain such provisions.

3.16.5 Waiver of Subrogation. All required insurance coverages, except for the professional liability coverage, shall contain or be endorsed to waiver of subrogation in favor of the City, its officials, officers, employees, agents, and volunteers or shall specifically allow Developer or others providing insurance evidence in compliance with these specifications to waive their right of recovery prior to a loss. Developer hereby waives its own right of recovery

against City, and shall require similar written express waivers and insurance clauses from each of its contractors.

3.16.6 Deductibles and Self-Insured Retentions. Any deductible or self-insured retention must be approved in writing by the City and shall protect the City, its officials, officers, employees, agents, and volunteers in the same manner and to the same extent as they would have been protected had the policy or policies not contained a deductible or self-insured retention.

3.16.7 Evidence of Insurance. The Developer, concurrently with the execution of the Agreement, and as a condition precedent to the effectiveness thereof, shall deliver either certified copies of the required policies, or original certificates on forms approved by the City, together with all endorsements affecting each policy. Required insurance policies shall not be in compliance if they include any limiting provision or endorsement that has not been submitted to the City for approval. The certificates and endorsements for each insurance policy shall be signed by a person authorized by that insurer to bind coverage on its behalf. At least fifteen (15 days) prior to the expiration of any such policy, evidence of insurance showing that such insurance coverage has been renewed or extended shall be filed with the City. If such coverage is cancelled or reduced and not replaced immediately so as to avoid a lapse in the required coverage, Developer shall, within ten (10) days after receipt of written notice of such cancellation or reduction of coverage, file with the City evidence of insurance showing that the required insurance has been reinstated or has been provided through another insurance company or companies.

3.16.8 Acceptability of Insurers. Each such policy shall be from a company or companies with a current A.M. Best's rating of no less than A:VII and authorized to transact business of insurance in the State of California, or otherwise allowed to place insurance through surplus line brokers under applicable provisions of the California Insurance Code or any federal law.

3.16.9 Enforcement of Agreement Provisions (non estoppel). Developer acknowledges and agrees that actual or alleged failure on the part of the City to inform Developer of non-compliance with any requirement imposes no additional obligation on the City nor does it waive any rights hereunder.

3.16.10 Requirements Not Limiting. Requirement of specific coverage or minimum limits contained in this Section are not intended as a limitation on coverage, limits, or other requirement, or a waiver of any coverage normally provided by any insurance.

3.16.11 Additional Insurance Provisions

(a) The foregoing requirements as to the types and limits of insurance coverage to be maintained by Developer, and any approval of said insurance by the City, is not intended to and shall not in any manner limit or qualify the liabilities and obligations otherwise assumed by the Developer pursuant to this Agreement, including but not limited to, the provisions concerning indemnification.

(b) If at any time during the life of the Agreement, any policy of insurance required under this Agreement does not comply with these specifications or is

canceled and not replaced, City has the right but not the duty to obtain the insurance it deems necessary and any premium paid by City will be promptly reimbursed by Developer.

(c) The City may require the Developer to provide complete copies of all insurance policies in effect for the duration of the Project.

(d) Neither the City nor any of its officials, officers, employees, agents or volunteers shall be personally responsible for any liability arising under or by virtue of this Agreement.

(e) The limits set forth herein shall apply separately to each insured against whom claims are made or suits are brought, except with respect to the limits of liability. Further the limits set forth herein shall not be construed to relieve the Developer from liability in excess of such coverage, nor shall it limit the Developer's indemnification obligations to the City and shall not preclude the City from taking such other actions available to the City under other provisions of the Agreement or law.

(f) Developer shall report to the City, in addition to Developer's insurer, any and all insurance claims submitted by Developer in connection with the Services under this Agreement.

3.17 Evidence of Bonds and Security. Evidence and Incorporation of Security. Evidence of the Security shall be provided on the forms set forth in Exhibit "C," unless other forms are deemed acceptable by the City Engineer and the City Attorney, and when such forms are completed to the satisfaction of City, the forms and evidence of the Security shall be attached hereto as Exhibit "C" and incorporated herein by this reference.

3.18 Signs and Advertising. Developer understands and agrees to City's ordinances, regulations and requirements governing signs and advertising structures. Developer hereby agrees with and consents to the removal by City of all signs or other advertising structures erected, placed, or situated in violation of any City ordinance, regulation or other requirement. Removal shall be at the expense of Developer. Developer shall indemnify and hold City free and harmless from any claim or demand arising out of or incident to signs, advertising structures, or their removal.

3.19 Relationship Between the Parties. The Parties hereby mutually agree that neither this Agreement, nor any other related entitlement, permit, or approval issued by City for the Property shall operate to create the relationship of partnership, joint venture, or agency between City and Developer. Developer's contractors and subcontractors are exclusively and solely under the control and dominion of Developer. Nothing herein shall be deemed to make Developer, its contractors, or its subcontractors an agent, contractor or subcontractor of City.

3.20 General Provisions.

3.20.1 Authority to Enter Agreement. Each Party warrants that the individuals who have signed this Agreement have the legal power, right, and authority to make this Agreement and bind each respective Party.

3.20.2 Cooperation; Further Acts. The Parties shall fully cooperate with one another, and shall take any additional acts or sign any additional documents as may be necessary, appropriate, or convenient to attain the purposes of this Agreement.

3.20.3 Construction; References; Captions. It being agreed the Parties or their agents have participated in the preparation of this Agreement, the language of this Agreement shall be construed simply, according to its fair meaning, and not strictly for or against any Party. Any term referencing time, days, or period for performance shall be deemed calendar days and not work days. All references to Developer include all personnel, employees, agents, and contractors and subcontractors of Developer, except as otherwise specified in this Agreement. All references to City include its elected officials, officers, employees, agents, and volunteers except as otherwise specified in this Agreement. The captions of the various articles and paragraphs are for convenience and ease of reference only, and do not define, limit, augment, or describe the scope, content, or intent of this Agreement.

3.20.4 Notices. All notices to be given hereunder shall be in writing and may be made either by personal delivery or by registered or certified mail, postage prepaid, return receipt requested. Mailed notices shall be addressed to the parties at the addresses listed below, but each party may change the address by written notice in accordance with this Section. Notices delivered personally will be deemed communicated as of actual receipt; mailed notices will be deemed communicated as of two (2) days after mailing.

CITY	**DEVELOPER**
City of Ontario Engineering Department 303 East "B" Street Ontario, CA 91764	Ambitus-Ontario 1 LP 9336 Daines Dr. Temple City, CA 91780-3110

3.20.5 Amendment; Modification. No supplement, modification, or amendment of this Agreement shall be binding unless executed in writing and signed by both Parties.

3.20.6 Entire Agreement. This Agreement contains the entire Agreement of the parties with respect to the subject matter hereof, and supersedes all prior negotiations, understandings or agreements, either written or oral, express or implied. The invalidity in whole or in part of any provision of this Agreement shall not void or affect the validity of any other provision of this Agreement.

3.20.7 Successors and Assigns. This Agreement shall be binding on the successors and assigns of the parties, and shall not be assigned by the Developer without the prior written consent of the City.

3.20.8 Waiver. The City's failure to insist upon strict compliance with any provision of this Agreement or to exercise any right or privilege provided herein, or City's waiver of any breach of this Agreement, shall not relieve Developer of any of its obligations of this Agreement, whether of the same or similar type. The foregoing shall be true whether City's actions are intentional or unintentional. Developer agrees to waive, as a defense, counterclaim or

set off, any and all defects, irregularities or deficiencies in the authorization, execution or performance of the Public Improvements or this Agreement, as well as the laws, rules, regulations, ordinances or resolutions of City with regards to the authorization, execution or performance of the Public Improvements or this Agreement.

3.20.9 Definition. For purposes of enforcing this Agreement, the term "City" shall include, but shall not be limited to, City Council, City Manager, City Attorney, City Engineer, or any of their authorized representatives. City shall have the sole and absolute discretion to determine which public body, public official or public employee may act on behalf of City for any particular purpose.

3.20.10 Assignment or Transfer of Agreement. Developer shall not assign, hypothecate, or transfer, either directly or by operation of law, this Agreement or any interest herein without prior written consent of City. Any attempt to do so shall be null and void, and any assignee, hypothecatee, or transferee shall acquire no right or interest by reason of such attempted assignment, hypothecation, or transfer. Unless specifically stated to the contrary in City's written consent, any assignment, hypothecation, or transfer shall not release or discharge Developer from any duty or responsibility under this Agreement. In the event that City consents in writing to such an assignment, any assignee, hypothecatee, or transferee shall expressly assume Developer's obligations hereunder by a written agreement in a form, and containing such security, as is reasonably acceptable to City.

The agreement, hypothecation, or transfer shall be to the satisfaction of the City Attorney and shall include provisions requiring the assignee to post bonds or submit another form of financial security, satisfactory to City and approved by the City Attorney, to guarantee construction of the Public Improvements. The agreement shall be recorded against the Property to inform successors and assigns of the required Public Improvements to be constructed and their time frame for construction.

Following any permitted assignment, hypothecation, or transfer of the Public Improvements as set forth in this Section, City shall release Developer from its obligations so assigned and shall release to Developer any bonds or other security posted to secure the Public Improvements so assigned; provided, however, that City shall not release any security or undertakings given to secure the performance of any of the Public Improvements not assigned, hypothecated, or transferred.

3.20.11 Binding Effect. Each and all of the covenants and conditions shall be binding on and shall inure to the benefit of the Parties, and their successors, heirs, personal representatives, or assigns. This Section shall not be construed as an authorization for any Party to assign any right or obligation.

3.20.12 No Third-Party Beneficiaries. There are no intended third-party beneficiaries of any right or obligation assumed by the Parties.

3.20.13 Invalidity; Severability. If any portion of this Agreement is declared invalid, illegal, or otherwise unenforceable by a court of competent jurisdiction, the remaining provisions shall continue in full force and effect.

3.20.14 Consent to Jurisdiction and Venue. This Agreement shall be construed in accordance with and governed by the laws of the State of California. Any legal action or proceeding brought to interpret or enforce this Agreement, or which in any way arises out of the Parties' activities undertaken pursuant to this Agreement, shall be filed and prosecuted in the appropriate California State Court in the County of San Bernardino, California. Each Party waives the benefit of any provision of state or federal law providing for a change of venue to any other court or jurisdiction including, without limitation, a change of venue based on the fact that a governmental entity is a party to the action or proceeding, or that a federal right or question is involved or alleged to be involved in the action or proceeding. Without limiting the generality of the foregoing waiver, Developer expressly waives any right to have venue transferred pursuant to California Code of Civil Procedure Section 394.

3.20.15 Attorneys' Fees and Costs. If any arbitration, lawsuit, or other legal action or proceeding is brought by one Party against the other Party in connection with this Agreement or the Property, the prevailing party, whether by final judgment or arbitration award, shall be entitled to and recover from the other party all costs and expenses incurred by the prevailing party, including actual attorneys' fees ("Costs"). Any judgment, order, or award entered in such legal action or proceeding shall contain a specific provision providing for the recovery of Costs. This Section shall survive the termination or expiration of this Agreement.

3.20.16 Acquisition and Dedication of Easements or Rights-of-Way. If any of the Public Improvements required by this Agreement are to be constructed on land not within the subdivision or an already-existing public right-of-way, no construction or installation shall be commenced before:

(a) The irrevocable offer of dedication or conveyance to City of appropriate rights-of-way, easements, or other interests in real property, and appropriate authorization from the property owner to allow construction or installation of the Public Improvements or work; or

(b) The issuance of an order of possession by a court of competent jurisdiction pursuant to California's Eminent Domain Law. Developer shall comply in all respects with any such order of possession.

3.20.17 Nothing in this paragraph shall be construed as authorizing or granting an extension of time to Developer for completion of the Public Improvements.

3.20.18 Prevailing Wages. Developer has been alerted to the requirements of California Labor Code section 1770 et seq., which require the payment of prevailing wage rates and the performance of other requirements if it is determined that this Agreement constitutes a public works contract. It shall be the sole responsibility of Developer to determine whether to pay prevailing wages for any or all work required by this Agreement. As a material part of this Agreement, Developer agrees to assume all risk of liability arising from any decision not to pay prevailing wages for work required by this Agreement.

3.20.19 Counterparts. This Agreement may be executed in counterpart originals, which taken together, shall constitute one and the same instrument.

[SIGNATURE PAGE FOLLOWS]

CITY OF ONTARIO

By:_____
Scott Ochoa, City Manager

DEVELOPER

Ambitus-Ontario 1 LP, a California limited partnership

By:_____
Signature

Name Eddy Wan

Title Manager of General Partner

Attest

_____

By:_____
Sheila Mautz, City Clerk

Approved as to Form:

By:_____
Best Best & Krieger, City Attorney

By:_____
_____

NOTE: DEVELOPER'S SIGNATURES SHALL BE DULY NOTARIZED, AND APPROPRIATE ATTESTATIONS SHALL BE INCLUDED AS MAY BE REQUIRED BY THE BY LAWS, ARTICLES OF INCORPORATION OR OTHER RULES OR REGULATIONS APPLICABLE TO DEVELOPER'S BUSINESS ENTITY.

ACKNOWLEDGMENT

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

State of California

County of Los Angeles

on 9-16-2025 before me, MUN PAK BARASORDA, a Notary Public,

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

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

WITNESS my hand and official seal.

MGC1 MUN PAK BARASORDA COMM. # 2446645 NOTARY PUBLIC - CALIFORNIA LOS ANGELES COUNTY COMM. EXPIRES MAY 11, 2027 MGC1

Signature _____ (seal)

Title or Type of Document AGREEMENT FOR COMPLETION OF PUBLIC IMPROVEMENTS BETWEEN THE CITY OF ONTARIO AND AMBITUS-ONTARIO 1 LP

Number of Pages _____ Date of Document _____

Signer(s) other than named above _____

Exhibit "A"

Legal Description

For APN/Parcel ID(s): 0108-551-34-0-000, 0108-551-35-0-000 and 0108-551-01-0-000

THE LAND REFERRED TO HEREIN BELOW IS SITUATED IN THE CITY OF ONTARIO, COUNTY OF SAN
BERNARDINO, STATE OF CALIFORNIA AND IS DESCRIBED AS FOLLOWS:
LOTS 35, 36, 37 AND 38, BLOCK "B", TRACT NO. 2493, IN THE CITY OF ONTARIO, COUNTY OF SAN BERNARDINO,
STATE OF CALIFORNIA, AS PER PLAT RECORDED IN BOOK 35, PAGE 60 OF MAPS, RECORD OF SAID COUNTY.
EXCEPT THAT PORTION AS CONVEYED TO THE CITY OF ONTARIO, MARCH 19, 1968, RECORDED IN BOOK 6993,
PAGE 981, OFFICIAL RECORDS, DESCRIBED AS FOLLOWS:
THE SOUTH 17 FEET OF SAID LOTS 35, 36, 37, AND 38, THE EAST 30 FEET OF SAID LOT 38, EXCEPTING
THEREFROM THE SOUTH 17 FEET THEREOF AND THE NORTH 30 FEET OF SAID LOTS 35, 36, 37 AND 38,
EXCEPTING THEREFROM THAT PORTION THEREOF WITHIN THE EAST 30 FEET OF SAID LOT 38.
SAID LAND IS SHOWN AND DESCRIBED AS LOT A PURSUANT TO LOT LINE ADJUSTMENT NO. LLA 23-015
RECORDED SEPTEMBER 10, 2024 AS INSTRUMENT NO. 2024-0212483 OF OFFICIAL RECORDS.

APN: 0108-551-62-0-000 (NEW), APN: 0108-551-01-0-000, APN: 0108-551-34-0-000, AND APN: 0108-551-35-0-000(OLD)

Exhibit "B"
List of Public Improvements

CITY OF ONTARIO
CONSTRUCTION AND BOND ESTIMATE
IMPROVEMENT AGREEMENT FOR PDEV22-033

[ENGINEERING ESTIMATE ATTACHED]

CITY OF ONTARIO

ENGINEERING DEPARTMENT

Project Cost Estimate
(Description of Cost Estimate)

Date	6/16/2025
Project Number	PDEV22-033
Plancheck Number	
Location	1749 E 4th St
Computed By	Ramoncito Ronquillo
Contact Phone	714-671-1050
Contact Email	ray@callandeng.com

Attached Project Cost Estimate prepared by (or under the direction of)

Signature of Registered Civil Engineer

40870
RCE No.

3/31/2027
Exp. Date:

REGISTERED PROFESSIONAL ENGINEER
JACK C. S. LEE
40870
Exp. 3-31-27
CIVIL
STATE OF CALIFORNIA

Civil Engineer Stamp

7/31/2025
Eng Dept
Harris PC#4

Recommended by HARRIS
for APPROVAL by City
By: _____
07/31/2025

Approved By: _____
Date: _____

CITY OF ONTARIO

ENGINEERING DEPARTMENT

Summary of Estimated Construction Cost in Public Right-Of-Way
For Encroachment Permit Fee Calculation

Date	6/16/2025
Project Number	PDEV22-033
Plancheck Number	
Location	1749 E 4th St
Computed By	Ramoncito Ronquillo
Contact Phone	714-671-1050
Contact Email	ray@callandeng.com

A.	STREET (Excludes Fiber Optic, Landscape, Utility Poles)	Sub-Total	$ 258,113.65
B.	POTABLE WATER	Sub-Total	$ 39,748.36
C.	RECYCLED WATER	Sub-Total	$ 4,697.00
D.	SANITARY SEWER	Sub-Total	$ 10,803.10
E.	STORM DRAIN	Sub-Total	$ -
F.	FIBER OPTIC	Sub-Total	$ 39,525.26

TOTAL ESTIMATED CONSTRUCTION COST (Excludes Landscape, Utility Poles)	$ 352,887.37	
CONSTRUCTION INSPECTION FEE (Excludes Landscape, Utility Poles)	$ 19,396.36	$164 Base Fee
SECURITY DEPOSIT	$ 352,887.37	
Check box if posting Refundable Cash Deposit ####		$500 Min
See Page 4 for posting of Security Bonds		
PERMIT FEE	$ 116.00	
TRAFFIC CONTROL PERMIT FEE	$ 103.00	
ENCROACHMENT PERMIT FEE TOTAL	$ 19,615.36	

CITY OF ONTARIO

ENGINEERING DEPARTMENT

Summary of Estimated Construction Cost in Public Right-Of-Way
For Plan Check Fee Calculation

Date	6/16/2025
Project Number	PDEV22-033
Plancheck Number	
Location	1749 E 4th St
Computed By	Ramoncito Ronquillo
Contact Phone	714-671-1050
Contact Email	ray@callandeng.com

A.	STREET (Excludes Fiber Optic, Landscape, Utility Poles)	Sub-Total	$ 258,113.65
B.	POTABLE WATER	Sub-Total	$ 39,748.36
C.	RECYCLED WATER	Sub-Total	$ 4,697.00
D.	SANITARY SEWER	Sub-Total	$ 10,803.10
E.	STORM DRAIN	Sub-Total	$ -
F.	FIBER OPTIC	Sub-Total	$ 39,525.26
G.	LANDSCAPE (Excludes Parkway)	Sub-Total	$ -
	TOTAL ESTIMATED CONSTRUCTION COST (Excludes Utility Poles)		$ 352,887.37
	PLAN CHECK FEE TOTAL		$ 16,409.26

CITY OF ONTARIO

ENGINEERING DEPARTMENT

Summary of Estimated Construction Cost in Public Right-Of-Way

For Security Bond Amount

(Subdivision Maps Only)

Date	6/16/2025
Project Number	PDEV22-033
Plancheck Number	
Location	1749 E 4th St
Computed By	Ramoncito Ronquillo
Contact Phone	714-671-1050
Contact Email	ray@callandeng.com

A.	STREET	Sub-Total	$ 436,241.51
B.	POTABLE WATER	Sub-Total	$ 39,748.36
C.	RECYCLED WATER	Sub-Total	$ 4,697.00
D.	SANITARY SEWER	Sub-Total	$ 10,803.10
E.	STORM DRAIN	Sub-Total	$ -

TOTAL ESTIMATED CONSTRUCTION COST	$ 491,489.97
CONTINGENCY FOR UNSIGNED PLANS (10%)	$ 49,149.00
Check box if plans are unsigned ####	
TOTAL SECURITY BOND AMOUNT	$ 491,489.97

SECURITY BOND AMOUNTS

Performance Bond (100% of Total Estimated Construction Cost)	$ 491,489.97
Labor and Material Bond (100% of Total Estimated Construction Cost)	$ 491,489.97
Maintenance Bond * (10% of Performance Bond)	$ 49,149.00
Monumentation Cash Deposit **	$ 1,000.00

No. of Monuments to set: ☐

* To be provided prior to release of Performance Bond

** To be provided if monumentation is not complete by the time of Final Map approval

ENGINEERING DEPARTMENT

Summary of Total Length of Utility Mains in Public Right-Of-Way
Provided to Fiscal Services Department

Date	6/16/2025
Project Number	PDEV22-033
Plancheck Number	
Location	1749 E 4th St
Computed By	Ramoncito Ronquillo
Contact Phone	714-671-1050
Contact Email	ray@callandeng.com

		Total Length (LF)
B.	POTABLE WATER MAIN	
C.	RECYCLED WATER MAIN	
D.	SANITARY SEWER MAIN	**26**
E.	STORM DRAIN MAIN	
F.	FIBER OPTIC CONDUIT	**748**

CITY OF ONTARIO

ENGINEERING DEPARTMENT

Construction Cost Estimate Form
Street Improvements

Date	6/16/2025
Project Number	PDEV22-033
Plancheck Number	
Location	1749 E 4th St
Computed By	Ramoncito Ronquillo
Contact Phone	714-671-1050
Contact Email	ray@callandeng.com

CONSTRUCTION ITEM DESCRIPTION	QTY	UNIT	COST	TOTAL
ASPHALT CONCRETE (AC) ($0.39/IN/S.F. AC & $0.19/IN/S.F. CAB)				
AC BASE PAVE (MINIMUM 4") THICKNESS: 6"		S.F.	$ 2.34	$ -
CRUSHED AGREGGATE BASE THICKNESS: 8"		S.F.	$ 1.52	$ -
AC PAVEMENT	57	TON	$ 65.00	$ 3,705.00
AC BERM		L.F.	$ 13.00	$ -
2" GRIND	3940	S.F.	$ 0.40	$ 1,576.00
SAWCUT	787	L.F.	$ 3.50	$ 2,754.50
IMPORT FILL (INCLUDING COMPACTION)		C.Y.	$ 25.00	$ -
PREPARATION OF SUBGRADE	787	S.F.	$ 0.50	$ 393.50
AC PAVEMENT REMOVAL	1531	S.F.	$ 3.50	$ 5,358.50
SLURRY SEAL (RPM TYPE II)		S.F.	$ 0.17	$ -
TRENCH BACKFILL AND COMPACTION		S.F.	$ 3.50	$ -
PORTLAND CEMENT CONCRETE (PCC)				
CURB & GUTTER	639	L.F.	$ 15.00	$ 9,585.00
CURB ONLY		L.F.	$ 12.00	$ -
CROSS GUTTER/SPANDREL	466	S.F.	$ 7.00	$ 3,262.00
SIDEWALK		S.F.	$ 4.75	$ -
WHEELCHAIR RAMP	2	EA.	$ 2,200.00	$ 4,400.00
TRAFFIC ISLAND		S.F.	$ 9.50	$ -
CONCRETE PAVEMENT (PCC - REINFORCED, UP TO 10" THICKNESS)		S.F.	$ 7.80	$ -
DRIVE APPROACHES				
RESIDENTIAL		S.F.	$ 6.50	$ -
COMMERCIAL	544	S.F.	$ 8.50	$ 4,624.00
REMOVAL				
REMOVAL OF CONCRETE	616	S.F.	$ 3.50	$ 2,156.00
REMOVAL OF BERM, A.C. OR P.C.C.	700	L.F.	$ 6.50	$ 4,550.00
ADJUSTMENT TO GRADE				
MANHOLE		EA.	$ 600.00	$ -
WATER VALVE		EA.	$ 325.00	$ -
CLEANOUT		EA.	$ 265.00	$ -
DRAINAGE				
PARKWAY DRAIN	1	EA.	$ 1,800.00	$ 1,800.00

CITY OF ONTARIO

ENGINEERING DEPARTMENT

Construction Cost Estimate Form
Street Improvements

SIGNS				
REFLECTOR SIGN AND POST	1	EA.	$ 175.00	$ 175.00
STREET NAME SIGN	1	EA.	$ 475.00	$ 475.00
TRAFFIC SIGN AND POST	10	EA.	$ 300.00	$ 3,000.00
LIGHTING				
STREET LIGHT				
- 70, 100 WATT (INCLUDING CONDUIT & PULL BOXES)	3	EA.	$ 6,200.00	$ 18,600.00
- 150, 250 WATT (INCLUDING CONDUIT & PULL BOXES)	1	EA.	$ 6,500.00	$ 6,500.00
STREET LIGHT SERVICE PEDESTAL		EA.	$ 4,100.00	$ -
STREET LIGHT SERVICE DUAL PEDESTAL	1	EA.	$ 5,900.00	$ 5,900.00
1.5" CONDUIT	755	EA.	$ 35.00	$ 26,425.00
3" CONDUIT	20	EA.	$ 55.00	$ 1,100.00
PULL BOX #3-1/2	8	EA.	$ 500.00	$ 4,000.00
PULL BOX #5	1	EA.	$ 750.00	$ 750.00
STRIPING				
L.S. FOR EACH STREET	2	L.S.	$ 3,500.00	$ 7,000.00
SIGNING & STRIPING LOCAL STREET		L.F.	$ 4.50	$ -
SIGNING & STRIPING COLLECTOR STREET		L.F.	$ 8.75	$ -
SIGNING & STRIPING ARTERIAL STREET		L.F.	$ 12.75	$ -
PAINTED LEGEND		EA.	$ 80.00	$ -
THERMOPLASTIC LEGEND	4	EA.	$ 165.00	$ 660.00
PAVEMENT MARKER	54	L.F.	$ 3.00	$ 162.00
TRAFFIC SIGNALS				$ -
NEW TRAFFIC SIGNAL		EA.	$ 355,600.00	$ -
MODIFY EXISTING SIGNAL (STREET WIDENING, PER CORNER)	1	EA.	$ 88,900.00	$ 88,900.00
REMOVE EXISTING SIGNAL		EA.	$ 25,000.00	$ -
REPLACE/RESTORE T.S. DETECTION LOOP		EA.	$ 425.00	$ -
TRAFFIC SIGNAL INTERCONNECT CONDUIT		L.F.	$ 17.00	$ -
TRAFFIC SIGNAL INTERCONNECT CONDUIT & CABLE		L.F.	$ 20.00	$ -
ADD LEFT TURN PHASING		L.S.	$ 30,000.00	$ -
ADD LEFT TURN PHASING		L.S.	$ 30,000.00	$ -
APS	1	L.S.	$ 12,000.00	$ 12,000.00
LANDSCAPE				$ -
PARKWAY TREE WITH IRRIGATION	9	EA.	$ 525.00	$ 4,725.00
PARKWAY LANDSCAPING	4805	S.F.	$ 6.00	$ 28,830.00
(INCLUDING IRRIGATION FACILITIES)				$ -
NEIGHBORHOOD EDGE AND/OR MEDIAN LANDSCAPING		S.F.	$ 6.00	$ -
(INCLUDING IRRIGATION FACILITIES)				$ -
NEIGHBORHOOD EDGE AND/OR MEDIAN TREE		EA.	$ 525.00	$ -
(INCLUDING IRRIGATION FACILITIES)				$ -

CITY OF ONTARIO

ENGINEERING DEPARTMENT

Construction Cost Estimate Form
Street Improvements

UTILITY POLES				$ -
RELOCATION OF POLE		EA.	$ 18,000.00	$ -
UNDERGROUNDING OF POWER LINES	192	L.F.	$ 350.00	$ 67,200.00
UNDERGROUNDING OF COMMUNICATION LINES	192	L.F.	$ 90.00	$ 17,280.00
				$ -
FIBER OPTIC				$ -
CONDUIT PLACEMENT TRENCH/BORE (INCLUDES HANDHOLES)	748	L.F.	$ 45.00	$ 33,660.00
(ARTERIAL/COLLECTOR STREETS - MAIN BACKBONE)				$ -
IN-TRACT LOCAL STREETS				$ -
FIBER CONDUIT PLACEMENT		L.F.	$ 5.70	$ -
FIBER TRENCH		L.F.	$ 6.50	$ -
HANDHOLE - FLOWER POT (FP)		EA.	$ 125.00	$ -
HANDHOLE - HH-3		EA.	$ 250.00	$ -
HANDHOLE - HH-4		EA.	$ 375.00	$ -
				$ -
DRY UTILITY TRENCHING				$ -
BORE - AC PAVEMENT		L.F.	$ 20.00	$ -
BORE - PARKWAY		L.F.	$ 10.00	$ -
MICRO TRENCHING		L.F.	$ 8.15	$ -
DRY UTILITY TRENCH - AC PAVEMENT		L.F.	$ 56.00	$ -
DRY UTILITY TRENCH - PARKWAY		L.F.	$ 8.00	$ -
OTHER				
				$ -
				$ -
				$ -
				$ -
STREET IMPROVEMENTS SUB-TOTAL				**$ 371,506.50**
10% CONTINGENCY				$ 37,150.65
TRAFFIC CONTROL	1	L.S.	$ 11,238.07	$ 11,238.07
MOBILIZATION, SWPPP, EROSION CONTROL	1	L.S.	$ 16,346.29	$ 16,346.29
STREET IMPROVEMENTS TOTAL				**$ 436,241.51**

CITY OF ONTARIO

ENGINEERING DEPARTMENT

Construction Cost Estimate Form
Potable Water Improvements

Date	6/16/2025
Project Number	PDEV22-033
Plancheck Number	
Location	1749 E 4th St
Computed By	Ramoncito Ronquillo
Contact Phone	714-671-1050
Contact Email	ray@callandeng.com

CONSTRUCTION ITEM DESCRIPTION	QTY	UNIT	COST	TOTAL
WATER / FIRE MAIN				
6" IN EASEMENT AREA ONLY (NOT IN PAVED STREET)		L.F.	$ 30.00	$ -
8" IN EASEMENT AREA ONLY (NOT IN PAVED STREET)		L.F.	$ 40.00	$ -
10" IN EASEMENT AREA ONLY (NOT IN PAVED STREET)		L.F.	$ 45.00	$ -
8" INC. EXC., BACKFILL & PVMT RESTORATION		L.F.	$ 90.00	$ -
10" INC. EXC., BACKFILL & PVMT RESTORATION		L.F.	$ 95.00	$ -
12" INC. EXC., BACKFILL & PVMT RESTORATION		L.F.	$ 105.00	$ -
16" INC. EXC., BACKFILL & PVMT RESTORATION		L.F.	$ 115.00	$ -
WATER SERVICE (EXCLUDES AC REMOVAL AND REPLACEMENT)				
1" WATER SERVICE WITH METER BOX		EA.	$ 1,000.00	$ -
2" WATER SERVICE WITH METER BOX	1	EA.	$ 2,200.00	$ 2,200.00
FIRE HYDRANT (EXCLUDES AC REMOVAL AND REPLACEMENT)				
BREAK-OFF TYPE FIRE HYDRANT (INC. CONNECTION)	1	EA.	$ 5,400.00	$ 5,400.00
AIR RELEASE / BLOW-OFF				
(EXCLUDES AC REMOVAL AND REPLACEMENT)				
AIR RELEASE VALVE (INC. CONNECTION)		EA.	$ 4,600.00	$ -
BLOW-OFF VALVE (INC. CONNECTION)		EA.	$ 4,500.00	$ -
BACKFLOW ($1000/IN)				
RP 2" AND SMALLER		EA.	$ 3,000.00	$ -
DDC ABOVE GROUND (UP TO 6" DIAMETER)	3	EA.	$ 7,000.00	$ 21,000.00
GATE VALVE				
6"		EA.	$ 550.00	$ -
8"		EA.	$ 850.00	$ -
10"		EA.	$ 1,250.00	$ -
12"		EA.	$ 1,375.00	$ -
16"		EA.	$ 3,425.00	$ -
HOT TAP				
HOT TAP WITH VALVE	3	EA.	$ 1,750.00	$ 5,250.00
CONNECTION TO EXISTING 6" MAIN		EA.	$ 3,500.00	$ -
CONNECTION TO EXISTING 8" MAIN		EA.	$ 3,750.00	$ -
CONNECTION TO EXISTING 12" MAIN		EA.	$ 4,100.00	$ -
INSTALL TEE		EA.	$ 300.00	$ -

CITY OF ONTARIO

ENGINEERING DEPARTMENT

Construction Cost Estimate Form
Potable Water Improvements

REMOVE EXISTING BLIND FLANGE		EA.	$ 475.00	$ -
CONCRETE THRUST BLOCK		EA.	$ 585.00	$ -
OTHER				
				$ -
				$ -
				$ -
				$ -
POTABLE WATER IMPROVEMENTS SUB-TOTAL				**$ 33,850.00**
10% CONTINGENCY				$ 3,385.00
TRAFFIC CONTROL	1	L.S.	$ 1,023.96	$ 1,023.96
MOBILIZATION, SWPPP, EROSION CONTROL	1	L.S.	$ 1,489.40	$ 1,489.40
POTABLE WATER IMPROVEMENTS TOTAL				**$ 39,748.36**

CITY OF ONTARIO

ENGINEERING DEPARTMENT

Construction Cost Estimate Form
Recycled Water Improvements

Date	6/16/2025
Project Number	PDEV22-033
Plancheck Number	
Location	1749 E 4th St
Computed By	Ramoncito Ronquillo
Contact Phone	714-671-1050
Contact Email	ray@callandeng.com

CONSTRUCTION ITEM DESCRIPTION	QTY	UNIT	COST	TOTAL
WATER / FIRE MAIN				
6" IN EASEMENT AREA ONLY (NOT IN PAVED STREET)		L.F.	$ 30.00	$ -
8" IN EASEMENT AREA ONLY (NOT IN PAVED STREET)		L.F.	$ 40.00	$ -
10" IN EASEMENT AREA ONLY (NOT IN PAVED STREET)		L.F.	$ 45.00	$ -
8" INC. EXC., BACKFILL & PVMT RESTORATION		L.F.	$ 90.00	$ -
10" INC. EXC., BACKFILL & PVMT RESTORATION		L.F.	$ 95.00	$ -
12" INC. EXC., BACKFILL & PVMT RESTORATION		L.F.	$ 105.00	$ -
16" INC. EXC., BACKFILL & PVMT RESTORATION		L.F.	$ 115.00	$ -
WATER SERVICE (EXCLUDES AC REMOVAL AND REPLACEMENT)				
1" WATER SERVICE WITH METER BOX	1	EA.	$ 1,000.00	$ 1,000.00
2" WATER SERVICE WITH METER BOX		EA.	$ 2,200.00	$ -
FIRE HYDRANT (EXCLUDES AC REMOVAL AND REPLACEMENT)				
BREAK-OFF TYPE FIRE HYDRANT (INC. CONNECTION)		EA.	$ 5,400.00	$ -
AIR RELEASE / BLOW-OFF				
(EXCLUDES AC REMOVAL AND REPLACEMENT)				
AIR RELEASE VALVE (INC. CONNECTION)		EA.	$ 4,600.00	$ -
BLOW-OFF VALVE (INC. CONNECTION)		EA.	$ 4,500.00	$ -
BACKFLOW ($1000/IN)				
RP 2" AND SMALLER	1	EA.	$ 3,000.00	$ 3,000.00
DDC ABOVE GROUND (UP TO 6" DIAMETER)		EA.	$ 7,000.00	$ -
GATE VALVE				
6"		EA.	$ 550.00	$ -
8"		EA.	$ 850.00	$ -
10"		EA.	$ 1,250.00	$ -
12"		EA.	$ 1,375.00	$ -
16"		EA.	$ 3,425.00	$ -
HOT TAP				
HOT TAP WITH VALVE		EA.	$ 1,750.00	$ -
CONNECTION TO EXISTING 8" MAIN		EA.	$ 3,750.00	$ -
CONNECTION TO EXISTING 12" MAIN		EA.	$ 4,100.00	$ -
INSTALL TEE		EA.	$ 300.00	$ -
REMOVE EXISTING BLIND FLANGE		L.S.	$ 475.00	$ -

CITY OF ONTARIO

ENGINEERING DEPARTMENT

Construction Cost Estimate Form
Recycled Water Improvements

CONCRETE THRUST BLOCK		EA.	$ 585.00	$ -
OTHER				
				$ -
				$ -
				$ -
				$ -
RECYCLED WATER IMPROVEMENTS SUB-TOTAL				**$ 4,000.00**
10% CONTINGENCY				$ 400.00
TRAFFIC CONTROL	1	L.S.	$ 121.00	$ 121.00
MOBILIZATION, SWPPP, EROSION CONTROL	1	L.S.	$ 176.00	$ 176.00
RECYCLED WATER IMPROVEMENTS TOTAL				**$ 4,697.00**

CITY OF ONTARIO

ENGINEERING DEPARTMENT

Construction Cost Estimate Form
Sanitary Sewer Improvements

Date	6/16/2025
Project Number	PDEV22-033
Plancheck Number	
Location	1749 E 4th St
Computed By	Ramoncito Ronquillo
Contact Phone	714-671-1050
Contact Email	ray@callandeng.com

CONSTRUCTION ITEM DESCRIPTION	QTY	UNIT	COST	TOTAL
SEWER MAIN (VCP ONLY)				
8" & SMALLER IN EASEMENT AREA ONLY	24	L.F.	$ 40.00	$ 960.00
(NOT IN PAVED STREET)				
10" IN EASEMENT AREA ONLY		L.F.	$ 60.00	$ -
(NOT IN PAVED STREET)				
12" & LARGER IN EASEMENT AREA ONLY		L.F.	$ 63.00	$ -
(NOT IN PAVED STREET)				
8" INC. EXC., BACKFILL & PVMT RESTORATION	2	L.F.	$ 70.00	$ 140.00
10" INC. EXC., BACKFILL & PVMT RESTORATION		L.F.	$ 75.00	$ -
12" INC. EXC., BACKFILL & PVMT RESTORATION		L.F.	$ 80.00	$ -
15" INC. EXC., BACKFILL & PVMT RESTORATION		L.F.	$ 90.00	$ -
18" INC. EXC., BACKFILL & PVMT RESTORATION		L.F.	$ 95.00	$ -
21" INC. EXC., BACKFILL & PVMT RESTORATION		L.F.	$ 105.00	$ -
24" INC. EXC., BACKFILL & PVMT RESTORATION		L.F.	$ 115.00	$ -
MANHOLE				
MANHOLE	2	EA.	$ 4,050.00	$ 8,100.00
DROP MANHOLE		EA.	$ 4,100.00	$ -
VAULT		EA.	$ 3,500.00	$ -
MONITORING FACILITY / NON TRAFFIC AREA		EA.	$ 1,750.00	$ -
MONITORING MANHOLE		EA.	$ 4,100.00	$ -
CLEANOUT		EA.	$ 1,750.00	$ -
REMOVE/ABANDON EXISTING MANHOLE		EA.	$ 1,200.00	$ -
REMOVE EXISTING SEWER				
UP TO 12" DIAMETER		L.F.	$ 55.00	$ -
GREATER THAN 12" DIAMETER		L.F.	$ 70.00	$ -
LATERAL				
4" HOUSE CONNECTION TO SEWER MAIN IN STREET		L.S.	$ 2,925.00	$ -
6" & SMALLER VCP SEWER LATERAL / EASEMENT		L.F.	$ 42.00	$ -
6" & SMALLER VCP SEWER LATERAL / PAVED STREET		L.F.	$ 70.00	$ -
SEWER CHIMNEY		EA.	$ 1,170.00	$ -
SEWER SADDLE		EA.	$ 1,170.00	$ -
WYE 4" x 8" TYPICAL		EA.	$ 115.00	$ -
OIL/GREASE INTERCEPTOR NOT IN STREET		EA.	$ 1,750.00	$ -

ENGINEERING DEPARTMENT

Construction Cost Estimate Form
Sanitary Sewer Improvements

OTHER				
				$ -
				$ -
				$ -
				$ -
SANITARY SEWER IMPROVEMENTS SUB-TOTAL				**$9,200.00**
10% CONTINGENCY				$920.00
TRAFFIC CONTROL	1	L.S.	$ 278.30	$ 278.30
MOBILIZATION, SWPPP, EROSION CONTROL	1	L.S.	$ 404.80	$ 404.80
SANITARY SEWER IMPROVEMENTS TOTAL				**$10,803.10**

CITY OF ONTARIO

ENGINEERING DEPARTMENT

Construction Cost Estimate Form
Storm Drain Improvements

Date	6/16/2025
Project Number	PDEV22-033
Plancheck Number	
Location	1749 E 4th St
Computed By	Ramoncito Ronquillo
Contact Phone	714-671-1050
Contact Email	ray@callandeng.com

CONSTRUCTION ITEM DESCRIPTION	QTY	UNIT	COST	TOTAL
RCP STORM DRAIN				
RCP SIZE X $3.25 / INCH OF I.D. UP TO 60" DIAMETER				
18" INC. EXC., BACKFILL & PVMT RESTORATION		L.F.	$ 58.50	$ -
INC. EXC., BACKFILL & PVMT RESTORATION		L.F.	$ -	$ -
INC. EXC., BACKFILL & PVMT RESTORATION		L.F.	$ -	$ -
INC. EXC., BACKFILL & PVMT RESTORATION		L.F.	$ -	$ -
66" INC. EXC., BACKFILL & PVMT RESTORATION		L.F.	$ 260.00	$ -
72" INC. EXC., BACKFILL & PVMT RESTORATION		L.F.	$ 290.00	$ -
78" INC. EXC., BACKFILL & PVMT RESTORATION		L.F.	$ 305.00	$ -
84" INC. EXC., BACKFILL & PVMT RESTORATION		L.F.	$ 330.00	$ -
90" INC. EXC., BACKFILL & PVMT RESTORATION		L.F.	$ 350.00	$ -
96" INC. EXC., BACKFILL & PVMT RESTORATION		L.F.	$ 365.00	$ -
102" INC. EXC., BACKFILL & PVMT RESTORATION		L.F.	$ 470.00	$ -
108" INC. EXC., BACKFILL & PVMT RESTORATION		L.F.	$ 480.00	$ -
LATERAL				
18" RCP OR SMALLER		L.F.	$ 45.00	$ -
INC. EXC., BACKFILL & PVMT RESTORATION				
MANHOLE		EA.	$ 4,500.00	$ -
CATCH BASIN				
CATCH BASIN LESS THAN 7' IN WIDE		L.F.	$ 409.50	$ -
7' WIDE - CB WITH SCREEN INLET		E.A.	$ 3,900.00	$ -
10' WIDE- CB WITH SCREEN INLET		E.A.	$ 4,200.00	$ -
14' WIDE - CB WITH SCREEN INLET		E.A.	$ 4,700.00	$ -
21' WIDE - CB WITH SCREEN INLET		E.A.	$ 4,900.00	$ -
LOCAL DEPRESSION FOR UP TO 10' WIDE CB		L.S.	$ 585.00	$ -
LOCAL DEPRESSION FOR > 10' WIDE CB		L.S.	$ 1,200.00	$ -
REINFORCED CONCRETE BOX				
INC. EXC., BACKFILL & PVMT RESTORATION				
4' X 6' RCB		L.F.	$ 400.00	$ -
7' X 6' RCB		L.F.	$ 470.00	$ -
7' X 8.5' RCB		L.F.	$ 560.00	$ -
7' X 9.5' RCB		L.F.	$ 575.00	$ -
8' X 11' RCB		L.F.	$ 585.00	$ -
8' X 13' RCB		L.F.	$ 600.00	$ -

CITY OF ONTARIO

ENGINEERING DEPARTMENT

Construction Cost Estimate Form
Storm Drain Improvements

9' X 9' RCB		L.F.	$ 610.00	$ -
9' X 12' RCB		L.F.	$ 650.00	$ -
OUTLET STRUCTURE		EA.	$ 700.00	$ -
INLET STRUCTURE		EA.	$ 700.00	$ -
TRANSITION STRUCTURE		EA.	$ 1,700.00	$ -
OTHER				
				$ -
				$ -
				$ -
				$ -
STORM DRAIN IMPROVEMENTS SUB-TOTAL				$ -
10% CONTINGENCY				$ -
TRAFFIC CONTROL	1	L.S.	$ -	$ -
MOBILIZATION, SWPPP, EROSION CONTROL	1	L.S.	$ -	$ -
STORM DRAIN IMPROVEMENTS TOTAL				

Exhibit "C"

Bonds and other Security

As evidence of understanding the provisions contained in this Agreement, and of the Developer's intent to comply with same, the Developer has submitted the below described security and has affixed the appropriate signatures thereto:

FAITHFUL PERFORMANCE BOND PRINCIPAL AMOUNT: $491,489.97
Description: Faithful Performance Bond
Surety: Markel Insurance Company
Attorney-in-fact: David Noddle
Title Service Representative: Noddle Surety & Insurance Services, Inc.
Address: 20121 Ventura Blvd., Ste 104
Woodland Hills, CA 91364
Phone Number: 818-881-1011
Email: david@noddlesurety.com

MAINTENANCE GUARANTEE BOND PRINCIPAL AMOUNT: $ 49,149.00
To be posted upon completion of the Public Improvements by Developer and approval and acceptance by City.

BOND NO. 4488263
PREMIUM $10,330.00

CITY OF ONTARIO

AGREEMENT FOR COMPLETION OF PUBLIC IMPROVEMENTS
PERFORMANCE BOND

KNOW ALL MEN BY THESE PRESENTS:

WHEREAS, the City Council of the City of Ontario, State of California ("CITY") and Ambitus-Ontario 1, LP ("PRINCIPAL") have entered into an Agreement for Completion of Public Improvements ("Improvement Agreement") dated on or about the 15th day of September 2025 for public improvements to be constructed as part of the Project Number PDEV22-033 Project; and,

WHEREAS, the Improvement Agreement is hereby referred to and incorporated herein by reference; and,

WHEREAS, the PRINCIPAL is required under the terms of the Improvement Agreement to provide a good and sufficient bond, in a form and from a surety acceptable to the CITY, for the performance of the Improvement Agreement; and,

NOW, THEREFORE, the PRINCIPAL and Markel Insurance Company, a company organized and doing business under and by virtue of the laws of the State of Illinois and duly licensed to conduct a general surety business in the State of California, as "SURETY," are held and firmly bound unto the CITY, as "OBLIGEES," in the sum of *see below ($491,489.97) for the payment of which sum well and truly to be made, we bind ourselves, our heirs, successors, executors and administrators, jointly and severally, firmly by these presents.

* Four Hundred Ninety One Thousand Four Hundred Eighty Nine & 97/100

The condition of this obligation is such, that if the above bonded PRINCIPAL, his or its heirs, executors, administrators, successors or assigns, shall in all things stand to and abide by, and well and truly keep and perform the covenants, conditions and provisions in said Improvement Agreement and any alteration thereof made as therein provided, on his or their part, to be kept and performed at the time and in the manner therein specified, and in all respects according to their true intent and meaning, and shall indemnify and save harmless the CITY, it officers, agents and employees, as therein stipulated, then this obligation shall become null and void; otherwise it shall remain in full force and effect.

As part of the obligation secured hereby and in addition to the face amount specified therefor, there shall be included costs and reasonable expenses and fees, including reasonable attorney's fees, incurred by the City in successfully enforcing such obligation, all to be taxed as costs and included in any judgment rendered.

The SURETY hereby stipulates and agrees that no change, extension of time, alteration or addition to the terms of the Improvement Agreement, or the work to be performed thereunder or the specifications accompanying the same, shall in any manner affect its obligations on this bond, and it does hereby waive notice of such change, extension, alteration or addition to the terms of the Improvement Agreement or to the work or specifications.

IN WITNESS WHEREOF, the seal and signature of said PRINCIPAL is hereto affixed, and the corporate seal and the name of said SURETY is hereto affixed and attested by its duly authorized Attorney-in-Fact at Woodland Hills California this 12th day of September, 2025.

PRINCIPAL	**SURETY**
Ambitus-Ontario 1, LP	Markel Insurance Company
Print Name	Print Name
By: _____	By: _____
Signature	Signature
EDDY WAN	David Noddle
Name	Name
Manager of Gen. Partner	Attorney in Fact
Title	Title
September 16, 2025	September 12, 2025
Date	Date

NOTE: APPROPRIATE NOTARIAL ACKNOWLEDGMENTS OF EXECUTION BY PRINCIPALS AND SURETY MUST BE ATTACHED TO THIS BOND.

AXV
RISK MANAGEMENT
DATE 09/17/25
SURETY APPROVED ONLY
INITIAL JA

ACKNOWLEDGMENT

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

STATE OF CALIFORNIA)
COUNTY OF Los Angeles)

On 09/16/2025, before me, Mun Pak Barasarda, Notary Public,

personally appeared Eddy Wan,

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

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

MUN PAK BARASORDA
COMM. # 2446645
NOTARY PUBLIC - CALIFORNIA
LOS ANGELES COUNTY
COMM. EXPIRES MAY 11, 2027

Signature of Notary Public

WITNESS my hand and official seal.

Principal must indicate below in what capacity he/she is signing. If other than in an individual capacity, the Principal must provide evidence satisfactory to demonstrate that he/she serves in such capacity and that he/she is authorized to execute this instrument.

CAPACITY CLAIMED BY SIGNER

- ☐ Individual
- ☐ Corporate Officer

Title(s)

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

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

Ambitus - Ontario I, LP

DESCRIPTION OF ATTACHED DOCUMENT

Performance Bond
Title or Type of Document

Number Of Pages

September 12 2025
Date Of Document

Signer(s) Other Than Named Above

PERFORMANCE BOND – (PRINCIPAL)

C-4

46700.00100\34360578.1

ACKNOWLEDGMENT

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

STATE OF CALIFORNIA)
COUNTY OF Los Angeles)

On September 12, 2025, before me, A. Bisordi, Notary Public,

personally appeared David Noddle,

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

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

A. BISORDI
NOTARY PUBLIC - CALIFORNIA
LOS ANGELES COUNTY
COMMISSION # 2448114
MY COMM. EXPIRES MAY 28, 2027

Signature of Notary Public

WITNESS my hand and official seal.

Principal must indicate below in what capacity he/she is signing. If other than in an individual capacity, the Principal must provide evidence satisfactory to demonstrate that he/she serves in such capacity and that he/she is authorized to execute this instrument.

CAPACITY CLAIMED BY SIGNER

- ☐ Individual
- ☐ Corporate Officer

Title(s)

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

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

Markel Insurance Company

DESCRIPTION OF ATTACHED DOCUMENT

Performance Bond
Title or Type of Document

Number Of Pages

September 12, 2025
Date Of Document

Signer(s) Other Than Named Above

POA# 510010

JOINT LIMITED POWER OF ATTORNEY

KNOW ALL MEN BY THESE PRESENTS: That SureTec Insurance Company, a Corporation duly organized and existing under the laws of the State of Texas and having its principal office in the County of Harris, Texas and Markel Insurance Company (the "Company"), a corporation duly organized and existing under the laws of the state of Illinois, and having its principal administrative office in Glen Allen, Virginia, does by these presents make, constitute and appoint:

David Noddle

Their true and lawful agent(s) and attorney(s)-in-fact, each in their separate capacity if more than one is named above, to make, execute, seal and deliver for and on their own behalf, individually as a surety or jointly, as co-sureties, and as their act and deed any and all bonds and other undertaking in suretyship provided, however, that the penal sum of any one such instrument executed hereunder shall not exceed the sum of:

Fifteen Million and 00/100 Dollars ($15,000,000.00)

This Power of Attorney is granted and is signed and sealed under and by the authority of the following Resolutions adopted by the Board of Directors of SureTec Insurance Company and Markel Insurance Company:

"RESOLVED, That the President, any Senior Vice President, Vice President, Assistant Vice President, Secretary, Assistant Secretary, Treasurer or Assistant Treasurer and each of them hereby is authorized to execute powers of attorney, and such authority can be executed by use of facsimile signature, which may be attested or acknowledged by any officer or attorney, of the company, qualifying the attorney or attorneys named in the given power of attorney, to execute in behalf of, and acknowledge as the act and deed of the SureTec Insurance Company and Markel Insurance Company, as the case may be, all bond undertakings and contracts of suretyship, and to affix the corporate seal thereto."

IN WITNESS WHEREOF, Markel Insurance Company and SureTec Insurance Company have caused their official seal to be hereunto affixed and these presents to be signed by their duly authorized officers on the 18th day of July , 2024 .

SureTec Insurance Company

By: _____
Michael C. Keimig, President

Markel Insurance Company

By: _____
Lindey Jennings, Vice President

State of Texas
County of Harris:

On this 18th day of July , 2024 A. D., before me, a Notary Public of the State of Texas, in and for the County of Harris, duly commissioned and qualified, came THE ABOVE OFFICERS OF THE COMPANIES, to me personally known to be the individuals and officers described in, who executed the preceding instrument, and they acknowledged the execution of same, and being by me duly sworn, disposed and said that they are the officers of the said companies aforesaid, and that the seals affixed to the proceeding instrument are the Corporate Seals of said Companies, and the said Corporate Seals and their signatures as officers were duly affixed and subscribed to the said instrument by the authority and direction of the said companies, and that Resolutions adopted by the Board of Directors of said Companies referred to in the preceding instrument is now in force.

IN TESTIMONY WHEREOF, I have hereunto set my hand, and affixed my Official Seal at the County of Harris, the day and year first above written.

JULIE E. MCCLARY
Notary Public State of Texas
Commission # 12947680-5
Commission Expires March 29, 2026

By: _____
Julie E. McClary, Notary Public
My commission expires 3/29/2026

We, the undersigned Officers of SureTec Insurance Company and Markel Insurance Company do herby certify that the original POWER OF ATTORNEY of which the foregoing is a full, true and correct copy is still in full force and effect and has not been revoked.

IN WITNESS WHEREOF, we have hereunto set our hands, and affixed the Seals of said Companies, on the 12th day of September , 2025 .

SureTec Insurance Company

By: _____
M. Brent Beaty, Assistant Secretary

Markel Insurance Company

By: _____
Andrew Marquis, Assistant Secretary

Any Instrument Issued in excess of the penalty stated above is totally void and without any validity. 510010
For verification of the authority of this Power you may call (713)812-0800 on any business day between 8:30 AM and 5:00 PM CST.

BOND NO. 4488263-W
PREMIUM Included with Performance Bond

CITY OF ONTARIO

AGREEMENT FOR COMPLETION OF PUBLIC IMPROVEMENTS
WARRANTY BOND

KNOW ALL PERSONS BY THESE PRESENTS:

WHEREAS, the City of Ontario ("CITY"), a California municipal corporation by its City Council and Ambitus-Ontario 1, LP ("PRINCIPAL") have entered into that certain Agreement for Completion of Public Improvements ("Improvement Agreement") dated 9-15-2025 referred to and incorporated herein by this reference, whereby PRINCIPAL agrees to install and complete certain designated public improvements for the project identified as Project Number PDEV22-033; and

WHEREAS, PRINCIPAL is required under the terms of the Improvement Agreement to furnish a bond to guarantee and warrant the work for a period of one year following its completion and acceptance against any defective work or labor done, or defective materials furnished, to comply with the terms of the Improvement Agreement; and

WHEREAS, we Ambitus-Ontario 1, LP, as PRINCIPAL and Markel Insurance Company a corporation organized and existing under the laws of the State of Illinois, and authorized to transact surety business in the State of California as surety ("SURETY"), are held and firmly bound onto the CITY, in the full and just sum of * see below for which payment well and truly to be made, the said PRINCIPAL and SURETY bind themselves, their successors and assigns, jointly and severally, firmly by these presents; and
*Four Hundred Ninety One Thousand Four Hundred Eighty Nine & 97/100 ($491,489.97)
WHEREAS, PRINCIPAL, required under the Improvement Agreement to construct the designated public improvements in accordance with CITY's Standard Specifications, agrees to repair or replace any and all work required under this Improvement Agreement that may prove defective in workmanship and/or materials, together with any other work which may be effected by this repair, excepting any work necessitated by ordinary wear and tear, or unusual abuse or neglect, within a one-year period from the date of acceptance of the work and improvements by the CITY; and

WHEREAREAS, such work and improvements have been completed in accordance with the Improvement Agreement; and

WHEREAS, CITY is willing and agreeable to accept a bond in the amount of Forty Nine Thousnd One Hundred Forty Nine ($49,149.00) (10% of CITY's estimated cost) to be a guarantee that all charges for material and labor accruing in the construction of said work and improvements have been or will be paid in full by PRINCIPAL and that the work and improvements shall remain free form defects resulting from defective material and labor for a period of twelve months from the date of acceptance by the CITY.

NOW, THEREFORE, the condition of this obligation is such that PRINCIPAL, having completed the work and improvements to the satisfaction of CITY, and if all charges for material and labor accruing in the construction of the work and improvements have been paid in full by PRINCIPAL, and if the work and improvements have remained free from defects resulting from the defective materials and labor, all for a period of twelve months from the date of acceptance by CITY. This bond shall remain in full force and effect until a written release is received from the City, at the written request of the Surety or Principal. The CITY may perform a warranty inspection prior to the expiration of the one year warranty period, but no sooner than 45 days prior to expiration. The PRINCIPAL will be notified in writing of any efficiencies revealed by this inspection. The warranty bond will not be released until the required repairs are completed and a one year warranty period has expired. Without any defects resulting from defective materials or labor, has been subsequently completed for all the installed public improvements and any repairs or replacement if necessary per the Improvement Agreement above. If the warranty inspection identifies no necessary repairs or replacement, the CITY will release the warranty bond at the end of the one year warranty period. The PRINCIPAL shall be entitled to seek a release of this bond only at that time when the installed public improvements have been maintained and have remained free of defects for an entire one year.

It is hereby expressly stipulated and agreed that this bond shall inure to the benefit of any and all persons, companies and corporations entitled to file claims under Title 3 (commencing with Section 9550) of Part 6 of Division 4 of the Civil code, so as to give a right of action to them or their assigns in any suit brought upon this bond.

Should the condition of this bond be full performed, then this obligation shall become null and void; otherwise, it shall remain in full force and effect.

The SURETY hereby stipulates and agrees that no change, extension of time, alteration or addition to the terms of said Improvement Agreement or the specifications accompanying the same shall in any manner affect its obligations on this bond, and it does hereby waive notice of any such change, extensions, alteration or addition; and expressly waives the defenses of statutes of limitation, laches and estoppel in the event said changes, extensions, alterations or additions are granted or made.

SURETY, by executing this Warranty Bond, warrants and alleges that it has read the said Improvement Agreement or by signing this bond shall be deemed to have read said Improvement Agreement and knows the contents and all provisions therein contained, and shall be bound by each and every term, condition and provision contained therein.

IN WITNESS WHEREOF, said PRINCIPAL and SURETY have caused this bond to be duly executed this 12th day of September, 2025.

[SIGNATURE PAGE FOLLOWS]

AXV
RISK MANAGEMENT
DATE 09/17/25
SURETY APPROVED ONLY
INITIAL JA

PRINCIPAL	**SURETY**
Ambitus-Ontario 1, LP	Markel Insurance Company
Print Name	Print Name
By: _____	By: _____
Signature	Signature
EDDY WAN	David Noddle
Name	Name
Manager of Gen. Partner	Attorney in Fact
Title	Title
September 16, 2025	September 12, 2025
Date	Date

NOTE: APPROPRIATE NOTARIAL ACKNOWLEDGMENTS OF EXECUTION BY PRINCIPALS AND SURETY MUST BE ATTACHED TO THIS BOND.

ACKNOWLEDGMENT

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

STATE OF CALIFORNIA)
COUNTY OF Los Angeles)

On 09/16/25, before me, Mun Pak Barasorda, Notary Public,

personally appeared Eddy Wan,

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

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

MUN PAK BARASORDA
COMM. # 2446645
NOTARY PUBLIC - CALIFORNIA
LOS ANGELES COUNTY
COMM. EXPIRES MAY 11, 2027

Signature of Notary Public

WITNESS my hand and official seal.

Principal must indicate below in what capacity he/she is signing. If other than in an individual capacity, the Principal must provide evidence satisfactory to demonstrate that he/she serves in such capacity and that he/she is authorized to execute this instrument.

CAPACITY CLAIMED BY SIGNER

- ☐ Individual
- ☐ Corporate Officer

Title(s)

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

Signer is representing:
Name Of Person(s) Or Entity(ies)
Bubitas - Ontario I LP

DESCRIPTION OF ATTACHED DOCUMENT

Warranty Bond
Title or Type of Document

Number Of Pages

September 12, 2025
Date Of Document

Signer(s) Other Than Named Above

ACKNOWLEDGMENT

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

STATE OF CALIFORNIA)
COUNTY OF Los Angeles)

On September 12, 2025, before me, A. Bisordi, Notary Public,

personally appeared David Noddle,

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

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

A. BISORDI
NOTARY PUBLIC - CALIFORNIA
LOS ANGELES COUNTY
COMMISSION # 2448114
MY COMM. EXPIRES MAY 28, 2027

Signature of Notary Public

WITNESS my hand and official seal.

Principal must indicate below in what capacity he/she is signing. If other than in an individual capacity, the Principal must provide evidence satisfactory to demonstrate that he/she serves in such capacity and that he/she is authorized to execute this instrument.

CAPACITY CLAIMED BY SIGNER

- ☐ Individual
- ☐ Corporate Officer

Title(s)

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

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

DESCRIPTION OF ATTACHED DOCUMENT

Warranty Bond
Title or Type of Document

Number Of Pages

September 12, 2025
Date Of Document

Signer(s) Other Than Named Above

WARRANTY BOND – (SURETY)

C-10

46700.00920\34258124.2
08/06/21

POA# 510010

JOINT LIMITED POWER OF ATTORNEY

KNOW ALL MEN BY THESE PRESENTS: That SureTec Insurance Company, a Corporation duly organized and existing under the laws of the State of Texas and having its principal office in the County of Harris, Texas and Markel Insurance Company (the "Company"), a corporation duly organized and existing under the laws of the state of Illinois, and having its principal administrative office in Glen Allen, Virginia, does by these presents make, constitute and appoint:

David Noddle

Their true and lawful agent(s) and attorney(s)-in-fact, each in their separate capacity if more than one is named above, to make, execute, seal and deliver for and on their own behalf, individually as a surety or jointly, as co-sureties, and as their act and deed any and all bonds and other undertaking in suretyship provided, however, that the penal sum of any one such instrument executed hereunder shall not exceed the sum of:

Fifteen Million and 00/100 Dollars ($15,000,000.00)

This Power of Attorney is granted and is signed and sealed under and by the authority of the following Resolutions adopted by the Board of Directors of SureTec Insurance Company and Markel Insurance Company:

"RESOLVED, That the President, any Senior Vice President, Vice President, Assistant Vice President, Secretary, Assistant Secretary, Treasurer or Assistant Treasurer and each of them hereby is authorized to execute powers of attorney, and such authority can be executed by use of facsimile signature, which may be attested or acknowledged by any officer or attorney, of the company, qualifying the attorney or attorneys named in the given power of attorney, to execute in behalf of, and acknowledge as the act and deed of the SureTec Insurance Company and Markel Insurance Company, as the case may be, all bond undertakings and contracts of suretyship, and to affix the corporate seal thereto."

IN WITNESS WHEREOF, Markel Insurance Company and SureTec Insurance Company have caused their official seal to be hereunto affixed and these presents to be signed by their duly authorized officers on the 18th day of July , 2024 .

SureTec Insurance Company

By: _____
Michael C. Keimig, President

SURETEC INSURANCE COMPANY

MARKEL INSURANCE COMPANY CORPORATE SEAL ILLINOIS

Markel Insurance Company

By: _____
Lindey Jennings, Vice President

State of Texas
County of Harris:

On this 18th day of July , 2024 A. D., before me, a Notary Public of the State of Texas, in and for the County of Harris, duly commissioned and qualified, came THE ABOVE OFFICERS OF THE COMPANIES, to me personally known to be the individuals and officers described in, who executed the preceding instrument, and they acknowledged the execution of same, and being by me duly sworn, disposed and said that they are the officers of the said companies aforesaid, and that the seals affixed to the proceeding instrument are the Corporate Seals of said Companies, and the said Corporate Seals and their signatures as officers were duly affixed and subscribed to the said instrument by the authority and direction of the said companies, and that Resolutions adopted by the Board of Directors of said Companies referred to in the preceding instrument is now in force.

IN TESTIMONY WHEREOF, I have hereunto set my hand, and affixed my Official Seal at the County of Harris, the day and year first above written.

JULIE E. MCCLARY
Notary Public State of Texas
Commission # 12947680-5
Commission Expires March 29, 2026

By: _____
Julie E. McClary, Notary Public
My commission expires 3/29/2026

We, the undersigned Officers of SureTec Insurance Company and Markel Insurance Company do herby certify that the original POWER OF ATTORNEY of which the foregoing is a full, true and correct copy is still in full force and effect and has not been revoked.

IN WITNESS WHEREOF, we have hereunto set our hands, and affixed the Seals of said Companies, on the 12th day of September , 2025 .

SureTec Insurance Company

By: _____
M. Brent Beaty, Assistant Secretary

Markel Insurance Company

By: _____
Andrew Marquis, Assistant Secretary

Any Instrument Issued in excess of the penalty stated above is totally void and without any validity. 510010
For verification of the authority of this Power you may call (713)812-0800 on any business day between 8:30 AM and 5:00 PM CST.

CITY OF ONTARIO *Agenda Report* **November 4, 2025**	**SECTION:** **CONSENT CALENDAR**
Department: Public Works Prepared By: Lance Verdugo Staff Member Presenting: Tito Haes, Executive Director Public Works Reviewed By: Bonnie Tam, Jacqueline Leon Approved By:	Submitted To: Council/OHA Approved: _____ Continued To: _____ Denied: _____ Item No: 8

SUBJECT: **AN AMENDMENT TO THE MAINTENANCE SERVICES AGREEMENT WITH EXCELSIOR ELEVATOR CORPORATION FOR ELEVATOR MAINTENANCE SERVICES AND ON-CALL EMERGENCY REPAIRS**

RECOMMENDATION: That the City Council authorize the City Manager, or his designee, to execute Amendment No. 1 to the Maintenance Services Agreement with Excelsior Elevator Corporation, of Santa Ana, California, in the amount of $333,305 for elevator maintenance services and on-call emergency repairs at various City facilities, for a total not-to-exceed contract amount of $483,305, and authorize the option to extend the agreement for two additional one-year terms.

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

FISCAL IMPACT: The recommended Amendment No. 1 with Excelsior Elevator Corporation is in the amount of $133,305 for routine elevator maintenance and $200,000 for on-call emergency parts and repairs, increasing the contract amount by $333,305 and authorize the option to extend the agreement for two additional one-year terms, for a total not-to-exceed contract amount of $483,305 over the five-year term. The Fiscal Year 2025–26 Adopted Budget includes appropriations in the Equipment Services Fund for elevator maintenance and on-call emergency repairs.

BACKGROUND & ANALYSIS: On July 28, 2025, the City entered into a three-year agreement with the option to extend for two additional one-year terms with Excelsior Elevator Corporation as a result of the award for Bid No. 1897, for a total not-to-exceed contract amount of $150,000. With the addition of the City's new Civic Center Parking Structure, two additional elevators must be included for monthly and annual maintenance, as well as emergency and after-hours repairs, to ensure equipment durability and elevator safety. The recommended Amendment No. 1 increases the contract amount by $333,305 for a total not-to-exceed contract amount of $483,305 over the five-year term.

As the City continues to expand its facilities, the number of elevators requiring maintenance has also increased. The Municipal Services Department relies on its vendors to provide ongoing maintenance and timely repairs to ensure the safety, reliability, and operation of all elevators

serving the public and staff. Further competition is not in the public's best interest because the amendment simply continues the existing vendor's maintenance and repair services for City facilities, and an additional procurement for the extra work would lead to higher costs for the City due to having multiple vendors providing unreasonably small scopes of work. Excelsior Elevator Corporation has proven effective in minimizing downtime, reducing the need for costly replacements, and extending the lifespan of existing equipment. Staff recommends approving Amendment No. 1 to the Maintenance Services Agreement with Excelsior Elevator Corporation to support continued, uninterrupted elevator operations across City facilities.

This work is exempt from competitive bidding under applicable law because competitive proposals work an incongruity and are unavailing as affecting the final result, competitive proposals do not produce any advantage, and it is practically impossible to obtain what is required and to observe such form, (Graydon v. Pasadena Redevelopment Agency (1980) 104 Cal. App. 3d 631, 636- 637), because the work identified could not have been ascertained prior to commencement of work, the pricing is on fair and reasonable terms pursuant to the change order provisions of the underlying contract, and bidding the work as a separate contract would result in greater expense to the public.

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

PAUL S. LEON
MAYOR

ALAN D. WAPNER
MAYOR PRO TEM

JIM W. BOWMAN
DEBRA PORADA
DAISY MACIAS
COUNCIL MEMBERS

SHEILA MAUTZ
CITY CLERK

JAMES R. MILHISER
CITY TREASURER

SCOTT OCHOA
CITY MANAGER

AMENDMENT NO. 1 TO THE MAINTENANCE SERVICES AGREEMENT BETWEEN THE CITY OF ONTARIO AND EXCELSIOR ELEVATOR CORPORATION

1. Parties and Date.

This Amendment No. 1 to the Agreement (as defined herein) is made and entered as of _____, by and between the City of Ontario ("City") and **Excelsior Elevator Corporation** a Corporation. City and Contractor are sometimes individually referred to as "Party" and collectively as "Parties."

2. Recitals.

2.1 Agreement. The City and Contractor have entered into an agreement entitled Maintenance Services Agreement" dated July 28, 2025 ("Agreement").

2.2 Amendment Purpose. The City and Contractor desire to amend the Agreement to add Additional Maintenance Services and on-call emergency repairs increasing compensation by **Three Hundred Thirty-Three Thousand Three Hundred Five Dollars with Zero Cents ($333,305)**. The new total not-to-exceed contract amount is **Four Hundred Eighty-Three Thousand Three Hundred Five Dollars with Zero Cents ($483,305).**

2.3 Amendment Authority. This Amendment No. 1 is authorized pursuant to Section 3.7.11.

3. Terms.

3.1 Amendment. Section 3.2.1 of the Agreement is hereby amended in its entirety to read as follows:

"3.2.1 Compensation. Contractor shall receive compensation, including authorized reimbursements, for all Services rendered under this Agreement at the rates set forth in Exhibit "C" attached hereto and

incorporated herein by reference. The total compensation shall not exceed **Four Hundred Eighty-Three Thousand Three Hundred Five Dollars with Zero Cents ($483,305)** without written approval of City's Manager. Extra Work may be authorized, as described below, and if authorized, will be compensated at the rates and manner set forth in this Agreement."

Exhibit "C" is hereby deleted in its entirety and replaced with Attachment A attached hereto and incorporated herein by reference.

Exhibit "B" is hereby deleted in its entirety and replaced with Attachment B attached hereto and incorporated herein by reference.

3.2 Continuing Effect of Agreement. Except as amended by this Amendment No. 1, all other provisions of the Agreement remain in full force and effect and shall govern the actions of the parties under this Amendment No. 1. From and after the date of this Amendment No. 1, whenever the term "Agreement" appears in the Agreement, it shall mean the Agreement as amended by this Amendment No. 1.

3.3 Adequate Consideration. The Parties hereto irrevocably stipulate and agree that they have each received adequate and independent consideration for the performance of the obligations they have undertaken pursuant to this Amendment No. 1.

3.4 Severability. If any portion of this Amendment No. 1 is declared invalid, illegal, or otherwise unenforceable by a court of competent jurisdiction, the remaining provisions shall continue in full force and effect.

3.5 Integration. This Amendment represents the entirety of the Parties' understanding relating to the subject of this Amendment, including written or verbal communications between the Parties, which shall have no relevance unless expressly incorporated herein. This is an integrated amendment.

[SIGNATURES ON FOLLOWING PAGE]

SIGNATURE PAGE FOR AMENDMENT NO. 1 TO MAINTENANCE SERVICES AGREEMENT BETWEEN THE CITY OF ONTARIO AND EXCELSIOR ELEVATOR CORPORATION

IN WITNESS WHEREOF, the Parties have entered into this Amendment No. 1 as of the day and year first above written.

CITY OF ONTARIO

Approved By:

_____
Scott Ochoa
City Manager

Approved as to Form:

_____
Best Best & Krieger LLP
City Attorney

Attested By:

_____
City Clerk

EXCELSIOR ELEVATOR CORPORATION

By: _____

Its: _____

Printed Name: _____

By: _____

Its: _____

Printed Name: _____

ATTACHMENT "A"

COMPENSATION

COMPENSATION NOT-TO-EXCEED $483,305

ATTACHMENT “B”

SCHEDULE OF SERVICES

ELEVATOR MAINTENANCE SERVICES MS2526-01

FY 2025-2028 3 YEAR CONTRACT

Building	Annual Price
C-Block Parking Structure (Elevator 1) 155 C Street	$4320.00
C-Block Parking Structure (Elevator 2) 155 C Street	$4320.00
City Hall (Elevator 1) 303 B St. DVB05197 MACHINE # Z13692	$4320.00
City Hall (Elevator 2) 303 B St. DVB05197 MACHINE# Y00053	$4320.00
Civic Center 200 N Cherry DVB05191 MACHINE# Z13634	$4320.00
Library (Elevator 1) 215 E. "C" St. DVB06494 MACHINE# Z13691	$4320.00
Library (Elevator 2) 215 E. "C" St. DVB06494 MACHINE #Z97199	$4320.00
Housing 208 W. Emporia DVB06773 MACHINE# Z98824	$4320.00
Police Department 2500 S. Archibald DVB06228 MACHINE# Z89955	$4320.00
Civic Center Parking Structure (Elevator 1) 331 N. Sultana Avenue	$5020.00
Civic Center Parking Structure (Elevator 2) 331 N. Sultana Avenue	$5020.00

SCHEDULE OF SERVICES

ELEVATOR MAINTENANCE SERVICES MS2526-01

FY 2028-2029 1st OPTIONAL YEAR CONTRACT

Building	Annual Price
C-Block Parking Structure (Elevator 1) 155 C Street	$4450.00
C-Block Parking Structure (Elevator 2) 155 C Street	$4450.00
City Hall (Elevator 1) 303 B St. DVB05197 MACHINE # Z13692	$4450.00
C**ity Hall (**Elevator 2) 303 B St. DVB05197 MACHINE# Y00053	$4450.00
Civic Center 200 N Cherry DVB05191 MACHINE# Z13634	$4450.00
Library (Elevator 1) 215 E. "C" St. DVB06494 MACHINE# Z13691	$4450.00
Library (Elevator 2) 215 E. "C" St. DVB06494 MACHINE #Z97199	$4450.00
Housing 208 W. Emporia DVB06773 MACHINE# Z98824	$4450.00
Police Department 2500 S. Archibald DVB06228 MACHINE# Z89955	$4450.00
Civic Center Parking Structure (Elevator 1) 331 N. Sultana Avenue	$5170.00
Civic Center Parking Structure (Elevator 2) 331 N. Sultana Avenue	$5170.00

SCHEDULE OF SERVICES

ELEVATOR MAINTENANCE SERVICES MS2526-01

FY 2029-2030 2nd OPTIONAL YEAR CONTRACT

Building	Annual Price
C-Block Parking Structure (Elevator 1) 155 C Street	$4585.00
C-Block Parking Structure (Elevator 2) 155 C Street	$4585.00
City Hall (Elevator 1) 303 B St. DVB05197 MACHINE # Z13692	$4585.00
C**ity Hall (**Elevator 2) 303 B St. DVB05197 MACHINE# Y00053	$4585.00
Civic Center 200 N Cherry DVB05191 MACHINE# Z13634	$4585.00
Library (Elevator 1) 215 E. "C" St. DVB06494 MACHINE# Z13691	$4585.00
Library (Elevator 2) 215 E. "C" St. DVB06494 MACHINE #Z97199	$4585.00
Housing 208 W. Emporia DVB06773 MACHINE# Z98824	$4585.00
Police Department 2500 S. Archibald DVB06228 MACHINE# Z89955	$4585.00
Civic Center Parking Structure (Elevator 1) 331 N. Sultana Avenue	$5325.00
Civic Center Parking Structure (Elevator 2) 331 N. Sultana Avenue	$5325.00

EXCELSIOR ELEVATOR

1961 Blair Avenue
Santa Ana, CA 92705
(949) 757-1688
Fax (949) 757-1689
License # 733576 Type C-11
SBE/MBE/WBE/DBE/WOSB

October 8, 2025

City of Ontario – Purchasing Department
303 East "B" Street
Ontario, CA 91764

RE: Response to RFP No. 1897 – Elevator Maintenance Services

To Whom It May Concern:

The following are our billing rates.

10. Fee Proposal
Excelsior Elevator Corporation has submitted a complete Fee Proposal in accordance with the requirements of RFP No. 1897 – Elevator Maintenance Services, including all required base maintenance pricing and labor rates for Additional Work.
Our pricing reflects:

- Compliance with the required minimum of 2 hours per elevator per inspection
- All labor, tools, materials, documentation, and reporting included in routine service
- Hourly rates for City-authorized Additional Work as defined in the sample Agreement

A. Base Maintenance Pricing
See Appendix D: Completed Bid Forms (Submitted via PlanetBids)
All routine maintenance pricing has been submitted on the City-provided forms via PlanetBids.
B. Hourly Labor Rates for Additional Work
The following labor rates will apply to any Additional Work requested and authorized by the City in writing, beyond the base scope of this contract:

Labor Category	Rate
Regular Time – One Technician (Mon–Fri, 7:00 a.m.–3:30 p.m.)	**$285.00 per hour**
Regular Time – Crew Technicians (Mon–Fri, 7:00 a.m.–3:30 p.m.)	**$405.00 per hour**
Overtime – One Technician (3:30 p.m.–7:00 a.m. & Saturdays)	**$375.00 per hour**
Overtime – One Technician (Sundays & Holidays)	**$545.00 per hour**
Overtime – Crew Technicians (All Overtime)	**$780.00 per hour**

All rates are fully burdened and include wages, tools, transportation, insurance, and overhead. Work will not proceed without prior written authorization by the City's representative.

Please let me know if you have any further questions. Thank you.

Sincerely,

Matthew Rough
Director of Sales
Excelsior Elevator Corporation

CITY OF ONTARIO *Agenda Report* **November 4, 2025**	**SECTION:** **CONSENT CALENDAR**
Department: Public Works Prepared By: Daniel P Beers Staff Member Presenting: Tito Haes, Executive Director Public Works Reviewed By: Bonnie Tam, Andrea Ampig Approved By:	Submitted To: Council/OHA Approved: _____ Continued To: _____ Denied: _____ Item No: 9

SUBJECT: **AN AMENDMENT TO THE PROFESSIONAL SERVICES AGREEMENT WITH KLEINFELDER, INC. FOR ON-CALL GEOTECHNICAL CONSULTING AND MATERIALS TESTING SERVICES FOR THE ONTARIO GRAND PARK PROJECT**

RECOMMENDATION: That the City Council authorize the City Manager, or his designee, to execute Amendment No. 10 to the Professional Services Agreement with Kleinfelder, Inc., of Ontario, California, for on-call geotechnical consulting and materials testing services for the Grand Park Project in the amount of $1,168,253 for a total not-to-exceed contract amount of $2,907,138.

THE FOLLOWING COUNCIL GOALS ARE BEING ACHIEVED:
Invest in the City's Infrastructure (Water, Streets, Sewers, Parks, Storm Drains and Public Facilities)
Focus Resources in Ontario's Commercial and Residential Neighborhoods
Encourage, Provide or Support Enhanced Recreational, Educational, Cultural and Healthy City Programs, Policies and Activities

FISCAL IMPACT: The proposed Amendment No. 10 to the Professional Services Agreement with Kleinfelder, Inc. is in the amount of $1,168,253 for total not-to-exceed contract amount of $2,907,138. The Fiscal Year 2025-2026 Adopted Budget includes appropriations in the Park Impact Fund for on-call geotechnical consulting and materials testing services for the Grand Park Project.

BACKGROUND & ANALYSIS: On December 21, 2021, the City Council approved the conceptual "Grand Park" Master Plan and the Preliminary Park Design for Phase 1. Phase 1 builds upon the framework established in the Conceptual Park Master Plan and is comprised of approximately 130 acres of land and occurs within the eastern portion of Ontario Ranch. This phase is bordered by Grand Park Street to the north, Eucalyptus Avenue to the south, Haven Avenue on the east and Archibald Avenue on the west. This portion of the park contains meadows, trails, and a field for recreational use that also serves as a storm water capture system. Day one core park amenities proposed in the center of this phase include a Market Alley where farmer's markets, food trucks and community events can be organized, a community barn and farm hub, kids' corral (a children's playground), and a 5,000 capacity amphitheater along the central plaza.

On October 15, 2024, the City Council approved a Construction Contract with Philbin Construction Company for the mass grading of the Grand Park site. On January 7, 2025, the City Council approved an Amendment to the Professional Services Agreement with Kleinfelder, Inc. to provide geotechnical consulting and materials testing services during the mass and fine grading at the Grand Park site. Now that grading is nearing completion, Staff is recommending Kleinfelder, Inc. to perform materials testing, including soils and asphalt testing, special inspection services, including steel and concrete inspections, and geotechnical consulting services for the construction phase of the project. Grand Park is scheduled to be operational by Summer of 2027.

Further competition is not in the public interest because the contemplated amendment merely continues the consultant's work on an existing project. Were another consultant to be utilized, it would result in increases in expenses, delays, and inefficiencies as a result of the loss of continuity.

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

PAUL S. LEON
MAYOR

ALAN D. WAPNER
MAYOR PRO TEM

JIM W. BOWMAN
DEBRA PORADA
DAISY MACIAS
COUNCIL MEMBERS

SHEILA MAUTZ
CITY CLERK

JAMES R. MILHISER
CITY TREASURER

SCOTT OCHOA
CITY MANAGER

AMENDMENT NO. 10 TO THE PROFESSIONAL SERVICES AGREEMENT BETWEEN THE CITY OF ONTARIO AND KLEINFELDER, INC.

1. Parties and Date.

This Amendment No. 10 to the Agreement (as defined herein) is made and entered as of _____, by and between the City of Ontario ("City") and **Kleinfelder, Inc.**, a Corporation ("Consultant"). City and Consultant are sometimes individually referred to as "Party" and collectively as "Parties."

2. Recitals.

2.1 Agreement. The City and Consultant have entered into an agreement entitled "Professional Services Agreement" dated March 7, 2023 ("Agreement").

2.2 Amendment Purpose. The City and Consultant desire to amend the Agreement to include special inspections, geotechnical consulting and material testing services for D&C21-005 Grand Park Phase 1 and increase the amount by $1,168,253 for a new not-to-exceed amount of $2,907,138. The Parties have heretofore entered into that Amendment No. 1 dated April 4, 2023, Amendment No. 2 dated May 2, 2023, Amendment No. 3 dated May 2, 2023, Amendment No. 4 dated March 5, 2024, Amendment No. 5 dated March 5, 2024, Amendment No. 6 dated June 18, 2024, Amendment No. 7 dated January 7, 2025, Amendment No. 8 dated March 4, 2025 and Amendment No. 9 dated October 22, 2025.

2.3 Amendment Authority. This Amendment No. 10 is authorized pursuant to Section 3.7.14 of the Agreement.

3. Terms.

3.1 Amendment. Section 3.1.1 and 3.2.1 of the Agreement is hereby amended in its entirety to read as follows:

> "3.1.1 General Scope of Services. Consultant promises and agrees to furnish to the City all labor, materials, tools, equipment, services, and incidental and

customary work necessary to fully and adequately supply the professional material testing and geotechnical engineering services necessary for the Project ("Services"). The Services for 2022 Spring Alley CDBG Pavement Rehabilitation Project are more particularly described on Exhibit "A" and Exhibit "D" attached hereto and incorporated herein by reference. All Services shall be subject to, and performed in accordance with, this Agreement, the exhibits attached hereto incorporated herein by reference, and all applicable local, state and federal laws, rules and regulations."

"3. 2. 1 Compensation. Consultant shall receive compensation, including authorized reimbursements, for all Services rendered under this Agreement at the rates set forth in Exhibit "C" and Exhibit "D" attached hereto and incorporated herein by reference. The total compensation shall not exceed **Two Million Nine Hundred Seven Thousand and One Hundred Thirty-Eight Dollars ($2,907,138)** without written approval of the City Council or City Manager, as applicable. Extra Work may be authorized, as described below, and if authorized, will be compensated at the rates and manner set forth in this Agreement."

Exhibit "A" – Scope of services is hereby amended in its entirety and replaced with Attachment A attached hereto and incorporated herein by reference. All other previously added or deleted scope of services are retained in their entirety.

3.2 Continuing Effect of Agreement. Except as amended by this Amendment No. 10, all other provisions of the Agreement remain in full force and effect and shall govern the actions of the parties under this Amendment No. 10. From and after the date of this Amendment No. 10, whenever the term "Agreement" appears in the Agreement, it shall mean the Agreement as amended by this Amendment No. 10.

3.3 Adequate Consideration. The Parties hereto irrevocably stipulate and agree that they have each received adequate and independent consideration for the performance of the obligations they have undertaken pursuant to this Amendment No. 10.

3.4 Severability. If any portion of this Amendment No. 10 is declared invalid, illegal, or otherwise unenforceable by a court of competent jurisdiction, the remaining provisions shall continue in full force and effect.

3.5 Integration. This Amendment represents the entirety of the Parties' understanding relating to the subject of this Amendment, including written or verbal communications between the Parties, which shall have no relevance unless expressly incorporated herein. This is an integrated amendment.

[SIGNATURES ON FOLLOWING PAGE]

SIGNATURE PAGE FOR AMENDMENT NO. 10 TO THE PROFESSIONAL SERVICES AGREEMENT BETWEEN THE CITY OF ONTARIO AND KLEINFELDER, INC.

IN WITNESS WHEREOF, the Parties have entered into this Amendment No. 10 as of the day and year first above written.

CITY OF ONTARIO

Approved By:

_____
Scott Ochoa
City Manager

Approved as to Form:

_____
Best Best & Krieger LLP
City Attorney

Attested By:

_____
City Clerk

Kleinfelder, Inc.

By: _____

Its: _____

Printed Name: _____

By: _____

Its: _____

Printed Name: _____

[If Corporation, TWO SIGNATURES, President OR Vice President AND Secretary OR Treasurer REQUIRED]

July 31, 2025
Kleinfelder Project No.: 20236170.013A

City of Ontario
Mr. Daniel Beers
Design & Construction – Principal Project Manager
1333 S. Bon View Avenue
Ontario, California 91761

SUBJECT: Request for Additional Authorization to Provide Special Inspection and Materials Testing Services
Grand Park Project
North of Eucalyptus Avenue Between Haven Avenue & Archibald Avenue
City of Ontario, California

Dear Mr. Beers:

Kleinfelder Inc. is pleased to present this request for additional authorization to provide special inspection and materials testing services for the subject project. This request for additional authorization includes a description of our understanding of the project, our proposed scope of services, and our estimated fees.

Kleinfelder is committed to providing quality service to its clients, commensurate with their wants, needs, and desired level of risk. If a portion of this proposal does not meet your needs, or if those needs have changed, Kleinfelder stands ready to consider appropriate modifications, subject to the standards of care to which we adhere as professionals. Modifications such as changes in scope, methodology, and scheduling may result in changes to the risks assumed by the client, as well as adjustments to our fees. The following information forms the basis of our proposal and cost estimate.

PROJECT UNDERSTANDING

Kleinfelder understands that the City of Ontario plans to develop the Grand Park which is located north of Eucalyptus Avenue between Haven Avenue and Archibald Avenue. The park is proposed to include an outdoor amphitheater, barn structure, maintenance buildings, restroom buildings, trails, activity fields, and an arroyo.

Per conversations with Philbin Construction, Transtech Engineers, and the City of Ontario, we understand that the remaining work will consist of rough and fine grading the site along with utility improvements, street improvements, construction of structural concrete elements, construction of masonry walls, and steel framing with a proposed duration of approximately 24 months. Our services for this scope of the work will be requested starting on July 1, 2025 and will be completed on or around June 30, 2027.

Copyright 2025 Kleinfelder

620 Magnolia Ave., Bldg. G, Ontario, CA 91762 p | 909.657.1716 f | 909.988.0185

At the time of our proposal preparation, a construction schedule, project plans, and project specifications were not available for our review.

SCOPE OF SERVICES

Kleinfelder will continue to provide materials testing and special inspection services on an as-requested basis during development of the park. Our services will be coordinated with the City's on-site representatives. The overall proposed scope of Kleinfelder's services is provided in the following tasks which provide the basis of our cost estimate.

Materials Testing Services

Soil & Aggregate Base

Kleinfelder will staff the project with a field technician to observe and test the soil and aggregate base for compaction. Our services will include on-site in-situ density testing by nuclear method during site grading and utility trench backfill activities. This service will also include onsite observation and testing during grading activities and placement of aggregate base for the onsite access roadway/parking areas. In general, our services will be provided on a continuous basis during site grading and utility trench backfill operations. Import, export, and backfill material and compaction efforts will be observed for appropriate compaction, moisture content, oversized material, and debris. Compaction testing will be performed in general accordance with the project specifications. Our personnel will sample and deliver soil and aggregate base material to our laboratory for testing.

Asphalt Concrete

Kleinfelder will staff the project with a field technician to provide observation and testing during placement of the asphalt pavement. Our field personnel will collect load tickets to document the quantity of the delivered materials and observe and document that the asphalt pavement material is placed in lifts of suitable thickness and adequately compacted. Our technician will also measure the loose thickness of the asphalt prior to compaction. Density testing of the compacted asphalt pavement will be performed using a nuclear density gauge. The results of the density and field relative compaction testing will be reported to the owner's on-site representative and the contractor as the tests are performed so that adjustments can be made, if possible, during the course of the work. Our personnel will sample and deliver asphalt material to our laboratory for testing.

Special Inspection Services

Portland Cement Concrete

Kleinfelder will staff the project with ACI certified field technicians and ICC certified special inspectors on a periodic basis to observe and test structural concrete. Our technicians and inspectors will observe placement, sample, and test structural concrete used in footings, columns, beams, and slabs-on-grade. Our field services will include monitoring of slump, mix-design identification, temperature testing, time of batching/placement, mixing time, and casting of concrete cylinders for compression testing. We will pick up and deliver concrete specimens to our laboratory for the required testing.

We have assumed that Portland cement concrete batch plant inspection will not be required. If requested, Kleinfelder can provide batch plant inspection after receiving appropriate authorization from the City. We anticipate that the contractor will provide the proper submittals for concrete that

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will eliminate the need for qualification testing by us, therefore our fee does not include testing of concrete aggregates for acceptance testing.

Reinforcing Steel

Kleinfelder will staff the project with an ICC certified special inspector on a periodic basis to inspect placement of the reinforcing steel prior to placement of concrete. Reinforcing steel is checked for size, spacing, type, grade, identification, placement, and configuration. We will also collect samples of reinforcing steel which will be transported to our facility for laboratory testing as required by the project plans and specifications.

Structural Masonry

Kleinfelder will staff the project with an ICC certified special inspector on a periodic basis to during the lay-up of masonry units. Our inspector will inspect reinforcing steel utilized during masonry construction activities for size, grade, vertical and horizonal placement, and clearances. Additionally, they will observe if cleanouts are provided for the first course of each pour if high lift method is used, mortar ingredients and batching techniques, and they will prepare mortar compression test specimens for laboratory testing. During grouting observations, our inspector will observe the grout mix for conformance to the approved mix design, slump is in general accordance with specifications, and consolidation during placement and later during reconsolidation. Our inspectors will monitor the duration of time between batching of grout, flow of grout throughout wall, grout pour height, and they will prepare grout specimens and/or prisms. Our inspector will collect samples of mortar, grout, and composite masonry prisms following field curing for transportation to our laboratory for testing as required by the project plans and specifications.

Welding and Bolting

Kleinfelder will staff the project with an ICC certified special inspector on a periodic basis during field welding observations, and our special inspector will check welder certifications and the Welding Procedure System (WPS). We will inspect joints for proper preparation, including bevel, root faces, and root opening. Inspection will be performed on complete and partial joint penetration groove welds, multiple pass fillet welds, slot welds, and single pass fillet welds as required by the contract documents. Additionally, we will provide an ICC certified special inspector to provide structural steel fabrication shop inspection on a periodic basis. Services will include the review of welder certifications, and observation of overall conformance of structural steel construction to the project requirements. Steel fabrication shop services are limited to within 50 miles of the project site; locations outside the described radius are subject to additional fees.

During high strength bolting observation, we will review the type of joint specified, check bolts, nuts, and washers for compliance to project specifications, review the procedure for installation of bolts, monitor the installation of bolts to verify the selected installation procedure is properly used to tighten and torque the bolts per the project requirements.

Laboratory Testing Services

Our laboratory testing will be conducted in general accordance with ASTM procedures. Samples collected from the job site will be secured and delivered to our local Ontario laboratory for testing as required. Laboratory testing will be performed in accordance with the plans, specifications, and local jurisdictional requirements to evaluate that the materials comply with project requirements and are suitable for their intended use. Results of laboratory testing will be reviewed and prepared in typewritten reports for submittal to the appropriate city staff, Project Manager, and designated

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team members. Results of tests indicating material not meeting minimum project requirements will be immediately communicated with the project design professionals.

GEOTECHNICAL ENGINEERING, PROJECT MANAGEMENT, & ADMINISTRATION

Kleinfelder's Project Manager, Mr. Jeff Diaz, will coordinate our services with the City and other stakeholders. Mr. Diaz will be supported by Principal Geotechnical Engineer, Mr. Jeff Waller, PE, GE along with in-house technicians and special inspectors from our local Ontario office and laboratory having the appropriate experience and certifications necessary to perform materials testing and special inspection services at the project site. We have included the scope and budget for the following services during the project.

Maintain Responsibility as Geotechnical Engineer of Record

Kleinfelder proposes to review the referenced project documents to maintain the responsibility as Geotechnical Engineer of Record for the project. The conclusions and recommendations presented will be evaluated for application to the subject site and a Letter of Acceptance will be prepared for submittal to the appropriate agency. Kleinfelder will immediately advise you if supplemental investigation and analysis are needed to support the recommendations presented in the referenced documents. As part of our review, if requested, Kleinfelder also proposes to review the project Civil and Structural plans for conformance with the geotechnical recommendations presented in the referenced report. We anticipate providing only one list of comments for the project designers. Once the project plans are in conformance with the geotechnical recommendations, Kleinfelder will place the signature and stamp of a California registered Engineer on the plans and prepare a Letter of Plan Review for submittal to the appropriate agency.

Construction Meetings

Our proposed scope of services and fee estimate includes attendance at a pre-construction conference. During this meeting we will identify the project team members, their project roles for development of a distribution list of our reports, review the construction schedule, and discuss potential construction concerns. We have also included attendance during additional construction meetings to be held during construction activities.

Technical Management

Kleinfelder will provide technical consultation. These services may include field observations, research, as requested engineering review, interpretation of laboratory results, communication, and generation of requested professional recommendations. DFRs summarizing the work performed and conformance of the work with the project requirements will be reviewed by our project manager. Items found in non-compliance with the project requirements will be brought to the attention of the general contractor's construction superintendent, and the city's representative immediately upon findings.

Final Report

At the completion of the project, a final summary report will be prepared to document in-place density and moisture results for tests performed, our observations, and a summary of our materials testing and special inspection services.

As-Needed Additional Consultation

If needed, we can provide other services that may be required during construction, such as reviewing structural design calculations, material submittals (in addition to those previously

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mentioned), and responding to requests for information (RFIs). If requested, these services will be invoiced at our approved fee rates with the City of Ontario.

Scope in excess of the authorization requested herein can be provided on a time and materials basis in accordance with our current approved fee schedule with the City of Ontario.

ASSUMPTIONS

During our proposal preparation certain assumptions were required based on the available information provided. The following assumptions were made based on the provided information:

- No construction schedule, project plans, and/or project specifications were provided at the time of proposal preparation.
- Our services are limited to materials testing and special inspection over a 24-month duration from July 1, 2025 to June 30, 2027.
- Work will be performed during normal business hours, typically between 6 AM and 5 PM.
- Overtime services will not be required (more than eight hours per day, Saturday, Sunday, holidays, etc.).
- Work is subject to payment of California Prevailing Wages.
- Work is not subject to union requirements.
- Laboratory and field testing will be performed in general accordance with ASTM standards.
- We are not providing batch plant inspection for asphalt concrete and/or Portland cement concrete placements.
- It is assumed that traffic control will be provided by others if required for fieldwork.
- The cost of any equipment (i.e. ladders, shoring, etc.) to gain access to any area requiring testing or sampling of materials is not included in this proposal.
- Preparation of supplemental reports, addendum letters, and review of plans and specifications are not included in our fee.
- Rates presented in our attached fee estimate are valid until 3/31/2026 per our contract terms. A 5% escalation on all rates will be applied on 4/1/2026 and again on 4/1/2027.
- Responses to review agencies or additional work that may be requested by reviewing agencies are not included.
- Kleinfelder will not be taking over as the Structural Engineer of Record.
- Kleinfelder will provide one full-time materials testing technician for the duration of the 24-month period.
- Kleinfelder will provide an ICC certified special inspector on a periodic basis for the duration of the 24-month period.

It should be noted our services will not include: (1) supervision, direction, or acceptance of the contractor's work; (2) interpretation or modification of the project plans or specifications;

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(3) submittal of test results or reports to any regulatory agency (unless specifically requested by the Client in writing); or (4) job site safety.

ESTIMATED FEE

We propose our services be compensated on a time-and-expense basis as shown in our attached fee estimate. For the scope of work outlined above, we will use the approved rates associated with our on-call contract with the City of Ontario. We have estimated an approximate budget of **$1,168,252.80** for this project, as reflected in the attached Table 1 - Fee Estimate. It should be noted that the fee rates shown in Table 1 - Fee Estimate are inclusive of standard equipment charges. We do not anticipate using equipment that is non-standard (coring equipment, rebar locators, or other non-standard equipment) for this project.

A “show-up” fee for scheduled services that are canceled after arrival if any, will incur a two-hour minimum charge. All field inspection and testing services are based on portal-to-portal from our Ontario office and laboratory and will be billed in accordance with the Basis of Charges on the attached Table 1 - Fee Estimate.

It should be noted that the fees above do not anticipate overtime or double time work on the project. The rates associated with overtime and double time work are 1.5 and 2.0 times the listed hourly rates in the Table 1 - Fee Estimate. Overtime work can significantly impact our testing and inspection budget for the project. While we will be diligent in our attempts to keep overtime to a minimum, please be aware that contractor scheduling and performance are the primary causes for overtime work. Proficient contractor performance and scheduling minimizes additional testing and inspection time, consequently resulting in lower total fees. In the event conditions arise which are beyond our control, were unknown at the time this proposal was prepared, unanticipated based on the available information, or differ significantly from the assumptions shown below, we may need to revise our scope of work and estimated fees to complete the project. Should this occur, we will contact you for authorization before exceeding the project budget.

Our estimate is provided on a time-and-expense basis. It should be noted that our total fees on the project can fluctuate for a variety of unpredicted reasons beyond our control including weather conditions, the quality and performance of the construction materials used, and the contractor’s team, as well as the contractor’s approach and scheduling of construction sequences. Jurisdictional requirements not identified at the outset of the project, or other unpredictable events that develop over the course of the project, can contribute to additional unplanned inspection or unanticipated engineering consultation not factored into our estimate.

AUTHORIZATION

We anticipate that the City of Ontario will issue a Notice to Proceed (NTP) referencing this additional authorization request and Amendment No. 3 to the Professional Services Agreement for On-Call Materials Testing and Geotechnical Engineering Services dated March 7, 2023, as our authorization to proceed. Provided that the NTP is consistent with previously negotiated terms and conditions, we will execute and return executed original to you for your records. If there is a need for any change in the scope of work or schedule described in this proposal or changes to the terms and conditions from those previously negotiated, please call us immediately. Changes may require revision of the proposed fee, which will be communicated to you upon assessment of the requested changes' effect on the fee.

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All information gathered by Kleinfelder is considered confidential and will be released only to those specified by the construction documents, or to others upon written authorization by the client, or as required by law.

Kleinfelder offers a range of assessment and engineering services to suit the varying needs of our clients. Although risk can never be eliminated, more detailed and extensive assessment or engineering yields more information, which may help understand and manage the degree of risk. Since such detailed services involve greater expense, our clients participate in determining the level of service that provides adequate information for their purposes at an acceptable level of risk. Acceptance of this proposal will indicate that the City of Ontario has reviewed the scope of services and determined that it does not need or want services in addition to the services being proposed at this time. Any exceptions should be noted and may result in a change in fees.

LIMITATIONS

The safety of our employees is of paramount concern to Kleinfelder. You will be notified if the location of your project represents a potential safety concern to our employees. Unsafe conditions for fieldwork will require modification of our estimated scope of work and associated fees. We will advise you of the additional costs necessary to mitigate these unanticipated conditions, if applicable.

Our work will be performed in a manner consistent with that level of care and skill ordinarily exercised by other members of Kleinfelder's profession practicing in the same locality, under similar conditions and at the date the services are provided. Our conclusions, opinions and recommendations will be based on a limited number of observations and data. It is possible that conditions could vary between or beyond the data evaluated. Kleinfelder makes no guarantee or warranty, express or implied, regarding the services, communication (oral or written), report, opinion, or instrument of service provided. Even with diligent monitoring, construction defects may occur. In all cases the contractor is solely responsible for the direction and quality of the work, adherence to plans and specifications, and repair of defects.

This proposal is valid for a period of 90 days from the date of the proposal unless a longer period is specifically required in which case that time frame will apply. This proposal was prepared specifically for the client and its designated representatives and may not be provided to others without Kleinfelder's express permission.

The fee specified in this proposal is based upon the assumption that the site will be accessible to field personnel. If weather, access, or site conditions restrict our field operations, we may need to revise our fee estimate.

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CLOSURE

We appreciate the opportunity to submit this proposal and look forward to working with you on this project. If there is a need for any change in the scope of service or schedule described in this proposal, or if you have any questions or require additional information, please call the undersigned at 909.657.1734.

Sincerely,

KLEINFELDER

Jeffrey Diaz
Project Manager

Jeffery D. Waller, PE, GE
Principal Geotechnical Engineer

Attachments: Table 1 – Fee Estimate
Approved Fee Schedule for the City of Ontario

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TABLE 1 – FEE ESTIMATE

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Table 1 - Fee Estimate
Materials Testing & Special Inspection Services
Grand Park Project
City of Ontario, California

Estimated Duration for Kleinfelder's Services - 07/01/2025 through 06/30/2027

	Number of Visits (Days)	Hours Each Visit (Hours)	Total (Hours)	Rate	Cost	
Materials Testing & Special Inspection Services						
Field Technician	493	8	3944	$138.00	$544,272.00	
Special Inspector	247	8	1976	$138.00	$272,688.00	
ESTIMATED SUBTOTAL						**$816,960.00**
Laboratory Testing Services						
Estimated at 10% of Field Services Cost *(Billed Per Attached Fee Schedule)*					$81,696.00	
ESTIMATED SUBTOTAL						**$81,696.00**
Geotechnical Engineering, Project Management, & Administration						
Estimated at 20% of Field Services Cost *(Billed Per Attached Fee Schedule)*					$163,392.00	
ESTIMATED SUBTOTAL						**$163,392.00**
Project Contingency						
10% of Total Project Cost						**$106,204.80**
ESTIMATED TOTAL FEE						**$1,168,252.80**

This fee estimate assumes that prevailing wage laws apply to the subject project

BASIS OF CHARGES (Portal to Portal)

HOURS WORKED	HOURS BILLED
Show up-No Work/Cancelled	2
Sample Pick-up	2
2-8 hours	Actual Hours Worked
8-12 & Saturday	Time and One-Half
Greater than 12, Sundays & Holidays	Double Time

*Please note: Overtime services not specifically listed above will incur a multiplier of 1.5 times the rate shown and double time will incur a multiplier of 2.0 times the rate shown.
**Rates presented above are valid until 3/31/2026 per our contract terms. A 5% escalation on all rates will be applied on 4/1/2026 and again on 4/1/2027.

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KLEINFELDER'S APPROVED FEE SCHEDULE

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8. FEE PROPOSAL (Also uploaded separately on PlanetBids)

Kleinfelder's Fee Proposal below includes 2023-2026 professional staff rates and a laboratory fee schedule.

KLEINFELDER 2023 TO 2026 FEE SCHEDULE FOR THE CITY OF ONTARIO: ON-CALL MATERIAL TESTING AND GEOTECHNICAL ENGINEERING SERVICES

PROFESSIONAL STAFF RATES*

Professional	$ 150 / hour
Staff Professional	$ 160 / hour
Project Professional	$ 195 / hour
Senior Professional	$ 210 / hour
Principal Professional	$ 220 / hour
Senior Principal Professional	$ 245 / hour
Project Manager	$ 200 / hour
Senior Project Manager	$ 245 / hour
Designer/Drafter	$ 145 / hour
Senior Designer/Drafter	$ 160 / hour
Project Controls Professional	$ 150 / hour

TECHNICAL STAFF RATES

Technician/Inspector (Prevailing Wage Group 1, 2, and 3)	$ 138 / hour
Technician/Inspector (Non-Prevailing Wage)	$ 105 / hour

ADMINISTRATIVE STAFF RATES

Administrator	$ 105 / hour
Project Administrator	$ 135 / hour

Kleinfelder reserves the right to adjust the fee schedule on projects not completed within 180 days from the contract signature date.

Public works projects or projects receiving public funds may be subject to Prevailing Wage laws. The above rates apply to projects subject to prevailing wages.

Hourly rates assume that other direct costs will be billed and reimbursed by the client. Kleinfelder reserves the right to adjust the fee schedule on projects where other direct costs are not reimbursed.

*Applies to all professional rates including but not limited to: civil, mechanical, chemical, electrical, geotechnical, and environmental engineers; industrial hygienists; geologists; hydrogeologists; hydrologists; and computer specialists.

KLEINFELDER 2023 TO 2026 LABORATORY FEE SCHEDULE FOR THE CITY OF ONTARIO: ON-CALL MATERIAL TESTING AND GEOTECHNICAL ENGINEERING SERVICES

Test	Standard Test Method†	Fee		
Standard/Modified Proctor	D698, T99, D1557, T180	$	290	each
Sieve Analysis, Coarse and Fine	D6913, T88, C136, CT202	$	200	each
Water Content	D2216, D4363, T265	$	30	each
Atterberg Limits, Multiple Point	D4318-A, T89, T90	$	220	each
Resistance R-Value	D2844, CT301	$	390	each
Direct Shear, 3 Points	D3080, T236	$	470	each
Expansion Index	D4829	$	235	each
Cleanness Value	CT227	$	200	each
Coarse Durability	D3744, T210, CT229	$	180	each
Fine Durability	D3744, T210, CT229	$	190	each
Los Angeles Abrasion	C131, T96, C535, CT211	$	240	each
Sand Equivalent	D2419, T176, CT217	$	180	each
Concrete Compression	C39, CT521	$	40	each
Concrete Core Compression	C42	$	100	each
Concrete Flexural Strength	C78, CT523, CT524	$	125	each
Non-Shrink Grout Compression	C1107, C579	$	40	each
CLSM Compression	D4832	$	55	each
Masonry Grout Compression	C1019, C942	$	40	each
Masonry Mortar Compression	C270, C780	$	40	each
Masonry Prism Compression	C1314	$	150	each
CMU Absorption and Received Moisture	C140	$	120	each
CMU Compression	C140	$	125	each
CMU Dimension Verification	C140	$	55	each
Residue by Evaporation	D6934, T59	$	140	each
Slurry Seal Wet Track Abrasion	D3910, ISSA TB100	$	420	each
Gradation of Extracted Aggregate	D5444, CT202	$	150	each
AC Content by Extraction	D2172	$	260	each
AC Content by Ignition Oven	D6307, T308, CT382	$	190	each
AC Ignition Oven Calibration ***(determination of mix correction)***	D6307, T308, CT382	$	420	each
Hveem Stability without Compaction	D1560, CT366	$	220	each
AC Core Unit Weight & Thickness	D1188, D2726, D3549, CT308	$	65	each
Unit Weight, Hveem Method	D1561, CT304	$	370	each
Maximum Theoretical Specific Gravity	D2041, T209, CT309	$	200	each
Bolt Assembly Suite (Bolt, Nut, Washer)	F606	$	285	each
Bend	A370, E290	$	55	each
Rebar Tensile, up to No. 11	A370, E8	$	120	each
PT Strand Tensile	A370, A1061	$	205	each
Fireproofing Density	E605	$	95	each
Sample Preparation	N/A	$	65	each

NOTES:

** The above list only captures the most commonly used laboratory tests.*

***A full list of laboratory tests can be provided upon request.*

****Additional laboratory tests will be invoiced based on Kleinfelder's standard laboratory fee schedule.*

†Common ASTM, AASHTO and California test methods.

- **Those beginning with A, B, C, D, E, F, or G are ASTM methods.**
- **Those beginning with T are AASHTO methods.**
- **Those beginning with CT are California methods.**

CITY OF ONTARIO *Agenda Report* **November 4, 2025**	**SECTION:** **CONSENT CALENDAR**
Department: Utilities Prepared By: Dennis Mejia Staff Member Presenting: Scott Burton, Utilities General Manager Reviewed By: Dennice Raygoza, Courtney Jones, Michael Sigsbee Approved By:	Submitted To: Council/OHA Approved: _____ Continued To: _____ Denied: _____ Item No: 10

SUBJECT: **A RESOLUTION APPROVING A TEMPORARY CONSTRUCTION EASEMENT AGREEMENT AND A PERMANENT EXCLUSIVE EASEMENT AND ACCESS EASEMENT AGREEMENT WITH THE CHINO DESALTER AUTHORITY**

RECOMMENDATION: That the City Council adopt a Resolution approving a Temporary Construction Easement and a Permanent Exclusive Easement and Access Easement with the Chino Desalter Authority for the development, operation and maintenance of a new groundwater well facility located at Grand Park, and authorizing the City Manager, or designee, to execute said agreements.

THE FOLLOWING COUNCIL GOALS ARE BEING ACHIEVED:
Invest in the Growth and Evolution of the City's Economy
Invest in the City's Infrastructure (Water, Streets, Sewers, Parks, Storm Drains and Public Facilities)
Pursue City's Goals and Objectives by Working with Other Governmental Agencies

FISCAL IMPACT: The Fiscal Year 2025-26 Adopted Budget includes appropriations from the Water Capital Fund for any costs associated with this action, including the preparation of legal documentation. This action is not expected to have a significant cost impact. There is no impact to the General Fund.

BACKGROUND & ANALYSIS: The City of Ontario proposes to grant a temporary construction easement and a permanent exclusive and access easement to the Chino Desalter Authority (CDA) to facilitate the construction and operation of a new groundwater well facility. The City is a member agency of the CDA, a Joint Powers Authority responsible for owning, operating, and maintaining regional water desalting facilities (Chino I and Chino II Desalters).

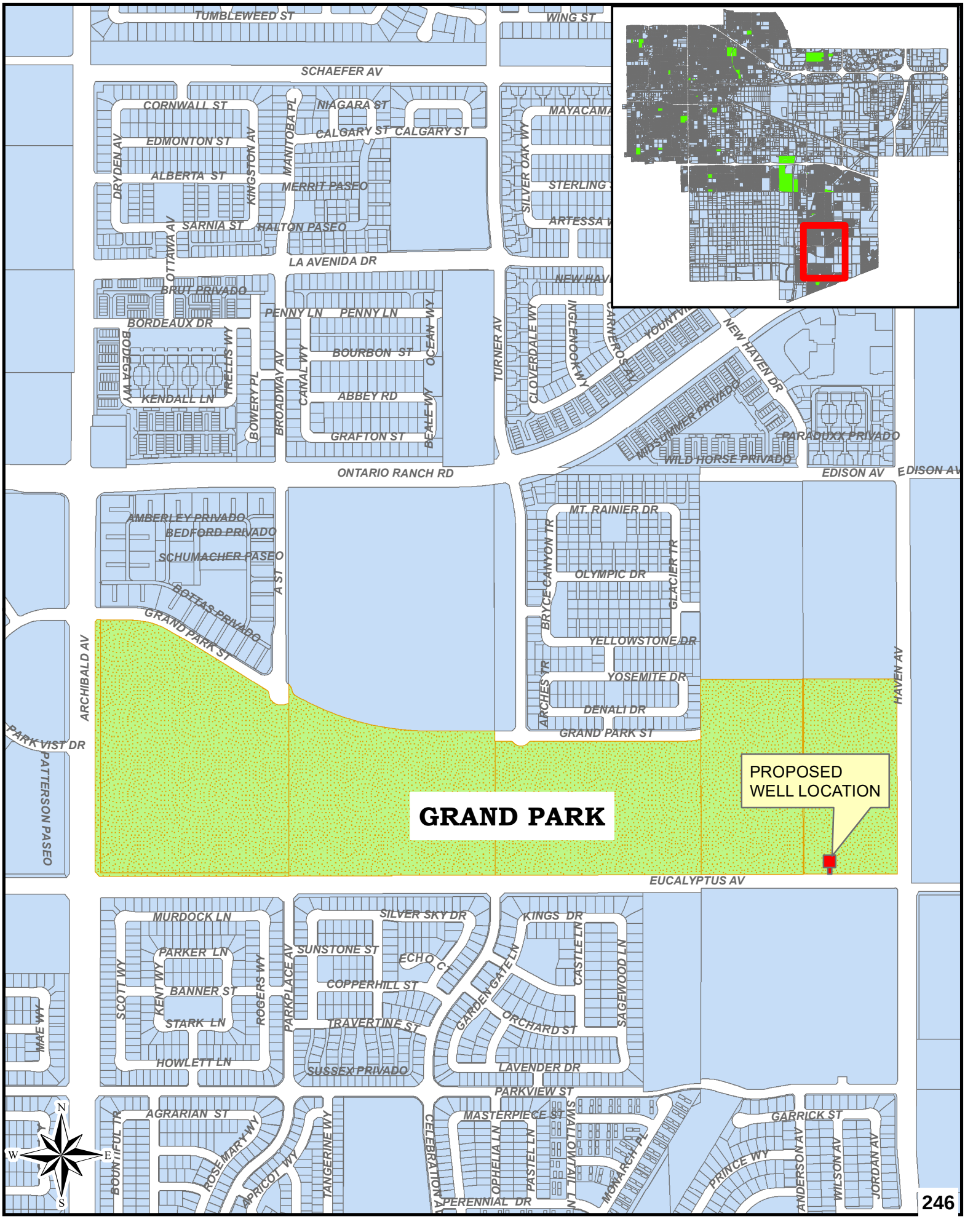
CDA's existing infrastructure includes two treatment plants, thirty groundwater wells, over forty miles of pipeline and various product water distribution facilities (pump stations, reservoirs and interconnections). The City, as a 20% owner in CDA, shares the responsibility for providing regional water supply reliability through groundwater treatment and delivery.

CDA currently produces approximately 35,200 acre-feet of drinking water annually for its member agencies. However, with demand for potable water continuing to grow across the region, the development of a new groundwater well facility is essential to expanding production capacity and maintaining long-term supply reliability.

The proposed well site is located within Grand Park, which has been jointly identified by the City and CDA as a suitable location to support the CDA's operational needs. This site will not conflict with any planned park amenities. The construction of this new well will enhance CDA's ability to meet water supply demands for its member agencies while contributing to the City's long-term water reliability goals. The City of Ontario will directly benefit from this construction, as approximately 15% of the City's total water supply is provided through CDA facilities.

Please see the location of the proposed construction in Exhibit A.

PROPOSED CDA WELL LOCATION WITHIN GRAND PARK



GRANT OF TEMPORARY CONSTRUCTION EASEMENT

FOR A VALUABLE CONSIDERATION, receipt of which is hereby acknowledged, and subject to the terms and conditions set forth herein,

The City of Ontario, a California municipal corporation ("Grantor"), owner of that certain real property in the City of Ontario, County of San Bernardino, State of California, as more particularly described as follows:

See Exhibits "E" and "F" attached hereto and made a part hereof ("Grantee Property"),

hereby grants to Chino Basin Desalter Authority, a California joint powers authority ("Grantee")

a nonexclusive temporary construction easement over, across, upon and below that certain real property in the City of Ontario, County of San Bernardino, State of California, as described as set forth in Exhibit "E" and depicted in Exhibit "F" ("Easement Area"), for the purposes set forth below ("Temporary Construction Easement").

This Grant is made to accommodate construction activities to be performed by or on behalf of Grantee within the Easement Area in connection with the installation of a water well together with connections, fittings and appurtenances thereof in the City (the "Project"). This Grant shall be subject to the requirements, assurances, and covenants of Grantee set forth herein.

1. Grantee shall provide Grantor with a minimum of 5 days' advance notice before occupying any part of the area of the Temporary Construction Easement.

2. Grantee shall secure the Easement Area from the general public and before undertaking any work.

3. Grantee shall require each of its contractors to obtain and continue to maintain, during the term of the Temporary Construction Easement and during the Project construction period in which the improvements are being constructed, commercial general liability insurance with combined single-limit coverage of not less than (i) commercial general liability insurance providing coverage for limited contractual liability, premises, and personal injury coverage with limits of $2,000,000 per occurrence and $4,000,000 aggregate, (ii) automobile insurance with limits of $2,000,000, (iii) worker's compensation insurance in accordance with statutory requirements, (iv) employer's liability insurance with limits of $1,000,000, and (v) pollution liability insurance with limits of $2,000,000. Upon Grantor's request, Grantee or its contractors shall furnish Grantor with copies of certificates of insurance from duly licensed insurance companies reasonably acceptable to Grantor showing all premiums required to be paid on the policy to have been paid and showing the insurance to be in full force and effect, such policy to provide coverage against any claim arising from the death of or injury to persons or from property damage caused by each such contractor, Grantee, or any of its agents or representatives.

4. Grantee shall indemnify, protect, defend, and hold Grantor free and harmless from and against any and all claims, actions, causes of action, suits, proceedings, costs, expenses

(including, without limitation, attorneys' fees and costs), liabilities, damages, and liens of any type (collectively "Losses") to the extent arising out of the use of the Temporary Construction Easement to the extent caused by the negligence or willful misconduct of Grantee or Grantee's agents or contractors. Grantee's obligations under this Section shall not be limited or otherwise affected by the amount or the availability of the insurance required herein, or by the amount or the availability of any other insurance. This indemnity shall not be limited by any defense or limitation of damages relating to worker's compensation claims that Grantee or its contractors could assert against the claimant.

5. Grantee shall keep Grantor's Property free and clear of mechanics' liens or any other liens resulting from work performed by or on behalf of Grantee within or from the area of the Temporary Construction Easement.

6. Should any part of Grantor's Property or the improvements thereon, including buildings, driveways, walkways, curbs, sidewalks, irrigation systems, fences, walls, lawn areas, trees, or other landscaping or similar areas become damaged during the course of and in connection with Grantee's Project construction activities upon or from the area of the Temporary Construction Easement, Grantee shall repair and restore such improvements, at Grantee's expense, to an equivalent condition or as otherwise set forth herein. Grantee shall not commence any installation of a well within the Easement Area until it has obtained all necessary permits and approvals required by the Grantor for such installation and operation. Grantee hereby assigns to Grantor, on a nonexclusive basis and without limiting its own rights, any and all express or implied warranties received by Grantee in connection with conformance work on Grantor's Property to be performed under this Section 6, to the extent such warranties exist, are unexpired, and are assignable.

7. The rights granted under this Easement shall commence on January 1, 2026, and shall terminate automatically on December 31, 2027, without the need for any further action by either party.

8. No amendment to this Easement shall be effective unless written approval is given by the parties or their respective successors and assigns.

IN WITNESS WHEREOF, the parties have executed this Temporary Construction Easement on the date set forth beside the signature of each.

Date: _____

City of Ontario
a California municipal Corporation, **Grantor**

By: _____

Name: _____

Its: _____

Date: 7/8/2025

Chino Basin Desalter Authority, a California joint powers authority, **Grantee**

By: _____

Name: Thomas O'Neill

Its: General Manager | CEO

ACKNOWLEDGMENT

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

State of California
County of San Bernardino)

On July 8, 2025 before me, Casey Anne Costa
(insert name and title of the officer)

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

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

WITNESS my hand and official seal.

CASEY ANNE COSTA
Notary Public - California
San Bernardino County
Commission # 2513549
My Comm. Expires Mar 3, 2029

Signature _____ **(Seal)**

EXHIBIT "E"
LEGAL DESCRIPTION
TEMPORARY CONSTRUCTION EASEMENT FOR WELL II-13

THAT PORTION OF THE EAST HALF OF THE SOUTHEAST QUARTER OF THE SOUTHEAST QUARTER OF SECTION 14, TOWNSHIP 2 SOUTH, RANGE 7 WEST, SAN BERNARDINO MERIDIAN IN THE CITY OF ONTARIO, COUNTY OF SAN BERNARDINO, STATE OF CALIFORNIA, LYING WITHIN PARCEL 15 AS SHOWN ON OFFICIAL MAP NO. 1009 AS PER MAP FILED IN BOOK 2, PAGES 30 THROUGH 34 OF OFFICIAL MAPS, IN THE OFFICE OF THE COUNTY RECORDER OF SAID COUNTY, DESCRIBED AS FOLLOWS:

COMMENCING AT THE SOUTHEAST CORNER OF SAID SECTION 14 AS SHOWN ON SAID OFFICIAL MAP;

THENCE ALONG THE SOUTHERLY LINE OF SAID SECTION ALSO BEING THE CENTERLINE OF EUCALYPTUS AVENUE PER SAID OFFICIAL MAP, SOUTH 89°48'05" WEST 553.36 FEET;

THENCE NORTH 00°11'55" WEST 54.00 FEET TO THE NORTHERLY RIGHT OF WAY LINE OF EUCALYPTUS AVENUE AS DESCRIBED PER DOCUMENT RECORDED FEBRUARY 25, 2014 AS DOCUMENT NO. 2014-0072744 OF OFFICIAL RECORDS AND THE **TRUE POINT OF BEGINNING;**

THENCE CONTINUING NORTH 00°11'55" WEST 160.00 FEET;

THENCE NORTH 89°48'05" EAST 125.00 FEET;

THENCE SOUTH 00°11'55" EAST 78.40 FEET TO THE NORTHWESTERLY LINE OF THAT CERTAIN 75.00 FOOT WIDE RIGHT OF WAY EASEMENT GRANTED TO SOUTHERN CALIFORNIA EDISON PER DOCUMENT RECORDED AUGUST 10, 1953 IN BOOK 3220 PAGE 457 OF OFFICIAL RECORDS, IN THE OFFICE OF SAID COUNTY RECORDER;

THENCE ALONG SAID NORTHWESTERLY LINE, SOUTH 31°21'38" WEST 95.76 FEET TO SAID NORTHERLY RIGHT OF WAY OF EUCALYPTUS AVENUE;

THENCE LEAVING SAID NORTHWESTERLY LINE, ALONG SAID NORTHERLY RIGHT OF WAY LINE, SOUTH 89°48'05" WEST 74.88 FEET TO THE **TRUE POINT OF BEGINNING;**

THE ABOVE DESCRIBED PARCEL CONTAINS 17,955 SQUARE FEET, MORE OR LESS.

AS SHOWN ON EXHIBIT "F", ATTACHED HERETO AND BY THIS REFERENCE MADE A PART HEREOF.

THIS DESCRIPTION WAS PREPARED BY ME, OR UNDER MY DIRECTION, IN CONFORMANCE WITH THE PROFESSIONAL LAND SURVEYORS' ACT.

KURT R. TROXELL, P.L.S. 7854
DATE PREPARED: 4/30/2025

M:\Mapping\1878\008\Legals\Well Site\1878-008 Temp.docx

EXHIBIT "F"

EASEMENT NOTES:

(1) SOUTHERN CALIFORNIA EDISON COMPANY HOLDER OF A RIGHT OF WAY AND PUBLIC UTILITIES EASEMENT PER DOCUMENT RECORDED MAY 14, 1952, IN BOOK 2949, PAGE 329, OF OFFICIAL RECORDS.

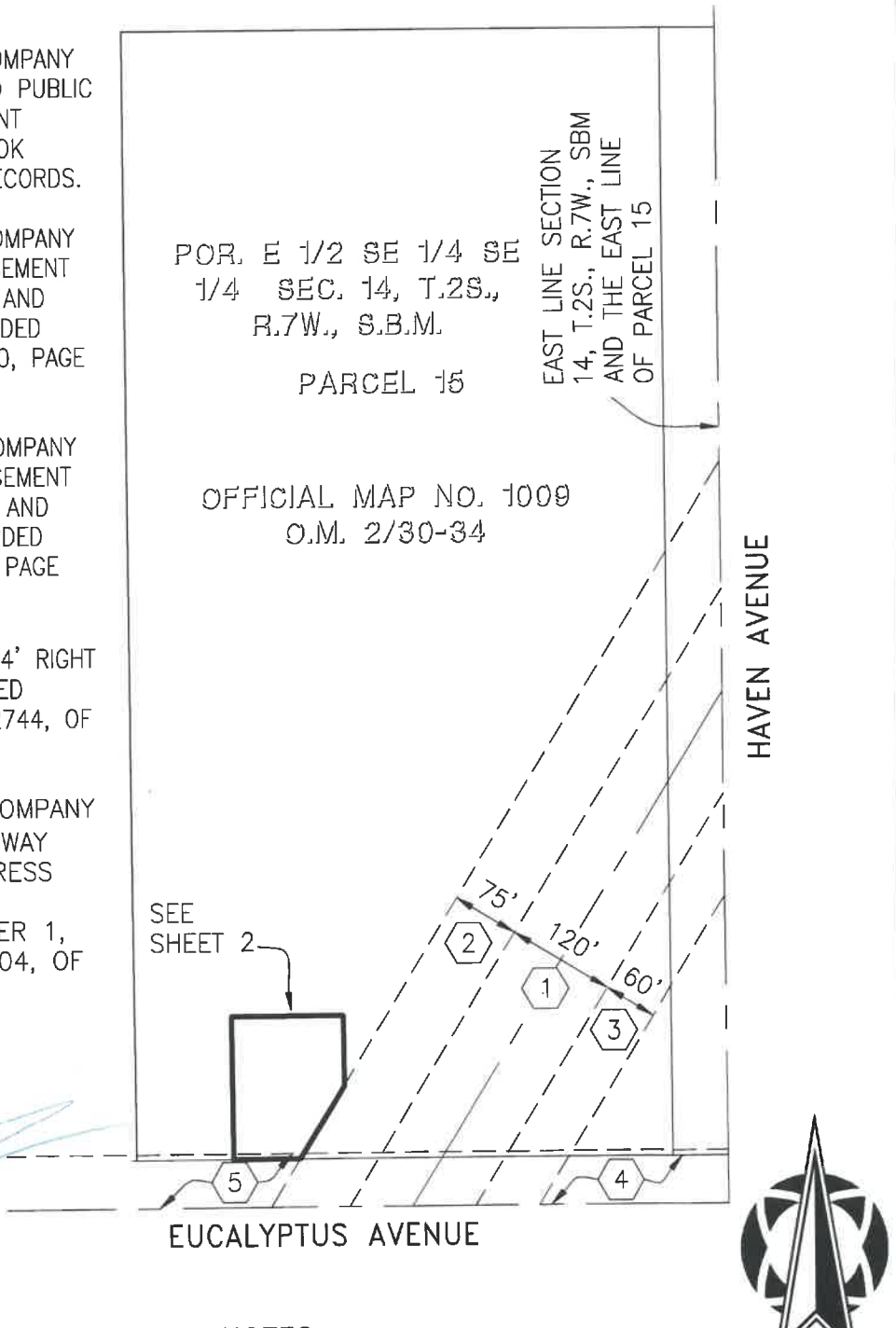
(2) SOUTHERN CALIFORNIA EDISON COMPANY HOLDER OF A RIGHT OF WAY EASEMENT FOR STEEL TOWERS, POLE LINES AND CONDUITS PER DOCUMENT RECORDED AUGUST 10, 1953, IN BOOK 3220, PAGE 457, OF OFFICIAL RECORDS.

(3) SOUTHERN CALIFORNIA EDISON COMPANY HOLDER OF A RIGHT OF WAY EASEMENT FOR METAL TOWERS, POLE LINES AND CONDUITS PER DOCUMENT RECORDED JUNE 24, 1968, IN BOOK 7047, PAGE 707, OF OFFICIAL RECORDS.

(4) CITY OF ONTARIO OWNER OF A 54' RIGHT OF WAY PER DOCUMENT RECORDED FEBRUARY 25, 2014, 2014-0072744, OF OFFICIAL RECORDS.

(5) SOUTHERN CALIFORNIA GAS COMPANY HOLDER OF A 60' RIGHT OF WAY FOR GAS PIPELINES AND INGRESS AND EGRESS PURPOSES PER DOCUMENT RECORDED OCTOBER 1, 1969 IN BOOK 7313 PAGE 204, OF OFFICIAL RECORDS.

4/30/2025



LINE LEGEND:

- SUBJECT PROPERTY LINES
- CENTERLINES
- PROPOSED EASEMENT LINES
- EXISTING EASEMENT LINES

NOTES:

SEE SHEET 2 FOR ABBREVIATIONS

200' 0' 100' 200'

SCALE: 1" = 200'

FUSCOE ENGINEERING
15535 Sand Canyon Ave, Suite 100
Irvine, California 92618
949.474.1960 fuscoe.com

EXHIBIT "F"

PLAT TO ACCOMPANY LEGAL DESCRIPTION

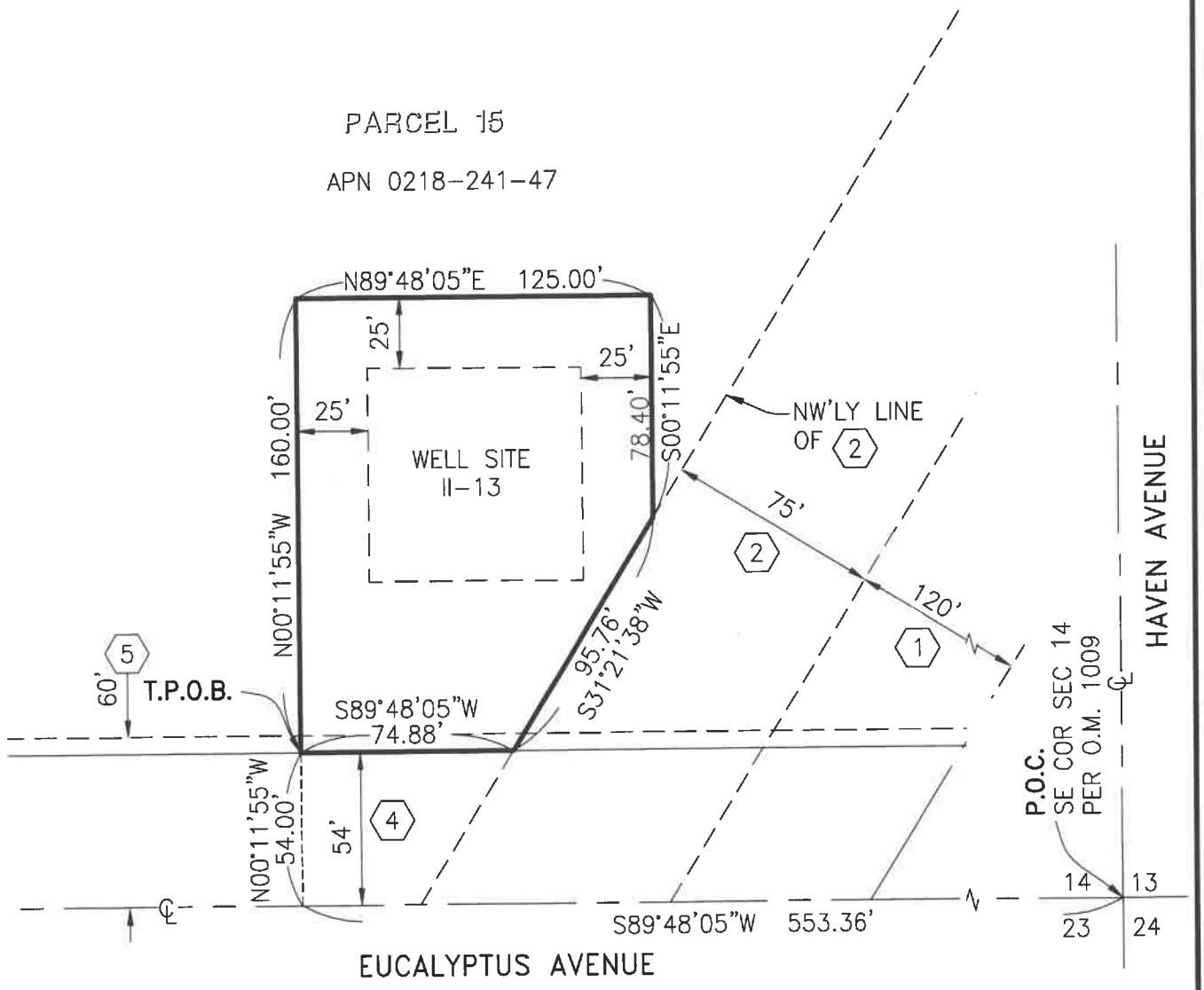
of: TEMPORARY CONSTRUCTION EASEMENT FOR WELL II-13

DATE: January 15, 2025
FN: 1878-008 Well
DRAWN BY: CS
CHECKED BY: KRT

SHEET 1 OF 2

M:\MAPPING\1878\008\LEGALS\WELL II-13\1878-008 WELL.DWG (04-30-25)

EXHIBIT "F"



NOTES:

SEE SHEET 1 FOR LEGEND AND EASEMENT NOTES.

AREA:

17,955 SQUARE FEET

ABBREVIATIONS:

CL	CENTERLINE
O.M.	OFFICIAL MAP
POR.	PORTION
SEC.	SECTION
S.B.M.	SAN BERNARDINO MERIDIAN
P.O.C.	POINT OF COMMENCEMENT
T.P.O.B.	TRUE POINT OF BEGINNING

N

60' 0' 30' 60'

SCALE: 1" = 60'

FUSCOE ENGINEERING
15535 Sand Canyon Ave, Suite 100
Irvine, California 92618
949.474.1960 fuscoe.com

EXHIBIT "F"

PLAT TO ACCOMPANY LEGAL DESCRIPTION

of: TEMPORARY CONSTRUCTION EASEMENT FOR WELL II-13

DATE: January 15, 2025
FN: 1878-008 Well
DRAWN BY: CS
CHECKED BY: KRT

SHEET 2 OF 2

M:\MAPPING\1878\008\LEGALS\WELL II-13\1878-008 WELL.DWG (04-30-25)

Recording Requested by

After Recordation Return to:

City of Ontario
303 East B Street
Ontario, CA 91764

Attn: City Manager

Space Above This Line for Recorder's Use

GRANT OF PERMANENT EXCLUSIVE EASEMENT AND ACCESS EASEMENT AGREEMENT

THIS GRANT OF PERMANENT EXCLUSIVE EASEMENT AND ACCESS EASEMENT AGREEMENT ("Agreement") dated for references purposes as of 7/8/2025 is entered into by and between the City of Ontario, a California municipal corporation ("Grantor") and Chino Basin Desalter Authority, a California joint powers authority ("Grantee").

RECITALS

WHEREAS, Grantor is the fee owner of that certain real property located in the City of Ontario, County of San Bernardino, California , as more particularly described as follows:

See Exhibit "A", Exhibit "B", Exhibit "C", and Exhibit "D" attached hereto and made a part hereof ("Grantor Property"); and

WHEREAS, Grantee desires to construct a water well ("Well") on the Grantor Property; and

WHEREAS, Grantee desires to obtain an exclusive permanent easement, more particularly described in Exhibit "A" and depicted on Exhibit "B", both of which are attached hereto and incorporated herein ("Well Easement Area"), to use and maintain the Well for the purpose of providing clean water to municipalities for drinking purposes; and

WHEREAS, in order for Grantee to access the Well and any necessary infrastructure related thereto, the Grantee requires an easement for ingress and egress over a portion of the Grantor's Property more particularly described in Exhibit "C" and depicted on Exhibit "D" , both of which are attached hereto and incorporated herein ("Access Easement Area"); and

WHEREAS, the parties desire to enter into this Agreement for the purposes of establishing an exclusive permanent easement to use and maintain the Well, and a non-exclusive permanent easement for ingress and egress over a portion of the Grantor Property to access the Well, subject to the terms and conditions set forth herein.

AGREEMENT

NOW, THEREFORE, for good and valuable consideration, the receipt and adequacy of which are hereby acknowledged, and with reference to the foregoing Recitals, Grantor and Grantee hereby agree as follows:

1. Grant of Easements. On and subject to the terms, conditions, restrictions, and reservations set forth herein, Grantor hereby grants to Grantee, and its successors and assigns, the following easements (collectively, the "Easements"):

(a) Exclusive Permanent Easement. Exclusive permanent easement in, on, over, under, along and across the Well Easement Area ("Well Easement") to use, maintain, operate, alter, repair, replace, reconstruct, remove, and inspect the Well and related facilities and improvements (collectively, the "Well Equipment").

(b) Non-Exclusive Permanent Access Easement. A non-exclusive permanent easement ("Access Easement") on, over, and across the Access Easement Area to reasonably permit Grantee ingress and egress to access the Well Easement Area. This easement granted does not include parking. Neither Grantee nor any of Grantee's visitors, tenants, licensees, or other related parties shall park any vehicle within the Access Easement Area at any time.

2. Scope and Use of Easements.

(a) *Reservation.* Grantor and Grantee acknowledge that the Grantor reserves for itself, and its successors and assigns, the use and enjoyment of the Well Easement Area and Access Easement Area (together "Easement Areas") for all lawful purposes provided that any such use by Grantor, and its successors and assigns, is not inconsistent with the rights and privileges granted to Grantee herein.

(b) *Use of Easement Areas.* Grantee, in its use of and installations on or under the Easement Areas, shall comply with all laws, regulations, and requirements of all governmental and regulatory bodies and authorities and shall observe all safety standards and guidelines applicable to use and occupancy of the Easement Areas and the construction, maintenance, and repair of the Well Equipment. Grantee's rights granted pursuant to the Easements granted under this Agreement shall at all times be exercised in such a manner as not to interfere with use of the Easement Areas by Grantor and others. All Well Equipment installed by or on behalf of Grantee shall be installed and maintained below the ground level or surface of the Well Easement Area. Grantee shall not make any installations, perform any work, or take other actions that will impose increased burdens or restrictions on the Grantor Property or the use and development thereof.

(c) *Approval of Installations and Work.* Grantee shall not construct or install any Well Equipment or perform any other Work (as such term is defined herein) in or about the Easement Areas without first submitting applicable plans and specifications to Grantor and obtaining Grantor's prior written approval of the proposed installation or other Work. Grantor shall have the right but not the obligation to inspect any installations or other Work and may require

changes in the method, location, or quality of the work. Grantor's approval of any installations or Work or of any plans and specifications shall not constitute any warranty or representation by Grantor with respect thereto.

(d) *No Rights in Public; No Implied Easements.* Nothing contained in this Agreement shall be construed as creating any rights for or on behalf of the general public or as dedicating for public use any portion of the Easement Areas. No easements except the easement set forth in this Agreement shall be implied by this Agreement.

(e) *Indemnification.* Grantee shall indemnify, protect, defend, and hold Grantor harmless from and against any and all costs, expenses (including, without limitation, reasonable attorney fees), damages, claims, liabilities, causes of action, liens (including, without limitation, mechanics liens), encumbrances, and charges arising out of or related to the Well Equipment, the use of the Easements or Easement Areas by Grantee and its invitees, or Grantee's violation of this Agreement.

(f) *No Liens.* Grantee shall not permit any claim, lien, or other encumbrance arising from its construction, installation, use, maintenance, repairs, operation, or removal of the Well Equipment or other Work by or on behalf of Grantee to accrue against, or attach to, the Easement Areas or the interest of Grantor in the Grantor Property.

3. Installation and Maintenance Duties.

(a) *Installation, Maintenance, and Repairs of Well Equipment.* Grantee will be solely responsible, at its cost and expense, for the installation, maintenance, inspection, repair, and replacement of any Well Equipment within the Well Easement Area. Grantee shall, at its sole expense, maintain the Well Equipment in good order and repair.

(b) *Maintenance of Exclusive Permanent Easement.* The Grantee shall, at its sole cost and expense, maintain the Well Easement Area in a good, clean, safe, and well-maintained condition. The Grantee shall maintain the Well Exclusive Easement Area in a manner consistent with the standards generally applicable to similar properties in the vicinity and in compliance with all applicable laws, ordinances, rules, and regulations.

(c) *Restoration of Grantor Property.* Grantee will repair any damage to the Easement Areas or other portions of the Grantor Property (and to the roadways, landscaping, fencing, structures, foundations, or other improvements located thereon from time to time) to the extent caused by Grantee's use of the Easement Areas or the installation, maintenance, inspection, repair, replacement, or use of Well Equipment, or by access over, or other use of or actions on or about the Easement Areas by Grantee or Grantee's agents, employees, or contractors.

(d) *Standards for Work.* All installation, maintenance, repair, replacement, and reconstruction work performed from time to time by Grantee hereunder (collectively, "Work") shall be completed in a good and workmanlike manner, in accordance with good construction practices and in compliance with all requirements of law.

4. Insurance. On commencement of construction or any maintenance, as applicable, of the Improvements and on Grantee's or its agents entry on the Grantor Property, such entering

parties shall obtain, and naming the Grantor as an additional insured, a policy or policies (which may be a combination of primary coverage and umbrella policies) of (i) commercial general liability insurance providing coverage for limited contractual liability, premises, and personal injury coverage with limits of $2,000,000 per occurrence and $4,000,000 aggregate, (ii) automobile insurance with limits of $2,000,000, (iii) worker's compensation insurance in accordance with statutory requirements, (iv) employer's liability insurance with limits of $1,000,000, and (v) pollution liability insurance with limits of $2,000,000.

5. Covenants Running With the Land. Each and all of the covenants, conditions, easements, and restrictions set forth in this Agreement (i) shall run with the land comprising the Easement Areas and the Grantee Property and every portion thereof, and shall apply to and bind Grantor and Grantee and their respective successors-in-interest; and (ii) shall be enforceable as equitable servitudes against both the dominant and servient tenements pursuant to applicable law.

6. Miscellaneous.

(a) *Entire Agreement.* This Agreement, including all recitals and exhibits hereto, constitutes the entire agreement between the parties with respect to the subject matter hereof and supersedes any and all prior or contemporaneous understandings, negotiations, representations, promises, and agreements, oral or written, by or between the parties, with respect to the subject matter of this Agreement. No representations, inducements, promises, or agreements have been made in connection with this Agreement by any party, or anyone acting on behalf of any party, other than those expressly set forth herein.

(b) *Binding Effect.* This Agreement, including, without limitation, the easements granted and the covenants made herein, generally shall be binding on, and inure to the benefit of, Grantor and Grantee, and their respective transferees, devisees, successors, and assigns.

(c) *Governing Law and Venue.* This Agreement shall be governed by, and construed in accordance with, the laws of the State of California. The venue shall be in the County of San Bernardino.

(d) *Notices.* Any notice, approval, consent, or other communication (each, a "Notice") required or permitted to be given under this Agreement shall be in writing and may be sent (i) by personal delivery or (ii) by reputable overnight courier service for next business day delivery. All Notices shall be deemed given and delivered on the date of receipt or first rejection. Each Notice shall be addressed to the party to whom such Notice is to be given at the party's address set forth below or as such party shall otherwise direct by Notice pursuant to this Section:

To Grantor: City of Ontario
Attn: General Manger
1425 South Bon View Avenue
Ontario, CA 91761

Copy to:

Best Best & Krieger
Attn: Ontario City Attorney
2855 E. Guasti Rd. Suite 400
Ontario, CA 91761

To Grantee:

Chino Basin Desalter Authority
Attn: CDA General Manager/CEO
2151 S. Haven Avenue, Suite 202
Ontario, CA 91761

(e) *Counterparts.* This Agreement may be executed in one or more counterparts, each of which counterparts shall, for all purposes, be deemed an original and all of which counterparts, when taken together, shall constitute one and the same instrument.

(f) *Non waiver.* No waiver by either party of any default in performance on the part of the other party, or of any breach or series of breaches of the terms, covenants, or conditions of this Agreement, will constitute a waiver of any subsequent breach or a waiver of any term, covenant, or condition.

(g) *Severability.* If any provision of this Agreement, or the application of any such provision to any person or circumstance, is held by any court of competent jurisdiction to be invalid or unenforceable, the remainder of this Agreement, or the application of such provision to persons or circumstances other than those to which it is held invalid, will be construed as if the void or unenforceable provision were not included in this Agreement.

(h) *Attorney Fees.* The parties agree that each shall be responsible for and bear its own respective attorneys' fees, costs, and expenses incurred in connection with this Agreement and any dispute arising hereunder.

(i) *Amendment.* This Agreement may be amended, modified, or supplemented only by a writing signed by both parties.

(*j*) *Recording.* Grantee shall record this Agreement in the San Bernardino County Records, at Grantee's sole cost and expense. This Agreement shall become effective only on such recordation.

IN WITNESS WHEREOF, this Agreement has been executed and delivered by Grantor and Grantee as of the date first written above.

Date: _____

City of Ontario, a California municipal corporation,
Grantor

By: _____

Name: _____

Its: _____

Attest:

By: _____

Date: 7/8/2025

Chino Basin Desalter Authority, a California joint powers authority,

Grantee

By: _____

Name: Thomas O'Neill

Its: General Manager/CEO

Approve as to legal form:

_____

City Attorney

ACKNOWLEDGMENT

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

State of California
County of San Bernardino)

On July 8, 2025 before me, Casey Anne Costa
(insert name and title of the officer)

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

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

WITNESS my hand and official seal.

CASEY ANNE COSTA
Notary Public - California
San Bernardino County
Commission # 2513549
My Comm. Expires Mar 3, 2029

Signature _____ **(Seal)**

EXHIBIT "A"
LEGAL DESCRIPTION
WELL II-13

THAT PORTION OF THE EAST HALF OF THE SOUTHEAST QUARTER OF THE SOUTHEAST QUARTER OF SECTION 14, TOWNSHIP 2 SOUTH, RANGE 7 WEST, SAN BERNARDINO MERIDIAN, IN THE CITY OF ONTARIO, COUNTY OF SAN BERNARDINO, STATE OF CALIFORNIA, LYING WITHIN PARCEL 15 AS SHOWN ON OFFICIAL MAP NO. 1009 AS PER MAP FILED IN BOOK 2, PAGES 30 THROUGH 34 OF OFFICIAL MAPS, IN THE OFFICE OF THE COUNTY RECORDER OF SAID COUNTY, DESCRIBED AS FOLLOWS:

COMMENCING AT THE SOUTHEAST CORNER OF SAID SECTION 14 AS SHOWN ON SAID OFFICIAL MAP;

THENCE ALONG THE SOUTHERLY LINE OF SAID SECTION ALSO BEING THE CENTERLINE OF EUCALYPTUS AVENUE PER SAID OFFICIAL MAP, SOUTH 89°48'05" WEST 453.36 FEET;

THENCE NORTH 00°11'55" WEST 114.00 FEET TO THE INTERSECTION OF A LINE PARALLEL WITH AND 114.00 FEET NORTHERLY OF SAID SOUTHERLY SECTION LINE AND A LINE PARALLEL WITH AND 10.00 FEET NORTHWESTERLY OF THE NORTHWESTERLY RIGHT OF WAY EASEMENT DESCRIBED IN DOCUMENT RECORDED AUGUST 10, 1953 IN BOOK 3220 PAGE 457 OF OFFICIAL RECORDS, IN THE OFFICE OF SAID COUNTY RECORDER;

THENCE ALONG SAID PARALLEL LINE TO SAID SECTION LINE, SOUTH 89°48'05" WEST 75.00 FEET;

THENCE NORTH 00°11'55" WEST 75.00 FEET;

THENCE NORTH 89°48'05" EAST 75.00 FEET;

THENCE SOUTH 00°11'55" WEST 75.00 FEET TO THE **TRUE POINT OF BEGINNING;**

THE ABOVE DESCRIBED PARCEL CONTAINS 5,625 SQUARE FEET, MORE OR LESS.

AS SHOWN ON EXHIBIT "B", ATTACHED HERETO AND BY THIS REFERENCE MADE A PART HEREOF.

THIS DESCRIPTION WAS PREPARED BY ME, OR UNDER MY DIRECTION, IN CONFORMANCE WITH THE PROFESSIONAL LAND SURVEYORS' ACT.

KURT R. TROXELL, P.L.S. 7854
DATE PREPARED: 4/30/2025

M:\Mapping\1878\008\Legals\Well Site\1878-008 Well.docx

EXHIBIT "B"

EASEMENT NOTES:

(1) SOUTHERN CALIFORNIA EDISON COMPANY HOLDER OF A RIGHT OF WAY AND PUBLIC UTILITIES EASEMENT PER DOCUMENT RECORDED MAY 14, 1952, IN BOOK 2949, PAGE 329, OF OFFICIAL RECORDS.

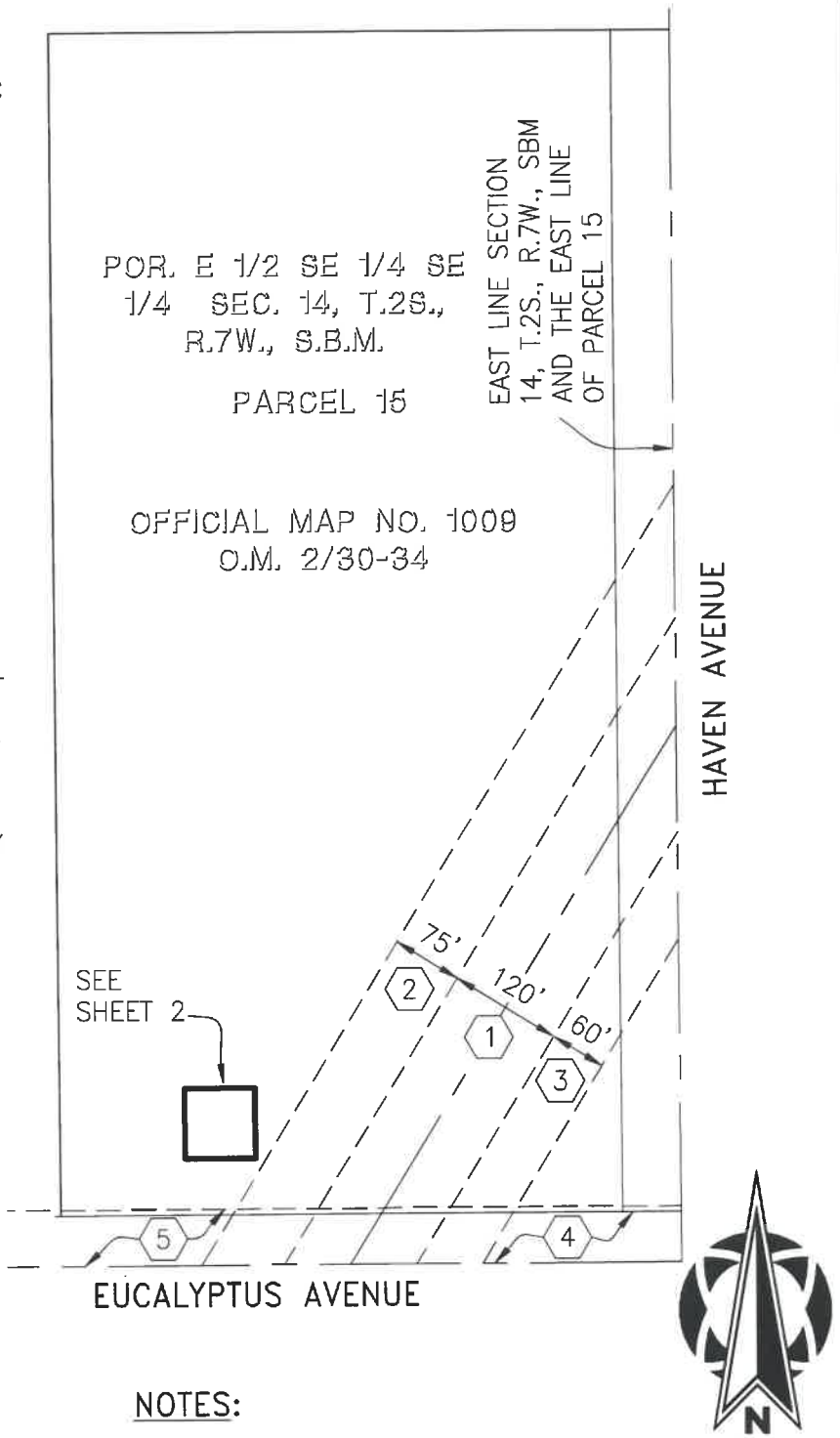
(2) SOUTHERN CALIFORNIA EDISON COMPANY HOLDER OF A RIGHT OF WAY EASEMENT FOR STEEL TOWERS, POLE LINES AND CONDUITS PER DOCUMENT RECORDED AUGUST 10, 1953, IN BOOK 3220, PAGE 457, OF OFFICIAL RECORDS.

(3) SOUTHERN CALIFORNIA EDISON COMPANY HOLDER OF A RIGHT OF WAY EASEMENT FOR METAL TOWERS, POLE LINES AND CONDUITS PER DOCUMENT RECORDED JUNE 24, 1968, IN BOOK 7047, PAGE 707, OF OFFICIAL RECORDS.

(4) CITY OF ONTARIO OWNER OF A 54' RIGHT OF WAY PER DOCUMENT RECORDED FEBRUARY 25, 2014, 2014-0072744, OF OFFICIAL RECORDS.

(5) SOUTHERN CALIFORNIA GAS COMPANY HOLDER OF A 60' RIGHT OF WAY FOR GAS PIPELINES AND INGRESS AND EGRESS PURPOSES PER DOCUMENT RECORDED OCTOBER 1, 1969 IN BOOK 7313 PAGE 204, OF OFFICIAL RECORDS.

4/30/2025



LINE LEGEND:

SUBJECT PROPERTY LINES
CENTERLINES
PROPOSED EASEMENT LINES
EXISTING EASEMENT LINES

NOTES:

SEE SHEET 2 FOR ABBREVIATIONS

200' 0' 100' 200'

SCALE: 1" = 200'

FUSCOE ENGINEERING
15535 Sand Canyon Ave, Suite 100
Irvine, California 92618
949.474.1960 fuscoe.com

EXHIBIT "B"

PLAT TO ACCOMPANY LEGAL DESCRIPTION

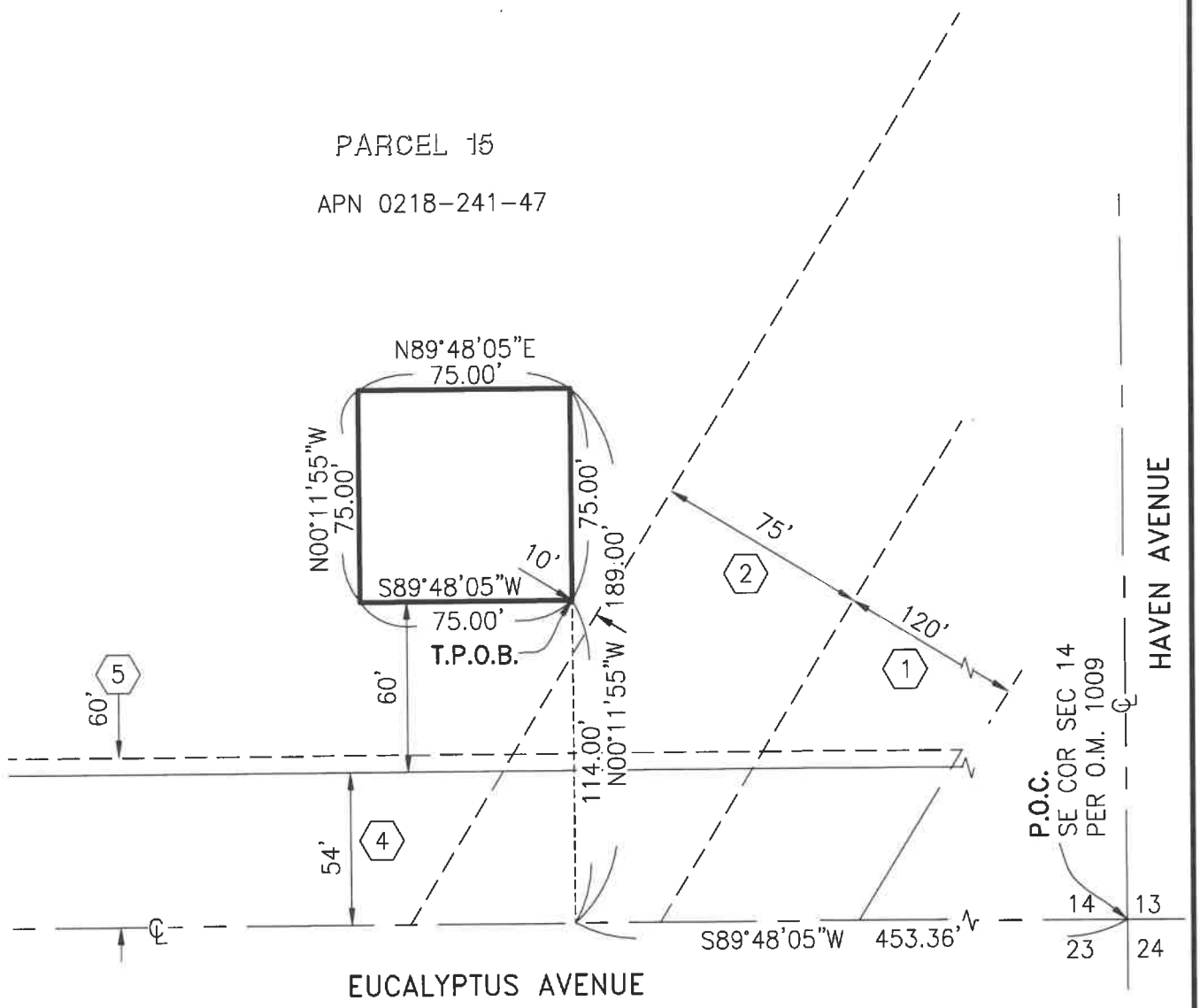
of: WELL II-13

DATE: January 15, 2025
FN: 1878-008 Well
DRAWN BY: CS
CHECKED BY: KRT

SHEET 1 OF 2

M:\MAPPING\1878\008\LEGALS\WELL II-13\1878-008 WELL.DWG (04-30-25)

EXHIBIT "B"



NOTES:

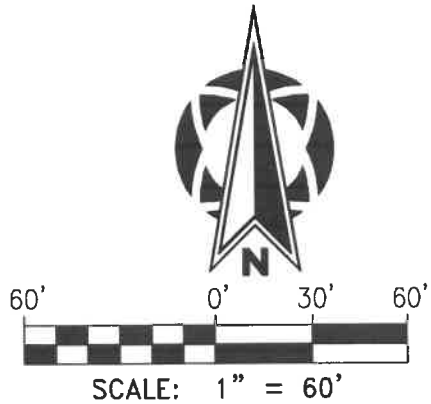
SEE SHEET 1 FOR LEGEND AND EASEMENT NOTES.

AREA:

5,625 SQUARE FEET

ABBREVIATIONS:

CL	CENTERLINE
O.M.	OFFICIAL MAP
POR.	PORTION
SEC.	SECTION
S.B.M.	SAN BERNARDINO MERIDIAN
P.O.C.	POINT OF COMMENCEMENT
T.P.O.B.	TRUE POINT OF BEGINNING



SCALE: 1" = 60'

FUSCOE ENGINEERING
15535 Sand Canyon Ave, Suite 100
Irvine, California 92618
949.474.1960
fuscoe.com

EXHIBIT "B"

PLAT TO ACCOMPANY LEGAL DESCRIPTION

of: WELL II-13

DATE: January 15, 2025
FN: 1878-008 Well
DRAWN BY: CS
CHECKED BY: KRT

SHEET 2 OF 2

M:\MAPPING\1878\008\LEGALS\WELL II-13\1878-008 WELL.DWG (04-30-25)

EXHIBIT "C"
LEGAL DESCRIPTION
ACCESS EASEMENT FOR WELL II-13

A 20.00 FOOT WIDE STRIP OF LAND LYING WITHIN THE EAST HALF OF THE SOUTHEAST QUARTER OF THE SOUTHEAST QUARTER OF SECTION 14, TOWNSHIP 2 SOUTH, RANGE 7 WEST, SAN BERNARDINO MERIDIAN, IN THE CITY OF ONTARIO, COUNTY OF SAN BERNARDINO, STATE OF CALIFORNIA, LYING WITHIN PARCEL 15 AS SHOWN ON OFFICIAL MAP NO. 1009 AS PER MAP FILED IN BOOK 2, PAGES 30 THROUGH 34 OF OFFICIAL MAPS, IN THE OFFICE OF THE COUNTY RECORDER OF SAID COUNTY, THE EASTERLY LINE OF SAID STRIP DESCRIBED AS FOLLOWS:

COMMENCING AT THE SOUTHEAST CORNER OF SAID SECTION 14 AS SHOWN ON SAID OFFICIAL MAP;

THENCE ALONG THE SOUTHERLY LINE OF SAID SECTION ALSO BEING THE CENTERLINE OF EUCALYPTUS AVENUE PER SAID OFFICIAL MAP, SOUTH 89°48'05" WEST 488.74 FEET;

THENCE NORTH 00°11'55" WEST 54.00 FEET TO THE INTERSECTION OF A LINE PARALLEL WITH AND 54.00 FEET NORTHERLY OF SAID SOUTHERLY SECTION LINE AND THE **TRUE POINT OF BEGINNING;**

THENCE CONTINUING NORTH 00°11'55" WEST 60.00 FEET TO A LINE PARLLEL WITH AND 114.00 FEET NORTHERLY OF SAID SOUTHERLY SECTION LINE;

THE ABOVE DESCRIBED PARCEL CONTAINS 1,200 SQUARE FEET, MORE OR LESS.

AS SHOWN ON EXHIBIT "D", ATTACHED HERETO AND BY THIS REFERENCE MADE A PART HEREOF.

THIS DESCRIPTION WAS PREPARED BY ME, OR UNDER MY DIRECTION, IN CONFORMANCE WITH THE PROFESSIONAL LAND SURVEYORS' ACT.

KURT R. TROXELL, P.L.S. 7854
DATE PREPARED: 4/30/2025

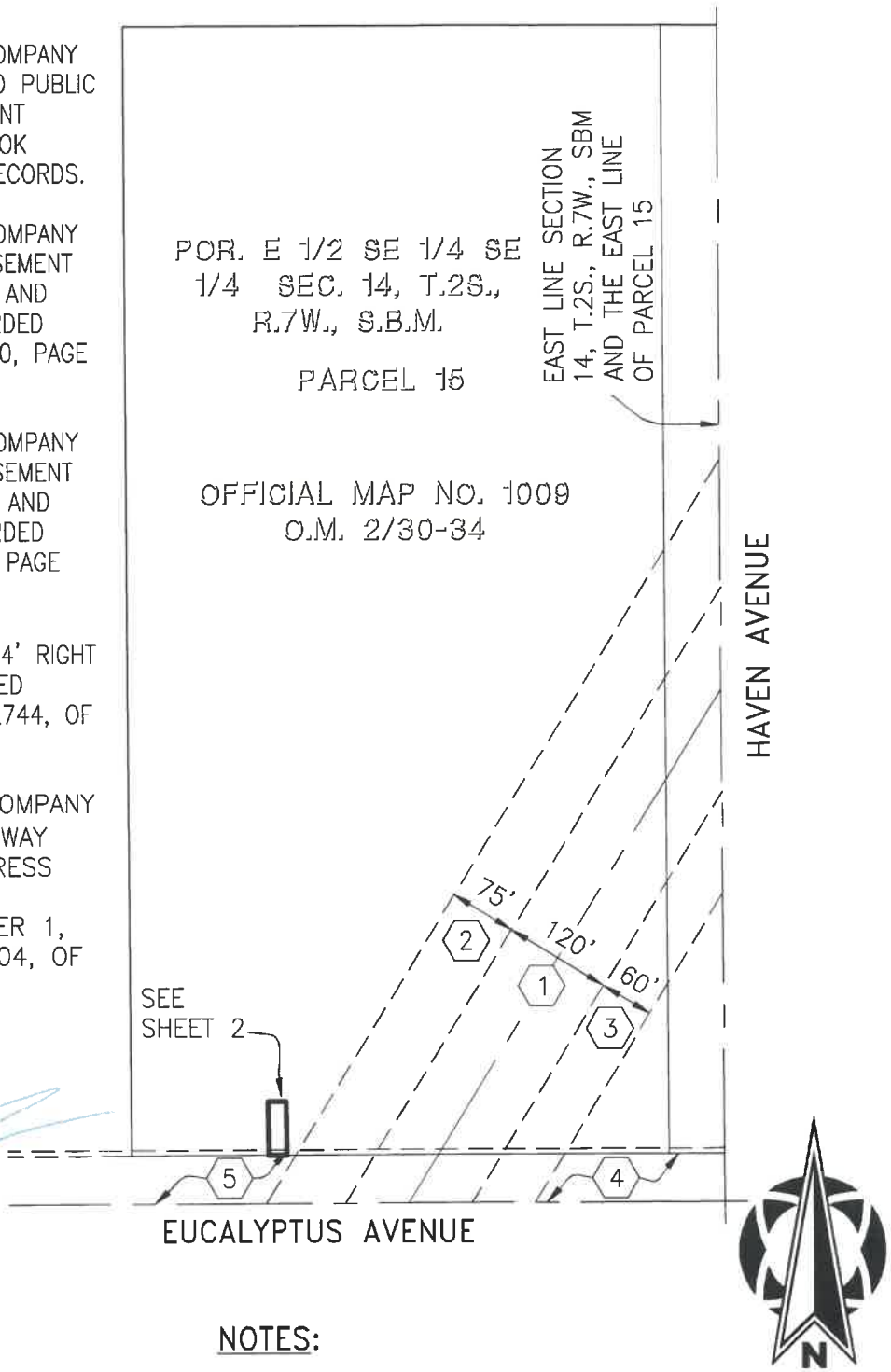
M:\Mapping\1878\008\Legals\Well Site\1878-008 Access.docx

EXHIBIT "D"

EASEMENT NOTES:

1. SOUTHERN CALIFORNIA EDISON COMPANY HOLDER OF A RIGHT OF WAY AND PUBLIC UTILITIES EASEMENT PER DOCUMENT RECORDED MAY 14, 1952, IN BOOK 2949, PAGE 329, OF OFFICIAL RECORDS.
2. SOUTHERN CALIFORNIA EDISON COMPANY HOLDER OF A RIGHT OF WAY EASEMENT FOR STEEL TOWERS, POLE LINES AND CONDUITS PER DOCUMENT RECORDED AUGUST 10, 1953, IN BOOK 3220, PAGE 457, OF OFFICIAL RECORDS.
3. SOUTHERN CALIFORNIA EDISON COMPANY HOLDER OF A RIGHT OF WAY EASEMENT FOR METAL TOWERS, POLE LINES AND CONDUITS PER DOCUMENT RECORDED JUNE 24, 1968, IN BOOK 7047, PAGE 707, OF OFFICIAL RECORDS.
4. CITY OF ONTARIO OWNER OF A 54' RIGHT OF WAY PER DOCUMENT RECORDED FEBRUARY 25, 2014, 2014-0072744, OF OFFICIAL RECORDS.
5. SOUTHERN CALIFORNIA GAS COMPANY HOLDER OF A 60' RIGHT OF WAY FOR GAS PIPELINES AND INGRESS AND EGRESS PURPOSES PER DOCUMENT RECORDED OCTOBER 1, 1969 IN BOOK 7313 PAGE 204, OF OFFICIAL RECORDS.

4/30/2025



LINE LEGEND:

- SUBJECT PROPERTY LINES
- CENTERLINES
- PROPOSED EASEMENT LINES
- EXISTING EASEMENT LINES

NOTES:

SEE SHEET 2 FOR ABBREVIATIONS

200' 0' 100' 200'

SCALE: 1" = 200'

FUSCOE ENGINEERING
15535 Sand Canyon Ave, Suite 100
Irvine, California 92618
949.474.1960 fuscoe.com

EXHIBIT "D"

PLAT TO ACCOMPANY LEGAL DESCRIPTION

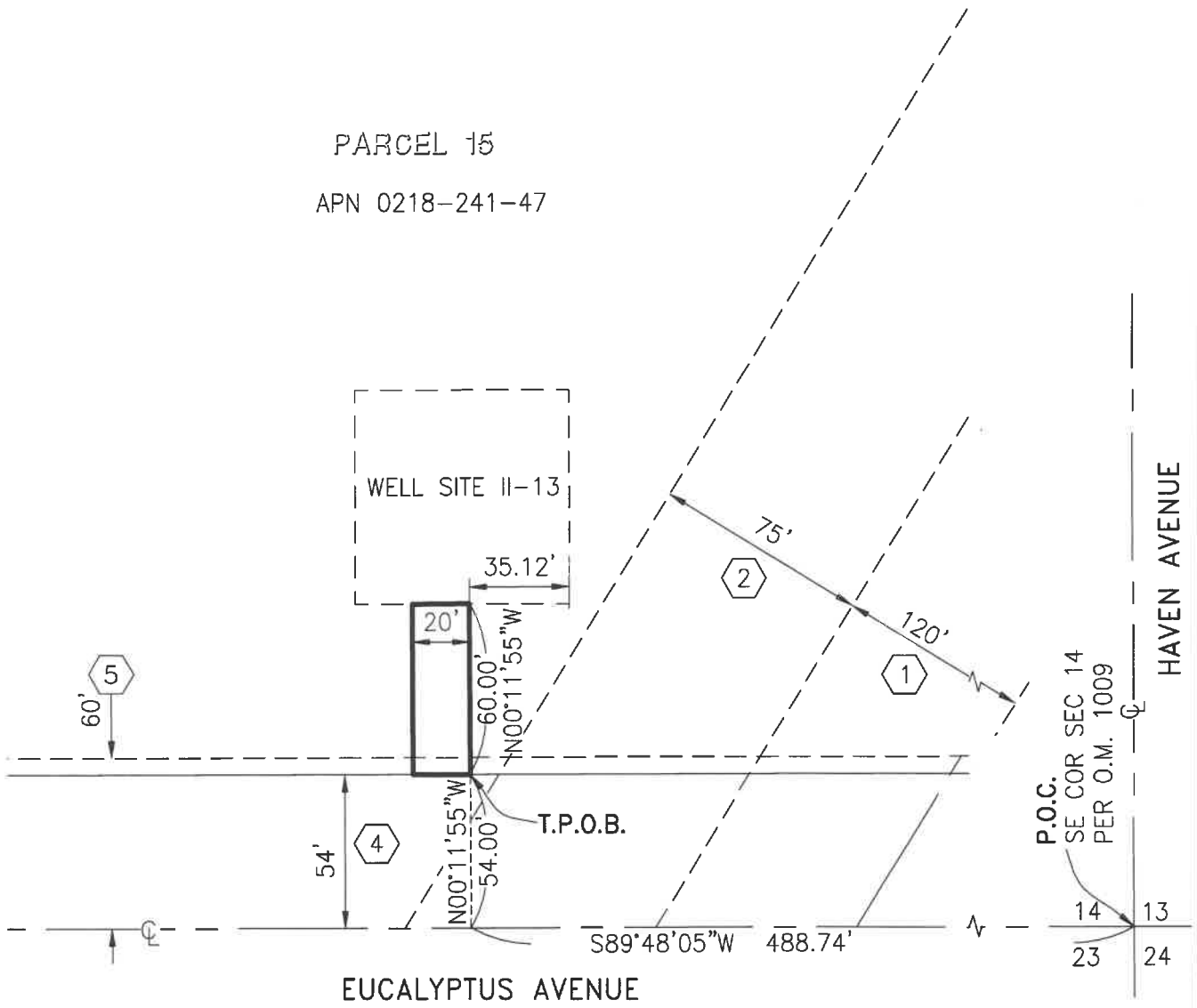
of: ACCESS EASEMENT WELL II-13

DATE: January 15, 2025
FN: 1878-008 Well
DRAWN BY: CS
CHECKED BY: KRT

SHEET 1 OF 2

M:\MAPPING\1878\008\LEGALS\WELL II-13\1878-008 WELL.DWG (04-30-25)

EXHIBIT "D"



NOTES:

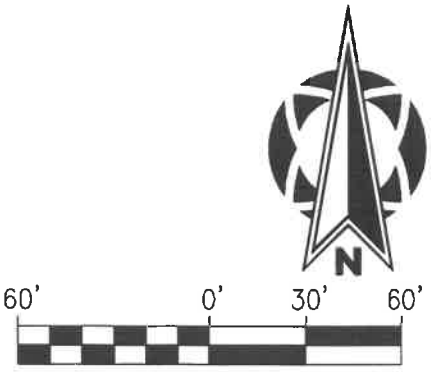
SEE SHEET 1 FOR LEGEND AND EASEMENT NOTES.

AREA:

1,200 SQUARE FEET

ABBREVIATIONS:

CL	CENTERLINE
O.M.	OFFICIAL MAP
POR.	PORTION
SEC.	SECTION
S.B.M.	SAN BERNARDINO MERIDIAN
P.O.C.	POINT OF COMMENCEMENT
T.P.O.B.	TRUE POINT OF BEGINNING



SCALE: 1" = 60'

FUSCOE ENGINEERING
15535 Sand Canyon Ave, Suite 100
Irvine, California 92618
949.474.1960
fuscoe.com

EXHIBIT "D"

PLAT TO ACCOMPANY LEGAL DESCRIPTION

of: ACCESS EASEMENT WELL II-13

DATE: January 15, 2025
FN: 1878-008 Well
DRAWN BY: CS
CHECKED BY: KRT

SHEET 2 OF 2

M:\MAPPING\1878\008\LEGALS\WELL II-13\1878-008 WELL.DWG (04-30-25)

RESOLUTION NO._____

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF ONTARIO, CALIFORNIA, APPROVING THE GRANT OF A TEMPORARY CONSTRUCTION EASEMENT AGREEMENT AND A PERMANENT EXCLUSIVE EASEMENT AND ACCESS AGREEMENT WITH THE CHINO BASIN DESALTER AUTHORITY.

WHEREAS, the City of Ontario ("City") is a member agency of the Chino Basin Desalter Authority ("CDA"), and directly benefits from CDA's operations, which provide approximately 15% of the City's total water supply; and

WHEREAS, the CDA desires to construct a new groundwater facility ("Well") within City owned property to enhance its ability to meet water supply demands for its member agencies and contribute to the City's long-term water reliability goals; and

WHEREAS, to facilitate the construction and permanent operation of the Well and its related infrastructure, the CDA requires a temporary construction easement, permanent exclusive easement for the use of the Well site, and an access easement to provide ingress and egress to the Well site area; and

WHEREAS, the City desires to grant CDA a temporary construction easement, permanent exclusive easement for the use of the Well site, and an access easement to provide ingress and egress to the Well site to assist CDA in facilitating the construction and operation of the Well; and

WHEREAS, the legal descriptions and depictions for the permanent exclusive easement, access easement, and temporary construction easement are contained within the exhibits attached to their respective agreements; and

WHEREAS, the grant of these easements are necessary and in the public interest.

NOW, THEREFORE, BE IT RESOLVED by the City Council of the City of Ontario, California, as follows:

SECTION 1. The above recitals are true, correct and by this reference incorporated herein.

SECTION 2. On June 5, 2025, the CDA Board adopted a Finding of Consistency with the Optimum Basin Management Program Update Subsequent Environmental Impact Report (OBMPU SEIR). The Notice of Determination was filed on June 9, 2025 under State clearinghouse number SCH#2020020183.

SECTION 3. The City Council of the City of Ontario ("City Council") approves the permanent exclusive easement and access easement agreement and the temporary construction easement agreement between the City and the CDA. The City Manager, or designee, is hereby authorized and directed to execute both agreements and any related documents on behalf of the City that is necessary to effectuate this Resolution

SECTION 4. This Resolution shall become effective immediately upon its adoption.

SECTION 5. If any provision of this Resolution or the application of any such provision to any person or circumstance is held invalid, such invalidity shall not affect other provisions or applications of this Resolution that can be given effect without the invalid provision or application, and to this end the provisions of this Resolution are severable. The City Council declares that it would have adopted this Resolution irrespective of the invalidity of any particular portion of this Resolution.

SECTION 6. The documents and materials that constitute the record of proceedings on which this Resolution is based are located at the City Clerk's office located at 303 E B Street, Ontario, CA 91764. The custodian of records is the City Clerk.

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

PASSED, APPROVED, AND ADOPTED this 4th day of November 2025.

_____
PAUL S. LEON, MAYOR

ATTEST:

_____
SHEILA MAUTZ, CITY CLERK

APPROVED AS TO FORM:

_____
BEST BEST & KRIEGER LLP
CITY ATTORNEY

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

I, SHEILA MAUTZ, City Clerk of the City of Ontario, DO HEREBY CERTIFY that foregoing Resolution No. 2025- was duly passed and adopted by the City Council of the City of Ontario at their regular meeting held November 4, 2025 by the following roll call vote, to wit:

AYES: COUNCIL MEMBERS:

NOES: COUNCIL MEMBERS:

ABSENT: COUNCIL MEMBERS:

_____
SHEILA MAUTZ, CITY CLERK

(SEAL)

The foregoing is the original of Resolution No. 2025- duly passed and adopted by the Ontario City Council at their regular meeting held November 4, 2025.

_____
SHEILA MAUTZ, CITY CLERK

(SEAL)

CITY OF ONTARIO *Agenda Report* **November 4, 2025**	**SECTION:** **CONSENT CALENDAR**
Department: Planning Prepared By: Thomas Grahn Staff Member Presenting: Rudy Zeledon, Executive Director Community Development Approved By:	Submitted To: Council/OHA Approved: _____ Continued To: _____ Denied: _____ Item No: 11

SUBJECT: **A DEVELOPMENT CODE AMENDMENT FILE NO. PDCA25-002 REVISING AND CLARIFYING CERTAIN PROVISIONS OF THE CITY OF ONTARIO DEVELOPMENT CODE**

RECOMMENDATION: That the City Council adopt an Ordinance approving File No. PDCA25-002, a Development Code Amendment revising and clarifying certain provisions of Chapters 2.0 (Administration and Procedures), 4.0 (Permits, Actions, and Decisions), and 6.0 (Development and Subdivision Regulations) of the City of Ontario Development Code.

THE FOLLOWING COUNCIL GOALS ARE BEING ACHIEVED:
Invest in the Growth and Evolution of the City's Economy
Operate in a Businesslike Manner
Pursue City's Goals and Objectives by Working with Other Governmental Agencies
Focus Resources in Ontario's Commercial and Residential Neighborhoods

FISCAL IMPACT: There is no direct fiscal impact associated with this action.

BACKGROUND & ANALYSIS: On October 21, 2025, the City Council introduced and waived further reading of the Development Code Amendment, File No. PDCA 25-002. The Development Code (Ontario Municipal Code Title 9) provides the legislative framework for the implementation of The Ontario Plan, which states long-term principles, goals, and policies for guiding the growth and development of the City in a manner that achieves Ontario's vision, and promotes and protects the public health, safety, comfort, convenience, prosperity, and welfare of its citizens. Staff has initiated certain clarifications and revisions to the City of Ontario Development Code that are necessary to adjust and clarify various provisions of the Development Code. The proposed Development Code Amendment is included as Attachment A (Proposed Development Code Amendment), and is comprised of certain clarifications and revisions generally described as follows:

- Revise Division 2.02, Table 2.02-1: Review Matrix for Fair Housing and Reasonable Accommodations. The proposed revision establishes the Planning Director as the approval authority for requests for accommodations under the Religious Land Use and Institutionalized Persons Act of 2000 (RLUIPA); however, the Zoning Administrator remains the approval authority for requests for fair housing accommodations.

- Revise Division 4.03 – Ministerial (Administrative) Permits and Decisions to revise Section 4.03.060: Fair Housing and Reasonable Accommodations to include RLUIPA. Under RLUIPA, deviations or exceptions to the Development Code may be allowed if applying a regulation would substantially burden someone's religious exercise, such as that of a person, religious assembly, or institution, unless the imposition of the burden is the least restrictive way to furthering a compelling governmental interest.
- Amend Division 6.01 – District Standards and Guidelines, Table 6.01-8: Commercial Zoning District Development Standards to include table Note No. 6 identifying that development standards applicable to projects within the CCS (Convention Center Support Commercial) zoning district may be subject to the Minor Adjustments/Alterations process under Section 4.02.020(C) of this Development Code.

The proposed provisions of the Development Code Amendment are shown in Attachment A (Development Code Amendment) of the appended Ordinance. Any provisions proposed for deletion are shown in red strikeout text (~~Abcdefg~~) and all additions are shown in blue underlined text (Abcdefg).

In considering the Development Code Amendment at their meeting on September 23, 2025, the Planning Commission conducted a public hearing and voted 6-0 to recommend the City Council consider and approve File No. PDCA25-002, pursuant to the facts and reasons contained in the staff report and attached Ordinance.

ENVIRONMENTAL REVIEW: The proposed Development Code Amendment is exempt from the requirements of the California Environmental Quality Act (CEQA) and the guidelines promulgated thereunder, pursuant to Section 15061(b)(3) of the CEQA Guidelines, in that the activity is covered by the commonsense exemption (general rule) that CEQA applies only to projects that have the potential for causing a significant effect on the environment. Where it can be seen with certainty that there is no possibility that the activity in question may have a significant effect on the environment, the activity is not subject to CEQA.

ORDINANCE NO. _____

AN ORDINANCE OF THE CITY COUNCIL OF THE CITY OF ONTARIO, CALIFORNIA, APPROVING FILE NO. PDCA25-002, A DEVELOPMENT CODE AMENDMENT REVISING AND CLARIFYING CERTAIN PROVISIONS OF CHAPTERS 2.0 (ADMINISTRATION AND PROCEDURES), 4.0 (PERMITS, ACTIONS, AND DECISIONS), AND 6.0 (DEVELOPMENT AND SUBDIVISION REGULATIONS) OF THE CITY OF ONTARIO DEVELOPMENT CODE, AND MAKING FINDINGS IN SUPPORT THEREOF.

WHEREAS, THE CITY OF ONTARIO (Applicant) has initiated an Application for the approval of a Development Code Amendment, File No. PDCA25-002 as described title of this Ordinance (hereinafter referred to as Application or Project); and

WHEREAS, the City of Ontario Development Code (Ontario Municipal Code Title 9) provides the legislative framework for the implementation of The Ontario Plan, which establishes long term principals, goals, and policies for guiding the growth and development of the City in a manner that achieves Ontario's vision, and promotes and protects the public health, safety, comfort, convenience, prosperity, and welfare of its citizens; and

WHEREAS, the Development Code Amendment is of citywide impact, affecting approximately 50 square miles (31,789 acres) of land, which is generally bordered by Benson Avenue and Euclid Avenue on the west; Interstate 10 Freeway, Eighth Street, and Fourth Street on the north; Etiwanda Avenue and Hamner Avenue on the east; and Merrill Avenue and the San Bernardino County/Riverside County boundary on the south; and

WHEREAS, pursuant to the police powers delegated to it by the California Constitution, the City has the authority to enact laws which promote the public health, safety, and general welfare of its citizens; and

WHEREAS, the Religious Land Use and Institutionalized Persons Act of 2000 (RLUIPA) protects religious exercise by prohibiting land use regulations that substantially burden, discriminate against, or unreasonably limit religious assemblies or institutions, except where a compelling governmental interest is advanced through the least restrictive means; and

WHEREAS, the Ontario Development Code implements federal and state planning, zoning, subdivision, and environmental laws to guide orderly development of the City in a manner that promotes and protects the public health, safety, comfort, convenience, prosperity, and welfare of its residents; and

WHEREAS, Section 4.03.060 of the Ontario Development Code establishes procedures for reasonable accommodation to ensure compliance with fair housing laws and prevent discrimination on the basis of protected characteristics; and

WHEREAS, to strengthen compliance with state and federal law and provide clear guidance for the review and approval of applications, the City Council desires to amend its Development Code to expressly reference RLUIPA within its reasonable accommodation framework; and

WHEREAS, certain clarifications and revisions to the City of Ontario Development Code are proposed, generally described as follows:

(1) Revise Chapter 2.0: Administration and Procedures, Division 2.02, Table 2.02-1: Review Matrix, C. Ministerial (Administrative) Permits and Decisions for Fair Housing and Reasonable Accommodations. No. 5. Fair Housing and Reasonable Accommodations (Fair Housing Exemption) pertains to requests for Fair Housing requests reviewed by the Zoning Administrator, and the new No. 6. Fair Housing and Reasonable Accommodations (RLUIPA) pertains to requests reviewed by the Planning Director.

(2) Revise Chapter 4.0: Permits, Actions, and Decisions, Division 4.03 – Ministerial (Administrative) Permits and Decisions to revise Section 4.03.060: Fair Housing and Reasonable Accommodations to include RLUIPA.

(3) Revise Chapter 6.0: Development and Subdivision Regulations, Division 6.01 – District Standards and Guidelines, Table 6.01-8: Commercial Zoning District Development Standards to include table Note No. 6 that development standards applicable to projects within the CCS (Convention Center Support Commercial) zoning district may be subject to the Minor Adjustments/Alterations process under Section 4.02.020(C) of this Development Code; and

WHEREAS, pursuant to the provisions of Government Code Title 1, Division 1, Chapter 3 (commencing with Government Code Section 65100) Ontario Development Code Table 2.02-1 (Review Matrix) assigns the City Council the responsibility and authority to review and act on the Development Code Amendment following review and recommendation on the matter by the Planning Commission; and

WHEREAS, City of Ontario Development Code Division 2.03 (Public Hearings) prescribes the manner in which public notification shall be provided and hearing procedures to be followed, and all such notifications and procedures have been completed; and

WHEREAS, on September 23, 2025, the Planning Commission of the City of Ontario conducted a hearing to consider the Development Code Amendment and concluded said hearing on that date, voting to issue Resolution No. PC25-026, recommending the City Council approve the Development Code Amendment; and

WHEREAS, on October 21, 2025 the City Council of the City of Ontario conducted a public hearing on the Development Code Amendment and concluded said hearing on that date; and

WHEREAS, all legal prerequisites to the adoption of this Ordinance have occurred.

NOW, THEREFORE, IT IS HEREBY FOUND, DETERMINED, AND RESOLVED by the City Council of the City of Ontario, as follows:

SECTION 1: ***Environmental Determination and Findings.*** As the decision-making body for the Development Code Amendment, the City Council has reviewed and considered the information contained in the administrative record for the Development Code Amendment. Based upon the facts and information contained in the administrative record, including all written and oral evidence presented to the City Council, the City Council finds as follows:

(1) The administrative record has been completed in compliance with CEQA, the State CEQA Guidelines, and the City of Ontario Local CEQA Guidelines; and

(2) The Development Code Amendment is exempt from the requirements of the California Environmental Quality Act (CEQA) and the guidelines promulgated thereunder, pursuant to Section 15061(b)(3) of the CEQA Guidelines, in that the activity is covered by the "common sense exemption" (also known as the "general rule exemption") that CEQA applies only to projects that have the potential for causing a significant effect on the environment. Where it can be seen with certainty that there is no possibility that the activity in question may have a significant effect on the environment, the activity is not subject to CEQA; and

(3) The determination that the Development Code Amendment is not subject to CEQA reflects the independent judgment of the City Council.

SECTION 2: ***Housing Element Compliance.*** Pursuant to the requirements of California Government Code Chapter 3, Article 10.6, commencing with Section 65580, as the decision-making body for the Project, the City Council finds that based on the facts and information contained in the Application and supporting documentation, the project is consistent with the Housing Element of the Policy Plan (General Plan) component of The Ontario Plan.

SECTION 3: ***Airport Land Use Compatibility Plan (ALUCP) Compliance.*** The California State Aeronautics Act (Public Utilities Code Section 21670, et seq.) requires that an Airport Land Use Compatibility Plan be prepared for all public use airports in the State; and requires that local land use plans and individual development proposals must be consistent with the policies set forth in the adopted Airport Land Use Compatibility Plan.

(1) On April 19, 2011, the City Council of the City of Ontario approved and adopted the Ontario International Airport Land use Compatibility Plan, establishing the Airport Influence Area for Ontario International Airport, which encompasses lands within parts of San Bernardino, Riverside, and Los Angeles Counties, and limits future land uses and development within the Airport Influence Area, as they relate to noise, safety, airspace protection, and overflight impacts of current and future airport activity. As the decision-making for the Project, the City Council has reviewed and considered the facts and information contained in the Application and supporting documentation against the ONT ALUCP compatibility factors, including [1] Safety Criteria (ONT ALUCP Table 2-2) and Safety Zones (ONT ALUCP Map 2-2), [2] Noise Criteria (ONT ALUCP Table 2-3)

and Noise Impact Zones (ONT ALUCP Map 2-3), [3] Airspace protection Zones (ONT ALUCP Map 2-4), and [4] Overflight Notification Zones (ONT ALUCP Map 2-5). As a result, the City Council, therefore, finds and determines that the Project is consistent with the policies and criteria set forth within the ONT ALUCP; and

(2) On August 2, 2022, the City Council of the City of Ontario approved and adopted a Development Code Amendment to establish the Chino Airport (CNO) Overlay Zoning District (OZD) and Reference I, Chino Airport Land Use Compatibility Plan (CNO ALUCP). The CNO OZD and CNO ALUCP established the Airport Influence Area for Chino Airport, solely within the City of Ontario, and limits future land uses and development within the Airport Influence Area, as they relate to safety, airspace protection, and overflight impacts of current and future airport activity. The CNO ALUCP is consistent with policies and criteria set forth within the Caltrans 2011 California Airport Land Use Planning Handbook. The proposed Project is located within the Airport Influence Area of Chino Airport and was evaluated and found to be consistent with the California Airport Land Use Planning Handbook and the CNO ALUCP. As the decision-making body for the Project, the City Council has reviewed and considered the facts and information contained in the Application and supporting documentation against the CNO ALUCP compatibility factors, including Safety, Airspace Protection, Overflight. As a result, the City Council, therefore, finds and determines that the Project is consistent with the policies and criteria set forth within the California Airport Land Use Planning Handbook and the CNO ALUCP.

SECTION 4: ***Concluding Facts and Reasons.*** Based upon the substantial evidence presented to the City Council during the above-referenced hearing, and upon the specific findings set forth in Sections 1 through 3, above, the City Council hereby concludes as follows:

(1) The proposed Development Code Amendment is consistent with the goals, policies, plans and exhibits of the Vision, Policy Plan (General Plan), and City Council Goals components of The Ontario Plan (TOP). The Development Code Amendment will: (a) serve to promote a community that is consistently seeking—and thoughtfully applying—new ways of doing things better, as encouraged by TOP's Vision; (b) provides for a variety of land uses and building types in our land use planning efforts that result in a complete community where residents at all stages of life, have a wide spectrum of choices of where they can live and recreate, as promoted by Land Use Element Policy LU-1.6, Complete Community; and (c) promotes the City Council Goals through the establishment of Development Code provisions that encourages investment in the growth and evolution of the City's economy and focuses City resources in commercial and residential neighborhoods.

(2) The proposed Development Code Amendment would not be detrimental to the public interest, health, safety, convenience, or general welfare of the City. The Development Code Amendment incorporates safeguards intended to ensure that the purposes of the Development Code are preserved; the project will not be contrary to or damage the public health, safety, convenience, or general welfare; the project will not result in any significant environmental impacts; and the project will be in full conformity with the Vision, City Council Priorities, and Policy Plan components of The Ontario Plan.

SECTION 5: ***City Council Action.*** Based upon the findings and conclusions set forth in Sections 1 through 4, above, the City Council hereby APPROVES the herein described changes that comprise the Development Code Amendment, and which are attached hereto as "Attachment A," and incorporated herein by this reference.

SECTION 6: ***Custodian of Records.*** The documents and materials that constitute the record of proceedings on which these findings have been based are located at the City of Ontario City Hall, 303 East B Street, Ontario, California 91764. The custodian for these records is the City Clerk of the City of Ontario.

SECTION 7. ***Severability.*** If any section, sentence, clause or phrase of this Ordinance or the application thereof to any entity, person or circumstance is held for any reason to be invalid or unconstitutional, such invalidity or unconstitutionality shall not affect other provisions or applications of this Ordinance which can be given effect without the invalid provision or application, and to this end the provisions of this Ordinance are severable. The People of the City of Ontario hereby declare that they would have adopted this Ordinance and each section, sentence, clause, or phrase thereof, irrespective of the fact that any one or more section, subsections, sentences, clauses, or phrases be declared invalid or unconstitutional.

SECTION 8. ***Effective Date.*** This Ordinance shall become effective 30 days following its adoption.

SECTION 9. ***Publication and Posting.*** The Mayor shall sign this Ordinance and the City Clerk shall certify as to the adoption and shall cause a summary thereof to be published at least once, in a newspaper of general circulation in the City of Ontario, California within 15 days following adoption. The City Clerk shall post a certified copy of this Ordinance, including the vote for and against the same, in the Office of the City Clerk in accordance with Government Code Section 36933.

PASSED, APPROVED, AND ADOPTED this 4th day of November 2025.

_____
PAUL S. LEON, MAYOR

ATTEST:

_____
SHEILA MAUTZ, CITY CLERK

APPROVED AS TO FORM:

_____
BEST BEST & KRIEGER LLP
CITY ATTORNEY

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

I, SHELIA MAUTZ, City Clerk of the City of Ontario, DO HEREBY CERTIFY that foregoing Ordinance No. was duly introduced at a regular meeting of the City Council of the City of Ontario held on October 21, 2025, and adopted at the regular meeting held on November 4, 2025, by the following roll call vote, to wit:

AYES:

NOES:

ABSENT:

SHELIA MAUTZ, CITY CLERK

(SEAL)

I hereby certify that the following is the original of Ordinance No. duly passed and adopted by the Ontario City Council at their regular meeting held on November 4, 2025, and that Summaries of the Ordinance were published on October 28, 2025, and November 11, 2025 in the Inland Valley Daily Bulletin newspaper.

SHELIA MAUTZ, CITY CLERK

(SEAL)

ATTACHMENT A:

File No. PDCA25-002
2025 Development Code Amendment No. 2

(Document to follow this page)

Chapter 2.0:
Administration and Procedures

Division 2.01—Planning Agency
Division 2.02—Application Filing and Processing
Division 2.03—Public Hearings
Division 2.04—Appeals
Division 2.05—City Initiated Modification or Revocation
Division 2.06—Performance Guarantees

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Division 2.01—Planning Agency

Sections:

2.01.000: Purpose
2.01.005: Applicability
2.01.010: City Council
2.01.015: Planning Commission
2.01.020: Historic Preservation Commission
2.01.025: Historic Preservation Subcommittee
2.01.030: Development Advisory Board
2.01.035: Zoning Administrator

2.01.000: Purpose

GC Section 65100 provides that each city and county establish a planning agency with the powers necessary to carry out the planning and zoning functions of the jurisdiction. The purpose of this Division is to identify and establish bodies, commissions, committees, positions, boards, and departments responsible for carrying out the powers and duties of the planning agency.

2.01.005: Applicability

The functions of the planning agency are hereby assigned to the following bodies, commissions, committees, positions, boards, and departments:

A. City Council;

B. Planning Commission;

C. Historic Preservation Commission;

D. Historic Preservation Subcommittee;

E. Development Advisory Board;

F. Zoning Administrator;

G. Planning Department.

2.01.010: City Council

A. **Established.** The City Council's establishment, membership, and operation are recognized by OMC Title 2 (Administration), Chapter 1 (City Council), commencing with Article 1, Section 2-1.101.

B. **Powers and Duties.** The City Council shall have the authority to hear and decide on those application types established by Table 2.02-1 (Review Matrix) of this Development Code and shall

have review and final authority on all appeals of Planning Commission or Historic Preservation Commission actions.

2.01.015: Planning Commission

A. Established. The Planning Commission's establishment, membership and operation are recognized by OMC Title 2 (Administration), Chapter 2 (Commissions and Boards), Article 3 (Planning Commission), commencing with OMC Section 2-2.301.

B. Powers and Duties. The Planning Commission shall have the authority to hear, recommend, and decide on those application types identified in Table 2.02-1 (Review Matrix) of this Development Code. In addition, the Planning Commission shall have the authority to act upon an appeal of any order, requirement, permit, decision or determination concerning zoning, land use or development, made by an administrative or appointed official or body, such as the Planning Director, Zoning Administrator, or Development Advisory Board, pursuant to the provisions of this Development Code.

C. Meetings. The Planning Commission shall adopt rules as necessary to the conduct of its affairs and in keeping with the provisions of this Development Code. Meetings shall be held on a regular basis and open to the public. The Planning Commission shall keep minutes of its proceedings, showing the vote of each member upon each question, or if absent or failing to vote, and shall keep records of its own examinations and other official actions, which shall be filed with the Planning Department.

2.01.020: Historic Preservation Commission

A. Established. Pursuant to the authority granted to municipalities by State Planning and Zoning Law, as established by GC Title 1, Division 1, Chapter 3 (commencing with GC Section 65100), there is hereby created and established in the City of Ontario, an Historic Preservation Commission.

B. Membership. The Historic Preservation Commission shall consist of the 7 standing members of the Planning Commission.

C. Powers and Duties. The Historic Preservation Commission shall have the following powers and duties:

1. Establish criteria for and conduct or cause to be conducted a comprehensive survey in conformance with state survey standards and guidelines of Historical Resources within the boundaries of the City, and publicize and periodically update the survey results;

2. The authority to hear make recommendations and/or decide on those application types established by Table 2.02-1 (Review Matrix) of this Development Code;

3. Authority to act upon an appeal of any order, requirement, permit, decisions, or determination concerning Historic Resources under this Development Code, made by the Historic Preservation Subcommittee;

4. Maintain a local register of Designated Historic Landmarks and Districts consistent with the National Register of Historic Places criteria, including all information required for each designation; and

5. Undertake any other action or activity necessary or appropriate to implement its powers or duties to fulfill the objectives of the Historic Preservation program.

D. Meetings. The Historic Preservation Commission shall adopt rules and procedures governing meeting business, conduct, and actions within the Historic Preservation Commission's jurisdiction and setting timeframes for such meetings.

2.01.025: Historic Preservation Subcommittee

A. Established. In accordance with the authority granted to municipalities by State Planning and Zoning Law, pursuant to GC Division 1, Chapter 3 (commencing with GC Section 65100), there is hereby created and established in the City of Ontario, an Historic Preservation Subcommittee.

B. Membership. The Historic Preservation Subcommittee shall consist of 3 members of the Historic Preservation Commission, to be appointed pursuant to the Historic Preservation Commission rules and procedures.

C. Powers and Duties. The Historic Preservation Subcommittee shall have the following powers and duties:

1. The authority to hear make recommendations and/or decide on those application types established by Table 2.02-1 (Review Matrix) of this Development Code;

2. The authority to review historic preservation work program, assist staff in any survey or historic research being conducted, and review of the City's list of Historical Resources; and

3. The authority to act upon appeals of administrative permits, decisions and actions concerning Historical Resources under this Development Code, made by any City Department.

D. Meetings. The Historic Preservation Commission shall adopt rules and procedures governing meeting business, conduct, and actions within the Historic Preservation Subcommittee's jurisdiction and setting timeframes for such meetings.

2.01.030: Development Advisory Board

A. Established. In accordance with the authority granted to municipalities by State Planning and Zoning Law, pursuant to GC Division 1, Chapter 3 (commencing with GC Section 65100), there is hereby created and established in the City of Ontario, a Development Advisory Board.

B. Membership. The Development Advisory Board shall include those representatives of certain City departments and/or agencies as established by resolution of the City Council.

C. Powers and Duties. The Development Advisory Board shall have the authority to hear, recommend and decide on those application types identified in Table 2.02-1 (Review Matrix) of this Development Code.

D. **Meetings.** The Development Advisory Board shall adopt rules and regulations to govern the procedures at meetings within the Board's jurisdiction and to set a time for such meetings.

2.01.035: Zoning Administrator

A. **Established.** In accordance with the authority granted to municipalities by State Planning and Zoning Law, pursuant to GC Division 1, Chapter 3 (commencing with GC Section 65100), there is hereby created and established in the City, the position of Zoning Administrator.

B. **Membership.** The Zoning Administrator position shall be filled by the Planning Director or the Zoning Administrator's designee, who shall fill the position of Deputy Zoning Administrator.

C. **Powers and Duties.** The Zoning Administrator shall have the power and duty to review and make decisions on those application types identified in Table 2.02-1 (Review Matrix) of this Development Code.

D. **Meetings.** The Zoning Administrator shall adopt rules and procedures governing meeting business, conduct, and actions within the Zoning Administrator's jurisdiction and setting timeframes for such meetings.

Division 2.02—Application Filing and Processing

Sections:

2.02.000: Purpose
2.02.005: Applicability
2.02.010: Applications and Fees
2.02.015: Application Processing Procedures
2.02.020: Environmental Review
2.02.025: Time Limits and Extensions
2.02.030: Failure by Applicant to Complete Application Processing
2.02.035: Limitations on Application Refiling
2.02.040: Indemnification

2.02.000: Purpose

The purpose of this Division is to establish procedures and requirements for the preparation, filing and processing of applications for permits, amendments, and approvals stipulated by this Development Code.

2.02.005: Applicability

Table 2.02-1 (Review Matrix), below, establishes the recommending, approving, and appeal authorities for all permits, amendments, and approvals stipulated by this Development Code. The symbols used within the Table have the following meanings:

R = Advisory (Recommending) Authority
X = Approving Authority
A = Appeal Authority

Table 2.02-1: Review Matrix

Applications, Actions, Decisions and Processes	*Reviewing Authorities [4]*										
	Planning Director	*City Engineer*	*Fire Marshal*	*Building Official*	*Zoning Administrator [2]*	*Development Advisory Board*	*Historic Preservation Subcommittee [2] [11]*	*Historic Preservation Commission [11]*	*Planning Commission [11]*	*City Council [11]*	*Ontario International Airport Authority*
A. LEGISLATIVE ACTIONS											
1. Airport Land Use Compatibility Plan and Amendments **[1]** (Ref: ODC Section 4.01.010)									**R**	**X**	
2. Development Agreements **[1]** (Ref: ODC Section 4.01.015)									**R**	**X**	

Table 2.02-1: Review Matrix

Applications, Actions, Decisions and Processes	Reviewing Authorities [4]										
	Planning Director	City Engineer	Fire Marshal	Building Official	Zoning Administrator [2]	Development Advisory Board	Historic Preservation Subcommittee [2] [11]	Historic Preservation Commission [11]	Planning Commission [11]	City Council [11]	Ontario International Airport Authority
3. Development Code Amendments **[1]** (Ref: ODC Section 4.01.020)									R	X	
4. Amendment to the Policy Plan (General Plan) Component of The Ontario Plan **[1]** (Ref: ODC Section 4.01.025)									R	X	
5. Planned Unit Developments and Amendments **[1]** (Ref: ODC Section 4.01.030)									R	X	
6. Specific Plans and Amendments **[1][12]** (Ref: ODC Section 4.01.035)									R	X	
7. Williamson Act Contract Cancellations **[1]** (Ref: GC Section 51200, et seq.)									R	X	
8. Zone Changes **[1]** (Ref: ODC Section 4.01.040)									R	X	
B. DISCRETIONARY PERMITS AND ACTIONS											
1. Billboard Relocation Agreements **[1]** (Ref: ODC Section 4.02.010)									R	X	
2. Conditional Use Permits (Ref: ODC Section 4.02.015)											
a. Hotels, Motels and Residence Inns **[1]**									R	X	
b. Use established in conjunction with a Development Plan **[1]**						R			X	A	
c. Use established within an existing structure **[1]**					X				A	A	
d. Modification or revocation per ODC Division 2.05 (City Initiated Modification or Revocation) **[1]**									X	A	
e. Revocation due to abandonment of use per ODC Division 2.05 (City Initiated Modification or Revocation) **[1]**					X				A	A	
3. Density Bonus and Other Incentives **[1]** (Ref: ODC Section 6.01.010.H)									R	X	
4. Development Plans, except within the ONT zoning district (Ref: ODC Section 4.02.025)											
a. Residential developments totaling 5 or more dwelling units or the development of 3 or more dwelling units on a single lot or parcel						R			X	A	

Table 2.02-1: Review Matrix

Applications, Actions, Decisions and Processes	Reviewing Authorities [4]										
	Planning Director	City Engineer	Fire Marshal	Building Official	Zoning Administrator [2]	Development Advisory Board	Historic Preservation Subcommittee [2] [11]	Historic Preservation Commission [11]	Planning Commission [11]	City Council [11]	Ontario International Airport Authority
b. Commercial developments, and developments in the CIV, OS-R, OS-C and UC zoning districts, greater than 500 SF in area						X			A	A	
c. Industrial developments equal to or less than 0.45 FAR						X			A	A	
d. Industrial developments exceeding 0.45 FAR						R			X	A	
e. Wireless telecommunications facilities pursuant to Section 5.03.415 (Wireless Telecommunications Facilities) of this Development Code											
(1) Tier 2 facilities						X			A	A	
(2) Tier 3 facilities **[2]**						X			A	A	
f. All others						X			A	A	
5. Extensions of Legal Nonconforming Status **[1]** (Ref: ODC Section 4.02.030)					X				A	A	
6. Historic Preservation											
a. Certificates of Appropriateness (Ref: ODC Section 4.02.050)											
(1) Designated Historic Landmarks and Contributors, and Architectural Conservation Areas; and Demolition of an Historic Resource **[1]**							R	X		A	
(2) Deferral of Replacement Structure **[1]**							R	X		A	
(3) Eligible Historic Resources **[1]**							X	A		A	
(4) Modification or revocation per ODC Division 2.05 (City Initiated Modification or Revocation) **[1]**							R	X		A	
(5) Waivers for Minor Improvements	X						A[6]	A[6]			
b. Certificates of Economic Hardship **[1]** (Ref: ODC Section 4.02.055)							R	X		A	
c. Certificates of Economic Hardship—Modification or revocation per ODC Division 2.05 (City Initiated Modification or Revocation) **[1]**							R	X		A	
d. Conservation Plans (Ref: ODC Section 4.02.060)							X	A		A	

Table 2.02-1: Review Matrix

Applications, Actions, Decisions and Processes	Reviewing Authorities [4]										
	Planning Director	City Engineer	Fire Marshal	Building Official	Zoning Administrator [2]	Development Advisory Board	Historic Preservation Subcommittee [2] [11]	Historic Preservation Commission [11]	Planning Commission [11]	City Council [11]	Ontario International Airport Authority
e. Historic Resource Tiering (Ref: ODC Section 4.02.040), including Rescinding or Amending Status (Ref: ODC Section 4.02.045)							X	A		A	
f. Local Historic Landmark and Local District Designations, and Architectural Conservation Areas (Ref: ODC Section 4.02.040), including Rescinding or Amending Status (Ref: ODC Section 4.02.045)							R	R		X	
g. Mills Act Contracts (Ref: ODC Section 4.02.065)							R	R		X	
h. Mills Act Cancellations **[1]** (Ref: ODC Section 4.02.065)							R	R		X	
i. Addition/Removal of Resources to/from the Ontario Register (Ref: ODC Section 4.02.045)											
(1) At the request of the property owner, or upon City initiation if the most recently prepared Historic Resource Survey evaluating the resource is more than 5 years old.							X	A		A	
(2) Loss of all historic and/or cultural significance due to a catastrophe causing a loss of integrity, or due to extensive legally performed alterations performed after the property was initially surveyed.	X							A		A	
7. Master Plans and Amendments **[1]** (Ref: ODC Section 4.02.070)									R	X	
8. Minor Adjustments/Alterations (Ref: ODC Section 4.02.020.C)					X				A	A	
9. Nonconforming Structure Reconstruction **[1]** (Ref: ODC Section 3.01.020)									X	A	
10. Parking Reduction (Ref: ODC Section 6.03.025)									X	A	
11. Sign Programs (Ref: ODC Section 4.02.075)	X								A	A	
12. Specific Plan Minor Adjustments/Alterations **[12]** (Ref: ODC Section 4.02.080)	X								A	A	
13. Stays of Permit Approval Time Limit (Ref: ODC Section 2.02.025.A.8)					X[5]	X[5]	X[5]	X[5]	X[5]	X[5]	
14. Subdivisions											

Table 2.02-1: Review Matrix

Applications, Actions, Decisions and Processes	*Reviewing Authorities [4]*										
	Planning Director	*City Engineer*	*Fire Marshal*	*Building Official*	*Zoning Administrator [2]*	*Development Advisory Board*	*Historic Preservation Subcommittee [2] [11]*	*Historic Preservation Commission [11]*	*Planning Commission [11]*	*City Council [11]*	*Ontario International Airport Authority*
a. Reversions to Acreage **[1]** (Ref: ODC Section 4.02.090)						**R**			**X**	**A**	
b. Tentative Tract and Parcel Maps, and Vesting Maps **[1]** (Ref: ODC Section 4.02.095)						**R**			**X**	**A**	
c. Tentative Tract and Parcel Map Time Extensions (Ref: ODC Section 2.02.025.A.3 & 4)						**R**			**X**	**A**	
15. Time Extensions, excepting tentative subdivision maps (Ref: ODC Section 2.02.025)	**X**								**A**	**A**	
16. Variances (Ref: ODC Section 4.02.020.D)											
a. Homeowner **[1]**					**X**				**A**	**A**	
b. Other **[1]**						**R**			**X**	**A**	
C. MINISTERIAL (ADMINISTRATIVE) PERMITS AND DECISIONS											
1. Historic Preservation – Adaptive Reuse Plans (Ref: ODC Section 4.03.010)	**X**		**X**	**X**							
2. Administrative Exceptions (Ref: ODC Section 4.03.050)					**X**				**A**	**A**	
3. Administrative Use Permits (Ref: ODC Section 4.03.015)	**X**										
4. Business License - Zoning/Land Use Compliance (Ref: OMC 3-1.129 Zoning Compliance)	**X**								**A**	**A**	
5. Development Plans within the ONT zoning district (Ref: ODC Section 4.02.025)	**X**								**A**	**A**	
6. Density Bonus **[10][13]** (Ref: ODC Section 6.01.010.H.3.b)	**X**								**A**	**A**	
7. Fair Housing and Reasonable Accommodation (Fair Housing Exemption) (Ref: ODC Section ~~4.02.035~~4.03.060)					**X**				**A**	**A**	
8. Fair Housing and Reasonable Accommodation (RLUIPA) (Ref: ODC Section 4.03.060)	**X**								**A**	**A**	
~~8.~~9. Interpretations and Land Use Determinations (Ref: ODC Section 1.02.010)					**X**				**A**	**A**	
~~9.~~10. Landscape and Irrigation Plans (Ref: ODC Section 6.05.005)	**X**								**A**	**A**	
~~10.~~11. Off-Site (Public) Improvement Plans (Ref: ODC Section 6.08.040)		**X**							**A**	**A**	

Table 2.02-1: Review Matrix

Applications, Actions, Decisions and Processes	Reviewing Authorities [4]										
	Planning Director	City Engineer	Fire Marshal	Building Official	Zoning Administrator [2]	Development Advisory Board	Historic Preservation Subcommittee [2] [11]	Historic Preservation Commission [11]	Planning Commission [11]	City Council [11]	Ontario International Airport Authority
~~11.~~12. ONT ALUCP Interagency Review **[7]** (Ref: ONT ALUCP)	X									A[8]	
~~12.~~13. Other Plan Checks and actions required by this Development Code	X								A	A	
~~13.~~14. Shopping Cart Retention Plans (Ref: ODC Section 6.11.020)	X								A	A	
~~14.~~15. Sign Plans (Ref: ODC Section 4.03.020)	X								A	A	
~~15.~~16. Single-Family Two-Unit Developments (Ref: ODC Section 5.03.403)	X								A	A	
~~16.~~17. Subdivisions											
a. Certificates of Compliance (Ref: ODC Section 4.03.025)		X							A	A	
b. Final Tract and Parcel Maps, and Vesting Maps (Ref: ODC Section 4.03.030)										X	
c. Lot Line Adjustments (Ref: ODC Section 4.03.035)		X							A	A	
d. Map Corrections and Amendments (Ref: ODC Section 4.03.040)		X							A	A	
e. Street Address Numbering (Ref: ODC Section 6.06.010)				X					A	A	
f. Street Name Assignment (Ref: ODC Section 6.06.010)	X								A	A	
g. Subdivision Improvement Agreement (Ref: ODC Section 6.08.040.G)		X							A	A	
h. Urban Lot Split (Ref: ODC Section 6.08.060)		X							A	A	
i. Lot Merger (Merger of Contiguous Parcels) **[1]** (Ref: ODC Section 4.02.085)		X							A	A	
~~17.~~18. Tier 1 wireless telecommunications facility pursuant to ODC Section 5.03.420 (Wireless Telecommunications Facilities)					X				A	A	
~~18.~~19. Wall, Fence, and Obstructions Plans not associated with a Development Plan (Ref: ODC Section 6.02.005)	X								A	A	
D. ENVIRONMENTAL DETERMINATIONS AND ACTIONS											

Table 2.02-1: Review Matrix

Applications, Actions, Decisions and Processes	***Reviewing Authorities [4]***										
	Planning Director	***City Engineer***	***Fire Marshal***	***Building Official***	***Zoning Administrator [2]***	***Development Advisory Board***	***Historic Preservation Subcommittee [2] [11]***	***Historic Preservation Commission [11]***	***Planning Commission [11]***	***City Council [11]***	***Ontario International Airport Authority***
1. Environmental Impact Reports (EIRs) (Ref: CCR Section 15080, et seq.)									**X[3]**	**X[3]**	
2. Exempt Projects (Ref: CCR Section 15300, et seq.)	**X[3]**				**X[3]**	**X[3]**	**X[3]**	**X[3]**	**A**	**A**	
3. Ministerial Projects (Ref: CCR Section 15268)		**Ministerial projects are exempt from the requirements of CEQA [10]**									
4. Negative Declarations (NDs) and Mitigated Negative Declarations (MNDs) (Ref: CCR Section 15070, et seq.)					**X[3]**	**X[3]**	**X[3]**	**X[3]**	**X[3]**	**X[3]**	
5. Addendums to previously certified EIRs and previously adopted NDs and MNDs (Ref: CCR Section 15164)					**X[3]**	**X[3]**	**X[3]**	**X[3]**	**X[3]**	**X[3]**	
6. Environmental review for projects located within the ONT zoning district **[9]**											**X**

Notes:

[1] A public hearing is required pursuant to the procedures set forth in Division 2.03 (Public Hearings) of this Development Code; however, public notification shall not be required for Development Advisory Board or Historic Preservation Subcommittee hearings when acting in the capacity of an Advisory Authority.

[2] The Approving Authority may refer any application subject to their review to the next higher authority (Appeal Authority).

[3] The Approving Authority for environmental determinations/actions shall be the same as the related legislative or discretionary actions. NDs and MNDs, and Addendums to previously certified EIRs, and previously adopted NDs or MNDs, which are not associated with, or are independent of, legislative or discretionary actions, shall be subject to Development Advisory Board review and adoption. EIRs that are not associated with, or are independent of, legislative or discretionary actions shall be subject to Planning Commission review and certification.

[4] An application submitted for concurrent review and action with another application, action or decision requiring review and action by a higher Reviewing Authority may be subject to concurrent review and action by that higher Reviewing Authority upon their request.

[5] The Approving Authority responsible for issuing a "Stay of Permit Approval Time Limit" pursuant to Section 2.02.025 (Projects Involving Pending Litigation) of the Development Code, shall be the same as for the related application, action, or decision.

[6] An appeal of an Historic Preservation—Certificate of Appropriateness—Waiver shall be considered by the Historic Preservation Subcommittee, except that an Historic Preservation—Waiver for an Historic Landmark shall be considered by the Historic Preservation Commission.

[7] Refer to the ONT ALUCP for procedures for application processing and administration, and appeals processing.

[8] Appeal shall be subject to review by the Mediation Board established pursuant to ALUCP Section 4.

[9] Pursuant to the Joint Powers Authority agreement between the City of Ontario and the County of San Bernardino, the Ontario International Airport Authority shall be the lead agency.

[10] Ministerial projects are exempt from the requirements of the California Environmental Quality Act (CEQA) pursuant to Section 15268 of the CEQA Guidelines. The following projects or actions shall be deemed ministerial:

- *Administrative Exceptions;*

- *Administrative Use Permit issuance;*
- *ALUCP inter agency reviews;*
- *Building permit issuance;*
- *Business license issuance;*
- *Density Bonus, without related discretionary applications;*
- *Encroachment permit issuance;*
- *Final subdivision map approval;*
- *Individual utility service connection and disconnection approval;*
- *Landscape and irrigation plan approval;*
- *Lot Line Adjustment approval;*
- *Public improvement plan approval;*
- *Shopping cart retention plan approval;*
- *Sign Plan approval;*
- *Single-Family Two-Unit Developments;*
- *Street address number issuance;*
- *Subdivision Improvement Agreement approval;*
- *Subdivision map corrections and amendments approval;*
- *Temporary Use Permit issuance;*
- *Tier 1 wireless telecommunications facility approval;*
- *Urban Lot Splits; and*
- *Wall and/or fence plan approval.*

[11] Applications that do not require a public Hearing pursuant to Note 1, above, may be reviewed and acted upon under the "Consent Calendar" portion of the Approving Authority meeting agenda.

[12] Unless otherwise specified in a respective Specific Plan, a Specific Plan Amendment or Specific Plan Minor Adjustment/Minor Alterations application shall be filed, processed, and acted upon pursuant to Division 2.02 (Application Filing and Processing), and Division 4.01 (Legislative Actions) or Division 4.02 (Discretionary Permits and Actions).

[13] A request for a density bonus, in and of itself, shall not require a General Plan Amendment, Zone Change, Development Agreement, or other discretionary approval (Ref: ODC 6.01.010.H.3.b.).

2.02.010: Applications and Fees

A. Application filing.

1. An application for a permit, permit modification, amendment, or any other matters pertaining to this Development Code shall be filed with the City, on a City application form, together with any required fees, plans, maps, reports, special studies, exhibits, and any other information deemed necessary by the City to process the application.

2. An application may be initiated by the City, owner(s) or lessee(s) of property, or their agent(s), or person(s) who have contracted to purchase property contingent upon their ability to acquire the necessary permits under this Development Code, or their agent(s).

3. A project requiring the filing of more than one land use or entitlement permit application shall, to the extent possible, be filed with all related applications for concurrent review and action by the highest required Reviewing Authority, except that an Administrative Exception application filed in conjunction with a Development Plan shall require separate review and action by the appropriate Reviewing Authority.

B. Filing Fees.

1. The City Council may establish by resolution, a schedule of fees for permits, amendments, inspections, licenses, services, and other matters pertaining to this Development Code. The schedule of fees may be changed or modified only by resolution of the City Council.

2. Application review and action shall not commence until such time that all applicable filing fees and/or deposits have been paid in full. An application received without all applicable filing fees and/or deposits shall be deemed incomplete for filing and further processing and shall be deemed just cause for denial of the application. In the case of time and materials projects, the payment of additional deposits may be required to fully cover all City processing costs.

C. Refunds and Withdrawals.

1. The refund of filing fees in response to the denial of an application shall be prohibited, recognizing that filing fees are utilized to cover City costs related to public hearings, mailings, postings, transcripts, and staff time involved in processing applications.

2. An applicant wishing to withdraw their application may do so by written request to the Planning Director at any time prior to action by the Approving Authority.

3. Upon receipt of a request for application withdrawal, the Planning Director may order the refund of all or part of the filing fees, based upon the prorated costs to date and determination of the status of the application at the time of withdrawal.

2.02.015: Application Processing Procedures

This section is intended to provide general procedures for the processing of applications for legislative actions, discretionary permits and actions, and ministerial permits and decisions filed pursuant Table 2.02-1 (Review Matrix) of this Division.

A. Legislative Actions. The Advisory and Approving Authorities for legislative actions are established by Table 2.02-1 (Review Matrix) of this Division. Unless otherwise stipulated by Division 4.01 (Legislative Actions) of this Development Code, the procedure for reviewing and acting upon an application resulting in a legislative action is as follows:

1. Initial Review for Application Completeness. Legislative actions shall be initially reviewed for application completeness and acceptance, as follows:

a. *Review for Application Completeness.*

(1) Following receipt of an application filed in compliance with this Division, the Planning Department shall determine, in writing, whether the application is complete for processing and shall transmit the determination to the applicant.

(2) If an application is determined to be incomplete for processing, the Planning Department shall specify those parts of the application that are incomplete and shall indicate the manner in which they can be made complete, including a list and thorough description of the specific information needed to complete the application. The applicant shall submit materials to the City in response to the list and description, which shall be reviewed pursuant to Subparagraph A.1.a(1), above.

(3) If the application, together with the submitted materials, is determined to be incomplete for processing, the applicant may appeal that decision to the Planning Commission pursuant to the provisions of Division 2.04 (Appeals) of this Development Code.

(4) Failure of an applicant to submit complete or adequate information pursuant to the provisions of Subparagraphs A.1.a(1) and (2), above, shall constitute grounds for denial of the application.

b. *Application Acceptance*.

(1) Following acceptance of an application as complete for processing, no new or additional information may be requested of the applicant; however, in the course of processing the application, the Planning Department may request the applicant to clarify, amplify, correct, or otherwise supplement the information required for the application. This provision shall not be so construed as to require an applicant to submit with the initial application, the entirety of the information that the Planning Department may require in order to take final action on the application.

(2) Prior to accepting an application as complete for processing, the Planning Department shall inform the applicant of any information included in the list prepared pursuant to Subparagraph A.1.b(1), above, which will subsequently be required from the applicant in order to complete final action on the application.

(3) The provisions of this Section shall not be construed as limiting the ability of the Planning Department to request and obtain information that may be needed in order to comply with the provisions of PRC Division 13 (commencing with Section 21000).

2. Investigation and Report.

a. Following acceptance of an application as complete for processing pursuant to Subparagraph B.1 (Initial Review for Application Completeness), above, the Planning Department shall investigate the facts bearing on the application and shall prepare a written report, which shall be transmitted to the appropriate Reviewing Authority.

b. The Planning Department's report shall provide the information necessary for action on the application, consistent with the provisions of this Development Code and The Ontario Plan, and shall report all findings to the appropriate Reviewing Authority.

c. During the investigation of the facts bearing on the application, the Planning Department may consult with other City departments and public agencies.

3. Public Hearings.

a. The Advisory and Approving Authorities established by Table 2.02-1 (Review Matrix), shall each conduct at least one public hearing, which shall be duly noticed, heard, and acted upon pursuant to Division 2.03 (Public Hearings) of this Development Code.

b. The Planning Department's written report, prepared pursuant to Subparagraphs A.2.a through c, above, shall be made available to the property owner and applicant, if different from the property owner, at least 72 hours prior to the public hearing.

4. Advisory Authority Review and Recommendation. The procedure for review and recommendation on a legislative action by an Advisory Authority is as follows:

a. The Advisory Authority shall make recommendation to the Approving Authority whether to approve, approve in modified form, or deny an application, which shall be transmitted to the Approving Authority in such manner and form as specified by the Approving Authority.

b. The Advisory Authority shall forward its recommendation to the Approving Authority within 60 days following the date its decision was rendered.

5. Approving Authority Review and Action. The procedure for review and action on a legislative action by the Approving Authority is as follows:

a. Upon receipt of the Advisory Authority's recommendation, the Approving Authority shall approve, approve in modified form, or deny an application.

b. The action of the Approving Authority shall be by written decision, setting forth the basis for the action, and shall include any applicable findings prescribed by Division 4.01 (Legislative Actions) of this Development Code. There shall be no time limit within which the Approving Authority must act on a legislative action.

c. The Approving Authority's action shall be final and conclusive.

6. Effective Date of Approving Authority Action. A legislative approval granted by resolution is effective immediately upon adoption of the numbered resolution by the City Council. A legislative approval granted by ordinance is effective 30 days following the date of adoption of the ordinance by the Approving Authority.

B. Discretionary Permits and Actions. The Advisory, Approving, and Appeal Authorities for discretionary permits and actions are established by Table 2.02-1 (Review Matrix) of this Division. Unless otherwise stipulated by Division 4.02 (Discretionary Permits and Actions) of this Development Code, the procedure for reviewing and acting upon an application resulting in a discretionary permit or action is as follows:

1. Initial Review for Application Completeness. Applications requesting discretionary permits and/or actions shall be initially reviewed for application completeness and acceptance, as follows:

a. *Review for Application Completeness.*

(1) Within 30 days following receipt of an application filed in compliance with this Division, the Planning Department shall determine, in writing, whether the application is complete for processing and shall transmit the determination to the applicant. If the written determination is not made within the required period, the application shall be automatically deemed complete for processing. Upon receipt of any resubmittal of the application, a new 30-day period shall begin, during which time completeness of the resubmitted application shall be determined.

(2) If an application is determined to be incomplete for processing, the Planning Department shall specify those parts of the application that are incomplete and shall indicate the manner in which they can be made complete, including a list and thorough description of the specific information needed to complete the application. The applicant shall submit materials to the Planning Department in response to the list and description, which shall be reviewed pursuant to Subparagraph B.1.a(1), above.

(3) If the application, together with the submitted materials, is determined to be incomplete for processing, the applicant may appeal that decision to the Planning Commission pursuant to the provisions of Division 2.04 (Appeals) of this Development Code.

(4) Failure of an applicant to submit complete or adequate information pursuant to the provisions of Subparagraphs B.1.a(1) and (2), above, shall constitute grounds for denial of the application.

b. *Application Acceptance*.

(1) Following acceptance of an application as complete for processing, no new or additional information may be requested of the applicant; however, in the course of processing the application, the Planning Department may request the applicant to clarify, amplify, correct, or otherwise supplement the information required for the application. This provision shall not be so construed as to require an applicant to submit with the initial application, the entirety of the information that the City may require in order to facilitate final action on the application.

(2) Prior to accepting an application as complete for processing, the Planning Department shall inform the applicant of any information included in the list prepared pursuant to Subparagraph B.1.b(1), above, which will subsequently be required from the applicant in order to complete final action on the application.

(3) The provisions of this Subsection shall not be construed as limiting the ability of the Planning Department to request and obtain information that may be needed in order to comply with the provisions of PRC Division 13 (commencing with Section 21000).

2. Investigation and Report.

a. Following acceptance of an application as complete for processing pursuant to Subparagraph B.1 (Initial Review for Application Completeness), above, the Planning Department shall investigate the facts bearing on the application and shall prepare a written report, which shall be transmitted to the appropriate Reviewing Authority.

b. The Planning Department's report shall provide the information necessary for action on the application, consistent with the provisions of this Development Code and The Ontario Plan, and shall report all findings to the appropriate Reviewing Authority.

c. During the investigation of the facts bearing on the application, the Planning Department may consult with other City departments and public agencies.

3. Public Hearings.

a. The Advisory, Approving and Appeal Authorities established by Table 2.02-1 (Review Matrix), and which require a public hearing pursuant to the Review Matrix, shall each conduct at least one public hearing, which shall be duly noticed, heard, and acted upon pursuant to Division 2.03 (Public Hearings) of this Development Code.

b. The Planning Department's written report, prepared pursuant to Subparagraphs B.2.a through c, above, shall be made available to the property owner and applicant, if different from the property owner, at least 72 hours prior to the public hearing.

4. Advisory Authority Review and Recommendation. If required pursuant to Table 2.02-1 (Review Matrix), the procedure for review and recommendation on a discretionary permit or action by an Advisory Authority is as follows:

a. The Advisory Authority shall make recommendation to the Approving Authority whether to approve, approve in modified form, or deny an application, which shall be transmitted to the Approving Authority in such manner and form as specified by the Approving Authority.

b. The Advisory Authority shall forward its recommendation to the Approving Authority within 60 days following the date its decision was rendered.

c. In instances where review and recommendation by more than one Advisory Authority is required, the initial Advisory Authority shall forward its recommendation whether to approve, approve in modified form, or deny an application to the subsequent Advisory Authority within 30 days following the date its decision was rendered. The 30-day time limit may be extended by mutual agreement of the applicant and City.

5. Approving Authority Review and Action. The procedure for review and action on a discretionary permit or action by an Approving Authority is as follows:

a. Upon receipt of the Advisory Authority's recommendation, the Approving Authority shall approve, approve in modified form, or deny an application, and may impose reasonable conditions to the approval of an application.

b. The action of the Approving Authority shall be by written decision, setting forth the basis for the action, and shall include any applicable findings prescribed by Division 4.02 (Discretionary Permits and Actions) of this Development Code. A discretionary permit or action shall be acted upon within the timeframes specified by GC Section 65950, 65950.1, 65951, and 65952, except that Tentative Subdivision Maps shall be acted upon within the timeframes specified by GC Section 66452.1.

c. The decision of the Approving Authority shall be final and conclusive in the absence of an appeal filed pursuant to Division 2.04 (Appeals) of this Development Code.

6. Effective Date of Approving Authority Action. A discretionary permit or action shall become effective on the City business day following Approving Authority action, unless the discretionary permit is being processed concurrently with and dependent upon any legislative action; in which case, the effective date of the discretionary permit or action shall be governed by Paragraph A.6 (Effective Date of Approving Authority Action) of this Section. The Approving Authority's action to approve, approve in modified form, or deny a discretionary permit or action shall be immediately suspended upon the filing of an appeal pursuant to Division 2.04 (Appeals) of this Development Code.

C. Ministerial Permits and Decisions. The Advisory, Approving and Appeal Authorities for ministerial permits and decisions are established by Table 2.02-1 (Review Matrix) of this Division. Unless otherwise stipulated by Division 4.03 (Ministerial Permits and Decisions) of this Development

Code, the procedure for reviewing and acting upon an application requiring a ministerial permit or decision is as follows:

1. Initial Review for Application Completeness. Applications requesting ministerial permits and/or decisions shall be initially reviewed for completeness and acceptance, as follows:

a. *Review for Application Completeness.*

(1) Within 30 days following receipt of an application filed in compliance with this Division, the City shall review the application and determine, in writing, whether the application is complete for further processing, and shall transmit the determination to the applicant. If the written determination is not made within the required period, the application shall automatically be deemed complete for further processing. Upon receipt of any resubmittal of the application, a new 30-day period shall begin, during which time completeness of the resubmitted application shall be determined.

(2) If an application is determined to be incomplete for processing, the City shall specify those parts of the application that are incomplete and shall indicate the manner in which they can be made complete, including a list and thorough description of the specific information needed to complete the application. The applicant shall submit materials to the responsible City department in response to the list and description, which shall be reviewed pursuant to Subparagraph C.1.a(1), above.

(3) If an application, together with the submitted materials, is determined to be incomplete for processing, the applicant may appeal that decision to the Planning Commission pursuant to the provisions of Division 2.04 (Appeals) of this Development Code.

(4) Failure of an applicant to submit complete or adequate information pursuant to the provisions of Subparagraphs C.1.a(1) and (2), above, shall constitute grounds for denial of the application.

b. *Application Acceptance.*

(1) Following acceptance of an application as complete for processing, no new or additional information may be requested of the applicant; however, in the course of processing the application, the responsible City department may request the applicant to clarify, amplify, correct, or otherwise supplement the information required for the application. This provision shall not be so construed as to require an applicant to submit with the initial application, the entirety of the information that the responsible City department may require in order to facilitate final action on the application.

(2) Prior to accepting an application as complete for processing, the responsible City department shall inform the applicant of any information included in the list prepared pursuant to Subparagraph C.1.b(1), above, which will subsequently be required from the applicant in order to complete final action on the application.

(3) The provisions of this Subsection shall not be construed as limiting the ability of the responsible City department to request and obtain information that may be needed in order to comply with the provisions of PRC Division 13 (commencing with Section 21000).

2. Investigation. Following acceptance of an application as complete for processing, the responsible City department shall investigate the facts bearing on the application and provide the information necessary for action or determination, consistent with this Development Code and The Ontario Plan, which shall be reported to the Approving Authority.

3. Review and Action.

a. The Approving Authority shall review the application and shall then approve, approve in modified form, or deny the application. The decision of the Approving Authority shall be final and conclusive in the absence of an appeal filed pursuant to the provisions of Division 2.04 (Appeals) of this Development Code.

b. The Approving Authority shall act on a ministerial approval request within 60 days following acceptance of an application as complete for processing pursuant to Paragraph C.1 (Initial Review for Application Completeness), above. The 60-day time limit may be extended by mutual agreement of the applicant and City.

4. Effective Date of Approving Authority Action. A ministerial permit or action shall become effective immediately upon Approving Authority action. An Approving Authority action to approve or deny a ministerial permit or decision shall be immediately suspended upon the filing of an appeal pursuant to Division 2.04 (Appeals) of this Development Code.

2.02.020: Environmental Review

A. Purpose. The purpose of this Section is to assist the City in accomplishing the basic objectives of CEQA, as follows:

1. Enhance and provide long-term protection for the environment, while providing a decent home and satisfying living environment for every Californian;

2. Provide information to governmental decision-makers and the public regarding the potential significant environmental effects of the proposed project;

3. Provide an analysis of the environmental effects of future actions associated with a project in order to adequately apprise all interested parties of the true scope of the project for intelligent weighing of the environmental consequences of the project;

4. Identify ways that environmental damage can be avoided or significantly reduced;

5. Prevent significant avoidable environmental damage through utilization of feasible project alternatives or mitigation measures; and

6. Provide full public disclosure of the City's basis for project approval in the manner chosen. Public participation is an essential part of the CEQA process. Each public agency should encourage wide public involvement, formal and informal, in order to receive and evaluate public reactions to environmental issues related to a public agency's activities. The involvement should include, whenever possible, making environmental information available in electronic format on the Internet, on a web site maintained or utilized by the public agency.

B. **Applicability.** The provisions of this division shall apply to any activity of the City that is determined to be a "project" pursuant CEQA (PRC Section 21000 through Section 21178) and the CEQA Guidelines (CCR Section 15000 through Section 15387).

C. **CEQA Implementation.** Local guidelines for the implementation of CEQA shall be adopted by Resolution of the City Council. The guidelines may be changed or modified only by resolution of the City Council.

D. **Environmental Review.** The City of Ontario shall conduct an environmental review of any activity within the City that constitutes a "project" pursuant CEQA, the CEQA Guidelines and the City's local guidelines for the implementation of CEQA. Depending upon the nature and scope of a "project," it may be found to be exempt from further environmental review, or a negative declaration, mitigated negative declaration or environmental impact report may be required to be completed. Negative declarations, mitigated negative declarations, and environmental impact reports shall be prepared pursuant to the requirements of CEQA and the implementing guidelines, and the City's local guidelines for the implementation of CEQA.

2.02.025: Time Limits and Extensions

A. **Time Limits.** Discretionary permits/actions granted pursuant to this Division shall become invalid if not exercised within the below-listed timeframes:

1. Generally. Unless otherwise stipulated by the conditions of approval, a discretionary permit/action shall become invalid if not exercised within 12 months following the effective date of application approval, except as specified in Paragraphs A.2 through A.6, below, unless extended by time extension pursuant to Subsection B (Time Extensions) of this Section.

2. Development Plan. Unless otherwise stipulated by the conditions of approval, a Development Plan shall become invalid if not exercised within 24 months following the effective date of application approval, unless extended by time extension pursuant to Subsection B (Time Extensions) of this Section.

3. Tentative Subdivision Map. A Tentative Tract or Parcel Map shall become invalid if not exercised within the time limits specified by GC Section 66452.6.

4. Vesting Tentative Maps.

a. A vesting tentative map shall become invalid if not exercised within the time limits specified by Paragraph A.3 (Tentative Subdivision Map), above.

b. If a final tract map is approved prior to the expiration of the vesting tentative map, the tentative map vesting rights for the final tract map area shall last for the periods listed below:

(1) An initial period of 12 months following recordation of the final tract map. Where several final tract maps are recorded on phases of a project covered by a single vesting tentative map, the 12-month period for each final tract map shall begin on the date of recordation of that final tract map;

(2) The initial period set forth in Subparagraph A.4.b.(1), above, shall be automatically extended by any time used by the City for processing a complete application for

a grading permit or for design or architectural review, if such processing exceeds 30 days; provided, that the extension shall only be for the number of days in excess of 30 days; and

(3) If during the 24-month period following approval of a final tract map or parcel map, the City receives a complete application for a building permit and the subdivider has satisfied all requirements for the issuance of a building permit, the right to proceed with development in accordance with the tentative map shall continue until the expiration of the building permit.

5. Expiration of Vesting Development Rights. Vesting development rights shall expire if a final map is not filed for approval prior to the expiration of the vesting tentative map, as provided in Paragraph A.6 (Vesting Tentative Maps) of this Section. If the final map is approved, these rights shall last for the following time periods, extending beyond the recording of the final map:

a. An initial period of 12 months, except that where several final maps are recorded for various project phases of a single vesting tentative tract map, this initial time period shall begin with each phase, when the final map for that phase is recorded;

b. The initial time period set forth in Subparagraph A.6.b(1) of this Section shall be automatically extended by any time used for processing a complete application for a grading permit or for design or architectural review, if the processing exceeds 30 days from the date a complete application is filed;

c. A subdivider may apply for a 12-month extension at any time before the initial expiration date for map approval; and

d. If the subdivider submits a complete application for a building permit during the time periods specified in Subparagraphs A.5.a through A.5.c, above, the rights referred to herein shall continue until the expiration of that permit, or any extension of that permit.

6. Certificate of Appropriateness. A Certificate of Appropriateness granted pursuant to this Division shall become invalid if not exercised within the time limit specified by the conditions of approval, or within 24 months if no time limit has been specified.

7. Phased Projects.

a. Wherein a project involves the construction of multiple phases over an extended period, and the conditions of approval do not specify a time limit differing from Paragraphs A.2 through A.5, above, the portion of entitlement applicable to a particular phase shall be deemed exercised through the issuance of a building permit for that phase. The remainder of the entitlement related to further construction shall expire 12 months following building permit expiration, final building inspection, or Certificate of Occupancy issuance for the previous construction phase, unless extended pursuant to Subsection B, below.

b. A building permit may be issued for a subsequent phase if no more than 12 months have lapsed since a Certificate of Occupancy was issued for the previous phase and the applicant is diligently pursuing the project toward completion. However, if more than 12 months have lapsed since Certificate of Occupancy issuance or final inspection has occurred for the previous phase, and the entitlement was not extended pursuant to Subsection B, below, the entitlement granting the construction of any subsequent phases shall be deemed invalid and no

further building permits shall not be issued, unless a time extension is granted pursuant to Section 2.02.025 (Time Limits and Extensions) of this Division.

8. Projects Involving Pending Litigation. The time limits specified in Paragraphs A.1 through A.5, above, including any time extension granted pursuant to Subsection B, below, shall not include the period of time during which a lawsuit involving the approval or conditional approval of a discretionary permit is or was pending in a court of competent jurisdiction, if the stay of the time period is approved by the Approving Authority pursuant to this Division. After service of the initial petition or complaint in the lawsuit upon the City, the applicant, or property owner if different from the applicant, may apply to the local agency for a Stay of Permit Approval Time Limit. Within 40 days after receiving the application, the Review Authority may stay the time limit for up to 5 years.

9. Definition. For the purposes of this Section, the term "exercised" shall mean the following:

a. The applicant, or property owner if different from the applicant, has completed or fulfilled all conditions of approval imposed upon the permit or action by the Approving Authority; and

b. In the case of permits or actions pertaining to a development project approval, a Building Permit shall have been issued and construction shall have been diligently pursued toward project completion. In the case of permits or actions pertaining to a land use approval, the approved use shall have commenced. In the case of a Merger of Contiguous Parcels, Reversion to Acreage, or Tentative Subdivision Map, the Merger, Reversion, or Final Subdivision Map shall have been recorded at the office of the San Bernardino County Recorder.

B. Time Extensions. The time limits within which a discretionary permit or action must be exercised, may be extended as follows:

1. Project Applicant or Property Owner Requested Time Extension.

a. The project applicant, or property owner if different from the applicant, may file a Time Extension request, together with any required filing fees, with the City (Planning Department or Engineering Department, as applicable) prior to the expiration date of an approved discretionary permit or action.

b. Upon the submittal of a Time Extension request, the affected discretionary permit or action shall be granted an automatic 90-day time extension to allow sufficient time for application processing.

2. An extension of the expiration date for an approved discretionary permit or action shall be acted upon as follows:

a. The Approving Authority may grant a Time Extension upon determination of the following:

(1) Each of the findings and conditions of the original approval are still applicable to the project and there are no changed circumstances;

(2) The Time Extension will not adversely affect the public health, safety, or welfare; and

(3) There has been diligent pursuit to exercise the permit or action for which an extension is being requested.

b. The burden of proof shall lie with the permittee to establish with substantial evidence that the approval for which the Time Extension is requested should not be allowed to expire. If the Approving Authority determines that the permittee has good-faith intent to commence with the proposed project, the Approving Authority may grant a Time Extension.

c. A discretionary permit or action may be granted Time Extensions in one-year increments, not to exceed a total of three, one-year time extensions, excepting tentative subdivision maps, which shall be subject to the provisions of GC Section 66452.6.

3. Blanket Time Extensions Granted by the City Council.

a. In addition to the Time Extensions allowed pursuant to Paragraph B.1 of this Section, the City Council may, by resolution, grant time extensions for discretionary permits and actions, as identified in Table 2.02-1 (Review Matrix) of this Division, to benefit homeowners, developers, landowners, and business owners within the City that may be negatively affected by economic slowdown/downturn or recession.

b. A blanket time extension shall be applicable only to those permits and actions that have not expired prior to the date that the Time Extension is granted.

2.02.030: Failure by Applicant to Complete Application Processing

A. Within 180 days following a written request by the City for plan changes, corrections, revisions, or the submittal of additional information, an application shall be deemed withdrawn if the Planning Director determines that the applicant has not made reasonable progress toward providing necessary plan changes or corrections, or additional information. Application processing shall not resume thereafter until a new application is filed, including fees, plans, exhibits, and other materials required for any project on the same site.

B. Upon written request of the applicant, the Planning Director may order the refund of all or a portion of filing fees pursuant to Section 2.02.010.C (Refunds and Withdrawals) of this Division.

2.02.035: Limitations on Application Refiling

A final action denying an application shall prohibit the further filing of the same or a substantially similar application for a period of not less than 12 months following the date of application denial, except that an application denied without prejudice may be resubmitted within the 12-month period following application denial.

2.02.040: Indemnification

It shall be a condition of any application approved pursuant to this Division, or any approval or certification required pursuant to CEQA or the CEQA Guidelines, that a property owner or

applicant, if different from the property owner, shall defend, indemnify, and hold harmless the City and its agents, officers, attorneys, and employees:

A. From any claim, action, or proceeding brought against the City or its agents, officers, attorneys, or employees, to attack, set aside, void, or annul the City's decision to approve any development, land use permit, and/or approvals and certifications under CEQA, but excluding any subdivision approval governed by GC Section 66474.9. This indemnification shall include, but not be limited to, damages, fees, and/or costs awarded against the City, if any, and the cost of any suit, attorney's fees, and/or other costs, liabilities, and expenses incurred in connection with a lawsuit, whether incurred by the applicant, the City, and/or the parties initiating or bringing a lawsuit;

B. For all costs incurred in additional investigation and/or study of, or for supplementing, preparing, redrafting, revising, or amending any document (such as, but not limited to, a negative declaration, mitigated negative declaration, environmental impact report, general plan amendment, specific plan, or specific plan amendment), if made necessary by a lawsuit and if the applicant desires to pursue securing approvals that are condition of application approval, after initiation of a lawsuit; and

C. For all costs, fees, and damages that the City incurs in enforcing the indemnification provisions set forth in Subsections A and B of this Section.

Division 2.03—Public Hearings

Sections:

2.03.000: Purpose
2.03.005: Applicability
2.03.010: Public Hearing Notices
2.03.015: Public Hearing Procedures
2.03.020: Request for Notification
2.03.025: Failure to Receive a Public Notice
2.03.030: Cemeteries

2.03.000: Purpose

The purpose of this Division is to implement GC Division 1, Chapter 2.7 (commencing with GC Section 65090), which governs public hearing and notification procedures for consideration of legislative actions, discretionary land use and development entitlements, and discretionary administrative actions. Public hearings are not required for nondiscretionary administrative permits, decisions, and actions; however, public notice may be required pursuant to this Division.

2.03.005: Applicability

A. A public hearing for a legislative action, land use or development entitlement, or any other matters pertaining to this Development Code requiring a public hearing pursuant to GC Division 1, Chapter 2.7 (commencing with GC Section 65090), shall be scheduled and heard in accordance with the provisions of this Division.

B. Public hearing notification for legislative actions, land use or development entitlements, or administrative permits, decisions, or actions shall be provided in the manner prescribed by Table 2.03-1 (Notification Matrix), below.

Table 2.03-1: Notification Matrix

Applications, Actions, Decisions And Processes	*Required Method of Public Notification*			
	Not Required	*Newspaper or Posting [2]*	*First Class Mail or Delivery [2]*	*Newspaper—1/8 page advertisement if the number of property owners to whom notices would be mailed or delivered is greater than 1,000*
A. LEGISLATIVE ACTIONS				
1. Airport Land Use Compatibility Plan and Amendments **[1]** (Ref: ODC Section 4.01.010)		X	X	X
2. Development Agreements **[1]** (Ref: ODC Section 4.01.015)		X	X	X

Table 2.03-1: Notification Matrix

Applications, Actions, Decisions And Processes	*Required Method of Public Notification*			
	Not Required	*Newspaper or Posting [2]*	*First Class Mail or Delivery [2]*	*Newspaper—1/8 page advertisement if the number of property owners to whom notices would be mailed or delivered is greater than 1,000*
3. Development Code Amendments **[1]** (Ref: ODC Section 4.01.020)				X
4. Amendment to the Policy Plan (General Plan) Component of The Ontario Plan **[1]** (Ref: ODC Section 4.01.025)		X	X	X
5. Planned Unit Developments and Amendments **[1]** (Ref: ODC Section 4.01.030)		X	X	X
6. Specific Plans and Amendments **[1]** (Ref: ODC Section 4.01.035)		X	X	X
7. Williamson Act Contract Cancellations **[1]** (Ref: GC Section 51200, et seq.)		X	X	X
8. Zone Changes **[1]** (Ref: ODC Section 4.01.040)		X	X	X
B. DISCRETIONARY PERMITS AND ACTIONS				
1. Billboard Relocation Agreements **[1]** (Ref: ODC Section 4.02.010)	X			
2. Conditional Use Permits (Ref: ODC Section 4.02.015)				
a. Hotels, Motels and Residence Inns **[1]**		X	X	
b. Use established in conjunction with a Development Plan **[1]**		X	X	
c. Use established within an existing structure **[1]**		X	X	
d. Modification or revocation per ODC Division 2.05 (City Initiated Modification or Revocation) **[1]**		X	X	
e. Revocation due to abandonment of use per ODC Division 2.05 (City Initiated Modification or Revocation) **[1]**		X	X	
3. Density Bonus and Other Incentives (Ref: ODC Section 6.01.010.H) **[1]**		X	X	
4. Development Plans, except within the ONT zoning district (Ref: ODC Section 4.02.025)				
a. Residential developments totaling 5 or more dwelling units or the development of 3 or more dwelling units on a single lot or parcel		X		

Table 2.03-1: Notification Matrix

Applications, Actions, Decisions And Processes	*Required Method of Public Notification*			
	Not Required	*Newspaper or Posting [2]*	*First Class Mail or Delivery [2]*	*Newspaper—1/8 page advertisement if the number of property owners to whom notices would be mailed or delivered is greater than 1,000*
b. Commercial developments, and developments in the CIV, OS-R, OS-C and UC zoning districts, greater than 500 SF in area		X		
c. Industrial developments equal to or less than 0.45 FAR		X		
d. Industrial developments exceeding 0.45 FAR		X		
e. Wireless telecommunications facilities pursuant to Section 5.03.420 (Wireless Telecommunications Facilities) of this Development Code				
(1) Tier 2 facilities		X		
(2) Tier 3 facilities		X		
f. All others		X		
5. Extensions of Legal Nonconforming Status **[1]** (Ref: ODC Section 4.02.030)		X	X	
6. Historic Preservation				
a. Certificates of Appropriateness (Ref: ODC Section 4.02.050)				
(1) Designated Historic Landmarks and Contributors, and Architectural Conservation Areas; and Demolition of an Historic Resource **[1]**		X	X	
(2) Deferral of Replacement Structure **[1]**		X	X	
(3) Eligible Historic Resources **[1]**		X	X	
(4) Modification or revocation per ODC Division 2.05 (City Initiated Modification or Revocation) **[1]**		X	X	
(5) Waivers and Minor Improvements	X			
b. Certificates of Economic Hardship **[1]** (Ref: ODC Section 4.02.055)		X	X	
c. Certificates of Economic Hardship—Modification or revocation per ODC Division 2.05 (City Initiated Modification or Revocation) **[1]**		X	X	
d. Conservation Plans (Ref: ODC Section 4.02.060)		X		

Table 2.03-1: Notification Matrix

Applications, Actions, Decisions And Processes	*Required Method of Public Notification*			
	Not Required	*Newspaper or Posting [2]*	*First Class Mail or Delivery [2]*	*Newspaper—1/8 page advertisement if the number of property owners to whom notices would be mailed or delivered is greater than 1,000*
e. Historic Resource Tiering (Ref: ODC Section 4.02.040), including Rescinding or Amending Status (Ref: ODC Section 4.02.045)	X			
f. Local Historic Landmark and Local District Designations, and Architectural Conservation Areas (Ref: ODC Section 4.02.040), including Rescinding or Amending Status (Ref: ODC Section 4.02.045)		X		
g. Mills Act Contracts (Ref: ODC Section 4.02.065)		X		
h. Mills Act Cancellations **[1]**		X	X	
i. Addition/Removal of Resources to/from the Ontario Register (Ref: ODC Section 4.02.045)				
(1) At the request of the property owner, or upon City initiation if the most recently prepared Historic Resource Survey evaluating the resource is more than 5 years old.	X			
(2) Loss of all historic and/or cultural significance due to a catastrophe causing a loss of integrity, or due to extensive legally performed alterations performed after the property was initially surveyed.	X			
7. Interpretations and Land Use Determinations (Ref: ODC Section 1.02.010)	X			
8. Master Plans and Amendments **[1]** (Ref: ODC Section 4.02.070)		X	X	X
9. Minor Adjustments/Alterations **[4]** (Ref: ODC Section 4.02.020.C)		X**[5]**	X	
10. Nonconforming Structure Reconstruction **[1]** (Ref: ODC Section 3.01.020)		X	X	
11. Parking Reduction (Ref: ODC Section 6.03.025)	X			
12. Sign Programs (Ref: ODC Section 4.02.075)	X			
13. Specific Plan Minor Amendments (Ref: ODC Section 4.02.080)	X			
14. Stays of Permit Approval Time Limit (Ref: ODC Section 2.02.025.A.8)	X			

Table 2.03-1: Notification Matrix

Applications, Actions, Decisions And Processes	*Required Method of Public Notification*			
	Not Required	*Newspaper or Posting [2]*	*First Class Mail or Delivery [2]*	*Newspaper—1/8 page advertisement if the number of property owners to whom notices would be mailed or delivered is greater than 1,000*
15. Subdivisions				
a. Lot Merger (Merger of Contiguous Parcels) **[1]** (Ref: ODC Section 4.02.085)		X	X	
b. Reversions to Acreage **[1]** (Ref: ODC Section 4.02.090)		X	X	
c. Tentative Tract and Parcel Maps, and Vesting Maps **[1]** (Ref: ODC Section 4.02.095)		X	X	
d. Tentative Tract and Parcel Map Time Extensions (Ref: ODC Section 2.02.025.A.3 & 4)		X		
16. Time Extensions, excepting tentative subdivision maps (Ref: ODC Section 2.02.025)	X			
17. Variances (Ref: ODC Section 4.02.020.E)				
a. Homeowner **[1]**		X	X	
b. Other **[1]**		X	X	
C. MINISTERIAL (ADMINISTRATIVE) PERMITS AND DECISIONS				
1. Administrative Exceptions (Ref: ODC Section 4.03.050.C)	X			
2. Administrative Use Permit (Ref: ODC Section 4.02.015)	X			
3. Business License - Zoning/Land Use Compliance (Ref: OMC 3-1.129 Zoning Compliance)	X			
4. Development Plans within the ONT zoning district (Ref: ODC Section 4.02.025)	X			
5. Fair Housing and Reasonable Accommodation (Ref: ODC Section 4.02.035)	X			
6. Landscape and Irrigation Documentation Plans (Ref: ODC Section 6.05.015)	X			
7. Off-Site (Public) Improvement Plans (Ref: ODC Section 6.08.040)	X			
8. ONT ALUCP Interagency Reviews **[3]** (Ref: ONT ALUCP)	X			
9. Other Plan Checks and actions required by this Development Code	X			

Table 2.03-1: Notification Matrix

Applications, Actions, Decisions And Processes	*Required Method of Public Notification*			
	Not Required	*Newspaper or Posting [2]*	*First Class Mail or Delivery [2]*	*Newspaper—1/8 page advertisement if the number of property owners to whom notices would be mailed or delivered is greater than 1,000*
10. Shopping Cart Retention Plans (Ref: ODC Section 6.11.020)	X			
11. Sign Plans (Ref: ODC Section 4.03.020)	X			
12. Single-Family Two-Unit Developments (Ref: ODC Section 5.03.403)	X			
13. Subdivisions				
a. Certificates of Compliance (Ref: ODC Section 4.03.025)	X			
b. Final Tract and Parcel Maps, and Vesting Maps (Ref: ODC Section 4.03.030)	X			
c. Lot Line Adjustments (Ref: ODC Section 4.03.035)	X			
d. Map Corrections and Amendments (Ref: ODC Section 4.03.040)	X			
e. Street Address Numbering (Ref: ODC Section6.06.010)	X			
f. Street Name Assignment (Ref: ODC Section 6.06.010)	X			
g. Subdivision Improvement Agreement (Ref: ODC Section 6.08.040.G)	X			
h. Urban Lot Splits (Ref: ODC Section 8.08.060)	X			
14. Tier 1 wireless telecommunications facility pursuant to ODC Section 5.03.415 (Wireless Telecommunications Facilities)	X			
15. Walls, Fences, and Other Obstructions Plans not associated with a Development Plan (Ref: ODC Section 6.02.005)	X			
D. ENVIRONMENTAL DETERMINATIONS AND ACTIONS				
1. Environmental Impact Reports (EIRs) (Ref: CCR Section 15080, et seq.)		X	X	X
2. Exempt Projects (Ref: CCR Section 15300, et seq.)	X			
3. Ministerial Projects (Ref: CCR Section 15268)	X			

Table 2.03-1: Notification Matrix

Applications, Actions, Decisions And Processes	*Required Method of Public Notification*			
	Not Required	*Newspaper or Posting [2]*	*First Class Mail or Delivery [2]*	*Newspaper—1/8 page advertisement if the number of property owners to whom notices would be mailed or delivered is greater than 1,000*
4. Negative Declarations (NDs) and Mitigated Negative Declarations (MNDs) (Ref: CCR Section 15070, et seq.)		X		
5. Addendums to previously certified EIRs and previously adopted NDs and MNDs (Ref: CCR Section 15164)	X			

Notes:

[1] Public hearing notification is required pursuant to Section 2.03.010 (Public Hearing Notification) of this Division.

[2] Public notification shall not be required for Development Advisory Board or Historic Preservation Subcommittee hearings when acting in the capacity of an Advisory Authority.

[3] Refer to the Ontario International Airport Land Use Compatibility Plan (ONT ALUCP) for procedures for application processing and administration, and appeals processing.

[4] A Minor Adjustment/Alteration shall require notification pursuant to Paragraph 4.02.020.C.3 (Application Filing, Processing and Hearing) of this Development Code.

[5] Publication or posting of a legal notice is required only if a public hearing is requested by the applicant, an abutting property owner, or other affected person or entity.

2.03.010: Public Hearing Notification

A. Public Hearing Notice Minimum Information. Public hearing notices shall contain the following minimum information:

1. A general description, in text or by diagram, of the location of the real property that is the subject of the hearing;

2. Time, place, and location of the public hearing;

3. A general description of the matter to be considered;

4. A statement indicating that additional application materials and documentation are on file with the City of Ontario and where such additional project information may be viewed or obtained;

5. A statement that any interested person may appear at the hearing or submit written material prior to the commencement of the hearing; and

6. The identity of the hearing body or officer.

B. **Notices for Public Hearings Conducted by the City Council.** A notice for a public hearing conducted by the City Council shall not be published, mailed, delivered, or posted in advance of a public hearing conducted by the Planning Commission pursuant to Table 2.02-1 (Review Matrix) of this Development Code, as the public hearing notice shall include the recommendation of the Planning Commission.

C. **Public Notification Required 10 Days in Advance of any Public Hearing.** Public hearing notification shall be provided a minimum of 10 days in advance of any public hearing (20 days if a proposed ordinance or amendment to a zoning ordinance affects the permitted uses of real property) and shall be provided by one or more of the following methods, as necessary:

1. First Class Mail or Delivery. First Class Mail or delivery shall be provided to:

a. Any person filing a request to the Planning Department to receive such notices; and

b. All owners of real property located within the specified minimum exterior boundaries of the property that is the subject of the hearing, as shown on the last equalized assessment roll, or records of the county assessor or tax collector if those records contain more recent information than the information contained on the assessment roll, except that:

(1) For Minor Variances, the area of notification shall include all properties having a property line common with the affected property;

(2) For discretionary applications, the area of notification shall be within 300 FT of the exterior boundaries of the property that is the subject of the hearing;

(3) For wireless telecommunications facilities located 500 FT or less from residentially zoned property, the area of notification shall be within 500 FT of the exterior boundaries of the property that is the subject of the hearing; and

(4) For legislative applications, the area of notification shall be within 600 FT of the exterior boundaries of the property that is the subject of the hearing.

c. The owner's duly authorized agent, if any; and

d. The project applicant; and

e. Any owner of a mineral right pertaining to the subject real property who has recorded a notice of intent to preserve the mineral right pursuant to CC Section 883.230; and

f. Each local agency expected to provide water, sewage, streets, roads, schools or other essential facilities or services to the project, whose ability to provide those facilities and services may be significantly affected.

2. Number of Owners Requiring Public Hearing Notification Is Greater Than 1,000. If the number of owners to whom notice would be mailed or delivered pursuant to Subparagraph C.1.b of this Section, is greater than 1,000, in lieu of mailed or delivered notice, a display advertisement of at least 1/8 page may be placed in at least one newspaper of general circulation within the City of Ontario.

3. Public Hearing Notice Publication. If notice is mailed or delivered pursuant to Subparagraph C.1.b of this Section, notice shall also be published in at least one newspaper of general circulation in the City or, if there is no such newspaper of general circulation, the notice shall be posted in at least 3 public places within the boundaries of the City, including the subject site.

4. Supplemental Public Noticing Requirements — Posting.

a. In addition to the requirements of paragraphs C.1 through C.3, above, supplemental public notice shall be provided, which consists of one or more large public notification signs consisting of a 6-foot-tall freestanding sign, having a sign face measuring 4 feet tall by 8 feet wide, which shall be posted on the project site for development related projects meeting any of the following criteria:

(1) The proposed project is planned to be developed at a higher density or intensity than the existing surrounding neighborhood; and/or

(2) The proposed project requires a General Plan Amendment, Specific Plan Amendment, or Zone Change; and/or

(3) The proposed project requires the preparation of an environmental impact report; and/or

(4) The Planning Director has determined that supplemental public notice is necessary and desirable based on the nature of the proposed project. For large projects, the planning director may determine that more than one sign is necessary.

b. A cash deposit is required in an amount adopted by resolution of the City Council, to ensure compliance with the supplemental notification requirements, including maintenance and removal of the large notification sign.

c. In order to implement the large public notification signs as an effective form of public notification, the following rules and standards shall apply:

(1) Large public notification signs shall be constructed and installed pursuant to the specifications established and published by the Planning Director.

(2) Large public notification signs shall be posted at each of the project site's street-facing corners and a logical midpoint of each street frontage, unless otherwise directed by the Planning Director. Sign locations shall be approved by the Planning Director in conjunction with a Sign Plan for a temporary sign issued pursuant to the requirements of Division 8.01 (Sign Regulations) of this Development Code.

(3) The fabrication and installation of a large public notification sign shall be the responsibility of the project applicant. Once the project application is deemed complete and all notification signs installed per city standards, the proposed project will be scheduled for all required public hearings.

(4) Large public notification signs shall be maintained in good condition and shall remain in place until the final decision on the proposed project has been made or the application is withdrawn.

(5) Large public notification signs shall be removed by the applicant within 14 days following the final decision on the project or the date of application withdrawal. Failure to remove the sign within the prescribed period shall result in forfeiture of the cash deposit and removal of the sign by the City.

5. Other Acceptable Methods of Public Noticing. In addition to the public noticing required by Paragraphs C.1 through C.4 of this Section, the City may give notice of a hearing by any other method deemed necessary or desirable by the Planning Director.

D. **Public Notices Required Pursuant to CEQA.** Public notification required pursuant to CEQA shall be prepared and advertised consistent with the requirements of the "City of Ontario Guidelines for the implementation of the California Environmental Quality Act," latest edition.

2.03.015: Public Hearing Procedures

A. At any public hearing held pursuant to the provisions of this Division, the Advisory, Approving or Appeal Authority shall hear the applicant, appellant, and any interested persons. The Advisory, Approving or Appeal Authority may restrict the oral presentation by any person to a time period established in the rules and procedures of the Authority, and may preclude the introduction of any evidence determined to be irrelevant to the public hearing. However, an Advisory, Approving or Appeal Authority shall receive any person's written statement.

B. In the event that an Advisory, Approving or Appeal Authority has obtained evidence outside of the hearing, the information shall be placed into the record. Thereafter, the applicant, appellant or any interested person may rebut the information and shall be entitled to a continuance for that purpose; however, no person may examine an Advisory, Approving or Appeal Authority.

C. Any action or decision of an Advisory, Approving or Appeal Authority shall require a majority vote of its attending members. An abstention by any member who is present at the hearing, and has heard all presented evidence, shall constitute an affirmative vote on any motion regarding the application.

D. When an action or decision of an Approving Authority is anticipated to be contested, the City shall insure that a verbatim record of the hearing is made and duly preserved, provided that a written request is submitted to the City, along with a deposit equal to the total anticipated cost of preparing the record, at least 5 days prior to the date of the hearing. If the actual cost to prepare the record is greater than the provided deposit, the difference (amount owed) shall be paid to the City prior to the record being made available. The City shall return any unused portion of the deposit following completion of the record.

E. Any public hearing conducted pursuant to this Section may be continued from time-to-time. If a hearing is continued at the request of an applicant or appellant, the continuance shall constitute a waiver of any applicable time period in which to act or render a decision.

F. Any action or decision of the Approving Authority shall be final and conclusive, unless appealed pursuant to the provisions of Division 2.04 (Appeals) of this Development Code.

2.03.020: Request for Notification

Wherein notice of a public hearing is required pursuant to Section 2.03.010 (Public Hearing Notices) of this Division, the notice shall also be mailed or delivered at least 10 days prior to the hearing to any person who has filed a written request for such notice with either the city clerk or the Planning Department.

2.03.025: Failure to Receive a Public Notice

Pursuant to GC Section 65093, the failure of any person or entity to receive notice given pursuant to this Division shall not constitute grounds for any court to invalidate the actions of the Approving Authority for which the notice was given.

2.03.030: Cemeteries

Wherein an application is submitted for a Development Code Amendment, General Plan Amendment, Specific Plan Amendment, Variance, Conditional Use Permit, Development Plan, or any entitlement for use which would permit all or any part of a cemetery, as defined in HSC Section 8100, to be used for other than cemetery purposes, the City shall give notice pursuant to Section 2.03.010 (Public Hearing Notices) of this Division. Those persons requesting notice shall be notified by the City at the address provided at the time of the request.

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Division 2.04—Appeals

Sections:

2.04.000: Purpose
2.04.005: Applicability
2.04.010: Appeals
2.04.015: Planning Commission Right to Direct that a Decision or Action of the Zoning Administrator or Development Advisory Board be Further Considered
2.04.020: City Council Right to Direct that a Decision or Action of the Planning Commission, Zoning Administrator, or Development Advisory Board be Further Considered

2.04.000: Purpose

The purpose of this Division is to implement GC Section 65903, which governs the establishment of procedures for the filing, processing and hearing of appeals on actions or decisions of a City department, agency, or Approving Authority.

2.04.005: Applicability

Any person having legal standing, including but not limited to an applicant, resident, business owner, or any person owning real property within the City, that is aggrieved by an interpretation, action or decision made pursuant to this Development Code by any City agency or department, or by an Approving Authority, may appeal such action to the Appeal Authority in accordance with the provisions of this Division.

2.04.010: Appeals

A. Appeal Authority.

1. The Appeal Authority for all legislative actions, discretionary permits and actions, and ministerial permits and decisions, is hereby established pursuant to Table 2.02-1 (Review Matrix) of this Development Code.

2. The Appeal Authority for an administrative interpretation, action, or decision made by any City agency or department head regarding any matter prescribed or governed by this Development Code may be appealed to the Planning Commission, except as otherwise prescribed by this Development Code.

B. Appeal Procedure.

1. An appeal request shall be filed with the Planning Department on a City application form, along with any appropriate fees established by resolution of the City Council, within 10 days following the action or decision being appealed. The appeal shall include a statement identifying the specific action or decision of the Approving Authority that is being appealed, the specific grounds for the appeal, and the relief requested from the Appeal Authority.

2. An appeal of an action or decision by the Approving Authority shall be limited to those matters raised during the hearing and contained in the appeal statement. The Appeal Authority shall not consider any matter that was not raised during the hearing before the Approving Authority and contained in the appeal statement.

3. Upon receipt of an appeal request, copies of the request and supporting information shall be conveyed to the Appeal Authority within 45 days (30 days for a tentative subdivision map) following the filing of the appeal request. The Appeal Authority shall set the matter for hearing, which shall be noticed and conducted pursuant to Division 2.03 (Public Hearings) of this Development Code.

4. Upon receipt of an appeal request, the Planning Director shall prepare the record on the subject matter of the appeal, including any staff reports and meeting minutes, and transmit the record to the Appeal Authority. The Planning Director shall also prepare a written report responding to the appeal statement, containing a recommendation on the appeal and appropriate findings supporting the recommendation, along with any appropriate conditions of approval. The report shall be made available to the Appellant at least 72 hours prior to the hearing before the Appeal Authority.

5. Within 30 days (10 days for a tentative subdivision map) following the conclusion of the hearing, the Appeal Authority shall render its decision on the appeal. The Appeal Authority may deny the appeal or may grant the appeal in whole or in part, along with any conditions it deems necessary to protect the public health, safety and general welfare. The decision shall include all required findings.

2.04.015: Planning Commission Right to Direct Further Consideration of a Zoning Administrator or Development Advisory Board Action

A. Agendas of Zoning Administrator and Development Advisory Board hearings shall be provided to the Planning Commission at least 72 hours prior to the date of the hearing.

B. Within 10 days following any decision or action of the Zoning Administrator or Development Advisory Board, the Planning Commission may call-up such decision or action for further consideration.

C. Upon calling-up a decision or action pursuant to Subsection B, above, the Planning Commission shall set the matter for hearing, which shall be noticed and conducted pursuant Division 2.03 (Public Hearings) of this Development Code. The hearing shall proceed pursuant to Subsection 2.04.010.B (Appeal Procedure) of this Division.

D. The Planning Commission may affirm, reverse, or modify the decision or action being reconsidered. The Planning Commission's decision shall be final and conclusive in the absence of an appeal filed pursuant to this Division.

2.04.020: City Council Right to Direct Further Consideration of a Planning Commission, Zoning Administrator, or Development Advisory Board Action

A. All agendas for Zoning Administrator, Development Advisory Board and Planning Commission hearings shall be provided to the City Council at least 72 hours prior to the date of the hearing.

B. Within 10 days following any decision or action of the Planning Commission, Zoning Administrator, or Development Advisory Board, the City Council may direct that such decision or action be sent to the Planning Commission for further consideration.

C. Within 10 days following any decision or action of the Planning Commission, the City Council may call-up such decision for further consideration.

D. Upon sending or calling-up a decision or action pursuant to Subsections B and C of this Section, the applicable hearing body shall set the matter for hearing, which shall be noticed and conducted pursuant to Division 2.03 (Public Hearings) of this Development Code. The hearing shall proceed pursuant to Section 2.04.010.B (Appeal Procedure) of this Division.

E. The Planning Commission or City Council may affirm, reverse, or modify the decision or action being reconsidered. The Planning Commission's decision shall be final and conclusive, unless appealed to the City Council pursuant to Section 2.04.010 (Appeals) of this Division. The City Council's decision shall be final and conclusive.

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Division 2.05—City Initiated Modification or Revocation

Sections:

2.05.000: Purpose
2.05.005: Applicability
2.05.010: Procedures for Disciplinary or Punitive Modification or Revocation
2.05.015: Procedures for Conditional Use Permit Revocation Due to Abandonment of Use

2.05.000: Purpose

The purpose of this Division is to:

A. Establish procedures for securing disciplinary or punitive modification or revocation of a previously granted Conditional Use Permit, or Historic Preservation—Certificate of Appropriateness or Certificate of Economic Hardship; and

B. Establish procedures for the revocation of Conditional Use Permits, for which the land use granted has been abandoned.

2.05.005: Applicability

A. Conditional Use Permit.

1. Disciplinary or Punitive Modification.

a. The Approving Authority shall have authority to add, delete, or modify conditions of approval imposed upon a previously granted Conditional Use Permit, based upon one or more of the following causes of action:

(1) The Conditional Use Permit granted is being, or has recently been exercised contrary to the terms and/or conditions of application approval;

(2) The Conditional Use Permit granted is being, or has recently been exercised in violation of a federal, State or City statute, ordinance, law, or regulation; and/or

(3) The Conditional Use Permit granted was exercised in a way that is detrimental to the public peace, health, safety, or welfare, or constitutes a nuisance.

b. The action to modify a Conditional Use Permit shall have the effect of changing the physical and/or operational aspects of the Conditional Use Permit. The changes may include the physical and/or operational aspects related to noise, buffers, duration of the permit, hours of operation, landscaping and maintenance, lighting, parking, performance guarantees, property maintenance, signs, surfacing, traffic circulation, or any other aspect or condition determined to be reasonable and necessary to ensure that the Conditional Use Permit is implemented in a manner consistent with the original findings for approval, and all conditions of project approval.

2. Disciplinary or Punitive Revocation.

a. The Approving Authority shall have authority to revoke a Conditional Use Permit, based upon one or more of the following causes of action:

(1) The Conditional Use Permit approval was obtained by fraud;

(2) The Conditional Use Permit granted is not being exercised, has ceased to exist, or has been suspended for more than 180 consecutive days;

(3) The Conditional Use Permit granted is being, or has recently been exercised contrary to the terms and/or conditions of application approval;

(4) The Conditional Use Permit granted is being or has been exercised in violation of a federal, State or City statute, ordinance, law, or regulation; and/or

(5) The Conditional Use Permit granted was exercised in a way that is detrimental to the public peace, health, safety, or welfare, or constitutes a nuisance.

b. The Approving Authority's action to revoke a Conditional Use Permit shall have the effect of terminating the permit and denying the privileges granted by the original approval and any subsequent modifications.

3. Revocation of Due to Abandonment of Use. A Conditional Use Permit granting a land use that is not being exercised, has ceased to exist, or has been suspended for more than 180 consecutive days, may be deemed to be abandoned (cause of action) and may be revoked solely on the basis of its abandonment.

B. Historic Preservation—Certificate of Appropriateness or Certificate of Economic Hardship.

1. Disciplinary or Punitive Modification.

a. The Approving Authority shall have authority to add, delete, or modify conditions of approval imposed upon a previously granted Certificate of Appropriateness or Certificate of Economic Hardship, based upon one or more of the following causes of action:

(1) The Certificate of Appropriateness or Certificate of Economic Hardship granted is being, or has recently been exercised contrary to the terms and/or conditions of certificate approval;

(2) The Certificate of Appropriateness or Certificate of Economic Hardship granted is being, or has recently been exercised in violation of a federal, State or City statute, ordinance, law, or regulation; and/or

(3) The Certificate of Appropriateness or Certificate of Economic Hardship granted was exercised in a way that is detrimental to the public peace, health, safety, or welfare, or constitutes a nuisance.

b. The action to modify a Certificate of Appropriateness or Certificate of Economic Hardship shall have the effect of changing the physical aspects of the certificate, such as landscaping and irrigation, lighting, parking, performance guarantees, property maintenance, signs, paving, or any other aspect or condition determined to be reasonable and necessary to

ensure that the certificate is implemented in a manner consistent with the original findings for approval, and all conditions of project approval.

2. Disciplinary or Punitive Revocation.

a. The Approving Authority shall have authority to revoke a Certificate of Appropriateness or Certificate of Economic Hardship, based upon one or more of the following causes of action:

(1) The Certificate of Appropriateness or Certificate of Economic Hardship approval was obtained by fraud;

(2) The Certificate of Appropriateness or Certificate of Economic Hardship granted is not being exercised;

(3) The Certificate of Appropriateness or Certificate of Economic Hardship granted is being, or has recently been exercised contrary to the terms and/or conditions of application approval;

(4) The Certificate of Appropriateness or Certificate of Economic Hardship granted is being or has been exercised in violation of a federal, State or City statute, ordinance, law, or regulation; and/or

(5) The Certificate of Appropriateness or Certificate of Economic Hardship granted was exercised in a way that is detrimental to the public peace, health, safety, or welfare, or constitutes a nuisance.

b. The Approving Authority's action to revoke a Certificate of Appropriateness or Certificate of Economic Hardship shall have the effect of terminating the certificate and denying the privileges granted by the original approval and any subsequent modifications.

2.05.010: Procedures for Disciplinary or Punitive Modification or Revocation

A. Initiation of Modification or Revocation.

1. Conditional Use Permit. It shall be the responsibility of the Zoning Administrator to determine whether reasonable grounds exist to initiate a Conditional Use Permit modification or revocation.

2. Certificate of Appropriateness or Certificate of Economic Hardship. It shall be the responsibility of the Historic Preservation Subcommittee to determine whether reasonable grounds exist to initiate a Certificate of Appropriateness or Certificate of Economic Hardship modification or revocation.

B. Hearing Notification. Upon determination that reasonable grounds exist to initiate a permit or certificate modification or revocation, the City shall:

1. Schedule a hearing before the Approving Authority, which shall be noticed pursuant to Division 2.03 (Public Hearings) of this Development Code, based upon the type of application being considered (Note: If Division 2.03 (Public Hearings) does not require public

notification for the application type being considered, no public notice shall be required for the modification/revocation hearing); and

2. Serve the affected applicant(s) and property occupant(s), and property owner if different from the applicant(s) or property occupant(s), with a *Notice of Commencement of Modification/Revocation Proceedings*. The notice shall be sent by certified mail at least 10 days prior to the public hearing date, and shall contain the following minimum information:

a. A description of the subject property, including street address, Assessor Parcel Number(s) or legal description;

b. The name(s) of the owner, and name(s) of occupants if different from the owner;

c. The project file number and date of issuance;

d. A description of the authorized land use or development entitlement, or discretionary administrative permit;

e. Statements supporting one or more of the causes of action contained in Section 2.05.005 (Applicability) of this Division;

f. A statement that the Approving Authority will hold a public hearing within 60 days following the date of the Notice, to determine whether sufficient cause exists and that the Approving Authority, at the conclusion of the hearing, may either revoke the entitlement or permit, or take other action as deemed appropriate to ensure entitlement or permit compliance;

g. A statement that the applicant, owner, and/or occupant may appear in person and/or be represented by legal counsel, may present oral and documentary evidence, and may call witnesses and may ask questions of witnesses called on behalf of the City; and

h. The date, time, and place of the public hearing.

C. Hearing.

1. The modification or revocation shall be heard and acted upon pursuant to the procedures for public hearings contained in Division 2.03 (Public Hearings) of this Development Code.

2. At the conclusion of the hearing, the Approving Authority may take appropriate action to ensure permit or certificate compliance, including the addition, deletion, or modification of conditions of approval, or revocation of the permit or certificate.

D. Decision and Notice to Property Owner.

1. Within 45 days following the conclusion of the modification or revocation hearing, the Approving Authority shall render a decision and shall mail notice of the decision, including facts and reasons supporting the causes of action, to the property owner and property occupant, if different from the property owner, and any other interested persons that have filed a written request for the notice.

2. The decision of the Approving Authority to modify or revoke an approved discretionary permit or action shall be final and conclusive in the absence of an appeal filed pursuant to Division 2.04 (Appeals) of this Development Code.

2.05.015: Procedures for Conditional Use Permit Revocation Due to Abandonment of Use

A. Revocation Initiation. The Approving Authority may initiate the revocation of a Conditional Use Permit when sufficient grounds exist, which clearly demonstrate abandonment of the use granted.

B. Hearing Notification. Upon determination by the Approving Authority that reasonable grounds exist to initiate Conditional Use Permit revocation, the Approving Authority shall conduct a hearing, setting the date and time upon which the request will be considered. Notice of the hearing shall be given, and the hearing shall be conducted, pursuant to Division 2.03 (Public Hearings) of this Development Code.

C. Decision and Notice to Property Owner.

1. The Approving Authority shall not revoke a Conditional Use Permit if there is a compelling government interest in maintaining the subject permit.

2. The Approving Authority's action to revoke a Conditional Use Permit shall have the effect of terminating the land use permit, along with any privileges granted by the original approval and any subsequent modifications that may have been granted.

3. Following the conclusion of the revocation hearing, the Approving Authority shall render a decision and shall mail notice of the decision, including facts and reasons supporting the cause of action, to the property owner and property occupant, if different from the property owner, and any other interested persons that have filed a written request for the notice.

4. The decision of the Approving Authority shall be final and conclusive in the absence of an appeal filed pursuant to Division 2.04 (Appeals) of this Development Code.

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Division 2.06—Performance Guarantees

Sections:

2.06.000: Purpose
2.06.005: Applicability
2.06.010: Surety Form and Amount
2.06.015: Surety for Maintenance
2.06.020: Duration of Surety
2.06.025: Release or Forfeiture of Surety

2.06.000: Purpose

The purpose of this Division is to establish a procedure by which a discretionary permit or action, or ministerial permit or decision may require, by conditions of approval or by action of the Approving Authority, to provide surety guaranteeing the faithful performance and proper completion of any approved work and compliance with conditions of approval.

2.06.005: Applicability

The provisions of this Division shall apply to performance guarantees for projects authorized by any a discretionary permit or action, or ministerial permit or decision required by this Development Code.

2.06.010: Surety Form and Amount

The required surety shall be in a form (e.g., cash deposit, certificate of deposit, surety bond, etc.) approved by the Planning Director or City Engineer, upon recommendation of the City Attorney. The amount of surety shall be as determined by the Planning Director and/or City Engineer to be necessary to ensure proper completion of the work and compliance with conditions of approval.

2.06.015: Surety for Maintenance

In addition to any improvement surety required to guarantee proper completion of work, the Planning Director or City Engineer may require surety for maintenance of the work in an amount determined by the Planning Director and/or City Engineer to be sufficient to ensure the proper maintenance and functioning of improvements.

2.06.020: Duration of Surety

Required improvement surety shall remain in effect until final inspections have been made and all work has been accepted by the Planning Director and/or City Engineer, or until any warranty period required by the Planning Director and/or City Engineer has lapsed. Maintenance surety shall remain in effect for the one-year period following the date of final inspection.

2.06.025: Release or Forfeiture of Surety

A. Upon satisfactory completion of work and the approval of a final inspection at the end of the required time for maintenance surety, the improvement and/or maintenance deposits or bonds shall be released.

B. Upon failure to complete all required work, failure to comply with all of the terms of any applicable permit or failure of the completed improvements to function properly, the City may perform the required work or cause it to be completed, and collect from the permittee or surety, all the costs incurred by the City, including the all costs for the work and all related administrative, inspection and legal costs.

C. Any unused portion of the surety shall be refunded to the funding source after deduction of all costs for the work and all related administrative, inspection and legal costs.

Chapter 4.0:
Permits, Actions, and Decisions

Division 4.01—Legislative Actions
Division 4.02—Discretionary Permits and Actions
Division 4.03—Ministerial (Administrative) Permits and Decisions

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Division 4.01—Legislative Actions

Sections:

4.01.000: Purpose
4.01.005: Applicability
4.01.010: Airport Land Use Compatibility Plan (ALUCP) and Amendments
4.01.015: Development Agreements
4.01.020: Development Code Amendments
4.01.025: Amendments to the Policy Plan Component of The Ontario Plan (General Plan Amendments)
4.01.030: Planned Unit Developments (PUD) and Amendments
4.01.035: Specific Plans and Amendments
4.01.040: Zone Changes

4.01.000: Purpose

The purpose of this Division is to prescribe procedures for the consideration of legislative actions by the appropriate Reviewing Authorities. Generally, legislative actions entail the establishment of rules, policies, or standards of general applicability, which involve the exercise of discretion and preside over considerations of public health, safety, and welfare.

4.01.005: Applicability

Whenever the public necessity, convenience, general welfare, or good planning practice so requires, the appropriate Reviewing Authorities, as prescribed by Table 2.02-1 (Review Matrix) of this Development Code, may consider the adoption of a legislative action pursuant to the general provisions prescribed by Division 2.02 (Application Filing and Processing) of this Development Code, and the provisions of this Division that are appropriate to the legislative action being considered.

4.01.010: Airport Land Use Compatibility Plan (ALUCP) and Amendments

A. Purpose. The purpose of this Section is to establish procedures for adopting, amending, supplementing, or changing the Los Angeles/Ontario International Airport Land Use Compatibility Plan pursuant to the provisions of PUC Section 21670 et seq., whenever the public necessity, convenience, general welfare, or good planning practice so requires.

B. Authority.

1. PUC Section 21675 requires the preparation of an Airport Land Use Compatibility Plan (ALUCP) that will provide for the orderly growth of Los Angeles/Ontario International Airport and the area surrounding the airport and will safeguard the inhabitants within the vicinity of the airport and the public in general. The City Council may, by ordinance and upon written recommendation of the Planning Commission, further amended, supplement or change the ALUCP, whenever the public necessity, convenience, general welfare, and good planning practice so requires.

2. The Los Angeles/Ontario International Airport Land Use Compatibility Plan and any amendments thereto, shall be enforceable in the same manner and to the same extent as any other provision of this Development Code.

C. Application Filing, Processing and Hearing. An application for ALUCP adoption or an amendment there to, shall be filed, processed, and heard pursuant to Section 2.02.015.A (Legislative Actions) of this Development Code.

D. Findings and Decision. An ALUCP, or any amendment thereto, shall be acted upon by the Approving Authority based upon the information provided in the submitted application, evidence presented in the Planning Department's written report, and testimony provided during the public hearing, only after considering and clearly establishing all of the below-listed findings, and giving supporting reasons for each finding. The application shall be denied if one or more of the below-listed findings cannot be clearly established.

1. The proposed ALUCP, or amendment thereto, will protect the public health, safety, and welfare by ensuring the orderly expansion of airports;

2. The proposed ALUCP, or amendment thereto, will minimize the public's exposure to excessive noise and safety hazards within areas around the airport to the extent that these areas are not already devoted to incompatible uses;

3. The proposed ALUCP, or amendment thereto, is consistent with the goals and policies of the general plan; and

4. The proposed ALUCP, or amendment thereto, is reasonable and beneficial, and in the interest of good planning practice.

4.01.015: Development Agreements

A. Purpose. The purpose of this Section is to establish procedures for adopting, amending, supplementing, or changing Development Agreements by and between the City and persons having a legal or equitable interest in a property proposed to be the subject of an agreement, whenever the public necessity, convenience, general welfare, or good planning practice so requires.

B. Authority. Pursuant to GC Section 65864, et seq., the City Council may, by ordinance and upon written recommendation of the Planning Commission as to the consistency of a proposed Development Agreement with the Policy Plan (General Plan) component of The Ontario Plan, enter into a development agreement with any person having a legal or equitable interest in real property for the development of the property. It is intended that the provisions of this division shall be fully consistent and compliant with the provisions of GC Section 65864, et seq., and shall be so construed.

C. Agreement Contents.

1. A Development Agreement entered into pursuant to the provisions of this Division shall, at a minimum, include the following information:

a. Duration of the agreement;

b. The permitted use(s) of the property;

c. The density or intensity of use;

d. The maximum height and size of proposed buildings; and

e. Provisions for reservation or dedication of land for public purposes.

2. In addition to the minimum information required by Paragraph C.1., above, the development agreement may include the following:

a. Conditions, terms, restrictions, and requirements for subsequent discretionary actions, provided such conditions, terms, restrictions and requirements for subsequent discretionary actions shall not prevent development of the land for the use(s) and to the density or intensity of development set forth in the agreement;

b. Provide that construction shall be commenced within a specified time period and that the project, or any phase thereof, be completed within a specified time;

c. Terms and conditions relating to applicant financing of necessary public facilities and subsequent reimbursement over time; and

d. Any other such terms, conditions, and requirements as deemed necessary and proper by the City Council, including, but not limited to, a requirement for assuring to the satisfaction of the City, performance of all provisions of the development agreement in a timely fashion by the agreement holder.

D. Application Filing, Processing and Hearing. An application for Development Agreement consideration shall be filed, processed, and heard pursuant to Section 2.02.015.A (Legislative Actions) of this Development Code.

E. Findings. A Development Agreement shall be acted upon by the Approving Authority based upon the information provided in the submitted application, evidence presented in the Planning Department's written report, and testimony provided during the public hearing, only after considering and clearly establishing that the provisions of the Agreement are consistent with the goals, policies, plans and exhibits of the Vision, Policy Plan (General Plan), and City Council Priorities components of The Ontario Plan, and any applicable specific plans, and giving supporting reasons for each finding. A Development Agreement shall be denied if one or more of the required findings cannot be clearly established.

F. Recordation of Agreement. Within 10 days following the City entering into a Development Agreement, the City Clerk shall record with the county recorder, a copy of the Agreement, which shall prescribe the land subject to the agreement. From and after the time of recordation, the Agreement shall impart notice thereof to all persons as is afforded by the recording laws of this State. The burdens of the Agreement shall be binding upon, and the benefits of the Agreement shall inure to, all successors in interest to the parties to the agreement.

G. Amendments. A Development Agreement may be amended, or cancelled in whole or in part, by mutual consent of the parties to the Agreement, or their successors in interest. Any action to amend or cancel any portion of the Agreement shall be carried out pursuant to the procedures specified in Subsection D (Application Filing, Processing and Hearing), above.

H. Annual Review.

1. Every Development Agreement approved and executed pursuant to this Division shall be annually reviewed during the term of the Agreement, following the date of its execution. The purpose of the review is to determine whether the holder of the Agreement has complied in good faith with the terms of the Agreement. The burden shall be placed on the holder of the Agreement to demonstrate compliance to the full satisfaction of and in a manner prescribed by the City.

2. If as a result of annual review pursuant to this Subsection the City Council finds and determines, on the basis of substantial evidence, that the holder of the Development Agreement has not complied in good faith with the terms or conditions of the Agreement, the City Council may either amend or terminate the Agreement.

I. Modification/Suspension in Compliance with State or Federal Regulations. In the event that State or Federal laws or regulations, enacted after a Development Agreement has been entered into, prevent or preclude compliance with one or more provisions of the Development Agreement, the affected provisions of the Agreement shall be modified or suspended as may be necessary to comply with State or Federal laws or regulations.

4.01.020: Development Code Amendments

A. Purpose. The purpose of this Section is to establish procedures for amending, supplementing, or changing this Development Code whenever the public necessity, convenience, general welfare, or good planning practice so requires.

B. Authority. Pursuant to GC Section 65853 through Section 65859, the City Council may, by ordinance and upon written recommendation of the Planning Commission, amend, supplement, or change the ordinances codified in this Development Code whenever the public necessity, convenience, general welfare, or good zoning practice so requires.

C. Application Filing, Processing and Hearing. An application for a Development Code Amendment shall be filed, processed, and heard pursuant to Section 2.02.015.A (Legislative Actions) of this Development Code.

D. Findings and Decision. A Development Code Amendment shall be acted upon by the Approving Authority based upon the information provided in the submitted application, evidence presented in the Planning Department's written report, and testimony provided during the public hearing, only after considering and clearly establishing all of the below-listed findings, and giving supporting reasons for each finding. The application shall be denied if one or more of the below-listed findings cannot be clearly established.

1. The proposed Development Code Amendment is consistent with the goals, policies, plans and exhibits of the Vision, Policy Plan (General Plan), and City Council Priorities components of The Ontario Plan; and

2. The proposed Development Code Amendment would not be detrimental to the public interest, health, safety, convenience, or general welfare of the City.

E. Urgency Measure: Interim Ordinance. Without following the procedures otherwise required prior to the adoption of a Development Code Amendment, to protect the public safety, health,

and welfare, the City Council may adopt as an urgency measure, an interim ordinance prohibiting any uses that may be in conflict with a contemplated general plan, specific plan, or zoning proposal that the City Council, Planning Commission, or the Planning Department is considering or studying, or intends to study within a reasonable period. An urgency measure shall be completed pursuant to the provisions of GC Section 65858.

4.01.025: Amendments to the Policy Plan Component of The Ontario Plan (General Plan Amendments)

A. Purpose. The Policy Plan component of The Ontario Plan serves as the City's General Plan, which is mandated by State law pursuant to GC Section 65300, et seq. The purpose of this Section is to establish procedures for amending, supplementing, or changing the Policy Plan whenever the public necessity, convenience, general welfare, or good planning practice so requires.

B. Authority.

1. Pursuant to GC Section 65358, the City Council may, by resolution and upon written recommendation of the Planning Commission, amend, supplement, or change the Policy Plan (General Plan) component of The Ontario Plan.

2. A mandatory element of the Policy Plan shall not be amended more than 4 times during any calendar year; except that this limitation shall not apply to amendments necessary for the development of residential units where at least 25 percent of the proposed units will be occupied by, or available to, persons and families of low or moderate income, as defined by HSC Section 50093.

C. Application Filing, Processing and Hearing. An application for a General Plan (Policy Plan) Amendment shall be filed, processed, and heard pursuant to Section 2.02.015.A (Legislative Actions) of this Development Code.

D. Findings and Decision. A General Plan (Policy Plan) Amendment shall be acted upon by the Approving Authority based upon the information provided in the submitted application, evidence presented in the Planning Department's written report, and testimony provided during the public hearing, only after considering and clearly establishing all of the below-listed findings, and giving supporting reasons for each finding. The application shall be denied if one or more of the below-listed findings cannot be clearly established.

1. Technical Amendment Findings. The first finding (Subparagraph D.1.a, below) and any one or more of the subsequent findings (Subparagraphs D.1.b through e, below) shall justify a technical amendment:

a. The proposed amendment will not change any policy direction or intent of the Policy Plan (General Plan) component of The Ontario Plan.

b. An error or omission is in need of correction.

c. A land use designation was based on inaccurate or misleading information and, therefore, should be changed to properly reflect the policy intent of the Policy Plan (General Plan) component of The Ontario Plan.

d. A point of clarification is needed to more accurately express the meaning of the Policy Plan (General Plan) component of The Ontario Plan, or eliminate a source of confusion.

e. A minor change in boundary will more accurately reflect geological or topographic features, or legal or jurisdictional boundaries.

2. Entitlement/Policy Amendment Findings. The first two findings (of the Policy Plan (General Plan) component of The Ontario Plan, below), and any one or more of the subsequent findings (Subparagraphs D.2.c through f, below), shall justify an entitlement/policy amendment:

a. The proposed change does not involve a change in, or conflict with:

(1) The Ontario Plan Vision;

(2) Any principle of the Policy Plan (General Plan) component of The Ontario Plan; or

(3) Any basic/foundational component of The Ontario Plan.

b. The proposed amendment would contribute to the achievement of the purposes of the Policy Plan (General Plan) component of The Ontario Plan, or, at a minimum, would not be detrimental to them.

c. Special circumstances or conditions have emerged that were unknown or unanticipated at the time the Policy Plan (General Plan) component of The Ontario Plan was adopted.

d. A change in policy is required to conform to changes in state or federal law, or applicable findings of a court of law.

e. An amendment is required to comply with an update of the Housing Element or change in State Housing Element law (commencing with GC Section 65580).

f. An amendment is required to address changes in public ownership of land.

3. Land Use Amendment Findings. The first four findings (Subparagraphs D.3.a through d, below), and any one or more of the subsequent findings (Subparagraphs D.3.e through h, below), shall justify an entitlement/policy amendment:

a. The proposed General Plan Amendment is consistent with the goals and policies of The Ontario Plan.

b. The proposed General Plan Amendment would not be detrimental to the public interest, health, safety, convenience, or general welfare of the City.

c. The Land Use Element is a mandatory element of the Policy Plan (General Plan) component of The Ontario Plan, which, pursuant to GC Section 65358, may be amended up to four times per calendar year, and the proposed General Plan Amendment is the first, second, third, or fourth (insert applicable amendment cycle) amendment to the Land Use Element within the current calendar year.

d. During the amendment of the Policy Plan (General Plan) component of The Ontario Plan, opportunities for the involvement of citizens, California Native American Indian tribes (pursuant to GC Section 65352.3), public agencies, public utility companies, and civic, education, and other community groups, through public hearings or other means, were implemented consistent with GC Section 65351.

e. The proposed project is consistent with the Housing Element of the Policy Plan (General Plan) component of The Ontario Plan, as the project site is not one of the properties listed in the Housing Element Sites Inventory. Furthermore, changing the land use designation of the subject property from the existing Policy Plan (General Plan) land use designation (including density, if applicable) to the proposed Policy Plan (General Plan) land use designation (including density, if applicable) will not impact the City's Regional Housing Needs Assessment (RHNA) obligations, or the City's ability to satisfy its share of the region's future housing need.

f. The proposed project is consistent with the Housing Element of the Policy Plan (General Plan) component of The Ontario Plan, as the project site is listed in the Housing Element Sites Inventory, and the proposed project is consistent with the number of dwelling units and density specified in the Housing Element Sites Inventory.

g. The project site is listed in the Housing Element Sites Inventory of the Policy Plan (General Plan) component of The Ontario Plan, and the proposed project is not consistent with the number of dwelling units or density specified in the Housing Element Sites Inventory; therefore, a General Plan Amendment to remove the subject property from the Housing Element Sites Inventory is required. Removal of the subject property from the inventory will not impact the City's RHNA obligations since there are an adequate number of sites in the inventory to meet the City's RHNA obligations.

h. The proposed project is not consistent with the adopted Housing Element. The project site is listed in the Housing Element Sites Inventory of the Policy Plan (General Plan) component of The Ontario Plan, and the proposed project is not consistent with the number of dwelling units or density specified in the Housing Element Sites Inventory; therefore, a General Plan Amendment to remove the subject property from the Housing Element Sites Inventory is required. Removal of the subject property from the inventory will impact the City's RHNA obligations since there are not an adequate number of sites in the inventory to meet the City's RHNA obligations; therefore, the following property(ies) will be added to the Housing Element Sites Inventory:

Assessor Parcel Numbers (APN)	***Lot Area***
[insert APN]	[insert lot area]

	Housing Element Sites Inventory	
	Existing	***Proposed***
Number of Units:	[insert existing number of units]	[insert proposed number of units]
Assumed Density:	[insert existing density]	[insert proposed density]

4.01.030: Planned Unit Developments (PUD) and Amendments

A. Purpose.

1. The purpose of this Section is to establish procedures for adopting, amending, supplementing, or changing PUDs whenever the public necessity, convenience, general welfare, or good planning practice so requires.

2. The PUD is intended to:

a. Secure a fuller realization of the Policy Plan component of The Ontario Plan than would result from the strict application of present zoning district regulations;

b. Promote high standards in urban design;

c. Encourage the development of exceptionally high quality, mixed-use, high intensity projects, while establishing regulations and standards for uses with unique regulatory and design needs; and

d. Ensure harmonious relationships with surrounding land uses.

B. Authority.

1. Pursuant to GC Section 65850, the City Council may, by ordinance and upon written recommendation of the Planning Commission, adopt, amend, supplement or change regulations pertaining to the use of buildings, structures, and land; and establish development standards governing: building location, height, bulk, number of stories, and size; the size and use of lots, yards, courts, and other open spaces; lot coverage; the intensity of land use; off-street parking and loading; and signage, whenever the public necessity, convenience, general welfare and good planning practice so requires.

2. A PUD shall be required for those properly identified areas shown on Exhibit LU-05 (Additional Plans Required Map) of The Ontario Plan, and may be allowed on those properties located within the growth areas described on Exhibit LU-04 (Generalized and Growth Areas) of The Ontario Plan and in conjunction with mixed-use developments.

3. A PUD, and any amendments thereto, adopted pursuant to this Division shall be enforceable in the same manner and to the same extent as any other provision of this Development Code.

C. Application Filing, Processing and Hearing. An application for Planned Unit Development adoption or amendment thereto, shall be filed, processed, and heard pursuant to Section 2.02.015.A (Legislative Actions) of this Development Code.

D. Findings and Decision. A PUD, or amendment thereto, shall be acted upon by the Approving Authority based upon the information provided in the submitted application, evidence presented in the Planning Department's written report, and testimony provided during the public hearing, only after considering and clearly establishing all of the below-listed findings, and giving supporting reasons for each finding. The application shall be denied if one or more of the below-listed findings cannot be clearly established.

1. The proposed PUD, or amendment thereto, is consistent with the goals, policies, plans and exhibits of the Vision, Policy Plan (General Plan), and City Council Priorities components of The Ontario Plan;

2. The proposed PUD, or amendment thereto, would not be detrimental to the public interest, health, safety, convenience, or general welfare of the City;

3. In the case of an application affecting specific property(ies), the proposed PUD, or amendment thereto, will not adversely affect the harmonious relationship with adjacent properties and land uses; and

4. In the case of an application affecting specific property(ies), the subject site is physically suitable, including, but not limited to, parcel size, shape, access, and availability of utilities, for the request and anticipated development.

5. The proposed PUD is superior to that which could be obtained through the application of the Development Code or a specific plan.

4.01.035: Specific Plans and Amendments

A. **Purpose.** The purpose of this Section is to establish procedures for adopting, amending, supplementing, or changing Specific Plans whenever the public necessity, convenience, general welfare, or good planning practice so requires.

B. **Authority.**

1. Pursuant to GC Section 65450, et seq., the City Council may, by ordinance or resolution, and upon written recommendation of the Planning Commission, adopt, amend, supplement or change a specific plan.

2. A Specific Plan and any amendments thereto, adopted pursuant to this Division, shall be enforceable in the same manner and to the same extent as any other provision of this Development Code.

C. **Application Filing, Processing and Hearing.** Unless otherwise specified in a respective Specific Plan, an application for Specific Plan adoption or amendment shall be filed, processed and heard pursuant to Section 2.02.015.A (Legislative Actions) of this Development Code.

D. **Findings and Decision.** A Specific Plan, or amendment thereto, shall be acted upon by the Approving Authority based upon the information provided in the submitted application, evidence presented in the Planning Department's written report, and testimony provided during the public hearing, only after considering and clearly establishing all of the below-listed findings, and giving supporting reasons for each finding. The application shall be denied if one or more of the below-listed findings cannot be clearly established.

1. The proposed Specific Plan, or amendment thereto, is consistent with the goals, policies, plans and exhibits of the Vision, Policy Plan (General Plan), and City Council Priorities components of The Ontario Plan;

2. The proposed Specific Plan, or amendment thereto, would not be detrimental to the public interest, health, safety, convenience, or general welfare of the City;

3. In the case of an application affecting specific property(ies), the proposed Specific Plan, or amendment thereto, will not adversely affect the harmonious relationship with adjacent properties and land uses; and

4. In the case of an application affecting specific property(ies), the subject site is physically suitable, including, but not limited to, parcel size, shape, access, and availability of utilities, for the request and anticipated development.

4.01.040: Zone Changes

A. **Purpose.** The purpose of this Section is to establish procedures for amending or changing the zoning boundaries or zoning classification (Zone Change) of any property within the City whenever the public necessity, convenience, general welfare, or good planning practice so requires.

B. **Authority.** Pursuant to GC Section 65853 through Section 65859, the City Council may, by ordinance, and upon written recommendation of the Planning Commission, change the zoning boundaries or classification of any property within the City, whenever the public necessity, convenience, general welfare, or good zoning practice so requires.

C. **Application Filing, Processing and Hearing.** An application for Zone Change shall be filed, processed, and heard pursuant to Section 2.02.015.A (Legislative Actions) of this Development Code.

D. **Findings and Decision.** A Zone Change, or amendment thereto, shall be acted upon by the Approving Authority based upon the information provided in the submitted application, evidence presented in the Planning Department's written report, and testimony provided during the public hearing, only after considering and clearly establishing all of the below-listed findings, and giving supporting reasons for each finding. The application shall be denied if one or more of the below-listed findings cannot be clearly established.

1. The proposed Zone Change is consistent with the goals, policies, plans and exhibits of the Vision, Policy Plan (General Plan), and City Council Priorities components of The Ontario Plan;

2. The proposed Zone Change would not be detrimental to the public interest, health, safety, convenience, or general welfare of the City;

3. The proposed Zone Change will not adversely affect the harmonious relationship with adjacent properties and land uses; and

4. The subject site is physically suitable, including, but not limited to, parcel size, shape, access, and availability of utilities, for the request and anticipated development.

E. **Prezoning of Unincorporated Territory.** The prezoning of unincorporated territory within the sphere of influence of the City may be initiated by the Planning Commission on its own motion, or by the City Council in the form of a request to the Planning Commission that it consider the prezoning, or by a petition of the owner or owners of land in the unincorporated territory proposed to be prezoned. A Prezone shall be completed pursuant to GC Section 65859 and this Section and shall become effective at the same time annexation of territory to the City becomes effective.

Division 4.02—Discretionary Permits and Actions

Sections:

4.02.000: Purpose
4.02.005: Applicability
4.02.010: Billboard Relocation Agreements
4.02.015: Conditional Use Permits
4.02.020: Departures from Development Standards (Minor Adjustments/Alterations and Variances)
4.02.025: Development Plans
4.02.030: Extensions of Legal Nonconforming Status
4.02.040: Historic Preservation—Local Historic Landmark and Local District Designations, Historic Resource Tiering, and Architectural Conservation Areas
4.02.045: Historic Preservation—Rescind or Amend the Status of a Historic Resource
4.02.050: Historic Preservation—Certificates of Appropriateness and Demolition of Historic Resources
4.02.055: Historic Preservation—Certificates of Economic Hardship
4.02.060: Historic Preservation—Conservation Plans
4.02.065: Historic Preservation—Mills Act Contracts
4.02.070: Master Plans and Amendments
4.02.075: Sign Programs
4.02.080: Specific Plan Minor Amendments/Alterations
4.02.090: Subdivisions—Reversions to Acreage
4.02.095: Subdivisions—Tentative Tract and Parcel Maps, and Vesting Maps

4.02.000: Purpose

The purpose of this Division is to prescribe procedures for the consideration of discretionary permits or actions. A discretionary permit or action, as established by Table 2.02-1 (Review Matrix) of this Development Code, includes projects that require the exercise of judgment or deliberation when making a decision to approve, conditionally approve, or deny a particular activity.

4.02.005: Applicability

The Reviewing Authorities prescribed by Table 2.02-1 (Review Matrix) of this Development Code, shall consider a discretionary permit or action pursuant to the general provisions prescribed by Division 2.02 (Application Filing and Processing) of this Development Code, and the provisions of this Division that are appropriate to the discretionary permit or action being considered.

4.02.010: Billboard Relocation Agreements

A. Purpose. The purpose of this Section is to establish a procedure to reduce the overall number of legally established nonconforming billboards within the City, allowing billboards to be relocated to locations within the City that are more suitable, and provide for more attractive, aesthetically pleasing billboard designs. In addition, Billboard Relocation Agreements are intended to reduce or eliminate the City's obligation to pay compensation for the removal of legal

nonconforming billboards. Billboard Relocation Agreements are part of the City's demonstrated commitment to improve its overall aesthetic appearance.

B. Applicability.

1. Pursuant to Table 2.02-1 (Review Matrix) of this Development Code, the Approving Authority, upon written recommendation of the Advisory Authority, is hereby empowered to approve, approve in modified form, or deny a Billboard Relocation Agreement for the relocation of legally established nonconforming billboards within the City, to a relocation site established pursuant to this Section, provided a minimum of two existing legal nonconforming billboards are removed.

2. Existing legally established nonconforming billboards may be relocated only as part of a Billboard Relocation Agreement.

3. A relocated billboard proposed pursuant to this Section shall require the concurrent filing of a Sign Plan application pursuant to Section 4.03.020 (Sign Plans) of this Development Code.

C. Definitions. For the purposes of this Section, the following definitions shall apply:

1. "Major Gateway" means an entry into the City through a major transportation corridor or node (e.g., airport, arterial, and rail lines).

2. "Regionally Significant" means a use that supports activities or economies at a scale greater than that of a single jurisdiction, drawing predominately from a market area that extends at least 20 miles beyond the City limits.

3. "Underdeveloped" means a lot that is not developed to its highest and best use.

4. "Visual Clutter" means disorganized, distracting, and/or competing graphics within public view, which contribute to visual blight.

D. Relocation Sites and Billboard Design Criteria. Generally, relocation sites are restricted to areas that are recognized as major gateways into the City, within or adjacent to a regionally significant project. The following considerations shall serve as guidelines for the placement and design of relocated billboards:

1. Site Criteria. The below-listed considerations shall serve as general guidelines for use by applicants and the City in the identification of potential suitable billboard relocation sites. Specific sites within suitable areas will be negotiated through the Billboard Relocation Agreement process.

a. The area is developed with a legally established allowed use that is regionally significant;

b. The area does not have excessive visual clutter;

c. The proposed relocated billboard would be compatible with uses and structures on the site, and in the surrounding area;

d. The proposed billboard would not create a traffic or safety problem with regard to on-site access, circulation, or visibility; and

e. The proposed billboard would not interfere with on-site parking or landscaping required by City ordinance or permit.

2. Prohibited Sites. No Billboard shall be relocated to a site if it meets any of the following criteria:

a. The site is adjacent to any freeway (Interstate 10, Interstate 15, or State Route 60) or Euclid Avenue;

b. The site is located within the AG (Interim Agricultural Overlay) zoning district;

c. The site is undeveloped or underdeveloped;

d. The site is within 3,000 FT of property located within a residential land use district shown on the Land Use Plan (Exhibit LU-01) of the Policy Plan (General Plan) component of The Ontario Plan; and

e. The site is within 3,000 FT of an existing billboard or electronic message center.

f. *Interagency Relocation Exception.* Notwithstanding the foregoing, a billboard may be relocated from a location outside the City, to any location within the City, pursuant to an agreement approved at the discretion of the City Council, between the City and another public agency, so long as the following findings can be clearly established:

(1) A minimum of 6 existing, legal nonconforming billboards shall be removed, at least 5 of which must be currently located within the City;

(2) The billboard's relocation is necessitated by work being performed on the same freeway as the planned new site for the billboard; and

(3) The public health safety and welfare are not impaired by the relocation.

3. Design Criteria. Typical billboard design with a large sign area mounted on a pole is not permitted. Pylon-type signs, which are structural elements with architectural treatment, are required. Suitable design shall be based on the following considerations:

a. The design should be integrated into the design scheme of the surrounding area and/or buildings;

b. The design shall provide architectural interest for the structure; and

c. The design shall incorporate a top and base treatment to the billboard structure;

E. Candidate Billboards for Relocation. The following considerations shall serve as general guidelines in identifying candidate billboards for relocation:

1. Areas of general priority for removal and relocation include redevelopment project areas, areas along major thoroughfares leading into commercial districts, areas visible to freeways and highways, and streets upon which billboards are heavily concentrated and contribute to existing visual clutter.

2. Candidate billboards must be legally established non-conforming billboards. Illegally placed billboards shall not be candidates for Billboard Relocation Agreements.

F. Application Filing, Processing and Hearing. A Billboard Relocation Agreement application shall be filed, processed, and heard pursuant to Division 2.02 (Application Filing and Processing) of this Development Code and the provisions of this Section.

G. Findings. A Billboard Relocation Agreement shall be acted on based upon the information provided in the submitted application, evidence presented in the Planning Department's written report, and testimony provided during the public hearing, only after considering and clearly establishing all of the below-listed findings, and giving supporting reasons for each finding. The Agreement shall be denied if one or more of the below-listed findings cannot be clearly established.

1. The Billboard Relocation Agreement is consistent with the goals, policies, plans and exhibits of The Ontario Plan, the requirements of the Development Code, and any applicable specific plans, area plans, or planned unit developments;

2. The proposed relocation site is compatible with uses and structures on the site and in the surrounding area;

3. The Billboard Relocation Agreement contributes to the reduction of visual clutter in the City;

4. The proposed site complies with the relocation criteria established by this Section; and

5. The proposed billboard will not create a traffic or safety problem with regard to on-site access, circulation, or visibility.

4.02.015: Conditional Use Permits

A. Purpose. The purpose of this Section is to establish a procedure to ensure that a degree of compatibility is maintained with respect to certain uses on certain properties, due to their nature, intensity or size, or to compensate for variations and degrees of technological processes and equipment as related to the generation of noise, smoke, dust, fumes, vibration, odors and other practical hazards.

B. Applicability.

1. Pursuant to Table 2.02-1 (Review Matrix) of this Development Code, the Approving Authority, as applicable, is hereby empowered to approve, approve in modified form, or deny a Conditional Use Permit, and to impose reasonable conditions upon the approval of the application.

2. Conditional Use Permit approval shall be required prior to: **[i]** the establishment of those land uses, activities and facilities so identified in Table 5.02-1 (Land Use Matrix) of this Development Code; **[ii]** the conversion of any existing residential development project for sale, transfer, or conveyance as a common interest project pursuant to Section 6.08.045 (Conversion to a Residential Common Interest Project); **[iii]** the conversion of any existing commercial or industrial development project for sale, transfer, or conveyance, as a common interest project pursuant to Section 6.08.050 (Conversion to a Commercial or Industrial Common Interest Project); and **[iv]** the alteration/expansion of a nonconforming nonresidential land use or structure pursuant to Subsection 3.01.020.J (Alteration and/or Expansion of a Nonconforming Nonresidential Structure) of this Development Code.

C. Application Filing, Processing and Hearing. A Conditional Use Permit application shall be filed, processed, and heard pursuant to Division 2.02 (Application Filing and Processing) of this Development Code and the provisions of this Section.

D. Findings and Decision. A Conditional Use Permit shall be acted upon by the Approving Authority based upon the information provided in the submitted application, evidence presented in the Planning Department's written report, and testimony provided during the public hearing, only after considering and clearly establishing all of the below-listed findings, and giving supporting reasons for each finding. The application shall be denied if one or more of the below-listed findings cannot be clearly established.

1. The scale and intensity of the proposed land use would be consistent with the scale and intensity of land uses intended for the particular zoning or land use district.

2. The proposed use at the proposed location, and the manner in which it will be operated and maintained, is consistent with the goals, policies, plans and exhibits of the Vision, Policy Plan (General Plan), and City Council Priorities components of The Ontario Plan.

3. The proposed use at the proposed location, and the manner in which it will be operated and maintained, is consistent with the objectives and requirements of this Development Code and any applicable specific plan or planned unit development.

4. The proposed use at the proposed location would be consistent with the provisions of the Airport Land Use Compatibility Plan.

5. The establishment, maintenance, and operation of the proposed use at the proposed location would not be detrimental or injurious to property and improvements within the vicinity, nor would it be detrimental to the health, safety, or general welfare of persons residing or working in the surrounding neighborhood.

E. Conditions of Approval.

1. In approving a Conditional Use Permit, the Approving Authority may require certain safeguards and impose certain conditions established to ensure that the purposes of this Development Code are maintained; ensure that the project will not endanger the public health, safety or general welfare; ensure that the project will not result in any significant environmental impacts; ensure that the project will be in harmony with the area in which it is located; and ensure that the project will be in conformity with The Ontario Plan and any applicable specific and/or area plan(s).

2. The conditions imposed on Conditional Use Permits may include provisions concerning use, height, area, yards, open spaces, setbacks, parking, loading, signs, improvements (public and private), site design, operational characteristics, land use compatibility, general character, appearance, environmental impact, time limits for commencement or termination of the construction or use authorized, revocation and use termination dates, and other conditions the Approving Authority may deem appropriate and necessary to carry out the purposes of the Development Code.

3. A copy of the approving decision or resolution, and related conditions of approval (if any) issued by the Approving Authority shall be maintained on site and shall be made available for inspection upon demand by a City representative.

4. A Conditional Use Permit shall only apply to the approved particular use on a particular property, which may be transferred from one owner of the property to another successive owner of the same property.

5. All conditions of approval or requirements authorized by this Section are enforceable in the same manner and to the same extent as any other applicable requirement of this Development Code.

F. Conditional Use Permit Modification/Revision.

1. Conditional Use Permits and/or their conditions of approval may be modified/revised upon application by a project proponent or property owner if different from the proponent. The request shall be submitted to the Planning Department on a City application form pursuant to Division 2.02 (Application Filing and Processing).

2. Modifications/revisions that are minor in nature may be processed administratively, without notice or public hearing, provided the proposed changes are consistent with the intent of the original approval and there are no resulting inconsistencies with this Development Code. Modifications/revisions are considered minor in nature if in the opinion of the Planning Director, they do not involve substantial changes to the approved plans or the conditions of approval and would in no way affect surrounding properties.

3. Modifications/revisions to an approved plan or conditions of approval that, in the opinion of the Planning Director, are not minor in nature, shall be processed as a revised Conditional Use Permit, following the procedures set forth in this Section for Conditional Use Permit approval, except that modification/revision approval shall not alter the expiration date established by the original application approval.

G. Voluntary Surrender of a Conditional Use Permit. A Conditional Use Permit approved pursuant to this Development Code may be voluntarily surrendered, in writing, by the affected property owner. The procedure for Conditional Use Permit surrender shall be as follows:

1. The Reviewing Authority originally approving the subject Conditional Use Permit shall set a date and time on which the request will be considered. Notice of the hearing shall be given pursuant to Division 2.03 (Public Hearings) of this Development Code.

2. The notice shall indicate that any interested person may make a written request at any time prior to the advertised public hearing, or may request in person at the time of the advertised hearing, that a public hearing be held at the advertised date and time. If no hearing is requested, the Reviewing Authority may decide on the matter without a public hearing. If a

public hearing is requested, the Reviewing Authority shall conduct the public hearing pursuant to Division 2.03 (Public Hearings) of this Development Code.

3. The Reviewing Authority shall deny the surrender of the Conditional Use Permit only if it can be clearly shown that there is a compelling government interest in maintaining the Conditional Use Permit.

4. The decision of the Reviewing Authority shall be final and conclusive in the absence of an appeal filed pursuant to Division 2.04 (Appeals) of this Development Code.

4.02.020: Departures from Development Standards (Minor Adjustments/Alterations and Variances)

A. Purpose. The purpose of this Section is to establish procedures by which departures from certain development standards may be permitted by this Development Code when certain specified circumstances exist.

B. Applicability.

1. Pursuant to Table 2.02-1 (Review Matrix) of this Development Code, the Approving Authority is hereby empowered to approve, approve in modified form, or deny certain departures from certain development standards established by this Development Code, and to impose reasonable conditions upon the approval of such request.

2. The City's authority to grant departures from the development regulations contained in this Development Code is authorized by GC Section 65906, which provides that in cases where special circumstances applicable to a property exist, and the strict application of the development regulations deprives such property of privileges enjoyed by other property in the vicinity and under identical zoning classification, the City may allow deviation from the strict application of the development regulations.

C. Minor Adjustments/Alterations.

1. Purpose. Minor Adjustments/Alterations, like Variances, are intended to allow for departures from the strict application of the numerical development standards established by this Development Code, when their strict application would result in practical difficulties, unnecessary hardships, or results inconsistent with the general purpose of the development regulations. Minor Adjustments/Alterations, however, are determined to have a lesser (minor) measure of impact than Variances, due to the limited measure of adjustment allowed; therefore, requiring a modified review process.

2. Applicability.

a. Pursuant to Table 2.02-1 (Review Matrix) of this Development Code, the Approving Authority is hereby empowered to approve, approve in modified form, or deny a Minor Adjustment/Alteration, and to impose reasonable conditions upon the approval of the application.

b. Minor Adjustments/Alterations may be approved for:

(1) A reduction of up to 25 percent from minimum setback and separation requirements, excepting nonresidential setback requirements from property lines that are common with any residentially zoned property; or

(2) A 10 percent increase in the maximum height of structures.

c. A Minor Adjustment/Alteration shall not be approved for reductions in minimum lot size, lot coverage, lot dimension, landscape coverage, parking requirements, or for an increase in maximum density or floor area ratio.

3. Application Filing, Processing and Hearing.

a. A Minor Adjustment/Alteration shall be filed and processed pursuant to Division 2.02 (Application Filing and Processing) of this Development Code and the provisions of this Section.

b. The applicant and the owners of all properties having a property line common with the affected property shall be notified of the proposed Minor Adjustment/Alteration pursuant to Section 2.03.010 (Public Hearing Notification) of this Development Code. Furthermore, the notice shall state that a public hearing shall not be required unless requested by the applicant, an abutting property owner, or other affected person or entity.

c. A public hearing, if requested, shall be conducted pursuant to Division 2.03 (Public Hearings) of this Development Code.

d. If no public hearing is requested, the Zoning Administrator shall approve, approve in modified form, or deny a Minor Adjustment/Alteration no less than 10 days following distribution of the notice required by Subparagraph D.3.b, above.

4. Findings and Decision. A Minor Adjustment/Alteration shall be acted upon by the Approving Authority based upon the information provided in the submitted application, evidence presented in the Planning Department's written report, and testimony provided during the public hearing, only after considering and clearly establishing all of the below-listed findings, and giving supporting reasons for each finding. The application shall be denied if one or more of the below-listed findings cannot be clearly established.

a. The strict or literal interpretation and enforcement of the specified regulation would result in practical difficulty or unnecessary physical hardship inconsistent with the objectives of the development regulations contained in this Development Code;

b. There are exceptional or extraordinary circumstances or conditions applicable to the property involved, or to the intended use of the property, that do not apply generally to other properties in the vicinity and in the same zoning district;

c. The strict or literal interpretation and enforcement of the specified regulation would deprive the applicant of privileges enjoyed by the owners of other properties in the same zoning district;

d. The granting of the Minor Adjustment/Alteration will not be detrimental to the public health, safety or welfare, or be materially injurious to properties or improvements in the vicinity.

e. The proposed Minor Adjustment/Alteration is consistent with the goals, policies, plans and exhibits of the Vision, Policy Plan (General Plan), and City Council Priorities components of The Ontario Plan, and the purposes of any applicable specific plan or planned unit development, and the purposes of this Development Code.

5. Conditions of Approval.

a. In approving a Minor Adjustment/Alteration, the Approving Authority may require certain safeguards and impose certain conditions established to ensure that the purposes of this Development Code are maintained; ensure that the project will not endanger the public health, safety or general welfare; ensure that the project will not result in any significant environmental impacts; ensure that the project will be in harmony with the area in which it is located; and ensure that the project will be in conformity with The Ontario Plan and any applicable specific and/or area plan(s).

b. All conditions or requirements authorized by this section are enforceable in the same manner and to the same extent as any other applicable requirement of this Development Code.

D. Variance.

1. Purpose. The City's authority to grant a Variance from the development regulations contained in this Development Code is authorized by GC Section 65906, which provides that in cases where special circumstances applicable to a property exist, and the strict application of the development regulations deprives such property of privileges enjoyed by other property in the vicinity and under identical zoning classification, the City may allow deviation from the strict application of the development regulations.

2. Applicability.

a. Pursuant to Table 2.02-1 (Review Matrix) of this Development Code, the Approving Authority, is hereby empowered to approve, approve in modified form, or deny a Variance application, and to impose reasonable conditions upon the approval of the application.

b. A Variance may be approved to allow deviation from any numerical development standard established by this Development Code with respect to minimum and/or maximum dimension, area, mass, and quantity, except that a Variance shall not be granted for increases in maximum density or floor area ratio.

c. A variance shall not be approved on a lot that authorizes a use or activity that is not otherwise expressly authorized by the zoning district governing the affected lot, nor shall the power to approve a Variance extend to any public health or safety standard, as this authority has been precluded by state laws.

3. Application Filing, Processing and Hearing. A Variance application shall be filed, processed, and heard pursuant to Division 2.02 (Application Filing and Processing) of this Development Code and the provisions of this Section.

4. Findings and Decision. A Variance shall be acted upon by the Approving Authority based upon the information provided in the submitted application, evidence presented in the Planning Department's written report, and testimony provided during the public hearing, only after

considering and clearly establishing all of the below-listed findings, and giving supporting reasons for each finding. The application shall be denied if one or more of the below-listed findings cannot be clearly established.

a. The strict or literal interpretation and enforcement of the specified regulation would result in practical difficulty or unnecessary physical hardship inconsistent with the objectives of the development regulations contained in this Development Code;

b. There are exceptional or extraordinary circumstances or conditions applicable to the property involved, or to the intended use of the property, that do not apply generally to other properties in the vicinity and in the same zoning district;

c. The strict or literal interpretation and enforcement of the specified regulation would deprive the applicant of privileges enjoyed by the owners of other properties in the same zoning district;

d. The granting of the Variance will not be detrimental to the public health, safety or welfare, or be materially injurious to properties or improvements in the vicinity.

e. The proposed Variance is consistent with the goals, policies, plans and exhibits of the Vision, Policy Plan (General Plan), and City Council Priorities components of The Ontario Plan, and the purposes of any applicable specific plan or planned unit development, and the purposes of this Development Code.

5. Conditions of Approval.

a. In approving a Variance, the Approving Authority, as applicable, may require certain safeguards and impose certain conditions established to ensure that the purposes of this Development Code are maintained; ensure that the project will not endanger the public health, safety or general welfare; ensure that the project will not result in any significant environmental impacts; ensure that the project will be in harmony with the area in which it is located; and ensure that the project will be in conformity with The Ontario Plan and any applicable specific and/or area plan(s).

b. All conditions or requirements authorized by this section are enforceable in the same manner and to the same extent as any other applicable requirement of this Development Code.

4.02.025: Development Plans

A. **Purpose.** The purpose of this Section is to:

1. Establish a review process whereby the integrity and character of the physical fabric of the City will be protected in a manner consistent with the goals and policies of The Ontario Plan. This is ensured through the review of:

a. The suitability of building location;

b. Location and design of off-street parking and loading facilities;

c. Location, design and dedication of streets and alleys (public and private facilities);

d. Location and design of pedestrian and vehicular entrances and exits;

e. Location, design, materials and colors of walls and fences;

f. Location, design, size, and type of landscaping (public and private facilities);

g. Location, design, and materials of hardscape areas, such as patios, sidewalks and walkways (public and private facilities);

h. Drainage and off-site improvements (public and private facilities);

i. Compatibility with the surrounding area;

j. Exterior building architectural design, materials and colors;

k. Quality of proposed design and construction;

l. Location, type, design, colors, and materials of signs; and

m. Any conditions affecting the public health, safety, welfare, and general aesthetic of the community.

2. Protect and preserve the value of properties and to encourage high quality development throughout the City, whereas adverse effects would otherwise result from excessive uniformity, dissimilarity, poor exterior quality and appearance of buildings and structures; inadequate and poorly planned landscaping; and failure to preserve, where feasible, natural landscape features, and open spaces.

3. Recognize the interdependence of land values and aesthetics, and to provide a method to implement this interdependence in order to maintain the values of surrounding properties and improvements consistent with The Ontario Plan, with due regard to the public and private interests involved.

4. Ensure that the public benefits derived from expenditures of public funds for improvement and beautification of streets and public facilities are protected by the exercise of reasonable controls over the character and design of private buildings, structures, parking and loading facilities, landscaped areas, recreation amenities and open spaces.

5. Ensure the design of landscaping and irrigation that shades parking facilities and other paved areas, buffers or screens undesirable views and compliments building architecture and overall site design.

6. Ensure reasonable controls over the character, design and location of signs, and the appropriate use of well-designed signs that complement the architecture of surrounding buildings, while considering the public and private interests involved and the exercise of control over the undesirable use of excessive signage.

B. Applicability.

1. Pursuant to Table 2.02-1 (Review Matrix) of this Development Code, the Approving Authority is hereby empowered to approve, approve in modified form, or deny a Development Plan application, and to impose reasonable conditions upon a Development Plan approval.

2. Development Plan approval shall be required for the physical alteration of a lot, the construction of a building, or the addition or significant alteration of an existing building, as follows:

a. The development of 3 or more dwelling units on a single lot;

b. The development of 5 or more lots within a residential subdivision;

c. The development of 5 or more dwelling units, regardless of the number of lots involved;

d. The development of a nonresidential building within a residential zoning district, or an addition thereto, which is in excess of 25 percent of the original structure GFA or 500 SF (cumulative), whichever is less;

e. The development of a vacant lot within a nonresidential zoning district;

f. The conversion of a commercial structure to a residential structure, or conversion of a residential structure to a commercial structure;

g. The remodel of, or addition to, an existing nonresidential building, which results in an overall change in the architectural/aesthetic integrity, as determined by the Planning Director;

h. The remodel of, or addition to, a nonresidential building, which would result in the demolition and replacement/reconstruction of more than 50 percent of the existing building;

i. The conversion of a gasoline or fueling station to facilitate another allowed land use (see standards contained in Subsection 5.03.040,C (Conversion of Gasoline and Fueling Stations) of this Development Code);

j. An addition to an institutional facility (including religious assembly and places of worship, government services, healthcare services, and educational services), when such addition would exceed 25 percent of the original structure GFA or 500 SF (cumulative), whichever is less;

k. Commercial developments and the development of a permanent building within the CIV, OS-R, OS-C, or UC zoning district, when such development would exceed 500 SF of GFA (cumulative), or an addition thereto, when such addition would exceed 25 percent of the original structure GFA or 500 SF (cumulative), whichever is less;

l. The development of a permanent building within the AG zoning district, when such development would exceed 5,000 SF of GFA (cumulative), or an addition thereto, when such addition would exceed 25 percent of the original structure GFA or 5,000 SF (cumulative), whichever is less;

m. The relocation (move-on) of a building within any zoning district;

n. The addition of dwelling units to a multiple-family residential development project, when such addition would result in 3 or more dwelling units on a single lot after the addition;

o. An addition to a previously developed site within a commercial zoning district, when such addition would exceed 25 percent of the original structure GFA or 2,000 SF (cumulative), whichever is less;

p. An addition to a previously developed site within an industrial zoning district, when such addition would exceed 25 percent of the original structure GFA or 10,000 SF (cumulative), whichever is less;

q. A Tier 2 or Tier 3 wireless telecommunications facility pursuant to Section 5.03.420 (Wireless Telecommunications Facilities) of this Development Code; and

r. Other projects, which, in the opinion of the Planning Director, require such level of review prior to issuance of a building permit, due to the size, nature and/or complexity of the project, or because the project could cause significant environmental impacts or generate significant neighborhood opposition or controversy.

3. A Development Plan shall remain in effect for the life of the affected development project, which shall be developed and maintained in substantial conformance with the plans as approved by the Approving Authority and shall be maintained on file with the City.

C. Application Filing, Processing and Hearing. A Development Plan application, except for wireless telecommunications facilities in the public right-of-way and facilities qualifying as Eligible Facilities Requests (EFRs), shall be filed, processed and heard pursuant to Division 2.02 (Application Filing and Processing) of this Development Code and the provisions of this Section. Applications to install wireless telecommunications facilities in the public right-of-way and for facilities qualifying as EFRs shall be filed and processed pursuant to the following:

1. Scope. There shall be a type of permit entitled a "Wireless Permit," which shall be subject to all of the requirements of this Section. Unless exempted, every person who desires to place a wireless telecommunications facility in the public right-of-way, modify an existing wireless telecommunications facility in the public right-of-way, or perform work as part of an EFR must obtain a Wireless Permit authorizing the placement or modification in accordance with this Section. Except for small cell facilities, facilities qualifying as EFRs, or any other type of facility expressly allowed in the public right-of-way by state or federal law, no other wireless telecommunications facilities shall be permitted pursuant to this Section.

2. Approving Authority. The Zoning Administrator is the approving authority for wireless telecommunications facilities in the public right-of-way and facilities qualifying as EFRs.

3. Application Submittal. Applications shall be submitted on a City application form issued and amended, from time-to-time, by the Zoning Administrator.

4. Review and Action.

a. The Zoning Administrator shall review the application and then approve, approve in modified form, or deny the application. The decision of the Approving Authority shall

be final and conclusive in the absence of an appeal filed pursuant to Paragraph C.5 (Appeals), below.

b. The wireless regulations and decisions on applications for placement of wireless telecommunications facilities in the public right-of-way and facilities qualifying as EFRs shall, at a minimum, ensure that the requirements of this Section are satisfied, unless it is determined that Applicant has established that denial of an application would, within the meaning of federal law, prohibit or effectively prohibit the provision of personal wireless services, or otherwise violate applicable laws or regulations. If that determination is made, the requirements of this Development Code may be waived by the Zoning Administrator, but only to the minimum extent required to avoid the prohibition or violation.

c. There will be no public hearings.

5. Appeals. The Applicant may appeal the decision to the Planning Commission, which may decide the issue *de novo*, and whose written decision will be the final decision of the City. An appeal by a wireless infrastructure provider must be taken jointly with the wireless service provider that intends to use the wireless telecommunications facility. Where the Zoning Administrator grants an application based on a finding that denial would result in a prohibition or effective prohibition under applicable federal law, the decision shall be automatically appealed to the Planning Commission. All appeals must be filed within 2 business days of the written decision of the Zoning Administrator, unless the Zoning Administrator extends the time therefore. An extension may not be granted where extension would result in approval of the application by operation of law. Any appeal shall be conducted so that a timely written decision may be issued in accordance with applicable law.

D. Findings and Decision. A Development Plan shall be acted upon by the Approving Authority based upon the information provided in the submitted application, evidence presented in the Planning Department's written report, and testimony provided during the public hearing, only after considering and clearly establishing all of the below-listed findings, and giving supporting reasons for each finding. The application shall be denied if one or more of the below-listed findings cannot be clearly established. Findings 1-4 do not apply to applications for wireless telecommunications facilities in the public right-of-way or facilities qualifying as EFRs, which are subject to the findings set forth by Paragraph 5, below.

1. The proposed development at the proposed location is consistent with the goals, policies, plans and exhibits of the Vision, Policy Plan (General Plan), and City Council Priorities components of The Ontario Plan;

2. The proposed development is compatible with those on adjoining sites in relation to location of buildings, with particular attention to privacy, views, any physical constraint identified on the site and the characteristics of the area in which the site is located;

3. The proposed development will complement and/or improve upon the quality of existing development in the vicinity of the project and the minimum safeguards necessary to protect the public health, safety and general welfare have been required of the proposed project;

4. The proposed development is consistent with the development standards and design guidelines set forth in the Development Code, or applicable specific plan or planned unit development.

5. Required findings for wireless telecommunications facilities in the public right-of-way and facilities qualifying as EFRs are as follows:

a. Except for EFRs, the Zoning Administrator or Planning Commission, as the case may be, shall approve an application if, on the basis of the application and other materials or evidence provided in review thereof, it finds the following:

(1) The facility is not detrimental to the public health, safety, and welfare;

(2) The facility complies with this Development Code and all applicable design and development standards; and

(3) The facility meets applicable requirements and standards of state and federal law.

b. For EFRs, the Zoning Administrator or Planning Commission, as the case may be, shall approve an application if, on the basis of the application and other materials or evidence provided in review thereof, it finds the following:

(1) That the application qualifies as an eligible facilities request; and

(2) That the proposed facility will comply with all generally applicable laws.

E. Conditions of Approval.

1. In approving a Development Plan application, the Approving Authority may require certain safeguards and impose certain conditions established to ensure that the purposes of this Development Code are maintained; ensure that the project will not endanger the public health, safety or general welfare; ensure that the project will not result in any significant environmental impacts; ensure that the project will be in harmony with the area in which it is located; and ensure that the project will be in conformity with The Ontario Plan and any applicable specific and/or area plan(s).

2. Conditions of approval imposed upon a Development Plan approval may include, but is not limited to, provisions concerning building height, bulk or mass; setbacks; lot coverage; lighting; private and common open space, and/or recreation amenities; screening, including garages, trash receptacles, mechanical and roof-mounted equipment and appurtenances; landscaping; walls and fences; vehicular parking, access and circulation; pedestrian circulation; on-site security; grading; street dedication and improvements (public and private); on and off-site public improvements (public and private) necessary to service the proposed development; project timing/phasing; loading and outdoor storage; architectural treatment; signage; vehicular trip reduction; graffiti removal; sound attenuation; reparation and recordation of covenants, conditions and restrictions, mutual access agreements, maintenance agreements and other similar agreements; property disclosure pursuant to BPC Section 11000, et seq.; and other conditions the Approving Authority may deem appropriate and necessary to carry out the purposes of the Development Code.

3. All conditions of approval or requirements authorized by this Section are enforceable in the same manner and to the same extent as any other applicable requirement of this Development Code.

F. Development Plan Modifications/Revisions.

1. Development Plans and/or their conditions of approval may be modified/revised upon application by a project applicant or property owner if different from the applicant. The request shall be submitted to the Planning Department on a City application form pursuant to Division 2.02 (Application Filing and Processing) of this Development Code.

2. Modifications/revisions that are minor in nature may be processed administratively, without notice or public hearing, provided the proposed changes are consistent with the intent of the original approval and there are no resulting inconsistencies with this Development Code. Modifications/revisions are considered minor in nature if in the opinion of the Planning Director, they do not involve substantial changes to the approved plans or the conditions of approval and would in no way affect surrounding properties.

3. Modifications/revisions to an approved plan or conditions of approval that, in the opinion of the Planning Director, are not minor in nature, shall be processed as a revised Development Plan, following the procedures set forth in this Section for Development Plan approval, except that modification/revision approval shall not alter the expiration date established by the original application approval.

4.02.030: Extensions of Legal Nonconforming Status

A. Purpose. The purpose of this Section is to establish a process whereby the date that a legal nonconforming use would lose its legal nonconforming status pursuant to Section 3.01.015 (Nonconforming Land Use) of this Development Code, may be extended to allow additional time to complete the sale of the affected property or structure, secure tenants for the affected property or structure, and/or obtain necessary permits or the completion of necessary improvements.

B. Applicability. Pursuant to Table 2.02-1 (Review Matrix) of this Development Code, the Approving Authority is hereby empowered to approve, approve in modified form, or deny an Extension of Legal Nonconforming Status application, and to impose reasonable conditions upon the approval of the application.

1. The submittal of an application requesting an Extension of Legal Nonconforming Status shall automatically extend the legal nonconforming status of a land use or structure for an initial period of 60 days to allow for the processing of the request pursuant to the procedures prescribed by this Section. The Zoning Administrator may then approve an additional 120-day extension, for a total of 180 days.

2. If due to unforeseen circumstances, a property/structure owner is unable to complete the sale of the affected property, secure necessary tenants for the property or structure, and/or obtain necessary permits and complete all necessary tenant improvements to allow for occupancy of the affected property or structure within the period established by Subsection B.2, above, (180 days), the Approving Authority may grant additional extensions, not to exceed a total of one-year.

C. Application Filing, Processing and Hearing. An Extension of Legal Nonconforming Status application shall be filed, processed and heard pursuant to Division 2.02 (Application Filing and Processing) of this Development Code and the provisions of this Section.

D. Findings and Decision. An Extension of Legal Nonconforming Status shall be acted on based upon the information provided in the submitted application, evidence presented in the Planning Department's written report, and comments and testimony provided by the public, only after considering and clearly establishing all of the below-listed findings, and giving reasons in support of each finding. The application shall be denied if one or more of the below-listed findings cannot be clearly established.

1. The applicant has made a good faith effort to keep the nonconforming status;

2. A physical and/or economic hardship has prevented the nonconforming use from being reestablished prior to the expiration date;

3. Approving the extension will not adversely affect the character, integrity, or value of surrounding properties;

4. Approving the extension will not adversely affect the character, integrity, or general welfare of the neighborhood; and

5. The extension will not adversely impact the public health, safety, or welfare of the City's residents.

E. Conditions of Approval.

1. In approving an Extension of Legal Nonconforming Status, the Approving Authority, may require certain safeguards and impose certain conditions established to ensure that the purposes of this Development Code are maintained; ensure that the project will not endanger the public health, safety or general welfare; ensure that the project will not result in any significant environmental impacts; ensure that the project will be in harmony with the area in which it is located; and ensure that the project will be in conformity with The Ontario Plan and any applicable specific and/or area plan(s).

2. All conditions of approval or requirements authorized by this Section are enforceable in the same manner and to the same extent as any other applicable requirement of this Development Code.

4.02.040: Historic Preservation—Local Historic Landmark and Local District Designations, Historic Resource Tiering, and Architectural Conservation Areas

A. Purpose. The purpose of this Section is to establish procedures by which Local Historic Landmarks and Districts, Historic Resource Tiering, and Architectural Conservation Areas may be designated

B. Applicability.

1. Designation of Historic Landmarks and Districts, Historic Resource Tiering and Architectural Conservation Areas. The Approving Authority established pursuant to Table 2.02-1 (Review Matrix) of this Development Code is hereby empowered to approve, approve in modified form, or deny a Historic Preservation—Historic Landmark and District Designations, Historic Resource Tiering and Architectural Conservation Areas application.

2. Local Landmark Designation. A historic resource may be designated an "historic landmark" by the City if it meets the criteria for listing in the National Register of Historic Places or the California Register of Historic Resources, or it meets one or more of the following criteria:

a. The historic resource exemplifies or reflects special elements of the City's history;

b. The historic resource is identified with persons or events significant in local, state, or national history;

c. The historic resource is representative of the work of a notable builder, designer, architect, or artist;

d. The historic resource embodies distinguishing architectural characteristics of a style, type, period, or method of construction;

e. The historic resource is a noteworthy example of the use of indigenous materials or craftsmanship;

f. The historic resource embodies elements that represent a significant structural, engineering, or architectural achievement or innovation;

g. The historic resource has a unique location, a singular physical characteristic, or is an established and familiar visual feature of a neighborhood, community, or the City;

h. The historic resource is one of the few remaining examples in the City, region, state or nation, possessing distinguishing characteristics of an architectural or historical type or specimen: or

i. The historic resource has yielded, or is likely to yield, information important to the City's history or prehistory.

3. Local Historic District Designation. A neighborhood or area listed as a historic resource may be designated a "Local Historic District" by the City if the neighborhood meets the criteria for listing in the National Register of Historic Places or the California Register of Historic Resources, or it meets one or more of the following criteria:

a. The historic resource is a geographically definable area possessing a concentration of historic resources or a thematically related grouping of structures that contribute to each other and are unified by plan, style, or physical development, and embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of a master or possesses high artistic values;

b. The historic resource reflects significant geographical patterns, including those associated with different eras of settlement and growth, particular transportation modes, or distinctive examples of a park landscape, site design, or community planning;

c. The historic resource is associated with, or the contributing resources are unified by, events that have made a significant contribution to the broad patterns of local or regional history, or the cultural heritage of California or the United States; or

d. The historic resource is, or the contributing resources are, associated with the lives of persons important to the City, State or National history.

4. Additional Historic Resource Evaluation Criteria. In addition to the "significance," criteria established in Paragraph B.2 (Local Landmark Designation) and Paragraph B.3 (Local Historic District Designation) of this Section, historic resources must have "integrity" for the time in which they are "significant." The period of "significance" is the date or span of time within which significant events transpired or significant individuals made their important contributions. The term "integrity" means the authenticity of a historical resource's physical identity, as evidenced by the survival of characteristics or historic or prehistoric fabric that existed during the resource's period of significance. Only after significance has been established, should the issue of integrity be addressed. The following criteria should be considered when evaluating properties for integrity:

a. *Design.* Any alterations to the property should not have adversely affected the character defining features of the property. Alterations to a resource or changes in its use over time may have historic, cultural or architectural significance.

b. *Setting.* Changes in the immediate surroundings of the property (e.g., buildings, land use and topography) should not have adversely affected the character of the property.

c. *Materials and Workmanship.* Any original materials should be retained, or if they have been removed or altered, replacements have been made that are compatible with the original materials.

d. *Location.* The relationship between a property and its location is an important component in determining integrity. The place where the property was built and where historic events occurred is often important to understanding why the property was created or why something happened. The actual location of a historic property, complemented by its setting, is particularly important in recapturing the sense of historic events and persons. Except in a few cases, the relationship between a property and its historic associations is destroyed if the property is moved.

e. *Feeling.* The term "feeling" means a property's expression of the aesthetic or historic sense of a particular period. It results from the presence of physical features that, taken together, convey the property's historic character. For example, a rural historic district, such as the Guasti Winery, retaining original design, materials, workmanship and setting, will relate the feeling of agricultural life in the 19th century.

f. *Association.* The term "association" means the direct link between an important historic event or person, and a historic property. A property retains its association if it is the place where the event or activity occurred and is sufficiently intact to convey that relationship to an observer. Like "feeling," association requires the presence of physical features that convey a property's historic character. For example, a Revolutionary War battlefield, whose natural and manmade elements have remained intact since the 18th century, will retain its quality of "association" with the battle.

Because "feeling" and "association" depend upon individual perceptions, their retention alone is never sufficient to support eligibility. Historic resources must retain enough of their historic or prehistoric character or appearance to be recognizable as historic resources, and to convey the reasons for their significance.

C. Application Filing, Processing, and Hearing. Historic Preservation—Historic Landmark and Historic District Designation applications shall be filed and processed pursuant to Division 2.02 (Application Filing and Processing) of this Development Code, and the provisions of this Section. All eligible historic resources nominated for designation as a Landmark or a Historic District shall be evaluated, processed, and designated a Tier pursuant to Subsection G (Historic Resource Tiering System) of this Section, concurrently with the application for landmark or historic district designation.

D. Local Historic Landmark and District Designation Application Findings and Decision.

1. Within the 30-day period following acceptance of a Historic Preservation—Historic Landmark and District Designations application as complete pursuant to the applicable provisions contained in Section 2.02.015.B (Discretionary Permits and Actions) of this Development Code, the Advisory Authority shall make a preliminary determination as to whether the requested Local Historic Landmark or Local Historic District designation is appropriate, based upon the designation criteria set forth in Paragraphs B.2 (Local Landmark Designation), B.3 (Local Historic District Designation), and B.4 (Additional Historic Resource Evaluation Criteria) of this Section. If it is determined that the proposed resource merits further consideration, the application shall be forwarded to the subsequent Advisory Authority. If the proposed resource does not merit further consideration due to failure of the property to meet the applicable designation criteria, the application shall be denied.

2. Upon receipt of the Advisory Authority's recommendation, the subsequent Advisory Authority shall make a recommendation to the Approving Authority to grant or deny a Historic Preservation—Landmark or District Designation application on the basis of the application and the evidence presented in the Planning Department's written report, after considering and clearly establishing the designation criteria set forth in Paragraphs B.2 (Local Landmark Designation), B.3 (Local Historic District Designation), and B.4 (Additional Historic Resource Evaluation Criteria) of this Section, and giving specific reasons in support of each applicable criterion.

3. The Approving Authority may grant or deny a Historic Preservation—Landmark or District Designation application on the basis of the application and the evidence presented in the Planning Department's written report, after considering and clearly establishing the applicable designation criteria set forth in Paragraphs B.2 (Local Landmark Designation), B.3 (Local Historic District Designation), and B.4 (Additional Historic Resource Evaluation Criteria) of this Section, and giving specific reasons in support of each applicable criterion.

E. Permits. No building, alteration, demolition, or removal permits for any proposed Local Landmark or Local Historic District shall be issued after a Historic Preservation—Landmark or District Designation application has been filed with the Planning Department, until such time that any public hearing or appeal proceedings regarding the application have been completed.

F. Automatic Designations.

1. Any property listed in the National Register of Historic Places or the California Register of Historic Resources shall automatically be designated as a local Historic Landmark.

2. Any neighborhood or area listed in the National Register of Historic Places or the California Register of Historic Resources shall automatically be designated as a local Historic District.

3. Any property identified as a contributing structure to a historic district listed on the National Register of Historic Places or the California Register of Historic Resources shall be considered a contributing structure within the historic district.

G. Historic Resource Tiering System. The Historic Preservation Commission shall be responsible for the adoption of the Historic Resource Tier Designation List, which shall be maintained by the Historic Preservation Subcommittee. A historic resource may be designated "Tier I, Tier II, or Tier III" by the Approving Authority established pursuant to Table 2.02-1 (Review Matrix) of this Development Code, to establish a ranking of historic resources within the City, based upon the determined significance of each resource, as specified below. For the purpose of this Section, upon determining the appropriate tier designation for a historic district, the Approving Authority may rank all contributing structures within that district into the same tier designation. Tier I, II and III historic resources shall be judged based upon their determined degree of significance, pursuant to the criteria contained in Subsection H (Historic Resource Tiering Criteria) of this Section.

1. Tier I. Tier I consists of historic resources that should not be demolished or significantly altered under any circumstances, regardless of their designation status. Resources within this tier are determined to be the City's most significant historical or cultural resources. Tier I resources shall meet one or more of the following:

a. A resource listed on the Ontario Register that meets at least one of the criteria within the Architecture/Form category, and 3 criteria within the History category, listed in Subsection H (Historic Resource Tiering Criteria) of this Section; or

b. A contributing resource within a district that meets at least one of the criteria within the Architecture/Form Category and 3 criteria within the History Category as listed below.

2. Tier II. Tier II consists of historic resources wherein demolition of these properties should be avoided. Tier II resources shall meet one or more of the following:

a. Any historic resource listed or determined eligible for listing in the National Register of Historic Places;

b. Any historic resource listed or determined eligible for listing in the California Register of Historic Resources;

c. A historic resource listed on the Ontario Register and meets at least 2 criteria within the Architecture/Form or History categories, listed in Subsection H (Historic Resource Tiering Criteria) of this Section; or

d. A contributing resource within an eligible historic district wherein the district meets at least 2 of the criteria in either the Architecture/Form or History categories as listed in Subsection H (Historic Resource Tiering Criteria) of this Section.

3. Tier III. Tier III consists of historic resources that are Designated Local Historic Landmarks, are contributing properties within Designated Local Historic Districts, or are eligible historic resources. Demolition of these resources should be avoided where possible but may be appropriate under certain circumstances.

H. Historic Resource Tiering Criteria. The following listing contains criteria to be used in determining the Tier designation of a historic resource:

1. Local Historic Landmark.

a. *Architecture/Form.*

(1) The resource is prototypical, or one of the finest examples, of a period, style, architectural movement, or construction in the City of a particular style of architecture, building type, or historical or archeological object. Only preeminent examples should be considered. Good representative examples of a style, period or method of construction are not appropriate; or

(2) The resource is the first, last, only, or one of the finest examples, notable works, or the best surviving work by an architect or designer of major importance to the City, State or Nation.

b. *History.*

(1) The resource is the location of a historic event(s) that has significantly contributed to the history of the City, State, or Nation;

(2) The resource is associated with a business, company, or individual that has made a significant cultural, social, or scientific contribution to the City, State, or Nation;

(3) The resource is identified with a person(s) who has exerted a major influence on the heritage or history of the City, State, or Nation;

(4) The resource embodies the ideals or principles of the "Model Colony" or furthers the ideals or principals established by the Chaffey Brothers;

(5) The resource has a direct relationship to one of the principal historic contexts in the City's history, including the "Model Colony," (includes the Chaffey Brothers, the Ontario Land and Improvement Company, or the citrus industry), the Guasti Winery or the wine industry, or the Dairy Preserve or the dairy industry;

(6) The resource is related with a business, company, or individual significant in the agricultural history of the City; or

(7) The resource is related to the archeological past of the region.

2. Local Historic Districts.

a. *Architecture/Form.*

(1) The district contains resources that are a prototype of, or one of the finest examples of, or the first, last, only, or few remaining groupings of a period, style, architectural movement, or construction in the City of a particular style of architecture, building type, or historical or archeological object. Only preeminent examples should be considered. Good representative examples of a style, period or method of construction are not appropriate; or

(2) The district contains resources that are the first, last, only, or the finest examples, notable works, or the best surviving work by an architect or designer of major importance to the City, State or Nation.

b. *History*.

(1) The district is the location of a historic event(s) that has significantly contributed to the history of the City, State, or Nation;

(2) The district is associated with a business, company, or individual that has made a significant, cultural, social, or scientific contribution to the City, State, or Nation;

(3) The district is identified with a person(s) who has exerted a major influence on the heritage or history of the City, State, or Nation;

(4) The district embodies the ideals or principles of the "Model Colony," or furthers the ideals or principals established by the Chaffey Brothers;

(5) The district has a direct relationship to one of the principal historic contexts in the City's history, including the "Model Colony," (includes the Chaffey Brothers, the Ontario Land and Improvement Company, or the citrus industry), the Guasti Winery or the wine industry, or the Dairy Preserve or the dairy industry, or the citrus industry; or

(6) The district is related with a business, company, or individual significant in the agricultural history of the City.

I. Architectural Conservation Area. An area may be designated an "Architectural Conservation Area" by the Approving Authority if the area meets any one of the below-listed criteria; however, these criteria do not evaluate for historic significance. As a result, properties within Architectural Conservation Areas are not qualified for historic landmark or historic district consideration. The criteria for establishing an Architectural Conservation Area are as follows:

1. The area is geographically definable and conveys a sense of architectural cohesiveness through its design, setting, materials, workmanship, or association; or

2. The area reflects significant geographical patterns, including those associated with different areas of settlement and growth, particular transportation modes, or distinctive examples of a park landscape, site design or community planning, or represents established and familiar visual features in the community.

3. Alternately, an area may be designated an Architectural Conservation Area by the City if a conservation plan has been prepared pursuant to Section 4.02.055 (Historic Preservation—Conservation Plans), outlining the character defining features of the neighborhood and appropriate design guidelines that will maintain the character of the neighborhood.

4.02.045: Historic Preservation—Rescind or Amend the Status of a Historic Resource

A. Purpose. The purpose of this Section is to establish a process by which a historic resource may rescind or amend its assigned status, including a Local Landmark or Local District Designation, a Tier Designation, an Eligibility Determination, or an Architectural Conservation Area.

B. Applicability. The Approving Authority for the original application type, pursuant to Table 2.02-1 (Review Matrix) of this Development Code, is hereby empowered to approve, approve in modified form, or deny a request to rescind or amend the assigned status of a Local Historic

Landmark or Local Historic District Designation, Tier Designation, Eligibility Determination, or Architectural Conservation Area.

C. Addition to the Ontario Register. Any property or grouping of properties surveyed at the intensive level pursuant to standards established by the California Office of Historic Preservation, and determined to meet the designation criteria for local historic landmarks or local historic districts set forth in Section 4.02.040 (Historic Preservation—Local Historic Landmark and Local District Designations, Historic Resource Tiering, and Architectural Conservation Areas) of this Development Code, shall be determined by the Approving Authority to be an "eligible" historic resource.

D. Removal of Eligible or Nominated Historic Resources from the Ontario Register. An eligible historic resource or a nominated historic resource may be removed from the Ontario Register, as follows:

1. Any historic resource listed on the Ontario Register may be removed by the Approving Authority if the resource has lost all historic and/or cultural significance due to a catastrophe causing a loss of integrity, or the resource has lost all historical and/or cultural significance due to extensive legally performed alteration(s), which has caused a loss of integrity after the property was initially surveyed.

2. Any historic resource listed on the Ontario Register may be removed by the Approving Authority upon reevaluation of the resource at the request of the property owner, or upon initiation by the City, if the most recently prepared Historic Resource Survey evaluating the resource is more than 5 years old.

3. The Historic Preservation Subcommittee shall evaluate a historic resource utilizing the designation criteria set forth in Paragraph 4.02.040.B.2 (Local Landmark Designation) of this Division. Furthermore, when a historic resource is located within an eligible local historic district, the area or neighborhood shall also be evaluated using the designation criteria set forth in Paragraph 4.02.040.B.3 (Local Historic District Designation) of this Division, and shall be evaluated to determine if it contributes to the significance of the district. The Approving Authority may retain a noncontributing property within a proposed or potential historic district.

4. Any reevaluation of a property shall be valid for a 5-year period.

E. Amending or Rescinding a Local Landmark, Local Historic District, or a Tier Designation from the Ontario Register. A local landmark, local historic district, or a tier designation may be amended or rescinded from the Ontario Register, if:

1. It is discovered that the information relied upon by the Advisory Authority and/or Approving Authority in making the original designation, was erroneous or false;

2. New information compromises the significance of a historic resource;

3. The historic resource has been demolished, relocated, or removed; or

4. The historic resource has been rendered ineligible for designation due to a catastrophic event, beyond the owner's control, which has destroyed the resource to the point where it is considered a hazard to the public health and safety, and the restoration of the resource is not feasible.

4.02.050: Historic Preservation—Certificates of Appropriateness and Demolition of Historic Resources

A. Purpose. The purpose of this Section is to establish a process to ensure that any alteration to, or demolition of, an eligible or designated historic resource within the City is in keeping with the historic character of the resource.

B. Applicability.

1. The Approving Authority established pursuant to Table 2.02-1 (Review Matrix) of this Development Code is hereby empowered to approve, approve in modified form, or deny a Historic Preservation—Certificate of Appropriateness application, and to impose reasonable conditions upon the approval of the application.

2. A Certificate of Appropriateness shall be required for any:

a. Alteration, addition, restoration, rehabilitation, remodeling, relocation, repainting, and/or resurfacing of an historic resource. Certificate of Appropriateness approval shall be required even if the City requires no other permits;

b. For any work to the exterior of any noncontributing resource in a Historic District or on a historic property. A reasonable effort shall be made to produce compatibility, and in no event shall there be a greater deviation from compatibility;

c. Infill development within a historic district or on a historic property; and

d. Any demolition, whether in whole or in part, of a historic resource or a noncontributor within a designated historic district in conjunction with a demolition application.

3. No permit shall be issued for work on a historic resource until a Certificate of Appropriateness or Waiver has been issued in accordance with the provisions of this Division.

4. Once a Certificate of Appropriateness has been issued, the Planning Department, from time to time, shall inspect the work to ensure that it is being carried-out in compliance with the approved Certificate of Appropriateness and shall issue a Certificate of Completion prior to any final inspection or occupancy by any City Department to ensure the work has been satisfactorily completed.

C. Application Filing, Processing and Hearing. A Historic Preservation—Certificate of Appropriateness application shall be filed, processed, and heard pursuant to Division 2.02 (Application Filing and Processing) of this Development Code and the provisions of this Section, except as follows:

1. Determination of Significance.

a. Upon acceptance of a Historic Preservation—Certificate of Appropriateness application as complete for processing pursuant to Subsection 2.02.015.B (Discretionary Permits and Actions) of this Development Code, the Historic Preservation Subcommittee shall evaluate the affected historic resource for significance, which shall include a review conducted by the Planning Department consisting of an evaluation of the resource's eligibility for listing on the National Register of Historic Places, the California Register of Historic

Resources, or the Ontario Register. The review may also include the preparation of a Historic Resource Survey, at the intensive level, pursuant to the standards set forth by the California Office of Historic Preservation.

b. A historic resource that does not meet the criteria for designation set forth in Section 4.02.040 (Historic Preservation—Local Historic Landmark and Local District Designations, Historic Resource Tiering, and Architectural Conservation Areas) of this Division, and not located within a designated, proposed, or potential district, shall be removed from the Ontario Register and the Certificate of Appropriateness shall be deemed approved. A resource that meets the designation criteria set forth in Section 4.02.040 (Historic Preservation—Local Historic Landmark and Local District Designations, Historic Resource Tiering, and Architectural Conservation Areas) of this Division, shall be further processed pursuant to this Section.

2. Environmental Review.

a. Upon determination that a historic resource is "significant," an environmental review shall be conducted pursuant to Section 2.02.020 (Environmental Review) of this Development Code; however, in determining the appropriate level of review for the demolition of a historic resource, the tiering system established pursuant to Subsection 4.02.040.G (Historic Resource Tiering System) of this Division shall be utilized.

b. Any historic resource proposed for demolition, which is determined to be within Tier III pursuant to Subsection 4.02.040.G (Historic Resource Tiering System) of this Division, shall require preparation of an Addendum to The Ontario Plan Environmental Impact Report pursuant to the requirements of CEQA and the implementing guidelines, and City's Local Guidelines For Implementing the California Environmental Quality Act, in conjunction with the approval of Certificate of Appropriateness and Demolition applications.

c. Any historic resource proposed for demolition, which is determined to be within Tier I or Tier II pursuant to Subsection 4.02.040.G (Historic Resource Tiering System) of this Division, shall require preparation and certification of an Environmental Impact Report pursuant to the requirements of CEQA and the implementing guidelines, and City's Local Guidelines For Implementing the California Environmental Quality Act, in conjunction with the approval of Certificate of Appropriateness and Demolition applications.

3. Hearing. Each Advisory or Approving Authority shall hold at least one hearing on the application, which shall be duly noticed, heard, and acted upon pursuant to Division 2.03 (Public Hearings) of this Development Code.

4. Advisory Authority Review and Recommendation. Following completion of all required environmental review pursuant to Paragraph C.2 (Environmental Review) of this Subsection, the Advisory Authority shall make recommendation to the Approving Authority whether to approve, approve in modified form or deny the application. The Advisory Authority's recommendation shall be transmitted to the Approving Authority in such manner and form as specified by the Approving Authority, within 60 days following the date the decision was rendered. The 60-day time limit may be extended by mutual agreement of the applicant and City.

5. Approving Authority Review and Action.

a. Upon receipt of the Advisory Authority's recommendation, the Approving Authority shall approve, conditionally approve, or deny the application, either in whole or in part. The action of the Approving Authority shall be by written decision, setting forth the basis for the

action and shall include all applicable findings prescribed by Subsection D (Findings and Decision), below.

b. The decision of the Approving Authority shall be final and conclusive in the absence of an appeal filed pursuant to Division 2.04 (Appeals) of this Development Code.

D. Findings and Decision.

1. Designated Historic Landmarks, Contributors, and Non-Contributors and Eligible Historic Resources.

a. A Historic Preservation—Certificate of Appropriateness application for Designated Historic Landmarks and Contributors, or Eligible Historic Resources, shall be acted upon by the Approving Authority based upon the information provided in the submitted application, evidence presented in the Planning Department's written report, and testimony provided during the public hearing, only after considering and clearly establishing all of the below-listed findings, and giving supporting reasons for each finding. The application shall be denied if one or more of the below-listed findings cannot be clearly established.

(1) The proposed alteration, restoration, relocation, or construction will not detrimentally change, destroy or adversely affect any significant architectural feature of the resource;

(2) The proposed alteration, restoration, relocation, or construction will not detrimentally change, destroy or adversely affect the historic character or value of the resource;

(3) The proposed alteration, restoration, relocation, or construction will be compatible with the exterior character-defining features of the historic resource; and

(4) The proposed alteration, restoration, relocation, or construction will not adversely affect or detract from the character of the historic district.

2. Demolition of Historic Resources.

a. A Historic Preservation—Certificate of Appropriateness and Demolition application for the Demolition Of Historic Resources shall be acted upon by the Approving Authority based upon the information provided in the submitted application, evidence presented in the Planning Department's written report, and testimony provided during the public hearing, only after considering and clearly establishing all of the below-listed findings, and giving supporting reasons for each finding. The application shall be denied if one or more of the below-listed findings cannot be clearly established.

(1) The proposed demolition is necessary because all efforts to restore, rehabilitate, and/or relocate the resource have been exhausted;

(2) The proposed demolition is necessary because restoration/rehabilitation is not practical because the extensive alterations required would render the resource not worthy of preservation;

(3) The proposed demolition is necessary because failure to demolish the resource would adversely affect or detract from the character of the District; and

(4) The resource proposed to be demolished has been assigned a Tier III designation.

3. Instances Wherein Findings Are Not Required. The Approving Authority may act upon Historic Preservation—Certificate of Appropriateness and/or Demolition applications for Tier I and Tier II historic resources that are designated historic landmark contributors and noncontributors to historic districts, or eligible historic resources , without making the findings contained in Paragraph D.1 (Designated Historic Landmarks, Contributors, and Non-Contributors and Eligible Historic Resources) or Paragraph D.2 (Demolition of Historic Resources) of this Subsection, if a Historic Preservation—Certificate of Economic Hardship has been granted pursuant to Section 4.02.055 (Historic Preservation—Certificates of Economic Hardship) of this Division.

E. Conditions of Approval.

1. In approving Historic Preservation—Certificate of Appropriateness and/or Demolition applications, the Approving Authority may require certain safeguards and impose certain conditions established to ensure that the purposes of this Development Code are maintained; ensure that the project will not endanger the public health, safety or general welfare; ensure that the project will not result in any significant environmental impacts; ensure that the project will be in harmony with the area in which it is located; and ensure that the project will be in conformity with The Ontario Plan and any applicable specific and/or area plan(s).

2. All conditions of approval or requirements authorized by this Section are enforceable in the same manner, and to the same extent, as any other applicable requirement of this Development Code.

3. In approving Historic Preservation—Certificate of Appropriateness and/or Demolition applications, the following conditions of approval shall be imposed, and shall be completed prior to commencing any demolition work:

a. Each historic resource shall be fully documented and cataloged pursuant to Historic American Building Survey/Historic American Engineering Record (HABS/HAER) standards, to provide a record of the resource, including, but not limited to: **[i]** the preparation of site plans, floor plans, exterior and interior elevations, and detail drawings of character defining features (such as moldings, stairs, etc.); and **[ii]** photographs of the resource, including the exterior, interior, and interior and exterior character defining features (such as moldings, light fixtures, trim patterns, etc.).

b. A mitigation fee established pursuant to Section 7.01.025 (Historic Preservation Mitigation Fee) shall be paid to the City prior to the issuance of a demolition permit for Tier III historic resources. Fees for Tier I and II historic resources shall be determined during the Environmental Impact Report process. The fees established for Tier III will be used as a reference point for establishing fees for Tier I and II historic resources.

c. A Certificate of Appropriateness shall not be issued for the demolition of an historic resource, either in whole or in part, until such time that a demolition permit application and a replacement structure has been approved by the City, and appropriate permits have been issued for its construction, unless: **[i]** a waiver is granted pursuant to Subsection H (Replacement Structure Waiver for Historic Resources Located within Industrial Zoning Districts) of this Section; **[ii]** a deferral of the replacement structure requirement is granted pursuant to Subsection G

(Replacement Structure Deferral) of this Section; or **[iii]** demolition is required pursuant to Section 7.01.050 (Unsafe or Dangerous Conditions) of this Development Code.

d. In an effort to preserve features and artifacts from historic resources, a determination whether items within or on the resource should be salvaged must be made by the Planning Department and may include the local historical society prior to the issuance of the demolition permit. The applicant shall be responsible for the removal, relocation, storage, and donation of such items selected for salvaging. The applicant shall provide an inventory of salvaged items to the Planning Department, and shall include a list of each item name, description and dimension (as necessary), and the location of each item on a floor plan.

F. Certificate of Appropriateness Waivers. The Approving Authority may waive the requirement for Certificate of Appropriateness approval for certain alterations, restorations, rehabilitations, remodeling, repainting, resurfacing, and additions to historic resources, as follows:

1. A waiver may be issued for work that is consistent with the Secretary of the Interior's Standards for the Treatment of Historic Properties and the guidelines set forth in Division 7.01 (Historic Preservation) of this Development Code.

2. A waiver may be issued for minor alterations to historic resources, provided no change in appearance occurs or the proposed change restores period features, including but not limited to, chimneys; fences and walls, including construction, demolition, or alteration of side, rear and front yard fences and walls; foundations; landscaping, unless the Landmark designation specifically identifies the landscape, layout, features or elements as having particular historical, architectural or cultural merit; roofing, provided a 30 year dimensional shingle, or an aesthetically equivalent dimensional shingle is used, and the replacement shingle must maintain the architectural character of the historic resource in terms of scale, pattern, texture, and coloration; and signage, including directional, monument, wall and window signs.

3. A waiver may be issued for the construction of residential accessory structures and additions less than 650 SF in area or 50 percent of the existing original historic building area, whichever is less, to historic resources that are not visible from a public right-of-way, excluding public alleys.

G. Replacement Structure Deferral. The Approving Authority may defer the obligation to construct replacement structures as a requirement for approval of the demolition of a historic resource, if the ultimate project proposed for the site of the demolition provides an exceptional benefit to the community.

1. Findings. A Replacement Structure Deferral shall be acted upon by the Approving Authority based upon the information provided in the submitted application, evidence presented in the Planning Department's written report, and any public testimony provided during the public hearing, only after considering and clearly establishing all of the below-listed findings, and giving supporting reasons for each finding. The application shall be denied if one or more of the below-listed findings cannot be clearly established.

a. The demolition is necessary to allow the acquisition and assembly of land for a future redevelopment or housing project within a redevelopment project area;

b. The future project will provide exceptional benefits to the City with respect to employment, fiscal, social, housing and economic needs of the community, or will provide new

public facilities that are needed by the City (such as off-site improvements, parks, open space, recreation, or other community facilities, not including parking lots); and

c. Failure to demolish the historic structures could hinder the ability of the City to revitalize or redevelop a blighted lot or area of the City or meet housing production requirements.

2. Condition of Approval. In granting a deferral of the replacement structure requirement, the Approving Authority shall impose a condition of approval requiring any new project on the subject site to be designed pursuant to the infill development guidelines listed in Subsection I (Infill Development Guidelines) of this Section, to insure compatibility with the surrounding area or neighborhood. The Historic Preservation Subcommittee shall make a recommendation to the Approving Authority for the replacement structure regarding compliance with the infill development guidelines.

H. Replacement Structure Waiver for Historic Resources Located within Industrial Zoning Districts. The Approving Authority may waive the obligation to construct replacement structures as a requirement for approval of the demolition of a Tier III Historic Resource, if the site is located in an Industrial Zone. The waiver shall be acted on based upon the information provided in the submitted application, after considering and clearly establishing all of the below-listed findings and giving supporting reasons for each finding. The application shall be denied if one or more of the below-listed findings cannot be clearly established.

1. The Tier III Historic Resource is a residential building located in an Industrial Zoning District;

2. Approving the deferral will not adversely affect the character, integrity, general welfare of the surrounding neighborhood, residents, and adjacent properties;

3. Conversion and/or rehabilitation of the residential home is not economically feasible, demonstrated through market analysis, construction costs, structural reports, property and building conditions assessments, and/or any other study/report deemed necessary by the Planning Director;

I. Infill Development Guidelines. The following infill development guidelines shall be incorporated into the design of all new structures proposed within a designated, proposed, or potential Historic District, or on a historic property, pursuant to this Division:

1. New buildings, structures, or improvements constructed within a historic district shall be designed to be compatible with the architectural style, features, and historic character of the district.

2. New buildings shall be compatible with the original style of the contributing buildings within a historic district. The design of the new building shall incorporate the following considerations:

a. The design shall incorporate the design features and details of contributing structures;

b. The height, width, and length of the new building shall be consistent with the original characteristic of the contributing structures; and

c. The exterior materials and treatment shall be similar to the contributing structures.

3. New buildings, structures, and/or improvements constructed on a historic property shall be designed to be compatible with the architectural style and features of contributing historic buildings located on the historic property.

4. New buildings shall be compatible with the original architectural style of the contributing historic buildings on the historic property. The design of the new building shall incorporate the following considerations:

a. The design shall incorporate the design features and details of the historic structure;

b. The height, width, and length of the new building shall be consistent with the original characteristic of the historic building; and

c. The exterior materials and treatment shall be similar to the historic building.

J. Certificate of Appropriateness Modification/Revision.

1. Historic Preservation—Certificates of Appropriateness and/or their conditions of approval may be modified/revised upon application by a project proponent or property owner if different from the proponent. The request shall be submitted to the Planning Department on a City application form pursuant to Division 2.02 (Application Filing and Processing).

2. Modifications/revisions that are minor in nature may be processed administratively, without notice or public hearing, provided the proposed changes are consistent with the intent of the original approval and there are no resulting inconsistencies with this Development Code. Modifications/revisions are considered minor in nature if in the opinion of the Planning Director, they do not involve substantial changes to the approved plans or the conditions of approval and would in no way affect surrounding properties.

3. Modifications/revisions to an approved plan or conditions of approval that are not minor in nature shall be processed as a revised Historic Preservation—Certificate of Appropriateness, following the procedures set forth in this Section for Historic Preservation—Certificate of Appropriateness approval, except that modification/revision approval shall not alter the expiration date established by the original application approval.

4.02.055: Historic Preservation—Certificates of Economic Hardship

A. Purpose. The purpose of this Section is to establish a process to ensure that denial of a Certificate of Appropriateness and/or a Demolition Application does not create any undue hardship upon the owner of a Tier I or Tier II historic resource.

B. Applicability.

1. The Approving Authority established pursuant to Table 2.02-1 (Review Matrix) of this Development Code is hereby empowered to approve, approve in modified form, or deny a Historic Preservation—Certificate of Economic Hardship application.

2. A Certificate of Economic Hardship may be filed concurrently with a Certificate of Appropriateness and/or Demolition Application in cases where the alteration, restoration, rehabilitation, remodel, addition to a historic resource, or demolition, partially or in whole, in compliance with the Certificate of Appropriateness and/or Demolition Application, would cause an immediate and substantial financial hardship. Furthermore, the denial of the Certificate of Appropriateness and/or Demolition Application would deny the property owner all reasonable beneficial use of, or return on, the property.

3. No action shall be taken to demolish or otherwise alter the historic resource for a period of 14 days following the issuance of a Certificate of Economic Hardship.

C. Application Filing, Processing and Hearing. A Historic Preservation—Certificate of Economic Hardship application shall be filed, processed, and heard pursuant to Division 2.02 (Application Filing and Processing) of this Development Code and the provisions of this Section.

D. Findings and Decision. A Historic Preservation—Certificate of Economic Hardship application shall be acted upon by the Approving Authority based upon the information provided in the submitted application, evidence presented in the Planning Department's written report, and testimony provided during the public hearing, only after considering and clearly establishing all of the below-listed findings, and giving supporting reasons for each finding. The application shall be denied if one or more of the below-listed findings cannot be clearly established.

1. Denial of the application will diminish the value of the subject property so as to leave substantially no value;

2. Sale or rental of the property is impractical, when compared to the cost of holding the property for uses permitted in the underlying zoning district;

3. An adaptive reuse study has been conducted and found that utilization of the property for lawful purposes is prohibited or impractical;

4. Rental at a reasonable rate of return is not feasible;

5. Denial of the Certificate of Appropriateness would damage the owner of the property unreasonably in comparison to the benefit conferred on the community, and

6. All means involving City sponsored incentives, such as a transfer of development rights, tax abatements, financial assistance, building code modifications, changes in the zoning ordinance, loans, grants, and reimbursements, have been explored to relieve possible economic disincentives.

4.02.060: Historic Preservation—Conservation Plans

A. Purpose. The purpose of this Section is to establish a process to expedite the review process for project areas in which numerous historic resources within a single project area would require the issuance of multiple Certificates of Appropriateness for proposed work to those Historic Resources.

B. Applicability. The Approving Authority established pursuant to Table 2.02-1 (Review Matrix) of this Development Code is hereby empowered to approve, approve in modified form, or deny

a Historic Preservation—Conservation Plan application and to impose reasonable conditions upon the approval of the application.

C. Application Filing, Processing and Hearing. A Historic Preservation—Conservation Plan application shall be filed, processed, and acted upon pursuant to the requirements for Historic Preservation—Certificates of Appropriateness, contained in Section 4.02.050 (Historic Preservation—Certificates of Appropriateness and Demolition of Historic Resources) of this Development Code, and the provisions of this Section.

D. Findings and Decision. A Historic Preservation—Conservation Plan shall be acted upon by the Approving Authority based upon the information provided in the submitted application, evidence presented in the Planning Department's written report, and testimony provided during the public hearing, only after considering and clearly establishing all of the below-listed findings, and giving supporting reasons for each finding. The application shall be denied if one or more of the below-listed findings cannot be clearly established.

1. The proposed alterations, restorations, relocations, or construction, in whole or in part, within the plan area will not detrimentally change, destroy or adversely affect any significant architectural feature of Historic Resources;

2. The proposed alterations, restorations, relocations, or construction, in whole or in part, within the plan area will not detrimentally change, destroy or adversely affect the historic character or value of Historic Resources;

3. The proposed alterations, restorations, relocations, or construction, in whole or in part, within the plan area will be compatible with the exterior features of other improvements within the plan area; and

4. The proposed alterations, restorations, relocations, or construction, in whole or in part, within the plan area will not adversely affect or detract from the character of the plan area.

E. Conditions of Approval.

1. In approving a Historic Preservation—Conservation Plan application, the Approving Authority may require certain safeguards and impose certain conditions established to ensure that the purposes of this Development Code are maintained; ensure that the project will not endanger the public health, safety or general welfare; ensure that the project will not result in any significant environmental impacts; ensure that the project will be in harmony with the area in which it is located; and ensure that the project will be in conformity with The Ontario Plan and any applicable specific and/or area plan(s).

2. All conditions of approval or requirements authorized by this Section are enforceable in the same manner, and to the same extent, as any other applicable requirement of this Development Code.

F. Conservation Plan Modification/Revision.

1. Historic Preservation—Conservation Plans and/or their conditions of approval may be modified/revised upon application by a project proponent or property owner if different from the proponent. The request shall be submitted to the Planning Department on a City application form pursuant to Division 2.02 (Application Filing and Processing).

2. Modifications/revisions that are minor in nature may be processed administratively, without notice or public hearing, provided the proposed changes are consistent with the intent of the original approval and there are no resulting inconsistencies with this Development Code. Modifications/revisions are considered minor in nature if in the opinion of the Zoning Administrator, they do not involve substantial changes to the approved plans or the conditions of approval and would in no way affect surrounding properties.

3. Modifications/revisions to an approved plan or conditions of approval that are not minor in nature shall be processed as a revised Historic Preservation—Conservation Plan, following the procedures set forth in this Section for Historic Preservation—Conservation Plan approval, except that modification/revision approval shall not alter the expiration date established by the original application approval.

4.02.065: Historic Preservation—Mills Act Contracts

A. **Purpose.** The purpose of this Section is to establish a process by which economic incentives may be provided for the preservation of a designated historic landmark or contributing structure within a designated historic district.

B. **Applicability.**

1. The Approving Authority established pursuant to Table 2.02-1 (Review Matrix) of this Development Code is hereby empowered to approve, approve in modified form, or deny a Historic Preservation—Mills Act Contract (Contract) application.

2. Pursuant to GC Section 50280, et seq., the owner(s) of designated historic landmarks, contributing structures within designated historic districts, and properties listed on the National Register of Historic Places or the California Register of Historic Resources, may request to enter into a Mills Act Contract with the City.

C. **Application Filing, Processing and Hearing.**

1. Historic Preservation—Mills Act Contract applications shall be filed, processed, and heard pursuant to Division 2.02 (Application Filing and Processing) of this Development Code and the provisions of this Section.

2. The owner shall furnish the Approving Authority with any information the Approving Authority shall require in order to enable it to determine the eligibility of the property involved.

D. **Findings and Decision.**

1. A Historic Preservation—Mills Act Contract shall be acted upon by the Approving Authority based upon the information provided in the submitted application, evidence presented in the Planning Department's written report, and testimony provided during the public hearing, only after considering and clearly establishing **[i]** the eligibility of the property involved, **[ii]** the appropriateness and sequencing of the improvements proposed, and **[iii]** the fiscal benefits derived from those improvements.

2. No later than 20 days after the City enters into a Mills Act Contract with an owner pursuant to this Section, the City Clerk shall record a copy of the Contract with the county recorder, which shall fully describe the affected property.

E. Required Contract Provisions. Pursuant to GC Section 50281, any Mills Act Contract entered into under this Section shall contain the following provisions:

1. The term of the Contract shall be for a minimum period of 10 years.

2. Where applicable, the Contract shall provide for the following:

a. The preservation of designated historic landmarks, contributing structures within designated historic districts, and properties listed on the National Register of Historic Places or the California Register of Historic Resources, and, when necessary, to restore and rehabilitate the property to conform to the rules and regulations of the Office of Historic Preservation of the Department of Parks and Recreation, the United States Secretary of the Interior's Standards for Rehabilitation, and the State Historical Building Code;

b. The periodic examinations of the interior and exterior of the premises by the City, San Bernardino County Assessor, the Department of Parks and Recreation, and the State Board of Equalization, as may be necessary to determine the owner's compliance with the Contract; and

c. The Contract shall be binding upon, and inure to the benefit of, all successors in interest of the owner. A successor in interest shall have the same rights and obligations under the Contract as the original owner who entered into the Contract.

F. Term of Contract. Each Mills Act Contract shall provide that on the anniversary date of the Contract, or other annual date specified in the Contract, a year shall be automatically added to the initial term of the Contract unless notice of nonrenewal is given pursuant to Subsection G (Contract Nonrenewal), below. If the property owner or the Approving Authority desires within any year not to renew the Contract, that party shall serve written notice of nonrenewal of the Contract on the other party in advance of the annual renewal date of the Contract. Unless the notice is served by the owner at least 90 days prior to the renewal date or by the Approving Authority at least 60 days prior to the renewal date, one year shall be automatically added to the term of the Contract.

G. Contract Nonrenewal.

1. Upon receipt by the owner of a notice of nonrenewal from the Approving Authority, the owner may make a written protest of the notice. The Approving Authority may, at any time prior to the renewal date, withdraw the notice of nonrenewal.

2. If, within any year, the Approving Authority or the owner serves notice of intent not to renew the Contract, the existing Contract shall remain in effect for the balance of the period remaining since the original execution or the last renewal of the Contract, as applicable.

H. Contract Cancellation.

1. The Approving Authority may cancel a Mills Act Contract if it determines that the owner has breached any of the conditions of the Contract provided for in this Section or has allowed the property to deteriorate to the point that it no longer meets the standards for a qualified historic property. The Approving Authority may also cancel a Contract if it determines that the owner has failed to restore or rehabilitate the property in the manner specified in the Contract.

2. A Mills Act Contract shall not be canceled until after the Reviewing Authorities have given notice of, and has held, a public hearing on the matter pursuant to Division 2.03 (Public Hearings) of this Development Code.

3. If a Mills Act Contract is canceled pursuant to Paragraph G.1, above, the owner shall pay a cancellation fee equal to 12.5 percent of the current fair market value of the property, as determined by the county assessor as though the property were free of the contractual restriction.

4. As an alternative to cancellation of a Mills Act Contract for breach of any condition, the City, or any landowner may bring any action in court necessary to enforce a Contract, including, but not limited to, an action to enforce the Contract by specific performance or injunction.

5. In the event that property subject to Mills Act Contract under this Section is acquired in whole or in part by eminent domain or other acquisition by any entity authorized to exercise the power of eminent domain, and the acquisition is determined by the Approving Authority to frustrate the purpose of the Contract, the Contract shall be canceled and no fee shall be imposed as required under Paragraph G.3, above. Furthermore, the Contract shall be deemed null and void for all purposes of determining the value of the acquired property.

I. Amendment to Work Program. Upon request of the property owner(s), the Planning Director may approve amendments to a Mills Act Contract Work Program, subject to the following:

1. The items listed in the proposed Work Program are consistent with the Secretary of the Interior's Standards for the Treatment of Historic Properties, and the guidelines set forth in this Development Code;

2. The Work Program shall be completed within the 10-year period following Contract enactment, unless extended by action of the City Council; and

3. The proposed Work Program shall have an equal or greater preservation and monetary value than the previously approved Work Program.

4.02.070: Master Plans and Amendments

A. Purpose. The purpose of this Section is to establish procedures for amending, supplementing, or changing official Master Plans of the City, whenever the public necessity, convenience, general welfare, or good planning practice so requires.

B. Applicability.

1. The Approving Authority is hereby empowered to approve, approve in modified form, or deny an official Master Plan of the City, or any amendment thereto, and to impose reasonable conditions upon the Master Plan approval.

2. The Master Plans subject to the provisions of this Section include the following:

a. 5-Year Capital Improvement Program (CIP) Master Plan prepared pursuant to GC Section 66540.32(b)(2)(H);

b. Fiber Optic Master Plan;

c. Parks Master Plan;

d. Citywide Streets Master Plan;

e. Sewer Master Plan;

f. Storm Drain Master Plan;

g. Water/Recycled Water Master Plan.

3. A Master Plan of the City shall be an internally consistent, action-oriented and pragmatic, considering both the short-term and long-term future, and shall present clear and concise policy guidance.

C. Application Filing, Processing, and Hearing. The adoption of a Master Plan of the City, or any amendments thereto, carried-out pursuant to Division 2.02 (Application Filing and Processing) of this Development Code and the provisions of this Section.

D. Findings and Decision.

1. A Master Plan or amendment thereto, shall be acted upon by the Approving Authority, upon recommendation of the Advisory Authority.

2. The actions of the Approving and Advisory Authorities shall be based upon the evidence presented in the departmental written report and testimony provided during the public hearing, only after considering and clearly establishing that the proposed Master Plan, or any amendment thereto, promotes and/or is consistent with the goals and policies of The Ontario Plan, and giving supporting reasons for the finding. A Master Plan shall be denied if reasons supporting the required finding cannot be clearly established.

E. Conditions of Approval.

1. In approving a Master Plan or any amendment thereto, the Approving Authority may require certain safeguards and impose certain conditions established to ensure that the purposes of this Development Code are maintained; ensure that the project will not endanger the public health, safety or general welfare; ensure that the project will not result in any significant environmental impacts; ensure that the project will be in harmony with the area in which it is located; and ensure that the project will be in conformity with The Ontario Plan and any applicable specific and/or area plan(s).

2. All conditions of approval or requirements authorized by this Section are enforceable in the same manner, and to the same extent, as any other applicable requirement of this Development Code.

4.02.075: Sign Programs

A. Purpose. The purpose of this Section is to establish a process whereby a Sign Program may be required to provide coordinated signing within development projects, utilizing common design elements and integrating the design of signs with the building and landscape design, to form a unified architectural statement.

B. Applicability.

1. Within any commercial, mixed-use, industrial, or specialized use or overlay zoning district, a Sign Program shall be submitted for any multi-tenanted building, complex or center, which shall fully comply with Section 8.01.020.F (Sign Programs) of this Development Code.

2. The Approving Authority is hereby empowered to approve, approve in modified form, or deny, either in whole or in part, a Sign Program on the basis of the application, supporting plans and documentation, and evidence submitted by the applicant.

C. Application Filing and Processing. A Sign Program shall be filed, processed, and acted upon pursuant to Division 2.02 (Application Filing and Processing) of this Development Code, the provisions of this Section, and the requirements of Subsection 8.01.020.F (Sign Programs) of this Development Code.

D. Decision. A Sign Program shall be acted upon only after considering and clearly establishing **[i]** that the Sign Program is in conformance with the provisions of this Section and Division 8.01 (Sign Regulations) of this Development Code, and **[ii]** that any deviations from Division 8.01 (Sign Regulations) of this Development Code, as allowed by the Sign Program, are limited only to those set forth in Paragraphs 8.01.020.F.2 and F.3 of this Development Code.

4.02.080: Specific Plan Minor Adjustments/Alterations

A. Purpose. The purpose of this Section is to establish a procedure by which minor departures from the strict application of the development standards and/or design guidelines established by a Specific Plan may be approved, provided the requested departure is in the interest of furthering the goals and policies of the affected Specific Plan and The Ontario Plan.

B. Applicability.

1. Pursuant to Table 2.02-1 (Review Matrix) of this Development Code, the Approving Authority is hereby empowered to approve, approve in modified form, or deny a Specific Plan Minor Adjustments/Alterations application, and to impose reasonable conditions upon the approval of the application.

2. The following constitute minor adjustments/alterations, not requiring a Specific Plan Amendment and/or update of the affected specific plan:

a. A net change of not more than 15 percent to the number of units within an individual residential area, provided the total number of units for the entire specific plan area does not exceed that established in the affected specific plan;

b. Adjustment/alteration of a residential planning area boundary, provided the total acreage of the affected area does not increase or decrease the total acreage stated in the affected specific plan by more than 15 percent;

c. Minor adjustments/alterations to landscape materials, wall materials, wall alignment, entry design, and streetscape design, which are consistent with the conceptual design set forth in the affected specific plan's development standards and design guidelines;

d. Minor adjustments/alterations to design guidelines, which are intended to be conceptual in nature, and are clearly intended to be flexible in implementation;

e. Other adjustments/alterations of a similar nature to those listed above, which are deemed minor by the Planning Director to be in keeping with the purpose and intent of the affected specific plan and are in conformance with The Ontario Plan; and

f. Adjustments/alterations in street alignments and dimensions that are deemed appropriate by the City Engineer, which are in keeping with the purpose and intent of the specific plan and are consistent with the purpose, principles, goals, and policies, of the Vision, Policy Plan (General Plan), and City Council Priorities components of The Ontario Plan, provided the changes do not impact the sizing of master planned infrastructure.

C. Application Filing, Processing and Hearing. Unless otherwise specified in a respective Specific Plan, a Specific Plan Minor Adjustments/Alterations application shall be filed, processed, and acted upon pursuant to Division 2.02 (Application Filing and Processing) of this Development Code and the provisions of this Section. A noticed hearing pursuant to Division 2.03 (Public Hearings) of this Development Code shall not be required.

D. Findings and Decision. A Specific Plan Minor Adjustments/Alterations shall be acted upon by the Approving Authority based upon the information provided in the submitted application, evidence presented in the Planning Department's written report, and testimony provided during the public hearing, only after considering and clearly establishing all of the below-listed findings, and giving supporting reasons for each finding. The application shall be denied if one or more of the below-listed findings cannot be clearly established.

1. The proposed Specific Plan Minor Adjustment/Alteration is consistent with the goals, policies, plans and exhibits of the Vision, Policy Plan (General Plan), and City Council Priorities components of The Ontario Plan, and the specific plan;

2. The proposed Specific Plan Minor Adjustment/Alteration is reasonable and beneficial, and in the interest of good planning practice; and

3. The proposed Specific Plan Minor Adjustment/Alteration will not adversely affect the harmonious relationship with adjacent properties and land uses.

4.02.090: Subdivisions—Reversions to Acreage

A. Purpose. The purpose of this Section is to establish a process for the implementation of those provisions of the Subdivision Map Act (commencing with GC Section 66451.30), pertaining to the unmerger of parcels (reversions to acreage).

B. Applicability.

1. Pursuant to Table 2.02-1 (Review Matrix) of this Development Code, the Approving Authority is hereby empowered to approve, approve in modified form, or deny a Reversion to Acreage application and to impose reasonable conditions upon the approval of the application.

2. Proceedings for Reversion to Acreage may be initiated by the City Council or by petition of all of the property owners of record of the real property within a subdivision.

C. Application Filing, Processing and Hearing. A Reversion to Acreage application (petition by property owners) shall be filed, processed, and heard pursuant to Division 2.02 (Application Filing and Processing) of this Development Code and the provisions of this Section.

D. Findings and Decision. A Reversion to Acreage shall be acted upon by the Approving Authority based upon the information provided in the submitted application, evidence presented in the Planning Department's written report, and testimony provided during the public hearing, only after considering and clearly establishing all of the below-listed findings, and giving supporting reasons for each finding. The application shall be denied if one or more of the below-listed findings cannot be clearly established.

1. The proposed Reversion to Acreage is consistent with the goals, policies, plans and exhibits of the Vision, Policy Plan (General Plan), and City Council Priorities components of The Ontario Plan;

2. Dedications or offers of dedication to be vacated or abandoned by the reversion to acreage are unnecessary for present or prospective public purposes; and

3. Either:

a. All owners of an interest in the real property within the subdivision have consented to reversion; or

b. None of the improvements required to be made have been made within 2 years from the date the final map or parcel map was filed for record, or within the time allowed by agreement for completion of the improvements, whichever is the later; or

c. No lots shown on the final map or parcel map have been sold within 5 years from the date the map was filed for recordation.

E. Conditions of Approval.

1. In approving a Reversion to Acreage request, the Approving Authority may require certain safeguards and impose certain conditions established to ensure that the purposes of this Development Code are maintained; ensure that the project will not endanger the public health, safety or general welfare; ensure that the project will not result in any significant environmental impacts; ensure that the project will be in harmony with the area in which it is located; ensure that the project will be in conformity with The Ontario Plan and any applicable specific and/or area plan(s); and ensure compliance with GC Section 66499.17.

2. All conditions of approval or requirements authorized by this Section are enforceable in the same manner and to the same extent as any other applicable requirement of this Development Code.

F. Filing of Parcel Map.

1. A parcel map submitted for the purpose of reverting to acreage shall be accompanied by evidence of title and nonuse or lack of necessity of any streets or easements that are to be vacated or abandoned, and a parcel map in a form acceptable to the City Engineer, which delineates any streets or easements that are to remain in effect after the reversion.

2. After approval of the reversion by the Approving Authority and City Engineer, the parcel map shall be delivered to the County Recorder. The reversion shall be effective upon the recordation of the parcel map by the County Recorder.

3. The filing of the parcel map shall constitute abandonment of all streets and easements not shown on the parcel map and shall constitute a merger of the separate lots into one lot, and shall thereby be shown as a single lot on the assessment roll of the County Assessor, subject to the provisions of GC Section 66445.

4. Except as provided in GC Section 66445(f), on any parcel map used for reverting acreage, a certificate shall appear, signed and acknowledged by all parties having any record title interest in the land being reverted, consenting to the preparation and filing of the parcel map.

G. Return of Fees and Deposits, and Release of Securities. Return of fees and deposits, and release of securities shall be in accordance with GC Section 66499.19.

H. Merger and Resubdividing Without Reversion.

1. Subdivided lands may be merged and resubdivided without reverting to acreage by complying with all the applicable requirements for the subdivision of land as provided by Section 4.02.095 (Subdivisions—Tentative Tract and Parcel Maps, and Vesting Maps) of this Division, and the Subdivision Map Act (commencing with GC Section 66410).

2. The filing of the final map or parcel map shall constitute legal merging of the lots into one lot and the resubdivision of the lot, which will thereafter be shown with the new lot boundaries on the assessment roll of the County Assessor.

3. Any unused fees or deposits pertaining to the resubdivided property shall be credited pro rata towards any of the requirements for the same purposes that are applicable at the time of resubdivision.

4. Any streets or public easements to be left in effect after the resubdivision shall be adequately delineated on the map.

5. After approval of the merger and resubdivision by the Approving Authority, the map shall be delivered to the San Bernardino County Recorder. The filing of the map shall constitute legal merger and resubdivision of the affected land and shall constitute abandonment of all public streets or public easements not shown on the map.

4.02.095: Subdivisions—Tentative Tract and Parcel Maps, and Vesting Maps

A. Purpose. The purpose of this Section is to establish a process for the implementation of those provisions of the Subdivision Map Act (commencing with GC Section 66410), pertaining to the review, regulation, and control of the design of subdivisions, and to achieve the following:

1. Assist in implementing the Vision, Policy Plan (General Plan) and City Council Priorities components of The Ontario Plan;

2. Encourage orderly development of the City through the regulation and control of the design and improvement of subdivisions, with a proper consideration of its relationship to adjoining areas;

3. Ensure that the areas within a subdivision that are dedicated for public purposes will be properly improved by the subdivider so that they will not become an undue burden on the community;

4. Protect the public and individual transferees of land from fraud and exploitation;

5. Provide lots of sufficient size and appropriate design for the purposes for which they are to be used;

6. Provide streets of adequate capacity and design for the traffic that will utilize them and to ensure maximum safety for pedestrians and vehicles;

7. Provide sidewalks or pedestrian ways where needed for the safety and convenience of pedestrians;

8. Identification and preservation of the cultural resources and natural assets of the City;

9. Prevent the indiscriminate clearing of property and the destruction of desirable landscape features;

10. Ensure adequate access to each building site, and safeguard the public safety and welfare through superior subdivision design;

11. Provide adequate systems of water supply, sanitary sewage disposal, storm drainage, street lighting, and other utilities necessary to the public health, safety, and convenience;

12. Provide adequate sites for public facilities necessary to serve the residents of the new developments; and

13. Ensure that the costs of providing land for streets, alleys, pedestrian ways, easements, and other rights-of-way, and for the improvements therein needed to serve new developments, are borne by the subdivider rather than by the taxpayers of the City at large.

B. Applicability.

1. Pursuant to Table 2.02-1 (Review Matrix) of this Development Code, the Approving Authority is hereby empowered to approve, approve in modified form, or deny a Tentative Tract

Map, Tentative Parcel Map, Vesting Tentative Tract Map, or Vesting Tentative Parcel Map, and to impose reasonable conditions upon the approval of the application pursuant to the provisions of the Subdivision Map Act (commencing with GC Section 66410), Planning and Zoning Law (commencing with GC Section 65000) and the California Environmental Quality Act (commencing with PRC Section 21000).

2. Each proposed parcel map, tract map or vesting parcel or tract map shall be submitted to the City in the form of a tentative map, which shall include an identifying map number issued by the office of the San Bernardino County Surveyor. All tentative maps shall be prepared by a state-licensed land surveyor or state-registered civil engineer authorized to practice land surveying.

C. Application Filing, Processing and Hearing. A Tentative Subdivision Map application shall be filed, processed and acted upon pursuant to Division 2.02 (Application Filing and Processing) of this Development Code and the provisions of this Section.

D. Findings and Decision. A Tentative Subdivision Map shall be acted upon by the Approving Authority based upon the information provided in the submitted application, evidence presented in the Planning Department's written report, and testimony provided during the public hearing, only after considering and clearly establishing all of the below-listed findings, and giving supporting reasons for each finding. The application shall be denied if one or more of the below-listed findings cannot be clearly established.

1. The proposed map is consistent with the goals, policies, plans and exhibits of the Vision, Policy Plan (General Plan), and City Council Priorities components of The Ontario Plan, and applicable area and specific plans, and planned unit developments;

2. The design or improvement of the proposed subdivision is consistent with the goals, policies, plans and exhibits of the Vision, Policy Plan (General Plan), and City Council Priorities components of The Ontario Plan, and applicable specific plans and planned unit developments;

3. The site is physically suitable for the type of development proposed;

4. The site is physically suitable for the proposed density of development;

5. The design of the subdivision or the proposed improvements are not likely to cause substantial environmental damage or substantially and avoidably injure fish or wildlife or their habitat;

6. The design of the subdivision or type of improvements are not likely to cause serious public health problems; and

7. The design of the subdivision or the type of improvements will not conflict with easements, acquired by the public at large, for access through or use of, property within the proposed subdivision.

E. Conditions of Approval.

1. In approving a Tentative Subdivision Map, the Approving Authority may require certain safeguards and impose certain conditions established to ensure that the purposes of this Development Code are maintained; ensure that the project will not endanger the public health, safety or general welfare; ensure that the project will not result in any significant environmental

impacts; ensure that the project will be in harmony with the area in which it is located; and ensure that the project will be in conformity with The Ontario Plan and any applicable specific and/or area plan(s).

2. All conditions of approval or requirements authorized by this Section are enforceable in the same manner and to the same extent as any other applicable requirement of this Development Code.

F. Tentative Map Modification/Revision.

1. Tentative maps and/or their conditions of approval may be modified/revised upon application by the subdivider or property owner if different from the subdivider. The request shall be submitted to the Planning Department on a City application form pursuant to Division 2.02 (Application Filing and Processing) of this Development Code.

2. Modifications/revisions that are minor in nature may be processed administratively, without notice or public hearing, provided the proposed changes are consistent with the intent of the original tentative map approval, do not affect off-site properties and there are no resulting inconsistencies with this Development Code. The following modifications/revisions are considered minor in nature:

a. Modifications/revisions affecting less than 20 percent of the total number of lots in the subdivision, provided there is no increase in the total number of lots within the subdivision; and

b. Any other changes that, in the opinion of the Planning Director and City Engineer, do not involve substantial changes to the map or the conditions of approval, and do not affect surrounding properties.

3. Any other amendment or modification of an approved tentative subdivision map shall be processed as a revised tentative map, following the procedures set forth in this Section for tentative subdivision map approval, except that modification/revision approval shall not alter the original expiration date of the tentative map.

G. Vesting Tentative Maps.

1. Filing and Processing of Vesting Tentative Maps. A vesting tentative map shall be filed in the same form; shall have the same content, accompanying data and reports; and shall be processed in the same manner described for tentative maps in Subsections A through F of this Section, except as stated below:

2. Development Rights.

a. The approval or conditional approval of a vesting tentative map shall confer a vested right to proceed with development in substantial compliance with the ordinances, policies and standards described in GC Section 66474.2. However, if GC Section 66474.2 is repealed, the approval or conditional approval of a vesting tentative map shall confer a vested right to proceed with development in substantial compliance with the ordinances, policies, and standards in effect at the time the vesting tentative map is approved or conditionally approved.

b. Notwithstanding Subparagraph G.2.a of this Section, a permit, approval, extension, or entitlement may be made conditional or may be denied if any of the following are determined:

(1) Failure to do so would place the residents of the subdivision or the immediate community, or both, in a condition dangerous to their health or safety, or both; and/or

(2) The condition(s) or denial is required in order to comply with state or federal laws.

c. The provisions of this Subparagraph shall not:

(1) Limit the City from imposing reasonable conditions on subsequently required approvals or permits necessary for the development and authorized by the ordinances, policies and standards described in Paragraph G.1 (Filing and Processing of Vesting Tentative Maps) of this Section; and

(2) Diminish or alter the types of conditions that may be imposed by the City on a development or the City's power to protect against a condition dangerous to the public health or safety.

3. Modifications/Revisions to Vesting Tentative Maps. At any time prior to the expiration of a vesting tentative map, the subdivider, their successor, or their assignee, may apply for a modification to the map. A public hearing shall be held by the Approving Authority on any application involving a modification to the vesting tentative map, or by the development related thereto, following procedures set forth for the modification of tentative maps contained in Subsection F (Tentative Map Modification/Revision) of this Section. Approval of a modification to a vesting tentative map, or development related thereto, shall be evaluated for compliance with the City regulations, standards, and policies in effect at the time the original vesting tentative map was deemed complete.

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Division 4.03—Ministerial (Administrative) Permits and Decisions

Sections:

4.03.000: Purpose
4.03.005: Applicability
4.03.010: Historic Preservation—Adaptive Reuse Plan
4.03.015: Administrative Use Permits
4.03.020: Sign Plans
4.03.025: Subdivisions—Certificates of Compliance
4.03.030: Subdivisions—Final Maps and Parcel Maps
4.03.035: Subdivisions—Lot Line Adjustments
4.03.040: Subdivisions—Map Corrections and Amendments
4.03.045: Subdivisions—Parcel Map Waiver
4.03.050: Subdivisions—Lot Merger (Merger of Contiguous Parcels)
4.03.055: Administrative Exceptions
4.03.060: Fair Housing and Reasonable Accommodations

4.03.000: Purpose

The purpose of this Division is to prescribe procedures for the consideration of ministerial (administrative) permits or decisions by the Reviewing Authorities established by Table 2.02-1 (Review Matrix) of this Development Code. Ministerial permits and decisions consist of City actions and determinations that involve little or no personal judgment by a public official as to the wisdom or manner of carrying out a project. The public official merely applies the law to the facts as presented but uses no special discretion or judgment in reaching a decision. A ministerial decision involves only the use of fixed standards or objective measurements.

4.03.005: Applicability

The Reviewing Authorities established by Table 2.02-1 (Review Matrix) of this Development Code shall consider a ministerial permit or decision pursuant to the general provisions prescribed by Division 2.02 (Application Filing and Processing) of this Development Code, and the provisions of this Division that are specific to each discretionary permit or action stipulated herein.

4.03.010: Historic Preservation—Adaptive Reuse Plan

A. Purpose. The purpose of this Section is to establish a procedure by which Adaptive Reuse Plans may be approved by the City, while at the same time:

1. Provide a more efficient way for qualified historic buildings and adaptive reuse projects to meet development, building, and fire protection standards;

2. Promote adaptive reuse as part of broader goals supporting historic preservation, economic development, environmental sustainability and resilience, and recognize the social value of historic buildings;

3. Incentivize building reuse to encourage activation of Downtown Ontario where there is a large collection of commercial and industrial historic buildings that are worthy of preservation;

4. Eliminate or allow nonconformance with certain development regulations that would make adaptive reuse of qualified historic buildings infeasible, including such standards related to parking and loading, height, density, floor-area ratio, and open space; and

5. Allow alternative building and fire code compliance for qualified adaptive reuse projects able to demonstrate an alternative means or method of protecting public health, safety, and welfare.

B. Applicability.

1. Pursuant to Table 2.02-1 (Review Matrix) of this Development Code, the Approving Authority is hereby empowered to approve, approve in modified form, or deny an Adaptive Reuse Plan application, and to impose reasonable conditions upon the approval of the application.

2. Adaptive Reuse Plan approval shall allow for those land uses identified in Table 5.02-1 (Land Use Matrix) of this Development Code, which allows for a broad range of land uses of the underlying zoning district in which the site is located. However, no new uses that emits noxious odors or excessive noise shall be allowed, unless it can be demonstrated to the satisfaction of the Planning Director that the use will not cause adverse impacts to nearby residential land uses.

3. Qualifying buildings include those listed on the National Register of Historic Places, on the California Register of Historic Resources, Ontario Register of Historic Resources as designated local landmarks or contributors to designated local historic districts located within the Adaptive Reuse Plan Area.

4. Adaptive Reuse projects are construction and remodeling projects that reconfigure existing spaces within existing buildings to accommodate a new use or purpose other than what it was originally designed for. Adaptive Reuse projects require a change of use and building occupancy from office or commercial to residential, industrial to work/live, residential to office or commercial, or assembly to residential, office or commercial.

5. Application Filing and Processing. An Adaptive Reuse Plan application shall be filed, processed, and acted upon pursuant to Division 2.02 (Application Filing and Processing) of this Development Code and the provisions of this Section. Plans and reports prepared for an Adaptive Reuse Plan shall be prepared by a California licensed architect meeting the minimum qualifications standards of The Secretary of the interior Professional Qualifications (Code of Federal Regulations, 36 CFR Part 61).

C. Adaptive Reuse Plan Area. This area consists of the City's original downtown, and extends north to include the historic districts adjacent to Euclid Avenue, the boundary of which is as follows:

> *Beginning at the intersection of the centerlines of State Street and San Antonio Avenue, thence north to the northernmost city boundary, thence east to the centerline of Sultana Avenue, thence south to the centerline of I Street, thence east to the centerline of Campus Avenue, thence south to the centerline of State Street, thence west to the point of beginning.*

D. Alternative Building and Fire Code Regulations. The alternative building and fire codes regulations adopted in this Section are applicable to qualified buildings and adaptive reuse projects.

1. *Alternative Codes.* Use of the California Historic Building Code, International Existing Building Code, California Health and Safety Code and the Ontario Adaptive Reuse Plan Technical Manual shall provide a process and the ability for the Building Official and Fire Marshal to consider alternative building standards while ensuring adequate health and safety protections.

2. In permitting repairs, alterations, and additions necessary to accommodate adaptive reuse projects, the alternative code regulations shall impose requirements that will, in the determination of the Building Official and the Fire Marshal, protect the public health, safety, and welfare.

3. Nothing in this Section shall be construed to allow the reduction of existing seismic or fire and life-safety elements of an eligible building where such elements provide a greater level of protection than the minimum requirements established by this Section.

4. Subject to the approval of the Building Official and Fire Marshal, the use or occupancy type of a qualified building shall be allowed to be changed as part of an adaptive reuse project without conforming to all requirements of Title 8, Building Regulations, and Title 4, Chapter 4, Fire Code of the City of Ontario Municipal Code provided the new or proposed occupancy is equally or less hazardous, based on life and fire risk, than the existing use.

5. Whenever there are practical difficulties involved in carrying out the provisions of Title 8, Building Regulations, and Title 4, Chapter 4, Fire Code of the City of Ontario Municipal Code, the Building Official and Fire Marshal shall have the authority to grant modifications for individual cases, provided the Approving Authority shall first find that special individual reasons make the strict letter of the local codes impractical and the modification is in compliance with the intent and purpose of the local codes and that such modification does not lessen health, life and safety requirements.

F. Incentives. The Planning Director may grant the following departures from certain development standards and requirements to incentivize qualified Adaptive Reuse Plans:

1. *Development Plan Waived.* Approved Adaptive Reuse Plans, which may allow for new additions up to 25 percent of the existing building floor area and is not visible from the public right-of-way, shall be exempt for the requirements for Development Plan review set forth in Section 4.02.025.

2. *Mezzanines*. Loft spaces in joint living and work quarters, dwelling units and guest rooms which do not exceed more than 33 percent of the floor area of the space below shall not be considered new floor area. Mezzanines may be included in the calculation of floor area for the purpose of determining compliance with the standards set forth in Paragraph (E) of this subdivision.

3. *Parking Reduction.* New parking spaces shall not be required for any converted use within the existing footprint of the building, but expansions to floor area shall require one parking space per bedroom or one parking space per 250 square feet of gross floor area for office or commercial.

4. *Setbacks*. Existing building setbacks may remain and shall be considered legally nonconforming, but no further encroachments shall be permitted into any nonconforming setback.

5. *Increases in Maximum Building Height*. The height of the structure, if it exceeds the maximum height of the zoning district, may remain and shall be considered legally nonconforming. Any rooftop construction needed for drainage, ventilation, utilities, or passive recreation shall be included within the height exemption. This height exemption does not include new residential or commercial floor area.

6. *Open Space*. Private open space for residential adaptive reuse projects may be waived when it is determined by the Approving Authority that the requirement would result in exterior alterations to the existing building that would result in an adverse impact to a historic resource. A minimum of 100 square feet of common open space per residential unit or 25 percent of the building square footage, whichever is less, shall be required and may be provided on the rooftop of the building or within the building and include various type of indoor amenities such as fitness center, workstations, playrooms, etc.

7. *Loading Zone*. A new loading zone shall not be required if the existing building does not have an existing loading zone.

G. Standards. Adaptive Reuse Projects permitted pursuant to this subdivision shall be developed in compliance with the following standards:

1. *Minimum Dwelling Units*. Adaptive reuse projects that propose residential shall develop no less than 3 units. The minimum floor area for new dwelling units and joint living and work quarters shall be 450 square feet. Floor area shall not include hallways or other common areas, or rooftops, balconies, terraces, fire escapes, or other projections or surfaces exterior to the walls of the building. The floor area of both the living space and the workspace shall be combined to determine the size of joint living and work quarters. The average floor area, as defined above, of all the dwelling units and joint living and work quarters in the building, including those that existed prior to the effective date of this ordinance, shall be at least 750 square feet. That minimum average size shall be maintained and not reduced.

2. *Storefront*. Ground floor of an existing multiple level commercial building shall contain street frontage and shall be used as a commercial storefront. Residential on ground may occur at the rear of the building behind the storefront.

3. *Exterior or Interior (Public Space) Alterations*. A Certificate of Appropriateness pursuant to Section 4.02.050: Historic Preservation—Certificates of Appropriateness and Demolition of Historic Resources is required for any alteration, addition, restoration, rehabilitation, remodeling, relocation, repainting, and/or resurfacing of an historic resource.

4. *Other Provisions*. Floor Area Ratio (FAR), Landscaping, Lot Coverage, and any other development standard of the underlying zone may be waived by the Approving Authority.

H. Conditions of Approval.

1. In approving an Adaptive Reuse Plan, the Planning Director may impose certain safeguards and standards to ensure that the purposes of this Development Code are maintained; ensure that the permit will not endanger the public health, safety or general welfare; ensure that the permit will not result in any significant environmental impacts; ensure that the permit will be in

harmony with the area in which it is located; and ensure that the permit will be in conformity with The Ontario Plan and any applicable specific and/or area plan(s).

2. The standards and requirements authorized by this Section are enforceable in the same manner and to the same extent as any other applicable requirement of this Development Code.

I. Findings and Decision. An Adaptive Reuse Plan, or any amendment thereto, shall be acted upon by the Approving Authority based upon the information provided in the submitted application, evidence presented in the Planning Department's written report, only after considering and clearly establishing all of the below-listed findings, and giving supporting reasons for each finding. The application shall be denied if one or more of the below-listed findings cannot be clearly established.

1. That the use(s) of the property will not be detrimental to the public health, safety and general welfare surrounding the project location;

2. That the Adaptive Reuse Project complies with the standards set forth in Section 4.03.010 (F) of this Development Code; and

3. A Certificate of Appropriateness has been approved or Waived for the Adaptive Reuse Plan.

4.03.015: Administrative Use Permits

A. Purpose. The purpose of this Section is to establish a procedure by which Administrative Use Permits may be issued by the City, while at the same time:

1. Eliminating any possibility for the exercise of unfettered discretion during the application review process through the establishment of reasonable and uniform regulations that will reduce possible adverse effects that uses subject to this Section may have upon the residents of the City; and

2. Establishing a process whereby the unique operating characteristics of the uses subject to this Section may be properly conditioned through an individual review, in order to ensure compatibility with surrounding uses of property, and preserve the integrity of the residential, commercial, mixed-use, and industrial areas of the City.

B. Applicability.

1. Pursuant to Table 2.02-1 (Review Matrix) of this Development Code, the Approving Authority is hereby empowered to approve, approve in modified form, or deny an Administrative Use Permit application, and to impose reasonable conditions upon the approval of the application.

2. Administrative Use Permit approval shall be required for those land uses so identified in Table 5.02-1 (Land Use Matrix) of this Development Code, excepting the following temporary and interim land uses:

a. Car Washes for Fundraising Purposes. Car washes shall be conducted by a qualifying sponsoring organization within a nonresidential zoning or land use district. Sponsorship

shall be limited to educational, fraternal, religious, or service organizations directly engaged in civic or charitable efforts, or to tax-exempt organizations in compliance with Federal Internal Revenue Code Section 501(c). Exempt temporary car washes for fundraising purposes shall be limited to one event per month at each location the activity is conducted and shall be limited to a maximum of 2 days duration.

b. Emergency Public Health and Safety Activities and Facilities. Temporary activities and facilities associated with emergency public health and safety needs of the City, State, and federal governments.

c. Film/Video Making. Temporary filming, photography, and videography, and production activities associated with a Film Permit issued by the City.

C. Application Filing and Processing. An Administrative Use Permit application shall be filed, processed, and acted upon pursuant to Division 2.02 (Application Filing and Processing) of this Development Code and the provisions of this Section.

D. Decision.

1. An Administrative Use Permit shall be acted upon by the Approving Authority, based upon the information provided in the submitted application, evidence presented with any supplemental information or written report, and testimony provided during any hearing (if required), only after considering and clearly establishing that the use for which an Administrative Use Permit is requested complies with all applicable Development Code provisions specific to the requested use.

2. An Administrative Use Permit shall be issued if the Approving Authority determines that the proposed use complies with all applicable Development Code provisions,

3. An Administrative Use Permit shall be denied if the proposed use does not comply with one or more Development Code provisions.

E. Conditions of Approval.

1. In approving an Administrative Use Permit, the Approving Authority may impose certain safeguards and standards to ensure that the purposes of this Development Code are maintained; ensure that the permit will not endanger the public health, safety or general welfare; ensure that the permit will not result in any significant environmental impacts; ensure that the permit will be in harmony with the area in which it is located; and ensure that the permit will be in conformity with The Ontario Plan and any applicable specific and/or area plan(s).

2. The standards and requirements authorized by this Section are enforceable in the same manner and to the same extent as any other applicable requirement of this Development Code.

3. A copy of the approved Administrative Use Permit shall be maintained on site for the duration of the use, activity, or facility authorized, and shall be made available for inspection upon demand by a City representative.

F. Unlawful Business Practices May Be Enjoined; All Remedies Are Cumulative. Any business activity requiring Administrative Use Permit approval pursuant to Table 5.02-1 (Land Use Matrix) of this Development Code, and which is operated, conducted, or maintained contrary to the

provisions of this Development Code, shall constitute an unlawful business practice pursuant to Business & Professions Code Section 17200, et seq., and the City may file a complaint with the District Attorney and request the District Attorney bring action seeking an injunction prohibiting the unlawful business practice or any other remedy available at law, including but not limited to fines, attorney's fees, and costs. All remedies provided for in this Section are cumulative.

G. Administrative Fines.

1. Violations. Upon a finding by the Police Chief or Community Improvement Director that a land use or business for which an Administrative Use Permit has been issued has violated any provision of this Development Code or of the City or Ontario Municipal Code, the Police Chief or Community Improvement Director may issue an administrative fine of up to $500.

2. Separate Violations. Each violation of this Development Code or of the Ontario Municipal Code constitutes a separate violation. Each day a violation of this Development Code or the Ontario Municipal Code occurs also constitutes a separate violation.

3. Administrative Fine Procedures. A Notice of Administrative Fine shall be served by hand delivery or certified mail and shall state the legal violation and all supporting facts. Furthermore, the Notice shall also contain an advisement of the right to request an appeal hearing before the Zoning Administrator to contest the suspension or revocation.

4. Appeal of Administrative Fines.

a. An appeal request shall be filed with the Planning Department on a City application form, within 10 days following the date appearing on the Notice of Administrative Fine. The appeal request shall include a statement identifying the pertinent facts disputing the violation.

b. An appeal hearing shall be scheduled within 30 days following the Planning Department's receipt of the appeal request unless an extension is mutually agreed upon by the appellant and the Zoning Administrator.

c. The appeal shall be heard by the Zoning Administrator. The decision of the Zoning Administrator shall be provided by certified mail. The decision constitutes a final administrative order, with no additional administrative right of appeal.

5. Failure to Pay Administrative Fines.

a. If an administrative fine is not paid within 30 days after the date appearing on the Notice of Administrative Fine or, if the Notice is appealed, within 30 days after the date of the Zoning Administrator's decision, whichever occurs later, the fine may be referred to a collection agency.

b. Any outstanding fine must be paid prior to the issuance or renewal of any license or permit issued by the City.

H. Suspension and Revocation of Administrative Use Permits.

1. Reasons. The Police Chief and the Community Improvement Director each has the authority to suspend or revoke an Administrative Use Permit, based on one or more of the following reasons:

a. The Administrative Use Permit approval was obtained by fraud;

b. The Administrative Use Permit is being, or has recently been exercised contrary to the terms or conditions of the application approval;

c. The Administrative Use Permit is being or has been exercised in violation of a federal, state, or City statute, ordinance, law, or regulation; and/or

d. The Administrative Use Permit was exercised in a way that is detrimental to the public peace, health, safety, or welfare, or otherwise constitutes a nuisance.

2. Suspension and Revocation Procedures. A Notice of Suspension or Revocation shall be served on the owner of the property and upon any tenant or operator in possession of the property, if different from the owner, by hand delivery or certified mail, along with the legal violation and supporting facts. The Notice shall also contain an advisement of the right to request an appeal hearing before the Zoning Administrator to contest the suspension or revocation.

3. Time Period of Suspension of Permit. When any of the conditions listed in H.1.a through d above exists, the Police Chief and the Community Improvement Director are each authorized to suspend an Administrative Use Permit for a period of no less than 5 days, and no more than 90 days, at their discretion.

4. Effective Date of Suspension or Revocation. A Notice of Suspension or Revocation issued under Paragraph H.2 of this Section is effective 10 days following the date appearing on the Notice, in the absence of an appeal filed in accordance with Paragraph H.5 of this Section.

5. Appeal of Suspension or Revocation of Permit.

a. The decision of the Police Chief or Community Improvement Director to suspend or revoke an Administrative Use Permit may be appealed by the permittee.

b. The appeal request shall be filed with the Planning Department on a City application form and shall include a statement identifying pertinent facts disputing the reasons stated in the Notice of Suspension or Revocation.

c. An appeal request must be received by the Planning Department on or before the effective date of the suspension or revocation under Paragraph H.4 of this Section.

d. The timely filing of an appeal request stays a suspension or revocation pending a decision on the appeal by the Zoning Administrator.

e. An appeal hearing shall be scheduled within 30 days following the Planning Department's receipt of the appeal request, unless an extension is mutually agreed upon by the appellant and the Zoning Administrator.

f. Within 20 days following the appeal hearing, the Zoning Administrator shall issue a final administrative order to the appellant, by certified mail. There shall be no further administrative right of appeal.

6. Evidence. The following rules shall apply to any hearing required by this Section. All parties involved shall have the right to offer testimonial, documentary, and tangible evidence

bearing on the issues, to be represented by counsel, and to confront and cross-examine witnesses. Any relevant evidence may be admitted if it is the sort of evidence upon which reasonable persons are accustomed to relying in the conduct of serious affairs. Formal rules of discovery do not apply to proceedings governed by this Section. Unless otherwise specifically prohibited by law, the burden of proof is on the appellant in any hearing or other matter under this Section.

7. Limitations on Application Refiling. A holder of an Administrative Use Permit who has had the Permit revoked under this Section may not apply for the same or substantially similar Administrative Use Permit for 12 months after the date of the Final Administrative Order revoking the Permit.

I. Public Nuisance. It shall be unlawful and a public nuisance for a land use or business activity for which an Administrative Use Permit has been issued to be operated, conducted, or maintained contrary to the provisions of this Development Code or of any conditions of approval imposed on an Administrative Use Permit by the Approving Authority. The City may exercise its discretion, in addition to or in lieu of prosecuting a criminal action, to commence proceedings for the abatement, removal, or enjoinment of that land use or business activity in any manner provided by law.

4.03.020: Sign Plans

A. Purpose. The purpose of this Section is to establish a process by which Sign Plans may be required to ensure compliance with the standards and guidelines contained within this Development Code pertaining to the number, placement, height, size, illumination, and design of signs, and to ensure compliance with any previously approved entitlements.

B. Applicability.

1. Pursuant to Table 2.02-1 (Review Matrix) of this Development Code, the Approving Authority is hereby empowered to approve, approve in modified form, or deny a Sign Plan application, and to impose reasonable conditions upon the approval of the application.

2. An approved Sign Plan shall be required prior to placing, erecting, modifying, moving, or reconstructing any sign in the City, unless expressly exempted by this Development Code. Signs requiring a permit shall comply with: **[i]** the provisions of this Development Code, **[ii]** all other applicable laws and ordinances, and **[iii]** with any associated approved entitlements.

C. Application Filing and Processing. A Sign Plan application shall be filed, processed and acted upon pursuant to Division 2.02 (Application Filing and Processing) of this Development Code and the provisions of this Section.

D. Decision. A Sign Plan shall be acted upon by the Approving Authority based upon the information contained in the application, supporting plans and documentation, and evidence submitted by the applicant, only after considering and clearly establishing that the Sign Plan is in conformance with the provisions of Division 8.1 (Sign Regulations) of this Development Code, and any associated entitlements that have been previously approved by the City.

4.03.025: Subdivisions—Certificates of Compliance

A. Purpose. The purpose of this Section is to establish a means by which a Certificate of Compliance or Conditional Certificate of Compliance may be issued by the City pursuant to GC Section 66499.35, and legal status may be conferred to parcels of real property that were not established by other legal means.

B. Applicability.

1. Pursuant to Table 2.02-1 (Review Matrix) of this Development Code, the City Engineer is hereby empowered to approve, approve in modified form, or deny a Certificate of Compliance, and to impose reasonable conditions upon the approval of the application.

2. The provisions of this Section shall apply to real property for which there is no final map, parcel map, official map, or approved certificate of exception, which establish the status for legal creation of parcels of real property.

C. Application Filing and Processing. A Certificate of Compliance shall be filed, processed and acted upon pursuant to Division 2.02 (Application Filing and Processing) of this Development Code and the provisions of this Section.

D. Decision.

1. Certificate of Compliance.

a. Upon receipt of a Certificate of Compliance application, the City Engineer shall determine whether the affected real property complies with the applicable provisions of the Subdivision Map Act and this Development Code. A certificate of compliance shall be issued for any real property that has been approved for development of the property.

b. If the City Engineer determines that the real property that is the subject of a Certificate of Compliance application complies with the applicable provisions of the Subdivision Map Act and this Development Code, it shall cause a Certificate of Compliance to be filed for recordation with the County Recorder.

2. Conditional Certificate of Compliance.

a. If the City Engineer determines that the real property that is the subject of a Certificate of Compliance application does not comply with the provisions of the Subdivision Map Act and this Development Code, it shall issue a Conditional Certificate of Compliance. As a condition to granting a Conditional Certificate of Compliance, the City Engineer may impose any conditions that would have been applicable to a division of land on the date the applicant acquired the property, except that if the current property owner was the owner of record at the time of the initial land division and currently owns one or more of the parcels involved in the land division, the Conditional Certificate of Compliance may impose conditions that would be applicable to a current division of land.

b. Upon making a determination and establishing conditions, the City shall cause a Conditional Certificate of Compliance to be filed for recordation with the County Recorder. The certificate shall serve as notice to the property owner or vendee who has applied for the Certificate pursuant to this Section, a grantee of the property owner, or any subsequent transferee or assignee of the property, that the fulfillment and implementation of these conditions

shall be required prior to subsequent issuance of a permit or other grant of approval for development of the property.

c. Compliance with imposed conditions shall not be required until the time that a permit or other grant of approval for development of the property is issued by the City.

E. Right to Develop. The issuance of a Certificate of Compliance or Conditional Certificate of Compliance does not imply or grant a right to develop the affected property.

4.03.030 Subdivisions—Final Maps and Parcel Maps

A. Purpose. The purpose of this Section is to establish a process for the implementation of those provisions of the Subdivision Map Act (commencing with GC Section 66410) pertaining to the review, approval and recordation of a final map or parcel map.

B. Applicability.

1. Pursuant to Table 2.02-1 (Review Matrix) of this Development Code, the City Council is hereby empowered to approve or deny a final map or parcel map.

2. The subdivider may cause a final map or parcel map to be prepared in substantial accord with the tentative tract map or parcel map as approved, and pursuant to the provisions of this Development Code and applicable standards imposed by the County of San Bernardino for maps filed with the County Recorder.

3. The final map or parcel map, and any accompanying data or additional information, shall be prepared by or under the direction of a registered civil engineer that possesses a State of California license registration number below C33966 and is competent to practice land surveying, or a licensed land surveyor authorized to practice in the State of California.

C. Final Map Preparation. Following approval or conditional approval of a tentative map, and prior to the expiration of the map, the subdivider may cause the property, or any part thereof, to be surveyed and a final map to be prepared, which is consistent with the tentative map, as approved, and the provisions of this Development Code and the Subdivision Map Act (commencing with GC Section 66410). A final map shall be filed with the County Recorder only after a determination by the City Engineer and Planning Director that the conditions of the tentative map have been met. The City Engineer and Planning Director determinations may be appealed to the City Council pursuant to Division 2.04 (Appeals) of this Development Code.

D. Multiple Final Maps. Multiple final maps relating to a single approved or conditionally approved tentative map may be filed pursuant to GC Section 66456.1. The subdivision improvement agreement to be executed by the subdivider shall include provisions for the construction of such improvements as may be required by the City Engineer to constitute a logical and orderly development of the whole subdivision by phases. Each phase shall be so designed and improved as to be functionally self-sufficient.

E. Final Map/Parcel Map Filing, Processing, and Action. A final map or parcel map shall be filed, processed and acted upon as follows:

1. Final Map/Parcel Map Filing.

a. Where a final map or parcel map, or a vesting final map or parcel map is required, the subdivider shall, prior to submitting the map for final review, complete all offers of dedication, secure the required approvals with respect to public and private easements and complete plans and specifications for public improvements, including drainage facilities and sewer facilities, and all applicable provisions of Section 6.08.025 (Improvements) of this Development Code. All certificates shall be executed, excepting those to be executed by the City Engineer, City Clerk and County Recorder.

b. The subdivider shall submit to the City Engineer for approval, the original mylar and as many prints as may be required, along with any required statements and documents. The City Engineer, after ensuring that all conditions and approvals have been met or secured, shall process the map for adoption by the City Council and recordation with the County Recorder.

2. Final Map/Parcel Map Processing.

a. The City Engineer shall, within 30 working days of receipt of the final map or parcel, and accompanying documents, fees and materials, cause the final map or parcel map to be examined, and if found to be in substantial conformity with the approved tentative map and all amendments, conditions, modifications, and provisions made or required by the City Council, and if found to be complete, technically correct, in conformity with the improvement plans and specifications, and in compliance with the requirements of this Development Code, other applicable codes, specific plans, and the Policy Plan (General Plan) component of The Ontario Plan, shall execute the City Engineer's certificate on the map, and shall file the final map or parcel map, and accompanying materials with the City Council.

b. Should the final map or parcel map, or other accompanying documents, fees or materials be found to be incomplete or incorrect in any respect, the subdivider shall be advised of the changes or additions that must be made. The City Engineer shall then cause the corrected final map or parcel map to be reexamined. If the map is found to be correct and in compliance with this Development Code and all other applicable codes, specific plans, and the Policy Plan (General Plan) component of The Ontario Plan, the City Engineer shall execute the City Engineer's certificate on the map, and shall file the final map or parcel map and accompanying materials with the City Council. The date of filing, as set forth in GC Section 66458, shall be the meeting date in which the final map or parcel map is received by the City Council.

3. Final Map/Parcel Map Action.

a. The City Council, at the meeting it receives the final map or parcel map, or at its next regular meeting or within a period of not more than 10 days following the meeting at which the City Council receives the final map and any accompanying materials, shall approve the map if it is found to be consistent with the approved tentative tract or parcel map, and is in compliance with this Development Code and all other applicable codes, specific plans, and the Policy Plan (General Plan) component of The Ontario Plan, and shall instruct the City Clerk to execute the approval certificate. If the final map or parcel does not conform, the City Council shall deny the final map.

b. At the time of approval of the final map or parcel map, the City Council shall accept, subject to improvement, or reject any offers of dedication.

c. The time limit for approval of the final map or parcel map may be extended by mutual consent of the subdivider and the City.

d. If the City Council does not approve or deny the final map or parcel map within the prescribed time, or any authorized extension, and the final map or parcel map conforms to all requirements and rulings, it shall be deemed approved, and the City Clerk shall certify its approval.

e. The City Clerk shall provide notice of any pending approval or denial of a final map or parcel map by the City Council. The notice shall be attached and posted with the City Council's regular agenda and shall be mailed to interested parties who request notification.

4.03.035: Subdivisions—Lot Line Adjustments

A. Purpose. The purpose of this Section is to establish procedures for adjusting the property lines between existing lots by means of a Lot Line Adjustment authorized by GC Section 66412(d).

B. Applicability.

1. Pursuant to Table 2.02-1 (Review Matrix) of this Development Code, the City Engineer is hereby empowered to approve, approve in modified form, or deny a Lot Line Adjustment, and to impose reasonable conditions upon its issuance.

2. A Lot Line Adjustment may be utilized to reconfigure up to 4 adjoining legally recognized lots, where the land taken from one parcel is added to an adjoining parcel, and where a greater number of parcels than originally existed is not thereby created.

C. Application Filing and Processing. A Lot Line Adjustment shall be filed, processed and acted upon pursuant to Division 2.02 (Application Filing and Processing) of this Development Code and the provisions of this Section.

D. Decision.

1. The City Engineer may approve or deny a Lot Line Adjustment on the basis of the application, supporting plans, and documentation submitted by the applicant. The City Engineer shall limit its review to a determination of whether or not the lots resulting from the Lot Line Adjustment will conform to the Policy Plan (General Plan) component of The Ontario Plan; any applicable specific plan, area plan or planned unit development; and this Development Code.

2. Upon approval of a Lot Line Adjustment, the applicant shall provide the City with a conforming grant deed for each affected lot, which reflects the approved Lot Line Adjustment. The City shall then cause the grant deed(s) to be filed for record with the County Recorder. No record of survey shall be required for a Lot Line Adjustment unless required by BPC Section 8762.

E. Conditions of Approval.

1. The City Engineer shall not impose conditions or exactions on its approval of a Lot Line Adjustment, except as follows:

a. Require conformance to the Policy Plan (General Plan) component of The Ontario Plan, and any applicable specific plan, planned unit development, or area plan;

b. Require conformance with all applicable provisions of this Development Code and any applicable building ordinances;

c. Require the prepayment of real property taxes prior to the approval of the Lot Line Adjustment; and

d. Facilitate the relocation of existing utilities, infrastructure, or easements.

2. No tentative tract map, final map or parcel map shall be required as a condition to the approval of a Lot Line Adjustment.

4.03.040: Subdivisions—Map Corrections and Amendments

A. Purpose. The purpose of this Section is to establish a process by which a final map or parcel map that has been filed for recordation with the County Recorder may be amended by either a Certificate of Correction or an amending map.

B. Applicability.

1. Pursuant to Table 2.02-1 (Review Matrix) of this Development Code, the City Engineer is hereby empowered to approve, approve in modified form, or deny an application to correct or amend a final map or parcel map that has been filed for recordation with the County Recorder.

2. After a final map or parcel map is filed for recordation in the office of the County Recorder, it may be amended by a Certificate of Correction for any of the following purposes:

a. Correct an error in any course or distance shown on the map;

b. Show any course or distance that was omitted from the map;

c. Correct an error in the description of the real property shown on the map;

d. Indicate monuments set after the death, disability, and retirement from practice or replacement of the engineer or surveyor charged with responsibilities for setting monuments;

e. Show the proper location or character of any monument that has been changed in location or character, or originally was shown at the wrong location or incorrectly as to its character; or

f. Correct any other type of map error or omission that does not affect any property right, including, but are not limited to, lot numbers, acreage, street names, and identification of adjacent record maps.

C. Application Filing and Processing. An amending map or Certificate of Correction shall be filed, processed, and acted upon pursuant to Division 2.02 (Application Filing and Processing) of this Development Code and the provisions of this Section.

D. Findings and Decision. The City Engineer may approve an amending map or Certificate of Correction only after finding that the changes made are limited to those set forth in Paragraphs B.2.a through f, above, and shall certify to this fact on the amending map or Certificate of Correction.

E. Form and Content of Amendment.

1. The Certificate of Correction shall be prepared and signed by a registered civil engineer that possesses a State of California license registration number below C33966 and is competent to practice land surveying, or a licensed land surveyor authorized to practice in the State of California.

2. The form and content of the amending map shall conform to the requirements of this Development Code for tentative tract maps, final maps or parcel maps.

3. The Certificate of Correction shall set forth in detail the corrections made and show the names of the present fee owners of the property affected by the correction.

4.03.045: Subdivisions—Parcel Map Waiver

A. Purpose. The purpose of this Section is to establish a procedure for waiving the requirement for a final parcel map pursuant to GC Section 66428(b), which requires that a local agency provide a procedure for such.

B. Applicability. Pursuant to Table 2.02-1 (Review Matrix) of this Development Code, the City Engineer is hereby empowered to waive the requirement for a final parcel map for the below-listed reasons, following the approval of a tentative map pursuant to this Development Code:

1. The parcel map is for a division of real property or interests therein created by probate, eminent domain procedures, partition, or other civil judgments or decrees; or

2. The Parcel Map is for a division of property resulting from the conveyance of land, or interest therein, to a public agency for a public purpose (e.g., drainage or sewers, public building sites, rights-of-way for streets, school sites, and utilities).

C. Application Filing and Processing. A request for waiver from the requirement for a final parcel map shall be filed and processed in conjunction with the tentative map. The City Engineer may act upon the parcel map waiver following approval of the tentative map and compliance with the conditions of approval imposed upon tentative map approval (if any).

D. Findings and Decision.

1. The City Engineer shall approve a waiver from the requirement for a final parcel map only after the City Engineer for the corresponding tentative map required pursuant to this Section finds that the proposed division of land:

a. Is consistent with the approved tentative parcel map, and is in compliance with this Development Code, the Subdivision Map Act, and all other applicable codes, specific plans, and is consistent with the goals, policies, plans and exhibits of the Vision, Policy Plan (General Plan), and City Council Priorities components of The Ontario Plan; and

b. Complies with the requirements established by this Development Code and the Subdivision Map Act as to area, improvement and design, floodwater drainage control, appropriate improved public roads, sanitary disposal facilities, water supply availability, and environmental protection.

2. If the proposed division of land does not conform to Subparagraphs 1.a and b above, the City Engineer shall not approve the Parcel Map Waiver.

E. Certificate of Compliance Required.

1. Following approval of a Parcel Map Waiver by the City Engineer, a Certificate of Compliance for the land to be divided shall be filed with the County Recorder.

2. Requirements for the construction of improvements shall be noted on the Certificate of Compliance by certificate pursuant to GC Section 66411.1.

F. Payment of Processing Fees. All necessary fees as established by City ordinance or by resolution of the City Council shall be paid by the applicant for processing and filing for record, any documents pertaining to the Parcel Map Waiver process.

4.03.050: Subdivisions—Lot Merger (Merger of Contiguous Parcels)

A. Purpose. The purpose of this Section is to establish a process for the implementation of those provisions of the Subdivision Map Act (commencing with GC Section 66451.10), pertaining to the merger of contiguous lots under common ownership (Lot Merger).

B. Applicability.

1. Pursuant to Table 2.02-1 (Review Matrix) of this Development Code, the City Engineer is hereby empowered to approve, approve in modified form, or deny a Lot Merger application, and to impose reasonable conditions upon the approval of the application.

2. The City may initiate a Lot Merger if any one of the contiguous lots or units held by the same owner does not conform to standards for minimum lot size applicable to the lots or units of land, and if all of the following requirements are satisfied:

a. At least one of the affected lots is not developed with a structure for which a building permit was issued or for which a building permit was not required at the time of construction, or is only developed with one or more accessory structures, or is developed with a single primary structure that is partially sited on a contiguous lot or unit.

b. With respect to any affected lot, one or more of the following conditions exists:

(1) Comprises less than 5,000 SF in area at the time of the determination of merger;

(2) Was not created in compliance with applicable laws and ordinances in effect at the time of its creation;

(3) Does not meet current standards for sewage disposal and domestic water supply;

(4) Does not meet slope stability standards;

(5) Has no legal access that is adequate for vehicular and safety equipment access and maneuverability;

(6) Its development would create health or safety hazards; or

(7) Is inconsistent with The Ontario Plan and any applicable area plan, specific plan, or planned unit development (other than minimum lot size or density standards).

c. The affected lots, when merged, will not:

(1) Be inconsistent or create a conflict with The Ontario Plan, any applicable Area Plan or Specific Plan, or the provisions of this Development Code;

(2) Result in a conflict with the location of any existing structures;

(3) Deprive or restrict access to another lot; or

(4) Result in the creation of new lot lines.

3. The City may require the owner of any contiguous lots to initiate the merger of contiguous lots as a condition of any Development Plan or Conditional Use Permit approval.

C. Application Filing, Processing and Hearing. A Lot Merger application shall be filed and processed pursuant to Division 2.02 (Application Filing and Processing) of this Development Code and the provisions of this Section.

D. Notification of Intention to Merge Lots.

1. Prior to merging any contiguous lots, the City Engineer shall mail a Notice of Intention to Merge ("NIM"), which notifies affected property owner(s) that the affected lots may be merged pursuant to the provisions of this Section. The NIM shall be sent by certified mail to the property owner(s) of record at the address(es) shown on the latest available assessment roll of the County of San Bernardino. The NIM shall include a statement that the property owner(s) may appeal the decision of the City Engineer to the Planning Commission to present evidence that the proposed Lot Merger does not meet the criteria for a merger. For the purpose of this Section, a property owner is any person holding any portion of title to any affected property.

2. The NIM shall be recorded with the San Bernardino County Recorder on the date that the notice is mailed to all property owners of record.

E. Request for Hearing. Within 30 days following the recordation of the NIM, the owner of the affected property may file a request with the City Engineer, for a hearing regarding the proposed Lot Merger.

F. Procedure for Hearing.

1. Upon receiving a request for a hearing, the City Engineer shall set a time, date, and location for a hearing to be conducted by the Appeal Authority, and shall notify the property owner of the time, date, and location of the hearing by certified mail. The hearing shall be conducted not more than 60 days following the City's receipt of the property owner's request for hearing but may be postponed by mutual consent of the City and the property owner.

2. During the hearing, the property owner shall be given the opportunity to present any evidence that the affected property does not meet the standards for Lot Merger specified by this Section.

3. At the conclusion of the hearing, the Appeal Authority shall make a determination as to whether the affected lots should be merged and shall so notify the property owner of its determination.

4. The Appeal Authority may approve or deny a Lot Merger on the basis of the application and the presented evidence, after considering and clearly establishing the following findings, and giving specific reasons in support of each finding:

a. The merged lots comply with the appropriate provisions of the Subdivision Map Act and all applicable City requirements for the merging of contiguous lots; and

b. The merged lots do not adversely affect the purpose and intent of The Ontario Plan, or the public health, safety, and welfare.

5. If the Appeal Authority determines that the affected lots shall be merged, the City Engineer shall cause the NIM, specifying the names of the recorded owner(s) and describing the affected real property, to be recorded with the San Bernardino County Recorder within 30 days following conclusion of the appeal hearing.

6. If the Appeal Authority determines that the affected lots shall not be merged, the City Engineer shall cause a Release of NIM to be recorded with the San Bernardino County Recorder, and a letter of notification shall be sent by certified mail to the property owner(s) of record.

G. Determination When No Hearing Is Requested. If within the 30 days following the recordation of the NIM specified in Subsection D (Request for Hearing) of this Section, the property owner does not file a request for a hearing, at any time thereafter, the City Engineer may make a determination whether or not the affected lots are to be merged. A NIM shall be recorded as provided for in Paragraph F.5 of this Section, no later than 90 days following the mailing of the NIM.

4.03.055: Administrative Exceptions

A. Purpose. The Administrative Exception is hereby established for the purpose of granting minor departures from the strict application of certain numerical development standards established by this Development Code, when the departure would result in superior site, landscape, or architectural design features that could not otherwise be incorporated into a development project under the strict application of the development standards contained in this Development Code.

B. Applicability.

a. Pursuant to Table 2.02-1 (Review Matrix) of this Development Code, the Approving Authority is hereby empowered to approve, approve in modified form, or deny an Administrative Exception application, and to impose reasonable conditions upon the approval of the application.

b. Administrative Exceptions may be approved for reductions of up to 10 percent from **[i]** minimum setback and separation requirements, excepting nonresidential setback requirements from property lines that are common with any residentially zoned property; and, **[ii]** off-street parking required for nonresidential land uses pursuant to Table 6.03-1 (Off-Street Parking Requirements). An Administrative Exception shall not be approved for reductions from minimum lot size, lot dimensions, landscape coverage, or for an increase in maximum density, floor area ratio, or the height of a structure.

C. Application Filing, Processing and Hearing.

1. An Administrative Exception shall be filed and processed pursuant to Division 2.02 (Application Filing and Processing) of this Development Code and the provisions of this Section.

2. A hearing shall not be required; however, the owners of all properties having a property line common with the affected property shall be notified of the proposed Administrative Exception pursuant to Section 2.03.010 (Public Hearing Notification) of this Development Code and shall be invited to comment on the application.

D. Findings and Decision. An Administrative Exception shall be acted upon by the Approving Authority based upon the information provided in the submitted application, evidence presented in the Planning Department's written report, and any comments received from property owners notified pursuant to Subparagraph C.3.b of this Section, only after considering and clearly establishing all of the below-listed findings, and giving supporting reasons for each finding. The application shall be denied if one or more of the below-listed findings cannot be clearly established.

1. The approval of the Administrative Exception is necessary to the production of a comprehensive development, incorporating an enhanced environment and architectural excellence (e.g., appropriate variety of structure placement and orientation opportunities, high quality architectural design, increased amounts of landscaping and open space, improved solutions to the design and placement of parking facilities, etc.) than would normally be possible under the strict application of the applicable development standards;

2. The approval of the Administrative Exception will allow for the inclusion of site, architectural, or landscape features that could not otherwise be incorporated into the design of the project under the strict application of the provisions of the applicable development standards; and

3. The approval of the Administrative Exception will not adversely affect the overall quality of development on the project site and will not adversely affect neighboring properties.

4. The proposed Administrative Exception is consistent with the goals, policies, plans, and exhibits of the Vision, Policy Plan (General Plan), and City Council Priorities components of The Ontario Plan, and the purposes of any applicable Specific Plan or Planned Unit Development, and the purposes of this Development Code.

E. Conditions of Approval.

1. In approving an Administrative Exception, the Approving Authority may require certain safeguards and impose certain conditions established to ensure that the purposes of this Development Code are maintained; ensure that the project will not endanger the public health, safety or general welfare; ensure that the project will not result in any significant environmental impacts; ensure that the project will be in harmony with the area in which it is located; and ensure that the project will be in conformity with The Ontario Plan and any applicable specific and/or area plan(s).

2. All conditions of approval or requirements authorized by this Section are enforceable in the same manner and to the same extent as any other applicable requirement of this Development Code.

4.03.060: Fair Housing and Reasonable Accommodations

A. Purpose. Pursuant to Federal and State fair housing laws, the purpose of this Section is to provide a procedure whereby exceptions from specific applications of this Development Code may be considered and properly evaluated in order to assure that no person is discriminated against on the basis of race, color, religion, sex, sexual orientation, family status, marital status, disability, national origin, source of income, or ancestry, by being denied an equal opportunity to use and enjoy a dwelling and in order to maintain compliance with the purpose and intent of the Religious Land Use and Institutionalized Persons Act (RLUIPA)of 2000.

B. Applicability.

1. Pursuant to Table 2.02-1 (Review Matrix) of this Development Code, the Approving Authority is hereby empowered to approve, approve in modified form, or deny a Fair Housing and Reasonable Accommodation application and to impose reasonable conditions upon the approval of the application.

2. The Approving Authority may approve reasonable exceptions from the provisions of this Development Code, except that a Fair Housing and Reasonable Accommodation request shall not be approved that would allow the establishment of a land use that would not otherwise be allowed in the zoning district in which the affected property is located, or for increases in residential density.

C. RLUIPA. In furtherance of the purpose described in Subsection A (Purpose), deviations from the requirements and regulations specified in this Development Code may be approved if it is found that, consistent with the RLUIPA, enforcement of a regulation results in a substantial burden on the religious exercise of a person, including a religious assembly or institution, unless it is determined that imposition of the burden on that assembly, institution, or person accomplishes furtherance of a compelling governmental interest where the burden is found to be the least restrictive means of furthering that compelling governmental interest.

D. Application Filing~~,~~ and Processing ~~and Hearing~~. A Fair Housing and Reasonable Accommodation application shall be filed~~,~~ and processed~~, and heard~~ pursuant to Division 2.02 (Application Filing and Processing) of this Development Code and the provisions of this Section.

E. Findings and Decision. A Fair Housing and Reasonable Accommodation request shall be acted upon by the Approving Authority based upon the information provided in the submitted application~~,~~ and evidence presented ~~in the Planning Department's written report, and testimony~~

~~provided during the public hearing,~~ only after considering and clearly establishing all of the below-listed findings, and giving supporting reasons for each finding. The application shall be denied if one or more of the below-listed findings cannot be clearly established.

1. The persons who will use the subject property are protected under federal and state fair housing laws;

2. The requested exception is necessary to make specific housing available to a person who will occupy the subject property and who is protected under federal and state fair housing laws;

3. The requested exception will not impose an undo financial or administrative burden upon the City; and

4. The requested exception will comply with all applicable Building and Fire Codes and will not result in a fundamental alteration of the planning, zoning and development laws and procedures of the City.

F. Conditions of Approval.

1. In approving a Fair Housing and Reasonable Accommodation application, the Approving Authority may require certain safeguards and impose certain conditions established to ensure that the purposes of this Development Code are maintained; ensure that the project will not endanger the public health, safety or general welfare; ensure that the project will not result in any significant environmental impacts; ensure that the project will be in harmony with the area in which it is located; ensure that the Reasonable Accommodation will comply with the findings required by Subsection E (Findings and Decision); and ensure that the project will be in conformity with The Ontario Plan and any applicable specific and/or area plan(s).

2. All conditions of approval or requirements authorized by this Section are enforceable in the same manner and to the same extent as any other applicable requirement of this Development Code.

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Chapter 6.0:
Development and Subdivision Regulations

Division 6.01—District Standards and Guidelines
Division 6.02—Walls, Fences and Obstructions
Division 6.03—Off-Street Parking and Loading
Division 6.04—Congestion Management and Trip Reduction
Division 6.05—Landscaping
Division 6.06—Street Naming and Address Numbering
Division 6.07—Reserved
Division 6.08—Development Projects and Subdivisions
Division 6.09—Reserved
Division 6.10—Reserved
Division 6.11—Shopping Cart Retention and Storage

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Division 6.01—District Standards and Guidelines

Sections:

6.01.000: Purpose
6.01.005: Applicability
6.01.010: Residential Zoning Districts
6.01.015: Commercial Zoning Districts
6.01.020: Mixed Use Zoning Districts
6.01.025: Industrial Zoning Districts
6.01.030: Specialized Use Zoning Districts
6.01.035: Overlay Zoning Districts

6.01.000: Purpose

This Division addresses development standards and guidelines, to ensure that proposed development produces an environment of stable and desirable character, is compatible with existing and future development in the vicinity, and protects the use and enjoyment of neighboring properties consistent with the Vision, Policy Plan (General Plan), and City Council Priorities components of The Ontario Plan.

6.01.005: Applicability

A. New Development Projects and Land Uses. The requirements of this Chapter shall apply to all proposed development projects and subdivisions, and new land uses, except as specified in Division 3.01 (Nonconforming Lots, Uses, Structures, and Signs), and shall be considered in combination with the provisions of Division 5.03 (Standards for Specific Land Uses, Activities, and Facilities). If any provision of this Division conflicts with the standards contained in Division 5.03 (Standards for Specific Land Uses, Activities, and Facilities), the standards contained in Division 5.03 (Standards for Specific Land Uses, Activities, and Facilities) shall control.

B. Conformity with District Regulations.

1. No site or structure shall be used for any purpose or in any manner other than in conformity with the regulations of the zoning district in which the site or structure is located.

2. No structure is to be erected and no existing structure is to be moved, altered, or enlarged, except in conformity with the regulations of the zoning district in which the structure or use is located.

3. No required yard or open space area related to any structure or use shall be used, encroached upon, or reduced in any manner, except in conformity with the regulations of the zoning district in which the yard or open space is located.

4. No lot or parcel shall be reduced in area to less than the minimum area prescribed for the district in which the site is located, unless a Variance is granted pursuant to Section 4.02.020 (Departures from Development Standards) of this Development Code.

5. Any lot that is shown on a recorded map prior to November 5, 1947, and that had a legal area, width, and frontage at the time the subdivision map was recorded or the lot was legally created, may be used for an allowed land use, and shall be subject to all other regulations applicable to the zoning district in which the site is located.

6.01.010: Residential Zoning Districts

A. **Purpose.** The purpose of the provisions of this Section is to ensure that development within residential zoning districts of the City will contribute toward an urban environment of stable, desirable character; which is harmonious with existing and future development; and is consistent with the goals and policies of the Policy Plan (General Plan) component of The Ontario Plan. These regulations are further established to:

1. Assist in implementing the goals and objectives of the Vision, Policy Plan (General Plan), and City Council Priorities components of The Ontario Plan;

2. Reserve appropriate areas for residential living in a variety of dwelling types and tenures, at reasonable ranges of population densities, that will accommodate the City's future population growth;

3. Encourage the continued vitality of existing neighborhoods, and, where appropriate, encourage the revitalization of neighborhoods by the use of appropriate standards and incentives;

4. Provide a physical environment that contributes to, and enhances, the quality of life;

5. Promote stable neighborhoods that are well designed, safe, and pleasant places to live, and that contributes to the establishment of Ontario as a "complete community;"

6. Ensure adequate light, air, privacy, and open space for dwellings;

7. Establish architectural and design guidelines to encourage a high quality appearance of new and remodeled structures;

8. Establish standards ensuring that new infill residential construction is consistent with the character and fabric of existing neighborhoods, including densities, design and exterior appearance;

9. Protect residential properties from the hazards of traffic congestion, noise, fire, explosion, noxious fumes, and other hazards;

10. Facilitate the provision of public utilities and services commensurate with their need; and

11. Allow for innovative and flexible methods of implementing the goals and policies of the Vision, Policy Plan (General Plan), and City Council Priorities components of The Ontario Plan.

B. **Applicability.** The standards and guidelines established by this Section shall apply to each of the City's residential zoning districts. The provisions of this Section shall apply to all residential

land subdivision and any new residential construction, addition, remodel, or reallocation requiring a building permit or other similar entitlement by the City.

C. Development Standards. The design and development of residentially zoned properties shall comply with the following:

1. Traditional Single-Family Residential Development Standards.

a. Traditional single-family residential development projects shall comply with the requirements of Table 6.01-1 (Traditional Single-Family Residential Development Standards), which specifies development standards within the AR-2, RE-2, RE-4, LDR-5, MDR-11, MDR-18, MDR-25, and HDR-45 zoning districts.

b. Traditional single-family residential development projects consist of the construction of one or more single-family (detached) dwellings within zoning districts that allow for such development pursuant to Table 5.01-1 (Land Use Matrix) of this Development Code and which meet or exceed the minimum lot size (area and dimensions) of the affected zoning district, as prescribed in Table 6.01-1 (Traditional Single-Family Residential Development Standards) of this Division. Examples of traditional single-family residential development are contained in Figure 6.01-1A (Example Development—Traditional Single-Family Residential) and Figure 6.01-1B (Example Development—Traditional Single-Family Residential with Public Alley Access) of this Division.

2. Small Lot Traditional Single-Family Residential Development Standards.

a. Small lot traditional single-family residential development projects shall comply with the requirements of Table 6.01-2A (Small Lot Traditional Single-Family Residential Development Standards), which specifies development standards within the LDR-5, MDR-11, MDR-18, MDR-25, and HDR-45 zoning districts.

b. Small lot traditional single-family residential development projects consist of the construction of single-family (detached) dwellings in zoning districts that allow for such development pursuant to Table 5.01-1 (Land Use Matrix) of this Development Code, and which meet or exceed the minimum lot size (area and dimensions) of the affected zoning district, as prescribed in Table 6.01-2A (Small Lot Traditional Single-Family Residential Development Standards) of this Division. Examples of traditional single-family residential development are contained in Figure 6.01-2A (Example Development—Small Lot Traditional Single-Family Residential) of this Division.

3. Small Lot Alley-Loaded Single-Family Residential Development Standards.

a. Small lot alley-loaded single-family residential development projects shall comply with the requirements of Table 6.01-2B (Small Lot Alley-Loaded Single-Family Residential Development Standards), which specifies development standards within the LDR-5, MDR-11, MDR-18, MDR-25, and HDR-45 zoning districts.

b. Small lot alley-loaded single-family residential development projects consist of the construction of one or more single-family (detached) dwellings, which take garage access from a private lane/alleyway or public alley, and are located within zoning districts that allow for such development pursuant to Table 5.01-1 (Land Use Matrix) of this Development Code, and which meet or exceed the minimum lot size (area and dimensions) of the affected zoning district, as prescribed in Table 6.01-2B (Small Lot Alley-Loaded Single-Family Residential Development Standards) of this Division. An example of small lot alley-loaded single-family residential

development is contained in Figure 6.01-2B (Example Development—Small Lot Alley-Loaded Single-Family Residential) of this Division.

4. Cluster Single-Family Residential Development Standards.

a. Cluster single-family residential development projects shall comply with the requirements of Table 6.01-2C (Cluster Single-Family Residential Development Standards), which specifies development standards within the LDR-5, MDR-11, MDR-18, MDR-25, and HDR-45 zoning districts.

b. Cluster single-family residential development projects consist of the construction of 3 or more single-family (detached) dwellings, which take garage access from a private lane/alleyway or public alley, and are located within zoning districts that allow for such development pursuant to Table 5.01-1 (Land Use Matrix) of this Development Code, and which meet or exceed the minimum lot size (area and dimensions) of the affected zoning district, as prescribed in Table 6.01-2C (Cluster Single-Family Residential Development Standards) of this Division. An example of cluster single-family residential development is contained in Figure 6.01-2C (Example Development—Cluster Single-Family Residential) of this Division.

5. Multiple-Family Residential Development Standards.

a. Multiple-family (attached) residential development projects shall comply with the requirements of Table 6.01-3 (Multiple-Family Residential Development Standards), which specifies development standards within the MDR-11, MDR-18, MDR-25, and HDR-45 zoning districts.

b. Multiple-family (attached) residential development projects consist of the construction of multiple-family (attached) dwellings in zoning districts that allow for such development pursuant to Table 5.01-1 (Land Use Matrix) of this Development Code, and which meet or exceed the development standards prescribed in Table 6.01-3 (Multiple-Family Residential Development Standards) of this Division. Examples of multiple-family residential development are contained in Figure 6.01-3A (Example Multiple-Family Development—MDR-11 (5.1 to 11.0 DU/Acre) Zoning District), Figure 6.01-3B (Example Multiple-Family Development—MDR-18 (11.1 to 18.0 DU/Acre) Zoning District), Figure 6.01-3C (Example Multiple-Family Development—MDR-25 (18.1 to 25.0 DU/Acre) Zoning District), and Figure 6.01-3D (Example Multiple-Family Development—HDR-45 (25.1 to 45.0 DU/Acre) Zoning District) of this Division.

6. Nonresidential Land Uses within Residential Zoning Districts. Nonresidential land uses allowed within residential zoning districts pursuant to Table 5.02-1 (Land Use Matrix) of this Development Code shall comply with the setback requirements applicable to multiple-family developments, except as follows:

a. The minimum building setback from any exterior (front and street side) property line that abuts a street or public alley shall meet the requirements of the zoning district upon which the building is located.

b. The minimum building setback from any interior residential property line (a property line that abuts another residentially zoned property) shall be 25-FT.

c. The minimum off-street parking space, drive aisle, or driveway setback, from any exterior property line or from any interior residential property line, shall be 10-FT. Off-street parking facilities shall not be located adjacent to a Euclid Avenue property line.

Table 6.01-1: Traditional Single-Family Residential Development Standards

Requirements	Residential Zoning Districts					Additional Regulations
	AR-2	RE-2	RE-4	LDR-5	MDR-11, MDR-18, MDR-25 & HDR-45	
A. SITE DEVELOPMENT STANDARDS						
1. Density Range (minimum to maximum, in dwelling units per acre)	0 to 2.0	0 to 2.0	2.1 to 4.0	2.1 to 5.0	MDR-11: 5.1 to 11.0 MDR-18: 11.1 to 18.0 MDR-25: 18.1 to 25.0 HDR-45: 25.1 to 45.0	Notes 2, 4 & 5
2. Minimum Lot Size						
a. Minimum (in SF)	18,000	10,000		7,200	5,000	Note 1
b. Average (in SF)		18,000		8,000	6,000	
3. Maximum Lot Coverage	30%	40%		50%	60%	
4. Minimum Lot Dimensions						
a. Lot Width						
(1) Interior Lots	100 FT	70 FT		60 FT	50 FT	Note 1
(2) Corner Lots	120 FT	80 FT		65 FT	50 FT	Note 1
(3) Cul-de-Sac Lots						
(a) At Front Property Line	40 FT					Note 1
(b) At Front Building Setback	70 FT			60 FT	40 FT	Note 1
b. Lot Depth	135 FT	100 FT		75 FT	100 FT	Note 1
5. Equestrian Trails Required	Yes		No			If yes, see Section 6.01.010. G.9
6. Walls, Fences, and Obstructions	Refer to Section 6.02.020 (Design Standards for Residential Zoning Districts).					
7. Off Street Parking	Refer to Division 6.03 (Off-Street Parking and Loading).					
8. Landscaping	Refer to Division 6.05 (Landscaping) and Paragraph 6.01.010.G.6 (Landscaping).					
9. Property Appearance and Maintenance	Refer to Division 6.10 (Property Appearance and Maintenance).					
10. Historic Preservation	Certain portions of residential zoning districts are identified as historic or potentially historic and are listed on the City's Historic Resources Eligibility List. Development regulations set forth in Division 7.01 (Historic Preservation), and application processing and permitting regulations set forth in Division 4.02 (Discretionary Permits and Actions) and of this Development Code, shall apply in these instances.					
11. Signs	Refer to Division 8.1 (Sign Regulations).					
12. Security Standards	Refer to Ontario Municipal Code Title 4, Chapter 11 (Security Standards for Buildings).					

Table 6.01-1: Traditional Single-Family Residential Development Standards

Requirements	Residential Zoning Districts					Additional Regulations
	AR-2	RE-2	RE-4	LDR-5	MDR-11, MDR-18, MDR-25 & HDR-45	
13. Noise	Habitable structures shall be designed and constructed to mitigate noise levels from exterior sources. Refer to OMC, Tile 5 (Public Welfare, Morals, and Conduct), Chapter 29 (Noise).					
14. Airport Safety Zones	Properties within the Airport Influence Area (AIA) established by the LA/Ontario International Airport Land Use Compatibility Plan (ALUCP) shall be subject to the requirements and standards of the ALUCP.					
B. BUILDING DEVELOPMENT STANDARDS						
1. Minimum Setback from Street and Alley Property Lines						Note 9
a. From Freeways	20 FT					
b. From Arterial Streets	30 FT – Front For street side and rear setbacks, refer to the Collector and Local Streets standards, below.					Note 7
c. From Collector and Local Streets	30 FT		20 FT – Front 10 FT – Front Garage Other (side-on condition) 10 FT – Street Side 10 FT – Street Rear 1st Floor 20 FT – Street Rear 2nd/3rd Floor			Note 7
d. From Rear Alleys	10 FT – 1st Floor 20 FT – 2nd/3rd Floor 5 FT –Garage Entry (1st Floor Only) 10 FT –Garage Other (1st Floor Only) For side alley conditions, refer to the Interior Property Lines standards, below.					Note 8
2. Minimum Setbacks from Interior Property Lines						
a. From Side Property Lines	10 FT		5 FT			Note 3
b. From Rear Property Lines	25 FT		10 FT – 1st Floor Living Area 20 FT – 2nd/3rd Floor Living Area 10 FT – Patio Covers			
3. Minimum Separation Between Buildings	6 FT (from buildings on the same lot)					
4. Maximum Height	35 FT					
5. Minimum Setback from Major Pipelines	50 FT (to any habitable structures)					Note 6

Notes:

1. *An existing lot of record that is substandard as to minimum "lot" area and/or dimension(s) shall be granted all development rights of the zoning district in which it is located (refer to Subsection 3.01.010.B of this Development Code).*

2. *A density bonus and other incentives pursuant to GC 65915 through 65918 may be granted by the Approving Authority. Refer to Subsection 6.01.010.H (Density Bonus and Other Incentives) of this Section.*

3. *When vehicle parking is provided at the rear of a lot (whether within a garage or carport, or uncovered) that does not have alley access, a minimum 10-FT interior side building setback, which is clear of meters and mechanical equipment, shall be provided to ensure clear vehicular access to the rear of the lot.*

4. *Lots with a maximum density calculation of less than one dwelling shall be allowed the construction of one dwelling unit.*

5. *A residentially zoned lot shall be developed at no less than the minimum number of dwelling units allowed within the specified density range for the applicable zoning district, except that If, as a result of the configuration/design of a lot, the minimum residential density cannot be achieved, the lot may be developed with a maximum of one dwelling unit.*

6. *Includes major high pressure pipelines for fuel oil, gasoline, and diesel and aviation fuels within the City. Existing pipelines include:*

    a. *Two parallel pipelines (a 16-inch and a 20-inch) that enter the City at Benson Avenue, traveling parallel to the northerly side of the Southern Pacific right-of-way to Ontario International Airport, then parallel to the southerly side of the Southern Pacific right-of-way, then parallel to the northerly side of the right-of-way beyond Ontario International Airport, then exiting the City at Etiwanda Avenue; and*

    b. *Two parallel pipelines that traverse the easterly portion of the City, entering the City at the southerly portion of Milliken Avenue, then traveling north under Milliken Avenue to Inland Empire Boulevard, then east to Rochester Avenue, then north to the City Limits.*

7. *On a lot having a street adjacent rear property line (arterial, collector and local streets, only), for the purpose of wall placement, each wall shall be setback a minimum of 5 FT behind the street property line to allow for landscaping beyond any required parkway landscaping.*

8. *A traditional single-family lot shall maintain a useable rear yard area having minimum horizontal dimension of 20 FT in any direction and a clear vertical dimension of 8 FT.*

9. *The minimum setback from private streets shall be measured from a line running parallel to the street, which is located 12 FT behind face-of-curb (a.k.a., "parkway").*

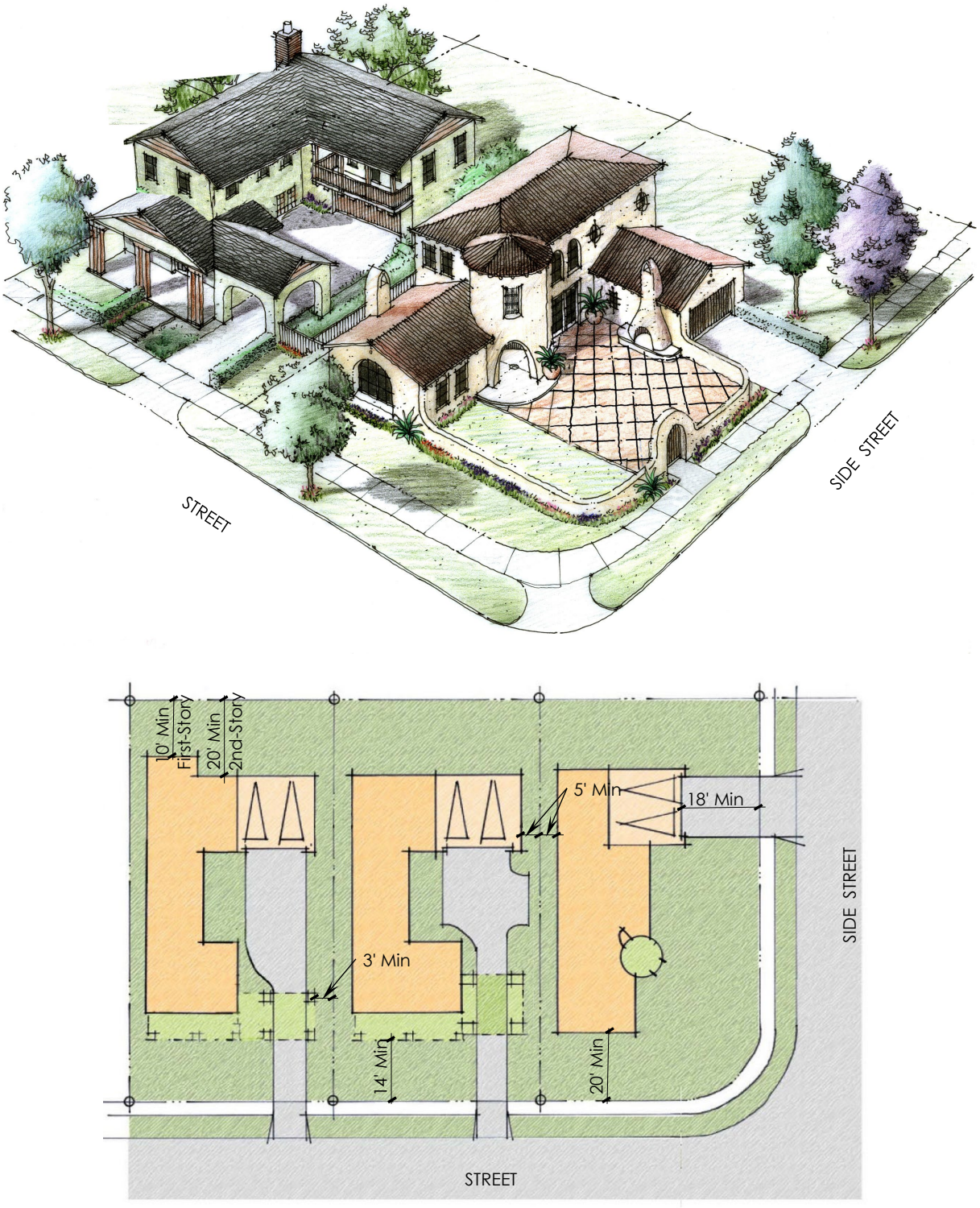


Figure 6.01-1A: Example Development—Traditional Single-Family Residential

Figure 6.01-1B: Example Development—Traditional Single-Family Residential with Public Alley Access

Table 6.01-2A: Small Lot Traditional Single-Family Residential Development Standards

Requirements	Residential Zoning Districts			Additional Regulations
	LDR-5	MDR-11	MDR-18, MDR-25 & HDR-45	
A. SITE DEVELOPMENT STANDARDS				
1. Density Range (minimum to maximum, in dwelling units per acre)	2.1 to 5.0	5.1 to 11.0	MDR-18: 11.1 to 18.0 MDR-25: 18.1 to 25.0 HDR-45: 25.1 to 45.0	Notes 2, 3 & 4
2. Minimum Project Area	One acre			Note 1
3. Minimum Lot Size	4,000 SF – Interior Lot 4,500 SF – Corner Lot		2,800 SF – Interior Lot 3,200 SF – Corner Lot	
4. Maximum Lot Coverage	55%	60%	70%	
5. Minimum Lot Dimensions				
a. Lot Width	40 FT – Interior Lots 45 FT – Corner Lots		35 FT – Interior Lots 40 FT – Corner Lots	
b. Lot Depth	75 FT		70 FT	
6. Minimum Parking Space (Uncovered), Drive Aisle, and Driveway Setbacks				
a. From Project Boundary Street Property Lines	20 FT - Freeways 30 FT – Arterial Streets 20 FT – All Other Streets			
b. From Project Boundary Interior Property Lines	5 FT			
7. Equestrian Trails Required	No			
8. Walls, Fences, and Obstructions	Refer to Section 6.02.020 (Design Standards for Residential Zoning Districts).			
9. Off Street Parking	Refer to Division 6.03 (Off-Street Parking and Loading).			
10. Open Space and Recreation Amenities	Refer to Subsection 6.01.010.E (Open Space Requirements for Small Lot Traditional and Alley-Loaded Development Projects, Cluster Single-Family Development Projects, and Multiple-Family and Mixed-Use Development Projects).			
11. Landscaping	Refer to Division 6.05 (Landscaping) and Paragraph 6.01.010.G.6 (Landscaping).			
12. Property Appearance and Maintenance	Refer to Division 6.10 (Property Appearance and Maintenance).			
13. Historic Preservation	Certain portions of residential zoning districts are identified as historic or potentially historic and are listed on the City's Historic Resources Eligibility List. Development regulations set forth in Division 7.01 (Historic Preservation), and application processing and permitting regulations set forth in Division 4.02 (Discretionary Permits and Actions) and of this Development Code, shall apply in these instances.			
14. Signs	Refer to Division 8.1 (Sign Regulations).			
15. Security Standards	Refer to Ontario Municipal Code Title 4, Chapter 11 (Security Standards for Buildings).			

Table 6.01-2A: Small Lot Traditional Single-Family Residential Development Standards

Requirements	Residential Zoning Districts			Additional Regulations
	LDR-5	MDR-11	MDR-18, MDR-25 & HDR-45	
16. Noise	Habitable structures shall be designed and constructed to mitigate noise levels from exterior sources. Refer to OMC, Tile 5 (Public Welfare, Morals, and Conduct), Chapter 29 (Noise).			
17. Airport Safety Zones	Properties within the Airport Influence Area (AIA) established by the LA/Ontario International Airport Land Use Compatibility Plan (ALUCP) shall be subject to the requirements and standards of the ALUCP.			
B. BUILDING DEVELOPMENT STANDARDS				
1. Minimum Setback from Street Property Lines				Note 7
a. From Freeways	20 FT			
b. From Arterial Streets	30 FT – Front For street side, rear, and alley setbacks, refer to the Collector and Local Streets standards, below.			
c. From Collector and Local Streets				
(1) From Street Front	14 FT – Living Area 18 FT – Garage Entry 10 FT – Other Garage (side-on condition)			
(2) From Street Side	10 FT			Note 6
(3) From Street Rear	10 FT – 1st Floor 15 FT – 2nd/3rd Floors 18 FT – Garage Entry 5 FT –Garage Other (1st Floor Only) 5 FT – Patio Covers			Note 6
d. From Alley Rear	5 FT –Garage (1st Floor Only) 10 FT – Rear 2nd/3rd Floors For side alley conditions, refer to the Interior Property Lines standards, below.			
2. Minimum Setback from Interior Property Lines				
a. From Side Property Lines	5/4 FT			Note 8
b. From Rear Property Lines	10 FT - Living Area 5 FT –Garage (1st Floor Only) 5 FT – Patio Cover to Side or Rear			
3. Minimum Separation Between Buildings	6 FT (from buildings on the same lot)			
4. Maximum Building Height	35 FT			
5. Minimum Setback from Major Pipelines	50 FT (to habitable structures)			Note 5

Notes:

1. *An existing lot of record that is substandard as to minimum "project" area and/or dimension(s) shall be permitted the development rights of the zone in which it is located, except that the maximum density shall be limited to the minimum allowed within the density range.*
2. *A density bonus and other incentives pursuant to GC 65915 through 65918 may be granted by the Approving Authority. Refer to Subsection 6.01.010.H (Density Bonus and Other Incentives).*
3. *Lots with a maximum density calculation of less than 1.00 may be developed with one dwelling unit.*
4. *A residentially zoned lot shall be developed at no less than the minimum number of dwelling units allowed within the specified density range for the applicable zoning district, except that If, as a result of the configuration/design of a lot, the minimum residential density cannot be achieved, the lot may be developed with a maximum of one dwelling unit.*
5. *Includes major high pressure pipelines for fuel oil, gasoline, and diesel and aviation fuels within the City. Existing pipelines include:*
    a. *Two parallel pipelines (a 16-inch and a 20-inch) that enter the City at Benson Avenue, traveling parallel to the northerly side of the Southern Pacific right-of-way to Ontario International Airport, then parallel to the southerly side of the Southern Pacific right-of-way, then parallel to the northerly side of the right-of-way beyond Ontario International Airport, then exiting the City at Etiwanda Avenue; and*
    b. *Two parallel pipelines that traverse the easterly portion of the City, entering the City at the southerly portion of Milliken Avenue, then traveling north under Milliken Avenue to Inland Empire Boulevard, then east to Rochester Avenue, then north to the City Limits.*
6. *On a lot having a street adjacent side or rear property line, for the purpose of wall placement, each wall shall be setback a minimum of 5 FT behind the street property line to allow for landscaping beyond any required parkway landscaping.*
7. *The minimum setback from private streets shall be measured from a line running parallel to the street, which is located 12 FT behind face-of-curb (a.k.a., "parkway").*
8. *The interior side property line setback may be reduced to 4 FT if the setback area is combined with the side setback area of the adjacent property to create a single minimum 8-FT wide outdoor use area clear of walls, thereby allowing a minimum 8–FT wide side to side building separation.*

Small Lot Traditional Single-Family Residential; 4,000/4,500 SF Lots

Small Lot Traditional Single-Family Residential; 2,800/3,200 SF Lots

Figure 6.01-2A: Example Development—Small Lot Traditional Single-Family Residential

Table 6.01-2B: Small Lot Alley-Loaded Single-Family Development Standards

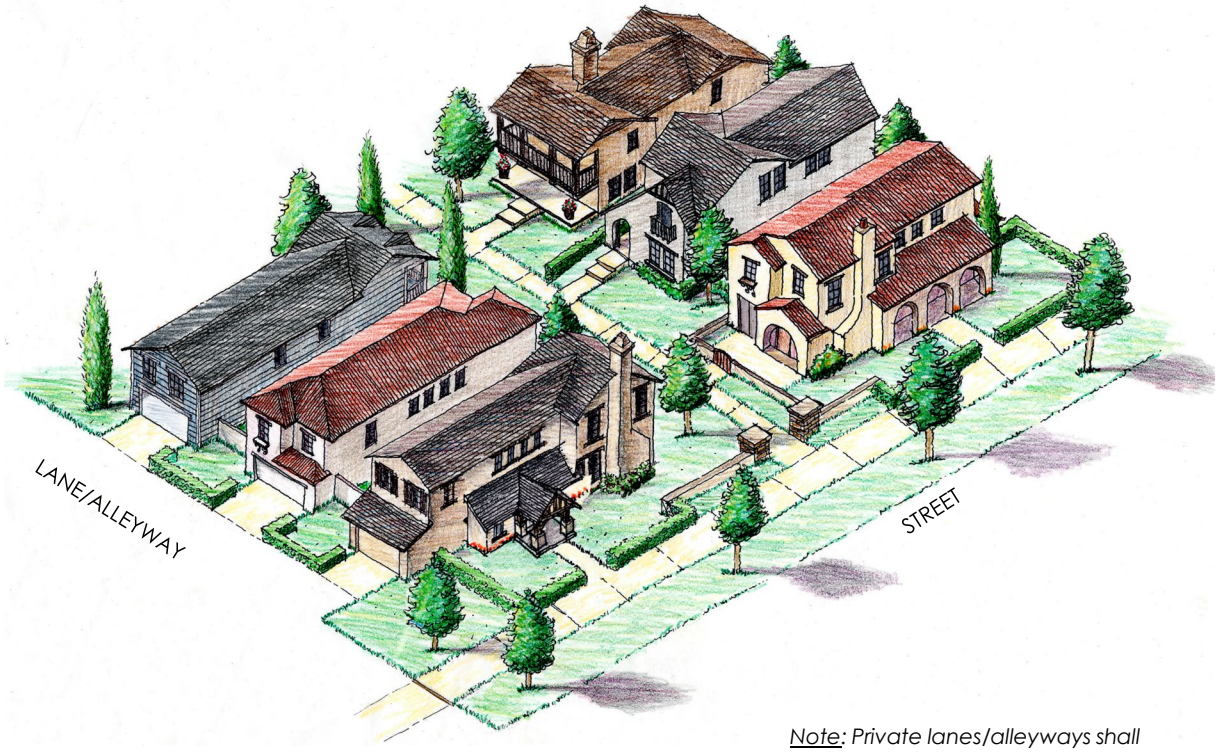
Requirements	Residential Zoning Districts			Additional Regulations
	LDR-5	MDR-11	MDR-18, MDR-25 & HDR-45	
A. SITE DEVELOPMENT STANDARDS				
1. Density Range (minimum to maximum, in dwelling units per acre)	2.1 to 5.0	5.1 to 11.0	MDR-18: 11.1 to 18.0; MDR-25: 18.1 to 25.0; HDR-45: 25.1 to 45.0	Notes 2, 3 & 4
2. Minimum Project Area	One acre			Note 1
3. Minimum Project Dimensions	200 FT – Width 200 FT - Depth			Note 1
4. Minimum Lot Size				
a. Lot width	40 FT – Interior Lots 45 FT – Corner Lots		35 FT – Interior Lots 40 FT – Corner Lots	
b. Lot Depth	75 FT		70 FT	
5. Maximum Lot Coverage	55%	60%	70%	
6. Minimum Lot Dimensions	N/A			
7. Minimum Parking Space (Uncovered) and Private Street, Drive, or lane/Alleyway Setbacks				
a. From Project Boundary Street Property Lines	20 FT - Freeways 30 FT – Arterial Streets 20 FT – Other Streets			
b. From Project Boundary Interior Property Lines	5 FT			
8. Equestrian Trails Required	No			
9. Walls, Fences, and Obstructions	Refer to Section 6.02.020 (Design Standards for Residential Zoning Districts).			
10. Off Street Parking	Refer to Division 6.03 (Off-Street Parking and Loading).			
11. Open Space and Recreation Amenities	Refer to Subsection 6.01.010.E (Open Space Requirements for Small Lot Traditional and Alley-Loaded Development Projects, Cluster Single-Family Development Projects, and Multiple-Family and Mixed-Use Development Projects).			
12. Landscaping	Refer to Division 6.05 (Landscaping) and Paragraph 6.01.010.G.6 (Landscaping).			
13. Property Appearance and Maintenance	Refer to Division 6.10 (Property Appearance and Maintenance).			
14. Historic Preservation	Certain portions of residential zoning districts are identified as historic or potentially historic and are listed on the City's Historic Resources Eligibility List. Development regulations set forth in Division 7.01 (Historic Preservation), and application processing and permitting regulations set forth in Division 4.02 (Discretionary Permits and Actions) and of this Development Code, shall apply in these instances.			
15. Signs	Refer to Division 8.1 (Sign Regulations).			
16. Security Standards	Refer to Ontario Municipal Code Title 4, Chapter 11 (Security Standards for Buildings).			

Table 6.01-2B: Small Lot Alley-Loaded Single-Family Development Standards

Requirements	Residential Zoning Districts			Additional Regulations
	LDR-5	MDR-11	MDR-18, MDR-25 & HDR-45	
17. Noise	Habitable structures shall be designed and constructed to mitigate noise levels from exterior sources. Refer to OMC, Tile 5 (Public Welfare, Morals, and Conduct), Chapter 29 (Noise).			
18. Airport Safety Zones	Properties within the Airport Influence Area (AIA) established by the LA/Ontario International Airport Land Use Compatibility Plan (ALUCP) shall be subject to the requirements and standards of the ALUCP.			
B. BUILDING DEVELOPMENT STANDARDS				
1. Minimum Setback from Street Property Lines				Note 8
a. From Freeways	20 FT			
b. From Arterial Streets	30 FT			Note 5
c. From Collector and Local Streets	10 FT - Front 10 FT – Street Sides 15 FT – Street Rear			Note 5
2. Minimum Setback from Project Boundary Property Lines	10 FT – Project Boundaries 5/4 FT – Side 10 FT – Rear 5 FT – Patio Cover			Note 6
3. Minimum Setback from Private Drives	10 FT – Living Area 6 FT – Porch (Single-Story) 18 FT – Garage Entry 10 FT – Other Garage (side/rear)			Note 8
4. Minimum Setback from Private Lanes/Alleyways	10 FT – Living Area 5 FT – Garage			
5. Minimum Setback from Parking Spaces	10 FT			
6. Minimum Separations Between Buildings				
a. Dwelling Front to Front	25 FT			
b. Dwelling Front to Side	20 FT			
c. Dwelling Side to Side	10/8 FT			Note 6
d. Dwelling Rear to Rear	20 FT			
e. Garage to Garage	30 FT – Entry to Entry 30 FT – Entry to Side 10/8 FT – Side to Side 10/8 FT – Side to Rear			Note 6
7. Maximum Building Height	35 FT			
8. Minimum Setback from Major Pipelines	50 FT (to habitable structures)			Note 7

Notes:

1. *An existing lot of record that is substandard as to minimum "project" area and/or dimension(s) shall be permitted the development rights of the zone in which it is located, except that the maximum density shall be limited to the minimum allowed within the density range.*
2. *A density bonus and other incentives pursuant to GC 65915 through 65918 may be granted by the Approving Authority. Refer to Subsection 6.01.010.H (Density Bonus and Other Incentives).*
3. *Lots with a maximum density calculation of less than 1.00 may be developed with one dwelling unit.*
4. *A residentially zoned lot shall be developed at no less than the minimum number of dwelling units allowed within the specified density range for the applicable zoning district, except that If, as a result of the configuration/design of a lot, the minimum residential density cannot be achieved, the lot may be developed with a maximum of one dwelling unit.*
5. *On lot having a street-adjacent side or rear property line, for the purpose of wall placement, each wall shall be setback a minimum of 5 FT behind the street property line to allow for landscaping beyond any required parkway landscaping.*
6. *The interior side property line setback may be reduced to 4 FT if the setback area is combined with the side setback area of the adjacent property to create a single minimum 8-FT wide outdoor use area clear of walls, thereby allowing a minimum 8–FT wide side to side building separation.*
7. *Includes major high pressure pipelines for fuel oil, gasoline, and diesel and aviation fuels within the City. Existing pipelines include:*
    a. *Two parallel pipelines (a 16-inch and a 20-inch) that enter the City at Benson Avenue, traveling parallel to the northerly side of the Southern Pacific right-of-way to Ontario International Airport, then parallel to the southerly side of the Southern Pacific right-of-way, then parallel to the northerly side of the right-of-way beyond Ontario International Airport, then exiting the City at Etiwanda Avenue; and*
    b. *Two parallel pipelines that traverse the easterly portion of the City, entering the City at the southerly portion of Milliken Avenue, then traveling north under Milliken Avenue to Inland Empire Boulevard, then east to Rochester Avenue, then north to the City Limits.*
8. *The minimum setback from private streets shall be measured from a line running parallel to the street, which is located 12 FT behind face-of-curb (a.k.a., "parkway").*



Note: Private lanes/alleyways shall be provided with enhanced paving, such as interlocking pavers, integral color stamped and/or scored concrete, or other similar materials acceptable to the Planning Director.

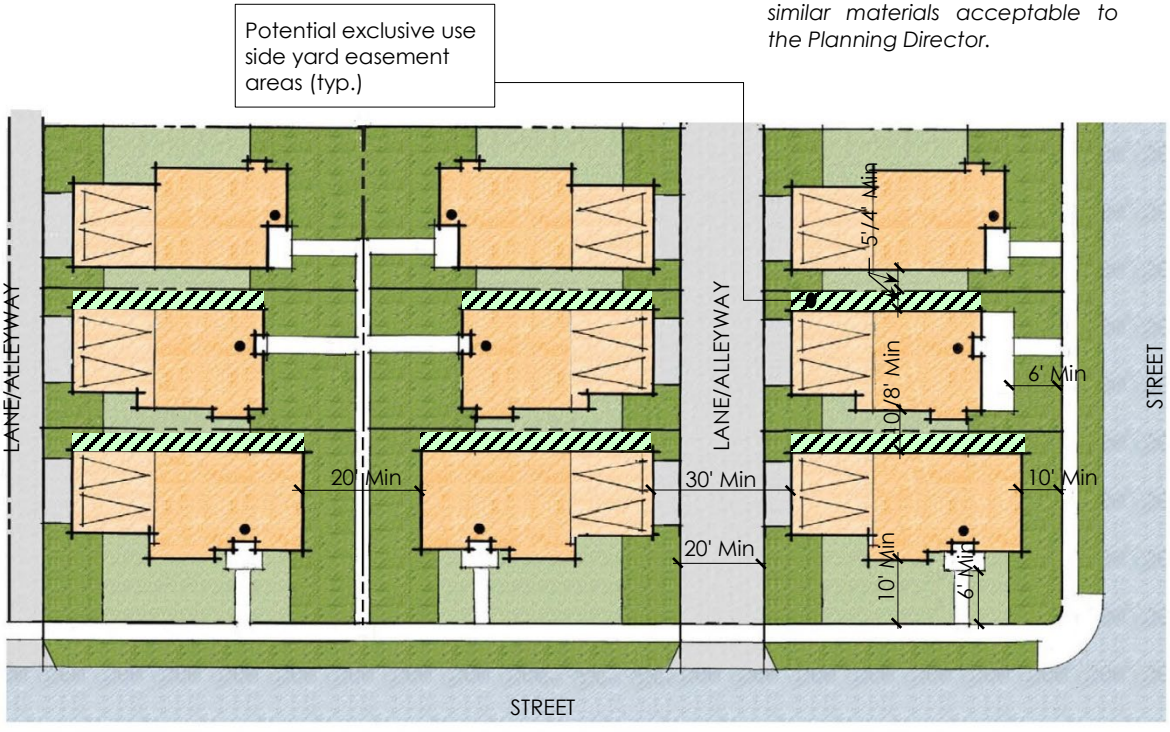


Figure 6.01-2B: Example Development—Small Lot Alley-Loaded Single-Family Residential Example

Table 6.01-2C: Cluster Single-Family Residential Development Standards

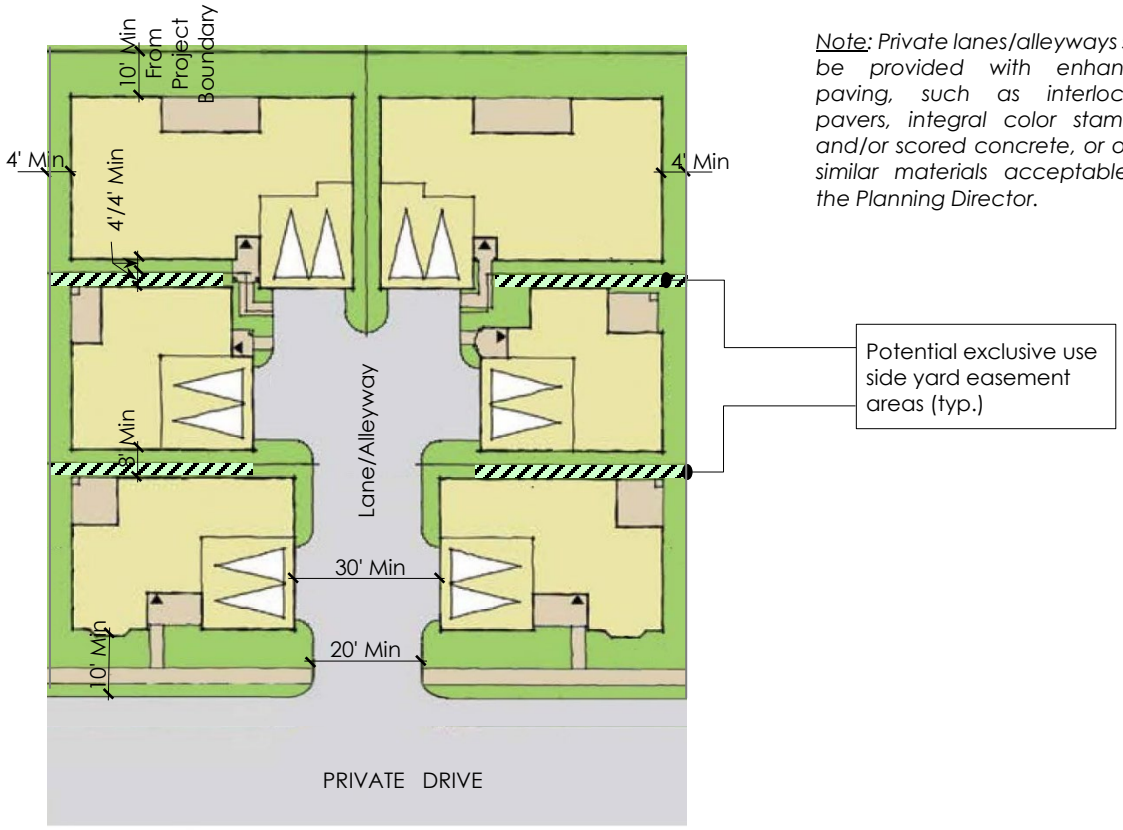
Requirements	Residential Zoning Districts			Additional Regulations
	LDR-5	MDR-11	MDR-18, MDR-25 & HDR-45	
A. SITE DEVELOPMENT STANDARDS				
1. Density Range (minimum to maximum, in dwelling units per acre)	2.1 to 5.0	5.1 to 11.0	MDR-18: 11.1 to 18.0 MDR-25: 18.1 to 25.0 HDR-45: 25.1 to 45.0	Notes 2, 3 & 4
2. Minimum Project Area	One acre			Note 1
3. Minimum Project Dimensions	200 FT - Width 200 FT - Depth			Note 1
4. Minimum Lot Size	N/A			
5. Maximum Lot Coverage	N/A			
6. Minimum Lot Dimensions	N/A			
7. Minimum Parking Space (Uncovered) and Private Street, Drive, or lane/Alleyway Setbacks				
a. From Project Boundary Street Property Lines	20 FT - Freeways 30 FT – Aerial Streets 20 FT – Other Streets			
b. From Project Boundary Interior Property Lines	5 FT			
8. Equestrian Trails Required	No			
9. Walls, Fences, and Obstructions	Refer to Section 6.02.020 (Design Standards for Residential Zoning Districts).			
10. Off Street Parking	Refer to Division 6.03 (Off-Street Parking and Loading).			
11. Open Space and Recreation Amenities	Refer to Subsection 6.01.010.E (Open Space Requirements for Small Lot Traditional and Alley-Loaded Development Projects, Cluster Single-Family Development Projects, and Multiple-Family and Mixed-Use Development Projects).			
12. Landscaping	Refer to Division 6.05 (Landscaping) and Paragraph 6.01.010.G.6 (Landscaping).			
13. Property Appearance and Maintenance	Refer to Division 6.10 (Property Appearance and Maintenance).			
14. Historic Preservation	Certain portions of residential zoning districts are identified as historic or potentially historic and are listed on the City's Historic Resources Eligibility List. Development regulations set forth in Division 7.01 (Historic Preservation), and application processing and permitting regulations set forth in Division 4.02 (Discretionary Permits and Actions) and of this Development Code, shall apply in these instances.			
15. Signs	Refer to Division 8.1 (Sign Regulations).			
16. Security Standards	Refer to Ontario Municipal Code Title 4, Chapter 11 (Security Standards for Buildings).			
17. Noise	Habitable structures shall be designed and constructed to mitigate noise levels from exterior sources. Refer to OMC, Tile 5 (Public Welfare, Morals, and Conduct), Chapter 29 (Noise).			

Table 6.01-2C: Cluster Single-Family Residential Development Standards

Requirements	Residential Zoning Districts			Additional Regulations
	LDR-5	MDR-11	MDR-18, MDR-25 & HDR-45	
18. Airport Safety Zones	Properties within the Airport Influence Area (AIA) established by the LA/Ontario International Airport Land Use Compatibility Plan (ALUCP) shall be subject to the requirements and standards of the ALUCP.			
B. BUILDING DEVELOPMENT STANDARDS				
1. Minimum Setback from Public Street Property Lines				Note 8
a. Freeways	20 FT			
b. Arterial Streets	30 FT			Note 5
c. Collector and Local Streets	20 FT - Front 10 FT – Street Sides 15 FT – Street Rear			Note 5
2. Minimum Setback from Interior Property Lines	10 FT – Project Boundaries 4 FT – Side 4 FT – Rear 4 FT – Patio Cover			Note 6
3. Minimum Setback from Private Drives	10 FT – Living Area 5 FT – Porch (Single-Story) ≤ 5 FT or ≥ 18 FT – Garage Entry 10 FT – Garage Other			Note 8
4. Minimum Setback from Lanes/Alleyways (measured from back-of-curb)	5 FT – Living Area 5 FT – Porch (Single-Story) 5 FT – Garage			
5. Minimum Setback from Parking Spaces	10 FT – Living Area 8 FT – Porch (Single-Story) 5 FT - Garage			
6. Minimum Separation Between Buildings				
a. Dwelling Front to Front	30 FT			
b. Dwelling Front to Side	14 FT			Note 6
c. Dwelling Side to Side	8 FT			Note 6
d. Dwelling Side to Rear	8 FT			
e. Dwelling Rear to Rear	16 FT			
f. Garage to Garage	30 FT – Entry to Entry 30 FT – Entry to Side 8 FT – Side to Side 8 FT – Side to Rear			Note 6
7. Maximum Building Height	35 FT			
8. Minimum Setback from Major Pipelines	50 FT (to habitable structures)			Note 7

Notes:

1. *An existing lot of record that is substandard as to minimum "project" area and/or dimension(s) shall be permitted the development rights of the zone in which it is located, except that the maximum density shall be limited to the minimum allowed within the density range.*
2. *A density bonus and other incentives pursuant to GC 65915 through 65918 may be granted by the Approving Authority. Refer to Subsection 6.01.010.H (Density Bonus and Other Incentives).*
3. *Lots with a maximum density calculation of less than 1.00 may be developed with one dwelling unit.*
4. *A residentially zoned lot shall be developed at no less than the minimum number of dwelling units allowed within the specified density range for the applicable zoning district, except that If, as a result of the configuration/design of a lot, the minimum residential density cannot be achieved, the lot may be developed with a maximum of one dwelling unit.*
5. *On a lot having a street-adjacent side or rear property line, for the purpose of wall placement, each wall shall be setback a minimum of 5 FT behind the street property line to allow for landscaping beyond any required parkway landscaping.*
6. *The interior side property line setback may be combined with the side setback area of the adjacent property to create a single minimum 8-FT wide outdoor use area clear of walls, which is defined in the project CC&Rs.*
7. *Includes major high pressure pipelines for fuel oil, gasoline, and diesel and aviation fuels within the City. Existing pipelines include:*
    a. *Two parallel pipelines (a 16-inch and a 20-inch) that enter the City at Benson Avenue, traveling parallel to the northerly side of the Southern Pacific right-of-way to Ontario International Airport, then parallel to the southerly side of the Southern Pacific right-of-way, then parallel to the northerly side of the right-of-way beyond Ontario International Airport, then exiting the City at Etiwanda Avenue; and*
    b. *Two parallel pipelines that traverse the easterly portion of the City, entering the City at the southerly portion of Milliken Avenue, then traveling north under Milliken Avenue to Inland Empire Boulevard, then east to Rochester Avenue, then north to the City Limits.*
8. *The minimum setback from private streets and drives shall be measured from a line running parallel to the street/drive, which is located 12 FT behind face-of-curb (a.k.a., "parkway").*



Note: Private lanes/alleyways shall be provided with enhanced paving, such as interlocking pavers, integral color stamped and/or scored concrete, or other similar materials acceptable to the Planning Director.

Figure 6.01-2C: Example Development—Cluster Single-Family Residential

Table 6.01-3: Multiple-Family Residential Development Standards

Requirements	Residential Zoning Districts				Additional Regulations
	MDR-11	MDR-18	MDR-25	HDR- 45	
A SITE DEVELOPMENT STANDARDS					
1. Density Range (minimum to maximum, in dwelling units per acre)	5.1 to 11.0	11.1 to 18.0	18.1 to 25.0	25.1 to 45.0	Notes 1, 2, 6 & 7
2. Minimum Project Area	0.23 Acre (10,000 SF)			1.0 AC	Note 1
3. Minimum Project Dimensions					
a. Width	100 FT			180 FT	Note 1
b. Depth	100 FT			200 FT	Note 1
4. Maximum Project Coverage	60%			100%	
5. Minimum Lot Size	N/A				
6. Maximum Lot Coverage	N/A				
7. Minimum Lot Dimensions					
a. Lot Width b. Lot Depth	Refer to Subsection 6.08.045.C (Common Interest Subdivisions are Exempt from Minimum Lot Area and Building Setback Requirements).				
8. Minimum Parking Space (Uncovered), Drive Aisle and Driveway Setbacks					
a. From Project Boundary Street Property Line	20 FT – Freeways 20 FT – Arterial Streets 10 FT – Collector and Local Streets			10 FT – Freeways 10 FT – Arterial Streets 10 FT – Collector and Local Streets	
b. From Project Boundary Interior Property Line	5 FT				
9. Equestrian Trails Required	No				
10. Walls, Fences and Obstructions	Refer to Section 6.02.020 (Design Standards for Residential Zoning Districts).				
11. Off Street Parking	Refer to Division 6.03 (Off-Street Parking and Loading).				
12. Open Space and Recreation Amenities	Refer to Subsection 6.01.010.E (Open Space Requirements for Small Lot Traditional and Alley-Loaded Development Projects, Cluster Single-Family Development Projects, and Multiple-Family and Mixed-Use Development Projects).				
13. Landscaping	Refer to Division 6.05 (Landscaping) landscape standards. Also refer to Paragraph 6.01.010.G.6.c (Single-Family Cluster and Multiple-Family Development) for additional standards addressing multiple-family development within commercial zoning districts.				
14. Property Appearance and Maintenance	Refer to Division 6.10 (Property Appearance and Maintenance).				

Table 6.01-3: Multiple-Family Residential Development Standards

Requirements	Residential Zoning Districts				Additional Regulations
	MDR-11	MDR-18	MDR-25	HDR- 45	
15. Historic Preservation	Certain portions of residential zoning districts are identified as historic or potentially historic and are listed on the City's Historic Resources Eligibility List. Development regulations set forth in Division 7.01 (Historic Preservation), and application processing and permitting regulations set forth in Division 4.02 (Discretionary Permits and Actions) and of this Development Code, shall apply in these instances.				
16. Signs	Refer to Division 8.1 (Sign Regulations).				
17. Security Standards	Refer to Ontario Municipal Code Title 4, Chapter 11 (Security Standards for Buildings).				
18. Noise	Habitable structures shall be designed and constructed to mitigate noise levels from exterior sources. Refer to OMC, Tile 5 (Public Welfare, Morals, and Conduct), Chapter 29 (Noise).				
19. Airport Safety Zones	Properties within the Airport Influence Area (AIA) established by the LA/Ontario International Airport Land Use Compatibility Plan (ALUCP) shall be subject to the requirements and standards of the ALUCP.				
B BUILDING DEVELOPMENT STANDARDS					
1. Minimum Setback from Public Street Property Lines	20 FT – Freeways 30 FT – Arterial Streets 20 FT – Collector and Local Streets			10 FT	Notes 3 & 9
2. Minimum Setback from Interior Project Boundary Property Lines	5 FT				Note 4
3. Minimum Setback from Public Alley Property Lines	5 FT				
4. Minimum Setback from Private Drives/Alleyways (from edge of drive aisle)					
a. Living Area	15 FT				
b. Garages and Other Nonhabitable Structures	5 FT				
5. Minimum Setback from Dwellings to Parking Spaces					
a. Living Area	10 FT				
b. Garages and Other Nonhabitable Structures	5 FT				
6. Minimum Setback from Parking Space or Drive Aisle to Wall or Fence	5 FT				
7. Minimum Separation Between Detached Buildings					
a. Dwelling Front to Front	≤ 2-Stories: 25 FT; ≥ 3 Stories: 30 FT				
b. Dwelling Front to Rear	≤ 2-Stories: 25 FT; ≥ 3 Stories: 30 FT				
c. Dwelling Front to Side	≤ 2-Stories: 25 FT; ≥ 3 Stories: 30 FT				
d. Dwelling Side to Side	≤ 2-Stories: 10 FT; ≥ 3 Stories: 15 FT				

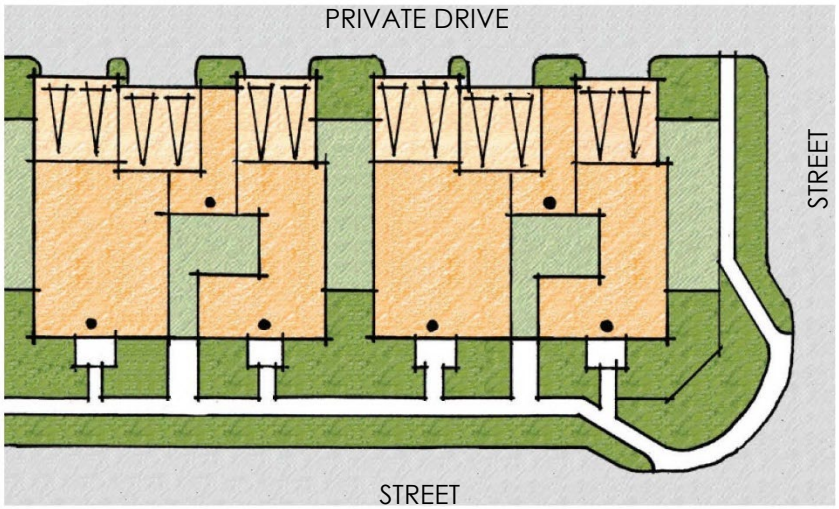
Table 6.01-3: Multiple-Family Residential Development Standards

Requirements	Residential Zoning Districts				Additional Regulations
	MDR-11	MDR-18	MDR-25	HDR- 45	
e. Dwelling Side to Rear	15 FT				
f. Dwelling Rear to Rear	20 FT				
g. Garage to Garage (or other nonhabitable structures)	30 FT – Entry to Entry 30 FT – Entry to Side 10 FT – Side to Side 10 FT – Side to Rear				
8. Minimum Storage Space	240 CF				Note 5
9. Maximum Building Height	35 FT	45 FT	60 FT	75 FT	
10. Minimum Setback from Major Pipelines	50 FT (to habitable structures)				Note 8

Notes:

1. *An existing lot of record that is substandard as to minimum "project" area and/or dimension(s), shall be permitted all of the development rights of the zone in which it is located, except that the maximum density shall be limited to the minimum number of dwelling units allowed within the specified density range for the applicable zoning district.*
2. *A density bonus and other incentives pursuant to GC Sections 65915 through 65918, may be granted by the Approving Authority. Refer to Subsection 6.01.010.H (Density Bonus and Other Incentives).*
3. *A health risk assessment shall be required for multiple-family development projects located within close proximity to a freeway, as determined by the Zoning Administrator.*
4. *A dwelling having the primary entry facing onto an interior property line shall maintain a minimum 10-FT setback from the corresponding interior property line.*
5. *Adequate lockable private storage space shall be provided within a garage or storage building, or a space directly accessible from the dwelling. Exterior closets accessed from patios or balconies may be used if screened from public view.*
6. *Lots with a maximum density calculation of less than 1.00 may be developed with one dwelling unit.*
7. *A residentially zoned lot shall be developed at no less than the minimum number of dwelling units allowed within the specified density range for the applicable zoning district, except that If, as a result of the configuration/design of a lot, the minimum residential density cannot be achieved, the lot may be developed with a maximum of one dwelling unit.*
8. *Includes major high pressure pipelines for fuel oil, gasoline, and diesel and aviation fuels within the City. Existing pipelines include:*
    a. *Two parallel pipelines (a 16-inch and a 20-inch) that enter the City at Benson Avenue, traveling parallel to the northerly side of the Southern Pacific right-of-way to Ontario International Airport, then parallel to the southerly side of the Southern Pacific right-of-way, then parallel to the northerly side of the right-of-way beyond Ontario International Airport, then exiting the City at Etiwanda Avenue; and*
    b. *Two parallel pipelines that traverse the easterly portion of the City, entering the City at the southerly portion of Milliken Avenue, then traveling north under Milliken Avenue to Inland Empire Boulevard, then east to Rochester Avenue, then north to the City Limits.*
9. *The minimum setback from private streets shall be measured from a line running parallel to the street, which is located 12 FT behind face-of-curb (a.k.a., "parkway").*

Triplex Townhomes — 5.1 to 11 DU/Acre



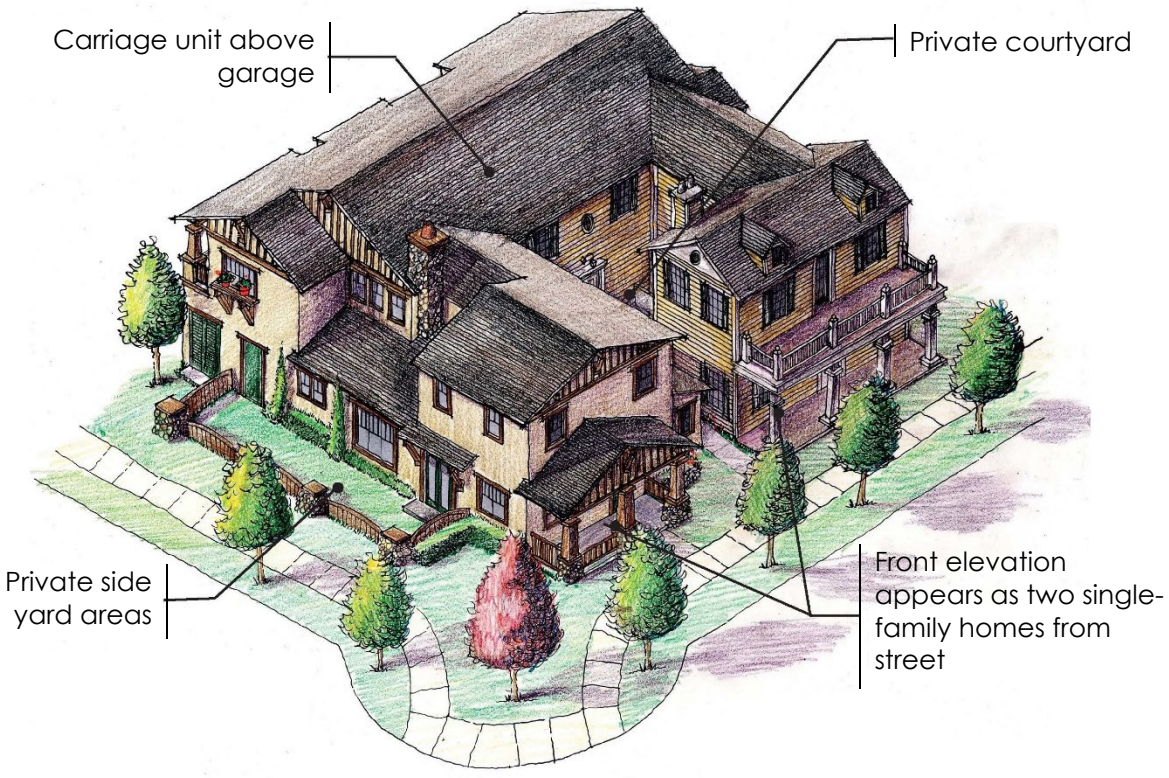
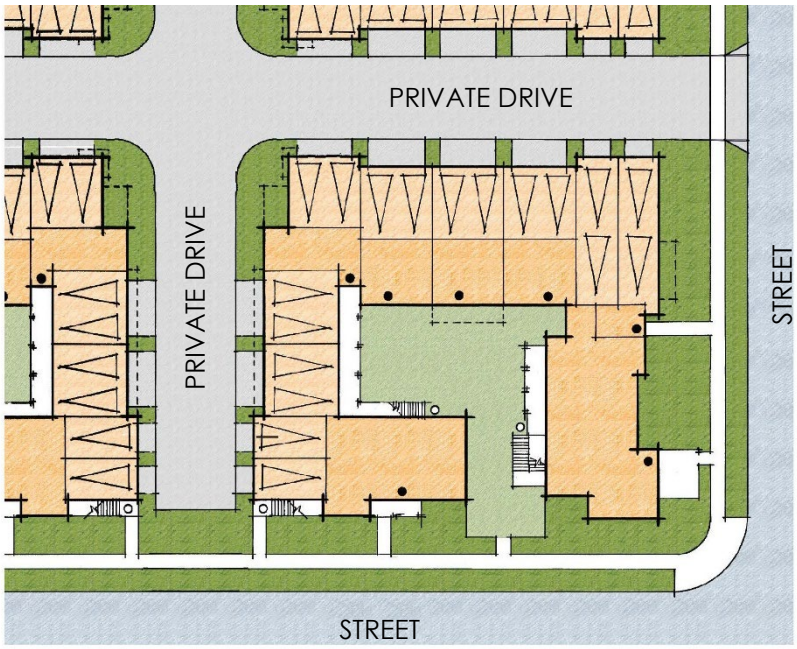


Figure 6.01-3A: Example Multiple-Family Development — MDR-11 (5.1 to 11.0 DU/Acre) Zoning District

Courtyard Townhomes — 11.1 to 18 DU/Acre



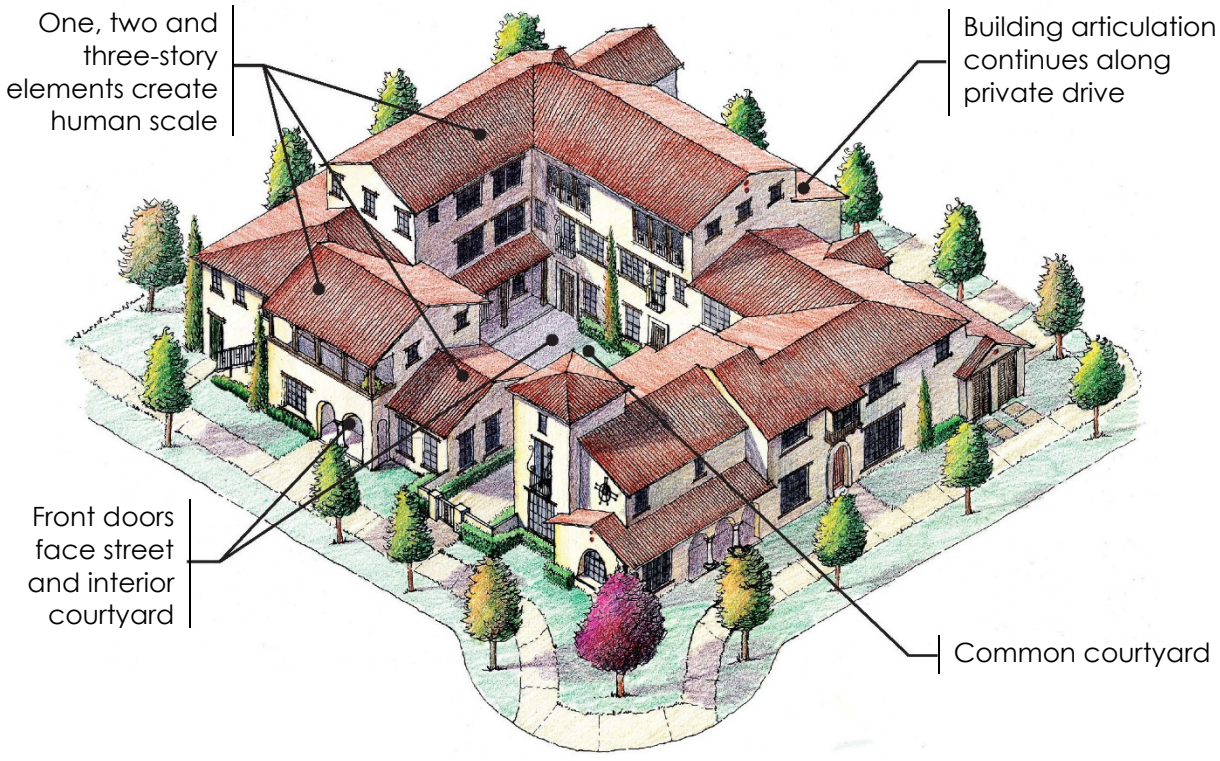


Figure 6.01-3B: Example Multiple-Family Development — MDR-18 (11.1 to 18.0 DU/Acre) Zoning District

Motorcourt Townhomes — 18.1 to 25 DU/Acre

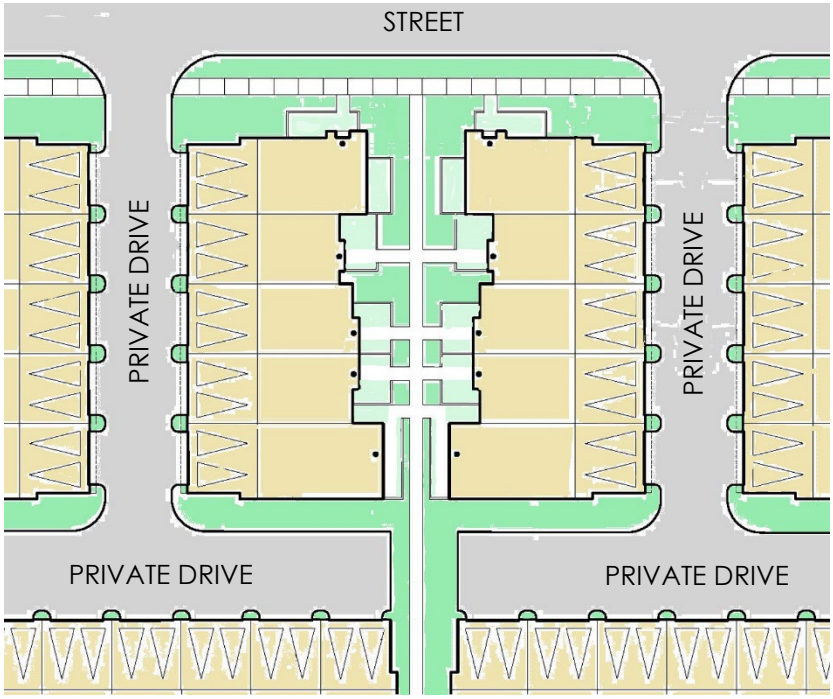


Figure 6.01-3C: Example Multiple-Family Development — MDR-25 (18.1 to 25.0 DU/Acre) Zoning District

Stacked Flats Condominiums Over Podium Parking — 25.1 to 45 DU/Acre

Figure 6.01-3D: Example Multiple-Family Development — HDR-45 (25.1 to 45.0 DU/Acre) Zoning District

D. Exceptions to Development Standards. The following exceptions from the maximum height and minimum setback requirements stipulated in Table 6.01.010-1 (Traditional Single-Family Residential Development Standards), Table 6.01.010-2 (Single-Family Residential Small Lot and Cluster Development Standards), and Table 6.01.010-3 (Multiple-Family Residential Development Standards) shall be permitted:

1. Height.

a. *Aerials and Antennas, Chimneys, Cupolas, Elevator Penthouses, Flagpoles, Monuments, Parapet Walls, Spires, Towers, Water Tanks, and Other Similar Structures*. Aerials and antennas, chimneys, cupolas, elevator penthouses, flagpoles, monuments, parapet walls, spires, towers, water tanks, and other similar structures may be erected to a height of up to 25 percent above the prescribed height limit of the base zoning district.

b. *Amateur (HAM) Radio Antennas*. HAM radio antennas may exceed the maximum prescribed height limit of a zoning district by a maximum of 10 FT. The Zoning Administrator, however, may allow HAM radio antennas to exceed this height limitation if it is necessary to accommodate amateur radio service communications. A HAM radio antenna that exceeds the maximum prescribed height limit of the zoning district in which it is located shall not exceed the minimum height and dimensions necessary to accommodate amateur radio service communications.

c. *Wireless Telecommunication Facilities*. Wireless telecommunication facilities shall comply with Section 5.03.420 (Wireless Telecommunications Facilities) of this Development Code.

2. Encroachments into Required Setback Areas.

a. *Attached Porte Cocheres.* Porte cocheres attached to the main dwelling may extend into a required front setback a maximum of 30 percent of the required setback depth and may extend into a side setback a maximum of 50 percent of the required setback width, provided the porte cochere is no greater than 20 FT in width. In no case, however, shall the side setback width be reduced to less than 3 FT.

b. *Cornices, Eaves, Canopies, Decorative Wall Elements, and Similar Architectural Features*. Cornices, eaves, canopies, decorative wall elements, and similar architectural features may extend into a required front, street side, or rear setback area, a maximum of 50 percent of the required setback, not to exceed 2.5 FT.

c. *Fireplaces and Chimneys.* Fireplaces and chimneys may extend a maximum of 2 FT into a required front, rear, side, or street side setback area; however, in no case shall the side setback be reduced to less than 3 FT.

d. *Porches, Patios, and Decks.* A porch, patio, or deck, may extend up to 30 percent into a required street setback area, provided the porch, patio, or deck, is no greater than 20 FT in width.

e. *Decorative Archways, Pergolas, and Porticos.* Decorative archways, pergolas, and porticos may be located within a front or street side setback area, provided the structure does not exceed 5 FT in width, 4 FT in depth, and 8 FT in height, and a minimum clear interior vertical dimension of 7 FT is maintained.

f. *Patio Covers.* Support structure for patio covers (i.e., columns, beams, and lintels) attached to single-family dwellings may extend into a required rear setback, to within 10 FT of the rear property line, to within 5 FT of an interior property line and to within 5 FT of a street side property line.

g. *Signs*. Signs allowed pursuant to Division 8.1 (Sign Regulations) of this Development Code may encroach into a required front or street side setback area, or rear setback area of a through-lot.

h. *Single-Story Additions to Single-Family Dwellings.* Single-story additions to single-family dwellings may extend into a required rear setback to within 10 FT of the rear property line, provided the building addition does not occupy more than 25 percent of the required rear setback area.

i. *Stairwells and Balconies.* Open, unenclosed stairways and balconies, which are not covered by a roof or canopy, may extend a maximum of 4 FT into a required setback area; however, in no case shall the side setback be reduced to less than 2.5 FT.

j. *Walls, Fences, and Obstructions.* Walls, fences, and obstructions may be permitted within required setback areas pursuant to the provisions of Division 6.02 (Fences, Walls, and Obstructions) of this Chapter.

k. *Utility and Storage Closets.* Utility and storage closets may extend a maximum of 2 FT into a required rear or side setback area. In no case, however, shall the setback be reduced to less than 3 FT.

E. Open Space Requirements for Small Lot Traditional and Alley-Loaded Development Projects, Cluster Single-Family Development Projects, and Multiple-Family and Mixed-Use Development Projects.

1. It is the intent of this section to ensure sufficient open space areas for the active enjoyment of recreational activities by residents and guests of small lot single-family and cluster development projects, and multiple-family and the residential portion of mixed-use development projects. In this regard, active open space elements shall be of sufficient size and location, and easily accessible to each dwelling unit.

2. Active open space areas that feature recreational amenities, such as pools, spas, court activities, etc., shall be placed and managed so as not to infringe upon the peacefulness of any neighboring traditional single-family development. The following open space areas shall contribute to the open space requirements for single-family small lot and cluster development projects, and multiple-family and the residential portion of mixed-use development projects:

a. *Minimum Open Space Requirements.*

(1) Small Lot Traditional and Alley-Loaded Development Projects, and Cluster Single-Family Development Projects—Small lot traditional, small lot alley-loaded, and cluster single-family development projects, which consist of more than 3 dwellings, shall devote a minimum of 20 percent of the project site to open space (private and common area), and shall include common recreation amenities and facilities pursuant to Paragraph E.2.c (Common Active Open Space Area) et seq., of this Section.

(2) Minimum Open Space Requirements for Multiple-Family and Mixed-Use Development Projects—

(a) Table 6.01-4 (Minimum Open Space Requirements for Multiple-Family and Mixed-Use Development Projects), below, establishes the minimum open space requirements for multiple-family development projects and the multiple-family residential portion of mixed-use development projects consisting of more than 3 dwellings. The required open space area shall be calculated on a per unit basis and includes **[i]** private open space for the exclusive use of a dwelling's occupants and guests, and **[ii]** common open space areas for the enjoyment of all residents within a development project. Common open space consists of active areas, with recreation facilities, and passive areas incorporating features that enhance the appearance and desirability of a development project, such as turf areas, exotic plantings, pathways, waterscape, hardscape, rockscapes, benches, gazebos, raised planters, and other unique features.

Table 6.01-4: Minimum Open Space Requirements for Multiple-Family and Mixed-Use Development Projects

Open Space Type	Zoning Districts		
	MDR-11 & MDR-18	MDR-25	HDR-45
Private Open Space	200 SF (40%)	150 SF (37.5%)	60 SF (20%)
Common Open Space	300 SF (60%)	250 SF (62.5%)	250 SF (80%)
Total Open Space	500 SF (100%)	400 SF (100%)	310 SF (100%)

(b) The ratios of "private" open space area to "common" open space area specified in Table 6.01-4 (Minimum Open Space Requirements for Multiple-Family and Mixed-Use Development Projects), above, are recommended and may be adjusted by the developer, based upon the housing market the proposed development is intended to serve, and subject to approval by the Approving Authority for the project. At a minimum, the "required total" open space for each zoning district shall be provided by all single-family residential small lot and cluster development projects, and multiple-family development projects.

(c) Off-street parking spaces, drive aisles, driveways, loading areas, or service areas, shall not be included in minimum open space calculations.

b. *Private Open Space Areas.*

(1) For small lot and cluster single-family development projects, a contiguous useable private open space area shall be provided for each dwelling at ground level, with a minimum clear horizontal dimension of 15 FT in depth by 15 FT in width (225 SF), and a minimum clear vertical dimension of 8 FT.

(2) For multiple-family dwellings, contiguous useable private open space located at the dwelling's main living level shall be provided, having a minimum contiguous clear area of 60 SF, a minimum clear horizontal dimension of 7 FT, and a minimum clear vertical dimension of 8 FT. Other open space areas located on balconies or roof decks shall have a minimum contiguous clear area of 50 SF, a minimum clear horizontal dimension of 6 FT, and a minimum clear vertical dimension of 8 FT.

(3) Private ground level open spaces located on the street side of a structure shall be screened from street public view by a decorative wall or fence, and densely planted landscaping.

(4) Private open spaces shall be permanently maintained in an orderly manner, and kept clear of weeds and refuse, debris, rubble, or any other waste.

c. *Common Active Open Space Area.*

(1) Common active open space areas containing recreation facilities shall be provided pursuant to Table 6.01-5A (Minimum Requirements for Common Recreation Amenities). For the purpose of this provision, required recreation facilities shall be categorized as follows:

(a) Major Recreation Facilities—A major recreation facility is intended to be a significant recreation node or focal point for residents, and include recreation buildings, swimming or wading pools, splash pads and water play fountains, tennis courts, childcare facilities, and other major amenities requiring significant investment and of appropriate size to serve the project residents, as determined by the City. (Note: For projects consisting of 45 or fewer dwellings, two minor recreation facilities may be provided in place of one major recreation facility.)

(b) Minor Recreation Facilities—A minor recreation facility is intended to augment the variety and availability of recreation facilities, and include tot lots for ages 2 to 5 and/or play areas/equipment for ages 5 to 12, spas or saunas, picnic and barbecue areas, cabanas and shade structures, basketball courts, volleyball courts, community gardens, and other similar amenities requiring significant investment and appropriate to serve project residents, as determined by the City.

Table 6.01-5A: Minimum Requirements for Common Recreation Amenities

Type	*No. of Dwelling Units*							
	4-10	*10-25*	*26-100*	*101-150*	*151-200*	*201-250*	*251-300*	*> 300*
Major Facilities:	0	1**	1**	1	2	2	3	One per 100 DUs
Minor Facilities:	1	0	1	2	2	3	3	One per 50 DUs

*Note: **Projects consisting of 45 or fewer dwellings may provide two minor recreation facilities in place of one major recreation facility.*

(2) Common active open space areas shall not be located within required setback areas from public or private streets.

(3) Common active open space areas shall be located a minimum of 10 FT from any habitable structures, and shall have a minimum contiguous area of 300 SF, with no horizontal dimension less than 15 FT, and no clear vertical dimension less than 8 FT.

(4) All common active open space areas shall be planted with permanent landscaping or be devoted to recreational facilities, such as swimming pools, tennis courts, tot lots, patios, or similar open space and recreational facilities.

(5) Common active open space areas are to be permanently maintained in an orderly manner.

d. *Common Active Open Space Area – Ontario Ranch.*

(1) Common active open space areas containing recreation facilities shall be provided pursuant to Table 6.01-5B (Minimum Requirements for Common Recreation Amenities – Ontario Ranch). For the purpose of this provision, required recreation facilities shall be categorized as follows:

(a) Minimum Requirements—2 acres of parkland per 1,000 people (3.806 PPU for single-family, 3.373 PPU for multiple-family), community pool (including restrooms/showers) required at >150 units, and clubhouse/amenity center per below at >200 units.

(b) Major Recreation Facilities—A major recreation facility is intended to be a significant recreation node or focal point for residents, and include recreation open lawn amphitheater (min. 100' x 150' or equivalent) or active lawn area (min. 150' x 150' or equivalent), clubhouse/amenity center with a minimum of 3 of the following amenities (multi-purpose room, kitchen facility, fitness center, child friendly amenity (indoor play area, game room, or educational center) movie room, business center/co-working spaces, library/study room, beverage area or common meeting space), community pool (min. 25' x 60' (1,500 SQ FT) or equivalent) and associated restroom/shower building, additional swimming pools (e.g., adult only, lap, children pool), splash pad or water play fountain, tennis/pickleball courts (1 tennis court = 1 amenity, 2 pickleball courts = 1 amenity), childcare facilities, dog park, SEC Utility Corridor Trail, private parkland/pocket park in excess of 2.5 AC/1,000 people, and other major amenities requiring significant investment and of appropriate size to serve project residents, as determined by the City.

(i) Larger Clubhouses with More Amenities – 2 additional amenities within the clubhouse courts towards a minor amenity.

(ii) Community Pool – Each additional 1,500 square feet added to the size of the pool shall be treated as another major amenity.

(c) Minor Recreation Facilities—A minor recreation facility is intended to augment the variety and availability of recreation facilities, and include open lawn amphitheater (min. 100' x 150' or equivalent) or active lawn area (min. 150' x 150' or equivalent), tot lots for ages 2 to 5 and/or play areas/equipment for ages 5 to 12, spas or saunas, picnic tables and barbecue areas, cabanas and shade structures, basketball courts, volleyball courts, community gardens, internal community trail(s) 13' minimum with minimum distance of ¼ mile, outdoor fitness stations, pocket parks, firepit, and other similar amenities to serve project residents, as determined by the City.

Table 6.01-5B: Minimum Requirements for Common Recreation Amenities – Ontario Ranch

Type	No. of Dwelling Units						
	<75	76-100	101-150	151-200	201-250	251-300	>301
Major Facilities:	TBD (*)	1	1	2	2	3	TBD (**)
Minor Facilities:	TBD (*)	1	2	2	3	3	TBD (**)

Note: **Amenities to be determined on a case-by-case basis during the entitlement process for the project.*
***Amenities to be determined on a case-by-case basis during the entitlement process for the project, with the idea being to allow flexibility in the amenity package to the benefit of the residents.*

e. *Common Passive Open Space Area.*

(1) Common passive open space areas shall not be located within required setback areas from public or private streets.

(2) Passive common open space areas shall be located a minimum of 5 FT from the habitable portion of any dwelling on the project site.

(3) Passive common open space areas shall have a minimum dimension of 5 FT; however, not more than 50 percent of the passive areas having a dimension less than 10 FT may be counted toward the minimum open space requirements of this Section.

F. General Provisions. The following general provisions are applicable within all residential zoning districts:

1. Single-Family Dwellings.

a. *Minimum Dwelling Width*. All traditional single-family residential dwellings units, including mobile homes constructed outside of mobile home parks, shall have a minimum overall width of 24 FT, excepting accessory detached residential structures and second dwellings.

b. *Variety of Floor Plans and Elevations.* For the development of 5 or more single-family dwellings, a variety of floor plans and building elevations shall be provided pursuant to Table 6.01-6 (Minimum Requirements for Floor Plan and Exterior Elevation Variation), below.

Table 6.01-6: Minimum Requirements for Floor Plan and Exterior Elevation Variation for Single-Family Dwellings

No. of Dwellings Proposed	*Minimum No. of Differing Floor Plans Required*	*Minimum No. of Elevations for Each Floor Plan Required*
5 to 10	2	2
11 to 25	2	3
26 to 50	3	3
51 to 75	3	4
76 to 100	4	4
> 100	Requirement for 76 to 100 dwellings, plus one additional floor plan with 4 elevations for each additional 25 units exceeding 100	

2. Roofing Materials on Sloped Roofs. Roofing materials used on sloped roofs, whether new construction or replacement roofing, shall be of clay or concrete tile, architectural grade dimensional composition shingle, or decorative metal shingle. Built-up/rock, roll-roofing, or other material shall not be permitted.

3. Temporary Structures. No temporary structure shall be located within a front or street side yard area. A temporary structure may be located within the rear or interior side yard area, provided it is screened from view by a solid 6-FT high fence or wall with appropriate view-obstructing access gate.

4. Refuse Storage Areas.

a. Within all residential zoning districts, refuse and recyclable materials shall be stored in an appropriate container, out of view from public streets and adjacent properties.

b. Any new dwelling unit or residential development project, for which a building permit has been issued, shall provide adequate, accessible, and convenient areas and facilities for the collection and storage of refuse and recyclable materials.

c. All animal keeping uses within residential zoning districts that generate a substantial amount of waste or refuse, as determined by the Ontario Municipal Utilities Company, shall provide refuse enclosures conforming to City standards.

d. New dwellings that have individual trash pick-up shall include an area for the storage of recyclable materials within a garage, or side or rear yard area. Furthermore, developers shall provide areas or systems containing recyclable materials receptacles, such as under-cabinet rollout drawers within kitchens, to make recycling more convenient and accessible to residents.

e. Single-family small lot and cluster developments, and multiple-family development projects that have not been approved by the City for individual dwelling unit pick-up of refuse and recyclable materials, shall provide trash enclosures for the storage of refuse and recyclable materials containers, as follows:

(1) The number of enclosures, and their precise locations, dimensions, and design shall be provided consistent with City standards.

(2) Trash enclosures shall be designed to contain separate containers for the collection of refuse and recyclable materials, with an adequate number of containers provided to allow for the collection of both refuse and recyclable materials generated by the development, pursuant to standards established by the Ontario Municipal Utilities Company.

(3) Trash enclosures shall meet the minimum design standards depicted in the standard drawings adopted by the City, which shall include: **[i]** a minimum 6-FT high decorative masonry wall, with appropriate view-obstructing gates for container access, **[ii]** separate pedestrian access that is designed to screen the interior of the enclosure from view from the exterior and prevent refuse dispersion, and **[iii]** a decorative overhead roof structure to protect bins containing recyclable materials from adverse environmental conditions, which might render the collected materials unusable, and screen trash bins from view of the upper floors of adjacent dwellings. Furthermore, trash enclosures shall be architecturally enhanced, and shall be consistent with the architectural design of adjacent buildings.

(4) Trash enclosure dimensions shall be of adequate size to accommodate containers consistent with the City's current methods of collection within the area in which the project is located.

(5) Signs clearly identifying all recycling and refuse collection areas, and the materials accepted for recycling shall be posted adjacent to all points of access to each trash enclosure.

(6) Trash enclosures shall be located a minimum of 10 FT from the interior project boundary/property line.

(7) Care shall be given when placing trash enclosures immediately adjacent to dwelling units; however, in no case should a trash enclosure be located within 10 FT of the livable portion of a structure.

(8) Trash enclosures shall be bordered by a minimum 5-FT wide planter and screened with landscaping on all exposed sides, excluding the side with bin access gates.

(9) Prior to the issuance of an occupancy permit, a developer or homeowners association may be required to develop a written recycling plan, which specifies the identification of targeted materials to be recycled, and methods of recycling program promotion to tenants or homeowners.

5. Stored Automobiles, Recreational Vehicles, Light Trucks, Trailers, and Other Similar Vehicles.

a. Automobiles, boats, recreational vehicles, trucks, trailers, and other similar vehicles stored within a front or street side yard area, is prohibited. For the purposes of this Section, the term "stored" means continuously parked in the same location for more than 72 hours.

b. Automobiles, boats, recreational vehicles, trucks, trailers, and other similarly used vehicles that are not stored within an enclosed structure, shall comply with the following:

(1) Vehicles shall be stored on a paved surface and screened from public view by buildings, decorative screen walls or fences, or a combination thereof.

(2) Vehicles shall only be stored on property owned by the owner of the vehicle or on property where the registered owner resides.

(3) Vehicles shall bear current vehicle registration (as required by state law).

(4) Vehicles shall not be stored in a wrecked, dismantled, or inoperative condition.

(5) Vehicles stored within side and rear yard areas shall be limited to 5 percent of the total lot area.

c. Recreational vehicles shall not be occupied or otherwise used as a living unit.

6. Landscaping.

a. *Traditional and Small Lot Single-Family Development.* The front and street side yards of lots developed with single-family dwellings shall be fully landscaped and provided with an automatic irrigation system irrigated prior to Certificate of Occupancy issuance.

b. *Maximum Allowed Area Devoted to Hardscape.* A maximum of 45 percent of the front yard of traditional single-family lots, including the street side yard area of corner lots, that is open to public view may be comprised of hardscape materials, including, but not limited to, paved porches, patios, courtyards, walkways, and driveways, areas of gravel and/or decomposed granite, and areas of artificial turf.

c. *Single-Family Cluster and Multiple-Family Development.* All areas of a development project not covered by structures, drive aisles, off-street parking facilities, or hardscape, shall be fully landscaped and provided with a permanent automatic irrigation system

prior to Certificate of Occupancy issuance, excepting private open space areas that are enclosed by a minimum 6-FT high decorative wall or fence.

7. Drive Approaches, Driveways, and Drive Aisles. Residential drive approaches, driveways, and drive aisles shall comply with the following:

a. *Drive Aisles and Driveways.*

(1) Drive aisles and driveways shall be allowed solely for the purpose of providing access to off-street parking facilities, and emergency vehicle access to a property.

(2) For lots developed with single-family dwellings:

(a) One driveway per lot may be permitted, which shall lead to a garage or carport, and shall not exceed the overall width of the garage or carport, except that vehicular access (maximum 10 FT in width, pursuant to Paragraph 6.01.010.F.6 (Landscaping)) may be provided to the side or rear yard area of lot used for vehicle storage pursuant to Paragraph 6.01.010.F.5 (Storage of Automobiles, Recreational Vehicles, Light Trucks, Trailers, and Other Similar Vehicles) of this Section; and

(b) Temporary off-street parking within a front or street side yard area shall only be allowed on a driveway leading to a garage or carport, or on an approved circular driveway constructed pursuant to Subparagraph 6.01.010.G.7.b (Circular Driveways) of this Section.

(c) Corner lots may have a rear yard access drive from a side street, subject to Planning Director and City Engineer approval. The rear yard access drive shall not exceed 12 FT in width and shall lead to a parking area that is screened by a view-obstructing wall or fence, with appropriate view-obstructing gate.

b. *Circular Driveways.* Circular driveways shall be permitted on lots developed with a single-family dwelling, which meet all of the following:

(1) The lot is located within the AR-2, RE-2, RE-4, or LDR-5 zoning district, or AG overlay zoning district, and is at least 10,000 SF in area;

(2) The property takes vehicular access from an arterial street, as identified on Exhibit M1 (Mobility Plan Map) of the Policy Plan component of The Ontario Plan, and does not front onto, or take vehicular access from, Euclid Avenue;

(3) The dwelling is setback at least 30 FT behind the front property line; and

(4) The proposed circular driveway does not exceed 10 FT in width.

c. *Maximum Drive Approach Width.*

(1) **Driveway Access for Traditional Single-Family Developments—**A drive approach on a public street shall not exceed the maximum widths prescribed by Table 6.01-7 (Maximum Single-Family Residential Drive Approach Widths), below, based upon the lot width range.

Table: 6.01-7: Maximum Single-Family Residential Drive Approach Widths

Lot Width Range	Maximum Drive Approach Width
Less than 51 FT	12 FT
51 to 80 FT	16 FT
Greater than 80 FT	20 FT

(2) Drive Aisle Access for Single-Family Cluster and Multiple-Family Developments—A drive approach providing street access to an intersecting drive aisle shall not exceed the width of the corresponding drive aisle, not to exceed 26 FT in width, unless otherwise required by the City Engineer.

d. *Drive Approaches, Driveways, and Drive Aisles Serving Developments with Multiple Dwellings.*

(1) Drive approaches serving a development project of 5 or more dwellings shall be delineated with enhanced paving treatment, such as interlocking pavers, textured and color pigmented concrete, or stamped concrete. Such treatment shall extend from the back of the drive approach to the first intersecting drive aisle or parking space.

(2) Single-family and multiple-family development projects that include dwellings configured into one or more motorcourts, shall incorporate enhanced paving treatments consisting of interlocking pavers, and textured and/or color pigmented concrete, throughout all motorcourt drives.

(3) Pedestrian pathways that cross driveways and drive aisles shall be delineated by enhanced paving treatments, such as interlocking pavers, and textured and/or color pigmented concrete.

8. Conversion of Garages. No garage shall be converted to another use unless a replacement garage is constructed on-site, which meets the minimum requirements of Division 6.03 (Off-Street Parking and Loading) of this Chapter, excepting a garage conversion to accommodate an Accessory Dwelling Units conforming to Section 5.03.010 (Accessory Dwelling Units) of this Development Code.

9. Equestrian Trails and Related Facilities. The following standards shall govern the establishment of equestrian trails and easements within the City:

a. If required by Table 6.01-1 (Traditional Single-Family Residential Development Standards) of this Section, an unobstructed 8-FT wide easement for equestrian trail purposes shall be dedicated immediately adjacent to the front property line. Furthermore, if determined necessary by the Planning Director, additional 8-FT wide equestrian trail easements may be required at the end of blocks, and along interior side, street side, or rear property lines, to create connections to adjacent public streets or equestrian trail easements. Moreover, if determined by the Planning Director that providing equestrian easements on both sides of a street is not necessary or practical, the requirement to provide equestrian trail easements may be waived.

b. Trails shall not be surfaced with hard materials such as concrete or asphalt. Preferred surface materials include wood chips, decomposed granite, and shale;

c. Fencing built at the edge of an easement shall not be over 48 inches in height; an additional inch of height shall be allowed for every 2 inches that the fence is setback from the easement. Within 4 FT of the easement, fences shall not be opaque for more than 50% of their surface area. Wooden rail and wood plank fencing are preferred, while chainlink and wrought iron fencing should be avoided. Entries to individual properties should be accentuated with hitching posts and gates;

d. Entrances to an equestrian trail from the street shall allow the free movement of pedestrians and equestrians. Vehicular access to the trail may be limited by removable bollards or a gate and should be designed to permit emergency vehicle access and occasional vehicular access by residents, as shown in Figure 6.01-4 (Equestrian Trail Step-Through Entry Design) and Figure 6.01-5 (Equestrian Trail Steel Barrier Gate Entry Design). Street crossing by pedestrians and equestrians should be facilitated at the street-trail entry by restricting on-street parking, narrowing paved widths (to minimize crossing distances), and marking the crossing with striping and signs.

10. Infill Traditional Single-Family Dwellings. Infill traditional single-family dwellings within existing residential neighborhoods are to be complementary with the character of the surrounding neighborhood in which they are proposed in terms of building height, setbacks, general architectural style, and use of exterior finish materials, and shall comply with the following standards:

a. New infill traditional single-family dwellings constructed within existing residential neighborhoods shall be integrated with existing surrounding homes to protect, enhance, and preserve the physical integrity of the existing neighborhood.

b. The area, dimensions, lot coverage, height, bulk, and scale of a proposed infill traditional single-family dwellings shall be compatible with existing residential development in the surrounding neighborhood.

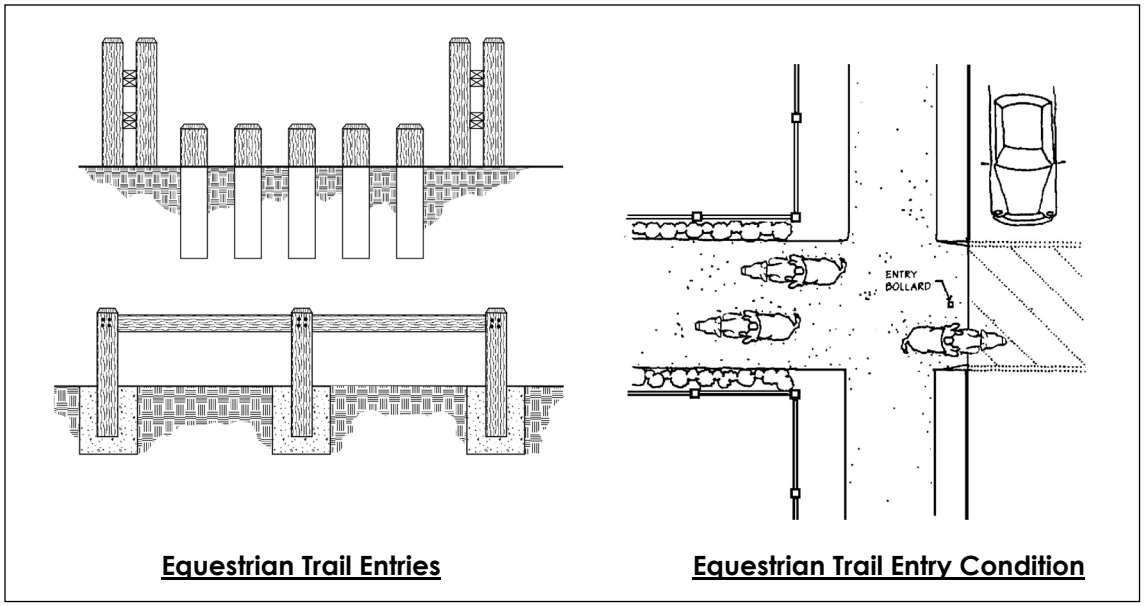


Figure 6.01-4: Equestrian Trail Step-Through Entry Design

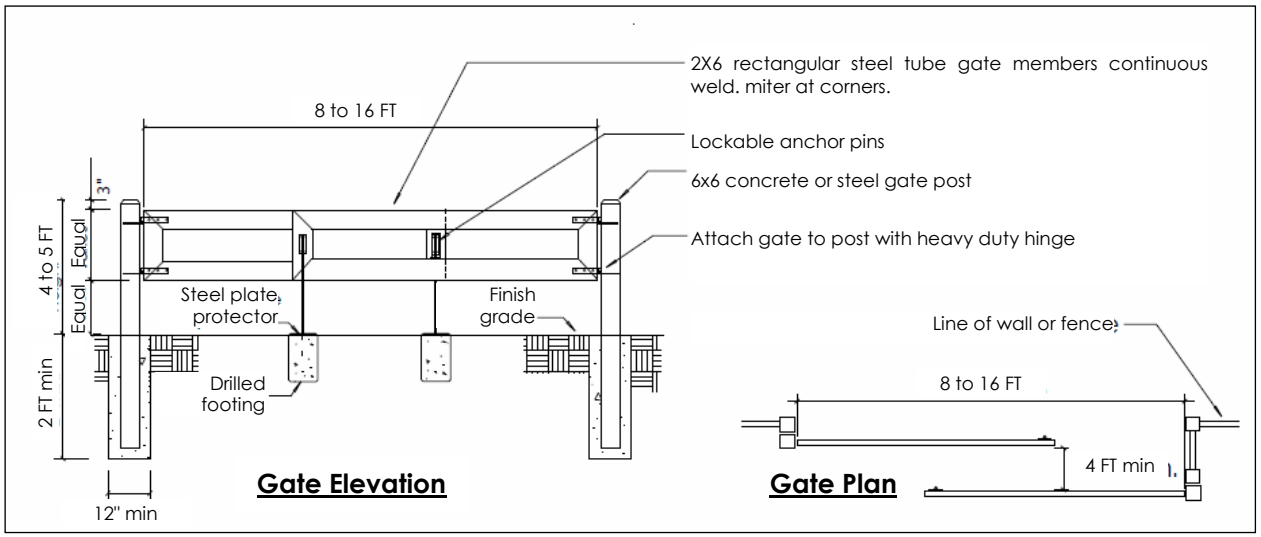


Figure 6.01-5: Equestrian Trail Steel Barrier Gate Entry Design

c. Infill traditional single-family dwellings shall be plotted on a lot in a manner consistent with the pattern of development in the surrounding residential neighborhood. The front door should be oriented toward the frontage street and any secondary entrances and side yard facing windows should be situated in such a way that the privacy of adjacent homes is not substantially impacted. Placing side yard facing windows across from side yard facing windows of adjacent houses is discouraged.

d. Garages shall be oriented consistent with garage orientations within the surrounding neighborhood. Garages shall be oriented with access off an alley on lots with alley access.

e. New street curb cuts should not be permitted on lots with alley access. If permitted, new curb cut locations should not compromise street trees, visibility, or neighborhood consistency.

f. Separation of pedestrian and vehicular circulation within the lot is encouraged. Exterior doors should not exit onto a driveway unless a porch or landing is provided.

11. Mobile Homes and Manufactured Housing on Residential Lots Not Constructed Within a Mobile Home Park. The following standards shall govern the development of mobile homes and manufactured housing on residential lots not constructed within a mobile home park:

a. Each housing unit shall meet and be certified under the standards set forth in the National Manufactured Housing Construction and Safety Act (42USC5401 et. seq.), as amended, at the time of any application for the placement of a mobile home or a manufactured housing unit;

b. The mobile home or manufactured housing unit shall be placed on a permanent foundation system;

c. The mobile home is to be covered with exterior finish materials similar in appearance to new, conventionally constructed dwellings within area surrounding the project site;

d. The exterior finish material shall extend to the ground. If a solid concrete or masonry perimeter foundation is used, the exterior finish material need not extend below the top of the foundation. Alternative skirting materials commonly found on conventionally built residential structures shall be considered compatible;

e. The roofing material shall be of a type commonly found on conventionally built residential structures located within the area surrounding the project site;

f. Electricity, water and natural gas service, and sewer connections are to be made in a permanent manner, as typically required for permanent buildings. Gas shut-off valves, meters, and regulators shall not be located beneath a mobile home or manufactured housing structure; and

g. An attached or detached garage, which is similar to conventionally built residential structures within the area surrounding the project site, shall be provided for each mobile home or manufactured housing unit. The roof material and exterior wall finishes of the garage or carport shall exactly match the mobile home or manufactured housing unit.

12. Gutters, Vents, and Downspouts. Gutters, vents, and downspouts shall be concealed from public view to the extent possible. Exposed gutters and downspouts, where necessary, shall be colored to match the fascia or wall material to which they are attached. Roof vents shall be colored to match the roof material or the dominant trim color of the structure, as appropriate.

13. Swimming Pools, Hot Tubs, Spas, Ponds, and Decorative Bodies of Water. Swimming pools, hot tubs, spas, ponds, and decorative bodies of water shall be permitted ancillary to those land uses allowed within residential zoning districts pursuant Table 5.02-1 (Land Use Matrix), subject to the following regulations governing their placement, construction, and security:

a. Swimming pools, hot tubs, spas, ponds, and decorative bodies of water that are 1.5 FT or more in depth, shall be secured by a decorative fence or wall pursuant to the requirements of Section 6.02.020.A.3 (Ponds and Swimming Pools) of this Development Code.

b. All gates or doors within the fence or wall shall be kept securely closed at all times when not in use.

c. A clear path, minimum of 3 FT wide, shall be provided around the entire perimeter of a swimming pool, hot tub, spa, pond, or decorative body of water to permit emergency access. For properties containing 2 or fewer dwellings, a clear path shall be provided around at least 50 percent of said perimeter.

d. Swimming pools, hot tubs, spas, ponds, and decorative bodies of water that are 1.5 FT or more in depth shall not be constructed within a front yard area and shall be setback a minimum of 3 FT from any side or rear property line.

e. Diving boards, slides, waterfalls, fountains, decorative rockscapes, and other similar appurtenances shall be setback a minimum of 5 FT from side and rear property lines, except that appurtenances that exceed 6 FT in height, measured from adjacent grade to the highest point of the structure, shall comply with the minimum building setback requirements of the applicable zoning district.

f. Swimming pools, hot tubs, spas, ponds, and decorative bodies of water shall comply with all applicable provisions of the City's building code.

14. Lighting. Exterior light fixtures shall be designed and/or located to eliminate adverse impacts of light spillover on to adjacent properties and promote safe vehicular and pedestrian access.

a. Exterior light fixtures shall prevent glare and light spillover on to adjacent properties, buildings, and public and private streets and roadways.

b. Parking lot lighting shall comply with Section 6.03.050 (Parking Lot Lighting) of this Development Code, and OMC Section 4-11.09(j).

c. Exterior light fixtures should use color-correct luminaires such as halogen, metal halide, or LED, to ensure true-color at night, visual comfort for pedestrians, and energy efficiency.

d. Pedestrian-level pole-mounted lighting, bollard lighting, ground-mounted lighting, or other low, glare-controlled fixtures mounted on buildings or walls, shall be used to light pedestrian walkways. Pole-mounted, building-mounted, or tree-mounted lighting fixtures shall be no more than 12 FT in height. Bollard-type lighting shall be no more than 4 FT in height.

e. Steps, ramps, and seatwalls shall be illuminated with built-in light fixtures, were possible.

15. Building Color. Building exteriors shall incorporate colors that are of compatible hues and intensities. Color schemes shall tie building elements together, relate separate buildings within the same development, and enhance the architectural form of a building.

a. Exterior building colors shall be low-reflecting and subtle. Furthermore, overly intense, overly bright, or fluorescent or Day-Glo colors, shall not be used on a building exterior, as determined by the Planning Director.

b. The exterior building color of a new development project shall be reviewed and approved in conjunction with the approval of the structure by the Approving Authority. Development projects consisting of multiple buildings shall incorporate colors that are coordinated between structures, utilizing compatible hues and intensities. The final review and approval of paint colors, utilizing a color test, may be required by the City, prior to painting a building.

c. All building mechanical equipment and appurtenances, including, but not limited to, meters, flues, vents, gutters, and utilities, shall match or complement the permanent color of the surface from which they are attached or project.

16. Equipment Screening.

a. *Single-Family Dwellings*. The placement of new exterior roof-mounted mechanical, heating and air conditioning equipment is prohibited; however, the replacement of existing permitted roof mounted equipment shall be permitted provided the replacement equipment does not exceed the size, height, and location of the existing equipment.

b. *Multiple-Family Dwellings*. The placement of exterior roof-mounted mechanical, heating and air conditioning equipment, and all appurtenances thereto, shall be completely screened from public view by parapet walls or roof screens that are architecturally treated so as to be consistent with the building architecture.

c. All ground-mounted utility equipment and structures, such as tanks, transformers, HVAC equipment, and backflow prevention devices, shall be located out of view from a public street, or adequately screened by landscaping and/or decorative low garden walls.

G. Small Lot Infill Subdivisions.

1. Purpose. The purpose of this Subsection is to regulate the development and subdivision of existing lots within certain residential and mixed use zoning districts, with infill small lots as an alternative form of fee simple homeownership.

2. Applicability. Small Lot Infill Subdivisions are permitted within residential and mixed use zoning districts specified in Table 5.02-1 (Land Use Matrix) of this Development Code.

3. Development Standards.

(a) *Site Development Standards.* A Small Lot Infill Single-Family Subdivision shall comply with the following site development standards:

(1) Maximum Number of Dwelling Units. A Small Lot Infill Single-Family Subdivision shall contain no more than 45 dwelling units.

(2) Density Range. A Small Lot Infill Single-Family Subdivisions shall comply with the density requirements of the underlying zoning district in which it is located.

(3) Lot Area and Dimension. Each individual lot established by a Small Lot Infill Single-Family Subdivision shall have a minimum area of 480 SF and a minimum lot width of 16 FT.

(4) Lot Coverage and Open Space.

(a) There shall be a maximum lot coverage of 80 percent for each individual lot established by a Small Lot Infill Subdivision.

(b) As an alternative to Subdivision (a), above, a Small Lot Infill Subdivision may provide common open space amenities within a common open space easement, which is equal to at least 20 percent of the total subdivision area, and having no horizontal dimension less than 5 FT Furthermore, each dwelling shall be provided a minimum of 50 SF of private open space (patios and/or balconies) having no horizontal dimension less than 5 FT.

(5) Lot Access. Access to a lot containing a dwelling unit and its required parking shall be by way of a public or private street, alley, or access easement.

(6) Off-Street Parking. Small Lot Infill Subdivisions shall provide off-street parking facilities pursuant to the requirements of Division 6.03 (Off-Street Parking and Loading) of this Development Code, except as follows:

(a) Off-street parking shall be provided for each dwelling at the minimum rate of 1.0 parking space per bedroom, plus guest/visitor parking at the minimum rate of 0.2 parking space per bedroom. A minimum of one space shall be provided in a fully enclosed garage.

(b) There shall be no limitations on the use of tandem parking spaces, except that tandem parking shall be no more than 2 parking spaces in depth and shall not be used for guest/visitor parking.

(7) **Fences, Walls, and Obstructions.** Refer to Section 6.02.020 (Design Standards for Residential Zoning Districts).

(8) **Landscaping.** Refer to Division 6.05 (Landscaping) and Paragraph 6.01.010.G.6 (Landscaping).

(9) ***Historic Preservation.*** Certain portions of residential and mixed use zoning districts are identified as historic or potentially historic and are listed on the City's Historic Resources Eligibility List. Development regulations set forth in Division 7.01 (Historic Preservation), and application processing and permitting regulations set forth in Division 4.02 (Discretionary Permits and Actions) and of this Development Code, shall apply in these instances.

(10) **Security Standards.** Refer to Ontario Municipal Code Title 4, Chapter 11 (Security Standards for Buildings).

(11) **Noise.** Habitable structures shall be designed and constructed to mitigate noise levels from exterior sources. Refer to OMC, Tile 5 (Public Welfare, Morals, and Conduct), Chapter 29 (Noise).

(12) **Airport Safety Zones.** Properties within the Airport Influence Area (AIA) established by the Ontario International Airport Land Use Compatibility Plan (ALUCP) shall be subject to the requirements and standards of the ALUCP.

(b) *Building Development Standards.*

(1) **Minimum Setbacks.**

(a) No front, side, or rear yard setback is required between interior lots within an approved Small Lot Infill Single-Family Subdivision; however, a minimum 5-FT setback shall be provided where a lot abuts a lot that is not created pursuant to this Section.

(b) The front yard setback required by the underlying zoning district shall apply to the front lot line of a Small Lot Infill Subdivision that abuts a public street.

(c) Any Small Lot Infill Subdivision **sharing** a property line with a LDR-5 (Low Density Residential - 2.1 to 5.0 DUs/Ac) or higher density residentially zoned property, shall provide front, side, and rear yard setbacks along the subdivision perimeter that are consistent with the requirements of the underlying residential zoning district.

(d) Any Small Lot Infill Single-Family Subdivision **not sharing** a property line with a LDR-5 (Low Density Residential - 2.1 to 5.0 DUs/Ac) or higher density residentially zoned property shall provide a minimum 5-FT setback along the side lot line of the subdivision perimeter and a minimum 10-FT setback along the rear lot line of the subdivision perimeter.

(2) **Building Separations.** There shall be a minimum 6-FT separation between buildings, except that a minimum 10-FT separation shall be provided between the front face (contains the primary entry) of a Small Lot Home and the adjacent building wall of a neighboring Small Lot Home. Chimneys may extend up to 2 FT into the minimum building separation area.

(3) **Maximum Height.** Within a Small Lot Infill Subdivision, the maximum allowed building height is 40 FT.

(4) **Driveway Length.** Straight-in driveways to garages shall have a minimum length of 18 FT, measured from the right-of way of a public or private street, or from the edge of a private drive. No driveways shall be more than 5 FT in length if parking is not provided in front of a garage.

4. Building Design.

(a) *Dwelling Orientation.*

(1) Small Lot Dwelling Units that abut a public or private street shall orient the primary entryway (front door) toward the street. Where there is a physical site constraint, provide a clearly identifiable pedestrian entry to the site from the street.

(2) Small Lot Dwelling Units located in the interior of the subdivision shall orient the primary entryway toward, and be visible from, a pedestrian pathway that is connected to a public or private street.

(3) Small Lot Dwelling Units that abut an alley shall orient the primary entryway toward the alley or shall be connected to a pedestrian pathway that leads directly to a public or private street.

(b) *Small Lot Dwelling Primary Unit Entries.*

(1) All Small Lot Dwelling Units shall have a primary entry. All primary entries shall be provided with the address or unit identification, ornamental low-level lighting to illuminate the entry area, and a porch or landing.

(2) All primary entries shall incorporate all of the following elements:

(a) The entry shall be recessed at least 3 FT behind the building façade to create a covered porch or landing area.

(b) The entry shall be designed with an overhead projection of at least 12 inches (awning, canopy, roof, or other design features) in depth, which distinguish the entry area from the rest of the building façade.

(c) The entry shall be clearly marked with a side lite window panel, adjacent window, or a door with a window.

(d) The entry porch or landing area shall be raised at least one stair step (6-inch riser) above the pedestrian pathway, except as otherwise required by the Building Code, Americans with Disabilities Act, or Universal Design Standards.

(e) The entry porch or landing area shall be enhanced with decorative paving, texture, pattern, or color that is differentiated from the pedestrian pathway.

(c) *Façade Articulation*. Façades facing a public or private street, the project perimeter, and all portions of exterior building elevations located greater than 7 FT from an adjacent Small Lot Dwelling Unit, shall be treated with an equal level of detail and articulation, and shall incorporate all of the following façade articulation techniques:

(1) Change in exterior building materials to include at least two high-quality building façade materials that accentuate or correspond to variations in building massing. Building materials may include, but are not limited to wood, glass, brick, metal spandrel, cement board siding, tile, or other material acceptable to the Approving Authority.

(2) Porticos, awnings, terraces, balconies, eyebrows, or trellises of at least 12 inches in depth that provide variations in the building plane.

(3) Window treatments that are recessed behind the building façade a minimum of 4 inches. Windows or doors that are flush with the plane of the building (rather than recessed at least 4 inches) will not qualify as facade articulation.

(4) A break in the façade plane of at least 8 inches in depth, which is applied to at least 10 vertical FT of the facade.

(5) Other additional architectural enhancements that create a human scale to the building. Examples include handrails, fixed planters, and ornamental details such as lighting, molding, tiles, or other similar design elements acceptable to the Approving Authority.

(d) *Varied Roofline*. Any Small Lot Dwelling Unit façade exceeding two stories in height, which faces a public or private street, shall be provided with an articulated roofline incorporating at least two of the following design elements:

(1) A roof with a slope equal to or greater than 3 inches of rise for every 12 inches of run, including but not limited to a sloped or curved roofline at the top of the dwelling.

(2) An open deck having a minimum clear area of 6 FT in depth and 8 FT in width.

(3) A flat roof with a minimum of 2 FT vertical height difference for a minimum of 10 horizontal FT along the roofline of each building façade.

(4) A vertical break in the façade plane of at least 1.5 FT in depth, which extends up and through the roofline.

(5) Any form of roofline variation incorporating a change or break in roof plane, such as horizontal recesses, incorporation of dormers, or other similar design elements acceptable to the Approving Authority.

(e) *Roof Decks.* All roof decks shall be stepped back a minimum of 5 FT from the roof edge to prevent direct views of abutting residential neighbors, except that roof decks facing a street are not required to be stepped back.

(f) *Building Massing Variation.*

(1) Small Lot Dwelling Units shall be grouped into clusters to avoid long spans of building wall, not to exceed six dwelling units in a single continuous row or 180 linear FT, whichever is less. Clusters of Small Lot Dwelling Units shall be separated with a building gap of at least 6 FT, which shall be treated with a combination of landscaping, open space, common walkways, or driveways.

(2) Small Lot Dwelling Units in a single row shall provide a horizontal change in plane in the building façade of at least 1.5 feet for every 3 dwelling units, or every 90 linear FT, whichever is less. The Approving Authority may approve alternate exterior building designs that achieve the City's desired variation in building massing.

(3) The exterior design of adjoining Small Lot Dwelling Units shall be unique, so as to provide architectural variety within a subdivision. A Small Lot Infill Subdivision containing more than 5 dwelling units in a single row shall provide at least two variations in building design, such as changes in dwelling orientation, primary entryways, fenestration patterns, façade articulation, and rooflines. A Small Lot development of 10 or more dwelling units shall provide at least 3 variations in exterior building design.

5. Pedestrian Connectivity and Access.

(a) *Pedestrian Pathways.*

(1) Pedestrian pathways, minimum 3 FT in width, shall be provided from the public street to all primary entryways and common areas.

(2) A pedestrian pathway located within or parallel to a common driveway shall be constructed and/or treated with a change of material, finish, pattern, or paving that distinguishes the pathway from vehicular traffic.

(3) Small Lot Infill Subdivisions shall provide pedestrian and bicycle access to surrounding neighborhood streets.

(b) *Walls and Fences.*

(1) Walls and fences abutting a public or private street or alley, or common open space area, shall be decorative. Walls shall be finished with a decorative masonry material, such as brick, natural or cultured stone, or stucco, or be constructed of decorative concrete block, such as split-face, slump, burnished, or shot block. Fences shall be constructed of ornamental tube steel or iron.

(2) Garden walls and fences, maximum 3 FT in height, that abut a public or private street shall provide a point of entry into each individual lot that abuts the street.

(c) *Landscaping, Common Open Space Areas, and Amenities.*

(1) All areas of a Small Lot Infill Subdivision not used for buildings, parking areas, driveways, pedestrian pathways, utilities, or common open space areas shall be automatically irrigated, and fully landscaped and maintained.

(2) Required common open space areas shall have a minimum area of 300 SF, with no horizontal dimension less than 15 FT, measured perpendicular from any point on each of the boundaries of the open space area. Driveways, parking spaces, or pedestrian pathways cannot be counted toward the open space requirement.

(3) Required common open space areas shall be open to the sky and have no structures that project into the common open space area, excepting structures provided as a common open space enhancement pursuant to Subparagraph G.3(c)(5), below.

(4) Common open space areas shall be located at grade level, contiguous or connected, and readily accessible to all residents of the Small Lot Infill Subdivision.

(5) Common open space areas shall be multi-functional and designed to accommodate a range of passive, active, or social uses, and may include enhancements such as activity lawns, swimming pools, spas, picnic tables, benches, children's play areas, ball courts, barbecue areas, sitting areas, decorative bike racks, and/or dog washing stations. Enhanced common side and rear yards that meet the minimum area and dimension specified in Subparagraph G.3(c)(2), above, may be counted toward common open space requirements.

(6) All yards of a subdivision abutting the right-of-way shall be improved with landscaping (combination of groundcover, shrubs, and trees) and amenities. Amenities may include decorative fencing, uncovered patios, enhanced pedestrian pathways, garden walls, seating areas, and/or decorative bike racks.

6. Small Lot Infill Subdivisions with Existing Dwellings. Small Lot Infill Subdivisions incorporating existing dwelling units, such as, but not limited to, multiple detached single-family structures or historic detached bungalow courts on a single lot, may be subdivided. The conversion of an existing structure to a Small Lot Infill Subdivision shall be required to comply with the following design standards:

(a) *Common Access Driveway.* Existing common access driveways, pedestrian pathways, and central common open space areas shall be maintained and not reduced in size.

(b) *Pedestrian Pathway.* Pedestrian pathways, minimum 3 FT in width, shall be provided from the public street to all primary entryways and common areas, such as centralized trash enclosures, guest parking, and open space easements, etc. If narrower pathways exist, they may be maintained in the same footprint and area and shall not be further reduced in width.

(c) *Existing Structures.* New dwelling unit construction or building additions affecting designated or identified historic structures shall be in conformance with the Secretary of the Interior's Standards for Rehabilitation.

(d) *New Dwelling.* All new dwelling units shall meet all applicable design standards in Paragraphs G.3 (Development Standards) and G.4 (Building Design) of this Subsection.

(e) *Landscaping.* All areas of the Small Lot Infill Subdivision not used for buildings, parking areas, driveways, pedestrian pathways, utilities, or amenity areas shall be fully landscaped and maintained, and automatically irrigated.

H. Density Bonus and Other Incentives.

1. Purpose. The purpose of these provisions is to establish a process whereby the City may provide a density bonus and other incentives to a developer agreeing or proposing to produce affordable housing within the City. The density bonus and incentives allowed by these regulations are used by the City as a means of meeting its commitment to encouraging the provision of affordable housing to all economic groups living within the City.

2. Applicability. A developer may request a density bonus and other incentives as prescribed in GC Section 65915, et seq. These density bonus provisions shall apply to single-family and multiple-family residential development projects, and mixed-use development projects, which contain a minimum of 5 dwelling units, excluding dwellings units granted as a density bonus.

3. Procedure.

a. A request for a density bonus and other incentives shall be filed, processed, and acted upon following the procedures for Development Agreements contained in Section 4.01.015 (Development Agreements) of this Development Code, and shall require the approval and adoption of a Development Agreement and a Density Bonus Agreement for its implementation. The Density Bonus Agreement shall be filed, processed, and acted upon following the procedures for Development Agreements.

b. A request for a density bonus, in and of itself, shall not require a General Plan Amendment, Zone Change, Development Agreement, or other discretionary approval and shall be filed, processed, and acted upon following the procedures for Ministerial (Administrative) Permits and Decisions.

4. Findings and Decision. In considering a proposed density bonus and other incentives, the Approving Authority shall consider and clearly establish that the density bonus and other incentives are consistent with the Vision, Policy Plan (General Plan), and City Council Priorities components of The Ontario Plan, and any applicable specific plans, giving reasons as to how the proposed density bonus and other incentives are consistent. Furthermore, the Approving Authority shall grant the requested concession or incentive, unless one or more of the following findings is established, based upon substantial evidence:

a. The concession or incentive is not required in order to provide for affordable housing costs, as defined in HSC Section 50052.5, or for rents for the targeted units to be set as specified in GC Section 659159(c).

b. The concession or incentive would have a specific adverse impact, as defined in GC Section 65589.5(d)(2), upon public health and safety or the physical environment, or on any real property that is listed in the California Register of Historical Resources and for which there is no feasible method to satisfactorily mitigate or avoid the specific adverse impact without rendering the development unaffordable to low- and moderate-income households.

c. The concession or incentive would be contrary to state or federal law.

I. Residential Design Guidelines.

1. The City Council adopted Residential Design Guidelines, included as Reference "D" of this Development Code, applicable to all residential zoning districts, which are intended as a reference to assist the designer in understanding the City's goals and objectives for residential development. The guidelines compliment the mandatory residential development regulations

contained in this Section, by providing examples of potential design solutions, and by providing design interpretations of the various mandatory regulations contained herein.

2. The design guidelines authorized herein shall be enforceable in the same manner and to the same extent as any other applicable requirement of this Development Code.

6.01.015: Commercial Zoning Districts

A. **Purpose.** The purpose of the provisions of this Section is to ensure that development within commercial zoning districts of the City will contribute toward an urban environment of stable, desirable character; which is compatible with existing and future development; and is consistent with the goals and policies of the Vision, Policy Plan (General Plan), and City Council Priorities components of The Ontario Plan. These regulations are further established to:

1. Promote the construction of well-designed professional office buildings.

2. Reserve certain areas of the City, consistent with the Policy Plan (General Plan) component of The Ontario Plan, allowing the establishment of a full range of retail stores, business and professional offices, personal and business service establishments, transportation related service establishments, and certain wholesale establishments, which are scaled to meet the needs of City neighborhood dwellers, residents of the City as a whole, residents of the nearby region and visitors.

3. Establish appropriate standards for the siting of neighborhood convenience retail stores, helping foster neighborhood cohesion, and reducing the need for vehicular traffic.

4. Encourage the construction of attractive and functional community shopping centers at strategic locations throughout the City, consistent with the Policy Plan (General Plan) component of The Ontario Plan.

5. Ensure adequate space on commercial lots to meet the needs of commercial development, including on-site parking, loading, and landscaping.

6. Provide a strong economic and financial base, and to increase employment opportunities for City residents and those of the surrounding area.

7. Ensure a high quality of exterior appearance for commercial uses and structures is maintained in harmony with the visual character of the area in which they are located, and at the same time, minimize the impact of uses and structures on surrounding residential neighborhoods.

8. Provide specific design guidelines that will result in well-designed and high quality commercial development projects.

B. **Applicability.** The standards and guidelines established by this Section shall apply to each of the City's commercial zoning districts. Furthermore, the provisions of this Section shall apply to all commercial land subdivisions and any new commercial construction, addition, remodel, or reallocation requiring a building permit or other similar entitlement by the City.

C. **Commercial Zoning District Development Standards.** Development within commercial zoning districts shall comply with the requirements of Table 6.01-8 (Commercial Zoning District

Development Standards), below, which specifies standards for the development of structures within the CS, CN, CC, CR, CCS, OL, and OH zoning districts.

Table 6.01-8: Commercial Zoning District Development Standards

Requirements	Commercial Zoning Districts							Additional Regulations
	CS	CN	CC	CR	CCS[6]	OL	OH	
A SITE DEVELOPMENT STANDARDS								
1. Minimum Lot Size	10,000 SF				20,000 SF	7,200 SF		Note 1
2. Maximum Floor Area Ratio (FAR)	0.4				1.0	0.75		Note 5
3. Minimum Lot Dimensions								
a. Lot Width	100 FT					60 FT		Note 1
b. Lot Depth	100 FT							Note 1
4. Minimum Landscape Coverage	Refer to Division 6.05 (Landscaping) landscape standards. Also refer to Paragraph 6.01.010.G.6.c (Single-Family Cluster and Multiple-Family Development) for additional standards addressing multiple-family development within commercial zoning districts.							
a. Interior Lots	15%		10%			15%		Notes 2 and 3
b. Corner Lots	18%		13%			18%		Notes 2 and 3
c. Off-Street Parking Areas	7%							Section 6.05.040.D (Landscaping of Off-Street Parking Facilities)
5. Minimum Parking Space and Drive Aisle Separations								
a. Parking Space or Drive Aisle to Street Property Line								
(1) Freeway	20 FT							
(2) Arterial Street	20 FT				25 FT	20 FT		
(3) Collector and Local Street	20 FT				15 FT	10 FT		
b. Parking Space or Drive Aisle to Interior Property Line	10 FT	5 FT						
Exception: Property line common to a residential zoning district	10 FT (area shall be densely landscaped)							
c. Parking Space or Drive Aisle to Buildings, Walls, and Fences	5 FT							Note 4
6. Walls, Fences and Obstructions	Refer to Section 6.02.025 (Design Standards for Nonresidential Zoning Districts).							
7. Off Street Parking	Refer to Division 6.03 (Off-Street Parking and Loading).							
8. Property Appearance and Maintenance	Refer to Division 6.10 (Property Appearance and Maintenance).							

Table 6.01-8: Commercial Zoning District Development Standards

Requirements	Commercial Zoning Districts							Additional Regulations
	CS	CN	CC	CR	CCS[6]	OL	OH	
9. Historic Preservation	Certain portions of commercial zoning districts are identified as historic or potentially historic and are listed on the City's Historic Resources Eligibility List. Development regulations set forth in Division 7.01 (Historic Preservation), and application processing and permitting regulations set forth in Division 4.02 (Discretionary Permits and Actions) and of this Development Code, shall apply in these instances.							
10. Signs	Refer to Division 8.1 (Sign Regulations).							
11. Security Standards	Refer to Ontario Municipal Code Title 4, Chapter 11 (Security Standards for Buildings).							
12. Noise	Buildings shall be designed and constructed to mitigate noise levels from exterior sources. Refer to OMC, Tile 5 (Public Welfare, Morals, and Conduct), Chapter 29 (Noise).							
13. Airport Safety Zones	Properties within the Airport Influence Area (AIA) established by the LA/Ontario International Airport Land Use Compatibility Plan (ALUCP) shall be subject to the requirements and standards of the ALUCP.							
B BUILDING DEVELOPMENT STANDARDS								
1. Minimum Street Setback								
a. From Freeway Property Line	20 FT							
b. From Arterial Street Property Line	20 FT				25 FT	20 FT		
c. From Collector and Local Street Property Line	20 FT				15 FT	10 FT		
2. Minimum Interior Property Line Setback	10 FT	5 FT	0 FT			5 FT	0 FT	
Exception: Setback at a property line common to a residential zoning district	15 FT		20 FT			15 FT		
3. Maximum Height	35 FT		55 FT			35 FT	65 FT	
Exception: Project contains properties having one or more property lines common with, or across the street from, a residential zoning district	Same as the adjacent residential zoning district. This exception shall not apply to development projects within the CIV (Civic) zoning district that are subject to the requirements of the OH zoning district.							
4. Minimum Setback from Major Pipelines (to habitable structures)	50 FT							Note 5

Notes:

1. *There is no minimum lot area or dimension for common interest subdivisions established pursuant to Section 6.08.010 (Common Interest Subdivisions) of this Development Code.*
2. *Landscaped areas with a minimum dimension of 5 FT or more shall contribute toward the "minimum landscape coverage" calculation.*
3. *The "minimum landscape coverage" calculation for interior and corner lots shall exclude all landscaped areas located within public rights-of-way.*

4. *The minimum separation area between a building, wall or fence, and a parking space or drive aisle, shall be fully landscaped. The separation area may include pedestrian walkways, as necessary; however, a minimum 3-FT wide planter area shall be maintained between a building wall and a pedestrian walkway. The minimum separation dimension does not include any area devoted to vehicle overhang.*

5. *Includes major high pressure pipelines for fuel oil, gasoline, and diesel and aviation fuels within the City. Existing pipelines include:*

   a. *Two parallel pipelines (a 16-inch and a 20-inch) that enter the City at Benson Avenue, traveling parallel to the northerly side of the Southern Pacific right-of-way to Ontario International Airport, then parallel to the southerly side of the Southern Pacific right-of-way, then parallel to the northerly side of the right-of-way beyond Ontario International Airport, then exiting the City at Etiwanda Avenue; and*

   b. *Two parallel pipelines that traverse the easterly portion of the City, entering the City at the southerly portion of Milliken Avenue, then traveling north under Milliken Avenue to Inland Empire Boulevard, then east to Rochester Avenue, then north to the City Limits.*

6. *Development standards applicable to projects within the CCS (Convention Center Support Commercial) zoning district within the Ontario Sports Empire may be subject to the Minor Adjustments/Alterations process under Section 4.02.020(C) of this Development Code.*

D. Exceptions to Development Standards.

1. Building Height.

a. *Aerials and Antennas, Chimneys, Cupolas, Elevator Penthouses, Flagpoles, Monuments, Parapet Walls, Spires, Towers, Water Tanks, and Other Similar Structures*. Aerials and antennas, chimneys, cupolas, elevator penthouses, flagpoles, monuments, parapet walls, spires, towers, water tanks, and other similar structures may be erected to a height of up to 25 percent above the prescribed height limit of the base zoning district.

b. *Amateur (HAM) Radio Antennas*. HAM radio antennas may exceed the maximum prescribed height limit of a zoning district by a maximum of 10 FT. The Zoning Administrator, however, may allow HAM radio antennas to exceed this height limitation if it is necessary to accommodate amateur radio service communications. A HAM radio antenna that exceeds the maximum prescribed height limit of the zoning district in which it is located shall not exceed the minimum height and dimensions necessary to accommodate amateur radio service communications.

c. *Wireless Telecommunication Facilities*. Wireless telecommunication facilities shall comply with Section 5.03.420 (Wireless Telecommunications Facilities) of this Development Code.

2. Encroachments into Required Setback Areas.

a. *Balconies.* Balconies may extend into a required street or interior property line setback area a maximum of 50 percent of the required setback, not to exceed 4 FT.

b. *Cornices, Eaves, Canopies, Decorative Wall Elements, and Similar Architectural Features*. Cornices, eaves, canopies, decorative wall elements, and similar architectural features may extend into a required street or interior property line setback area a maximum of 50 percent of the required setback, not to exceed 4 FT.

c. *Signs*. Signs and advertising structures may encroach into a required front setback area, street side setback area, or rear setback area of a through-lot, pursuant to Division 8.1 (Sign Regulations) of this Development Code.

d. *Walls, Fences, and Obstructions.* Walls, fences, and obstructions may be permitted within required setback areas pursuant to the provisions of Division 6.02 (Fences, Walls, and Obstructions) of this Chapter.

E. General Provisions.

1. Building Setback Areas Adjoining Streets. Except as otherwise specifically provided by this Development Code, required setback areas adjoining streets shall only be used for the placement of landscaping and irrigation installed pursuant to Division 6.05 (Landscaping), vehicular and pedestrian accesses, off-street parking and vehicular circulation, and site lighting pursuant to Division 6.03 (Off-Street Parking and Loading), walls and fences installed pursuant to Division 6.02 (Walls, Fences, and Obstructions), and signs installed pursuant to Division 8.1 (Sign Regulations) of this Development Code.

2. Location of Off-Street Parking Lots on Properties that Front or Have Direct Access to Euclid Avenue. Proposed off-street parking lots on properties with Euclid Avenue frontage, or having direct access to Euclid Avenue, shall be located at the side or rear of the buildings they serve, excepting shared off-street parking lots serving shopping centers. This provision shall not preclude the City approval of access driveways to parking lots on properties with Euclid Avenue frontage or having direct access to Euclid Avenue.

3. Parking Space and Drive Aisle Setback Areas. Parking space and drive aisle setback areas required pursuant to Table 6.01-7 (Commercial Zoning District Development Standards) of this Division shall only be used for landscaping and irrigation installed pursuant to Division 6.05 (Landscaping), walls and fences installed pursuant to Division 6.02 (Walls, Fences, and Obstructions), and signs installed pursuant to Division 8.1 (Sign Regulations) of this Development Code.

4. Compatibility with Existing Surrounding Development. New buildings shall respect and enhance the qualities and features of the existing neighborhood or area in which they are built. In-fill development projects within existing developed areas that have an established character shall be compatible with, or complement, the established architectural character of the area in terms of **[i]** consistency of rooflines, materials, and colors; **[ii]** similar window and door patterns; and **[iii]** similar decorative elements.

5. Compatibility within a Complex or Center. Development projects consisting of multiple buildings within a complex or center shall be designed as a distinct place or district, establishing a cohesive identity for the development, which differentiates it from other commercial development projects within the area.

6. 360-Degree Architecture. Buildings shall not have the appearance of a false facade attached to the front of a uniform building shell. A building shall be designed to ensure that it's massing and proportion, along with its colors and architectural detailing, are consistent on all building walls, giving a four-sided (360-degree) appearance.

7. Corporate Architecture. A building within a complex or center, or an in-fill building within a developed area that has an established character, shall not be dominated by corporate or trademark architectural details, or building forms intended to serve as signing and marketing elements.

a. Individual corporate image, trademark, or design elements and colors intended to market the occupant of a building shall be incorporated only as secondary design elements, and not as dominant features of the building. These secondary design elements shall be compatible with the surrounding development and shall not define the character or style of the building or development.

b. The City hereby reserves the right to require significant departures from "corporate architecture," which is proposed for the purpose of marketing or branding the occupant of a structure, when such architectural features are determined by the Approving Authority, to dominate the established architectural theme or character of a complex or center, or that of a developed area that has an established architectural character.

8. Building Materials. Building exteriors shall be finished with attractive and durable materials, which are of high quality and require minimal maintenance.

a. *Acceptable Exterior Building Finishes.* Exterior building finishes shall be classified according to their visual weight and are listed in Table 6.01-9 (Acceptable Exterior Building Finishes), below. The list of finishes is not all-inclusive but is intended to describe the types of finishes applicable to each weighted category.

Table 6.01-9: Acceptable Exterior Building Finishes

Heavy Materials	*Intermediate Materials*	*Light Materials*
Natural Stone	Stucco	Natural Wood
Integrally-Colored Decorative Masonry Block	Exterior Insulation and Finishing System (EIFS)	Cement Board
Brick	Smooth Textured Tilt-Up or Precast Concrete Panels	Synthetic Wood
Cast and Synthetic Stone		Architectural Metal
Richly Textured Tilt-Up or Precast Concrete Panels		Glass Curtain Wall

b. *Hierarchy of Materials.*

(1) **Heavy Materials**—Heavy materials shall be principally located: (a) at the base of the structure, as a foundation material that visually carries the weight of the structure; and/or (b) on significant architectural elements of a structure, to define those elements or suggest that the building has been built and added to, over time. Generally, heavy materials comprise the foundation (most visually significant) materials used on the exterior wall surface area.

(2) **Intermediate Materials**—Intermediate materials shall be situated so as to be visually supported by heavy materials. Generally, intermediate materials comprise the body (primary building material) of a building.

(3) **Light Materials**—Light materials shall be positioned above intermediate materials, at the top of the structure, and visually supported by the intermediate and heavy materials below.

c. *Manufactured Materials.* The use of manufactured materials, such as synthetic, cast, and cultured materials is allowed, provided the materials are identical in

appearance and of equal or greater durability to the natural materials they are intended to emulate.

9. Use of Structural Masonry and Masonry Veneers. Concrete block, brick, stone, and other types of structural masonry or masonry veneer shall be detailed as masonry bearing walls, especially at openings. Proper masonry detailing allows the building to be more pleasing to the eye, as the openings appear to be structurally supported.

a. *Exterior Corners.* Stone and brick used on exterior walls shall not terminate at exterior corners, except where such termination would be consistent with the architectural style being represented.

b. *Masonry Openings.* Openings in a block, brick, or stone façade, including all windows and doors, shall have a lintel, arch, or soldier course at the top of the opening, which appears to structurally support the area of masonry above the opening.

c. *Horizontal Change in Material.* A horizontal change in material from masonry to another material shall include a decorative cap or sill that projects from the face of the building.

10. Parapets and Cornices.

a. A parapet wall and decorative cornice shall be used to visually terminate an exterior wall on a building with a flat roof and shall be used as the primary method for screening roof-mounted mechanical equipment.

b. The parapet and cornice design shall be in proportion to the size and scale of the building and shall reflect the architectural style and detailing of the building.

11. Gutters and Downspouts.

a. Gutters and downspouts shall be concealed from public view, unless designed as a continuous architectural feature.

b. Exposed gutters and downspouts used as architectural features should be colored to match the fascia or wall material to which they are attached.

c. Care shall be taken to avoid locating downspouts near building public entrances and openings.

12. Glazing. The ground floor glazing of a building shall be transparent. Ground floor transparency guarantees a visual connection to the casual observer located at the building exterior, which is an essential feature of commercial structures. By exposing the ground floor to the exterior, there is an invitation to participate with the activity inside. Furthermore, the use of transparent glazing provides the City's public safety personnel the ability to view inside a building without having to first enter the structure.

a. The minimum glazing required on all primary building façades shall be equal to at least 60 percent of the view plane area, with at least 50 percent of the view plane area being transparent.

b. For the purposes of these regulations governing glazing on a building, the following words, terms, and phrases are defined as follows:

(1) *Primary Facade*. Primary facade shall mean any exterior building elevation that faces a street, access way, pedestrian walkway, or drive aisle internal to a complex or center. For the purposes of this requirement, alleys and service drives shall not be considered a street, access way, or internal drive aisle.

(2) *View Plane Area.* View plane area shall mean the wall area on the primary façade of a building, which is located between 2 FT and 10 FT above the adjacent exterior grade.

(3) *Transparent*. Transparent shall mean glazing that is see-through from both the exterior and the interior of the building. This does not, however, preclude the use of tinted glazing.

c. This standard shall not apply if the Approving Authority determines that the required transparency is inconsistent with the operational or design needs of the building.

13. Lighting. Commercial development shall incorporate lighting fixtures that are decorative and are designed to eliminate adverse impacts of light spillover and promote safe vehicular and pedestrian access.

a. Light fixtures shall be full cut-off fixtures to prevent glare and light spill off the project site onto adjacent properties, buildings, and roadways.

b. Parking lot lighting shall comply with Section 6.03.050 (Parking Lot Lighting) of this Development Code and OMC Section 4-11.09(j).

c. Lighting fixtures shall be color-correct types, such as halogen, metal halide, or LED, to ensure true-color at night, visual comfort for pedestrians, and energy efficiency.

d. Pedestrian-level pole-mounted lighting, bollard lighting, ground-mounted lighting, or other low, glare-controlled fixtures mounted on buildings or walls shall be used to light pedestrian walkways. Pole-mounted, building-mounted, or tree-mounted lighting fixtures shall be no more than 12 FT in height. Bollard-type lighting shall be no more than 4 FT in height.

e. Steps, ramps, and seatwalls shall be illuminated with built-in light fixtures, were possible.

14. Building Color. Building exteriors shall incorporate colors that are of compatible hues and intensities. Color schemes shall tie building elements together, relate separate buildings within the same development, and enhance the architectural form of a building.

a. Exterior building colors shall be low-reflecting and subtle. Furthermore, overly intense, overly bright, or fluorescent or Day-Glo colors, shall not be used on a building exterior, as determined by the Planning Director.

b. The exterior building color of a new development project shall be reviewed and approved in conjunction with the approval of the structure by the Approving Authority. Development projects consisting of multiple buildings shall incorporate colors that are coordinated between structures, utilizing compatible hues and intensities. The final review and

approval of paint colors, utilizing a color test, may be required by the City, prior to painting a building.

c. All building mechanical equipment and appurtenances, including, but not limited to, meters, flues, vents, gutters, and utilities, shall match or complement the permanent color of the surface from which they are attached or project.

15. Roof Access Ladders. Ladders for roof access shall be mounted on the inside of the building, or if located on the building exterior, shall be completely concealed from public view.

16. Equipment Screening.

a. All exterior roof-mounted mechanical, heating and air conditioning equipment, and all appurtenances thereto, shall be completely screened from public view by parapet walls or roof screens that are architecturally treated so as to be consistent with the building architecture.

b. All ground-mounted utility equipment and structures, such as tanks, transformers, HVAC equipment, and backflow prevention devices, shall be located out of view from a public street, or adequately screened by landscaping and/or decorative low garden walls.

17. Refuse Storage Areas (Trash Enclosures).

a. Within commercial zoning districts, refuse and recyclable materials shall be stored in an appropriate container, out of view of public or private streets, and adjacent properties.

b. Refuse and recyclable materials container storage shall be within City-approved enclosures designed to contain separate containers for the collection of refuse and recyclable materials. The number of trash enclosures required, their precise locations and dimensions, and their design shall be pursuant to the City's Refuse and Recycling Planning Manual. The requirement for refuse container storage areas may be reduced or waived by the Approving Authority if a trash compactor is used, which is screened from public view.

c. Trash enclosures shall consist of a minimum 6-FT high decorative masonry wall, with appropriate view-obstructing gates for container access, and separate pedestrian access, which is designed to screen the interior of the enclosure from view from the exterior and prevent refuse dispersion. The enclosure design shall be consistent with the architectural design of adjacent buildings and shall include a decorative overhead roof structure to protect bins containing recyclable materials from adverse environmental conditions, which might render the collected materials unusable.

d. To the extent practicable, trash enclosures shall be located away from property lines common with sensitive uses, such as, but not limited to, dwellings, schools, playgrounds, childcare centers, health care facilities, rehabilitation centers, convalescent centers, and retirement homes.

e. Trash enclosure dimensions shall be of adequate size to accommodate containers consistent with the City's current methods of collection within the area in which the project is located.

f. Signs clearly identifying all recycling and refuse collection areas, and the materials accepted for recycling, shall be posted adjacent to all points of access to each trash enclosure.

g. Trash enclosures shall be bordered by a minimum 5-FT wide planter and screened with landscaping on all exposed sides, excluding the side with bin access gates, except when located out of public view.

h. Prior to the issuance of an occupancy permit, a developer or property owner(s) may be required to develop a written recycling plan, which specifies the identification of targeted materials to be recycled, and methods of recycling program promotion to tenants.

18. Trip Reduction. All new development projects shall fully implement trip reduction measures in compliance with Division 6.04 (Congestion Management and Trip Reduction) of this Chapter.

19. Outdoor Loading and Storage Areas.

a. Loading facilities shall be designed and constructed pursuant to Division 6.03 (Off-Street Parking and Loading) of this Development Code.

b. Areas designated for open space, landscaping, off-street parking, loading, and vehicular circulation and maneuvering shall not be used for the outdoor storage of materials or equipment.

c. The outdoor storage of materials and equipment shall be permitted only within the CC and CR zoning districts in conjunction with, and ancillary to, the primary allowed land use. Outdoor loading and storage areas, and loading doors, shall be fully enclosed by a masonry screen wall with view-obstructing gates pursuant to Paragraph 6.02.025.A.2 (Screening of Outdoor Loading and Storage Areas, and Loading Doors) of this Development Code. Walls and gates visible to the public shall be decorative. Chain link fencing with a screening material shall not be used to screen loading and storage activities and areas.

20. Outdoor Activities. All business activities shall be conducted entirely within a completely enclosed structure, except for the following:

a. Sale or display of new or used automobiles, boats, trucks, recreational vehicles and similar large equipment;

b. Outdoor cafes and eating areas;

c. Sale or display of building material, lumber, nursery stock and similar bulk stock, subject to the location and screening requirements of this Section;

d. Temporary activities, such as Christmas tree sales, sidewalk sales and other temporary or seasonal activities, subject to the issuance of an Administrative Use Permit for temporary uses, activities, and facilities pursuant Section 4.03.015 (Administrative Use Permits) of this Development Code;

e. Off-street parking facilities, and outdoor loading and storage areas, which are properly screened pursuant to Paragraph 6.02.025.A.2 (Screening of Outdoor Loading and Storage Areas, and Loading Doors) of this Chapter; and

f. As allowed pursuant to the standards contained in Division 5.03 (Standards for Specific Land Uses, Activities as Facilities) of this Development Code.

21. Noise. Within all commercial zoning districts, structures and equipment shall be designed, located, constructed, and operated in a manner so as not to exceed the maximum interior and exterior noised levels set forth in OMC Title 5 (Public Welfare, Morals, and Conduct), Chapter 29 (Noise).

22. Airport Safety Zones. Within commercial zoning districts, properties located within the Airport Influence Area (AIA) established by the LA/Ontario International Airport Land Use Compatibility Plan (ALUCP) shall be subject to the requirements and standards of the ALUCP.

23. Security Standards. Within commercial zoning districts, any lot, and any building or structures thereon, shall comply with all applicable requirements of OMC Title 4 (Public Safety), Chapter 11 (Security Standards for Buildings).

F. Commercial Design Guidelines.

1. The City Council adopted Commercial Design Guidelines, included as Reference "E" of this Development Code, applicable to all commercial zoning districts, which are intended as a reference to assist the designer in understanding the City's goals and objectives for commercial development. The guidelines compliment the mandatory commercial development regulations contained in this Section, by providing examples of potential design solutions and by providing design interpretations of the various mandatory regulations contained herein.

2. The design guidelines authorized herein shall be enforceable in the same manner and to the same extent as any other applicable requirement of this Development Code.

6.01.020: Mixed Use Zoning Districts

A. Purpose.

1. The purpose of this Section is to establish regulations intended to encourage innovative mixed-use development as an alternative to the typical suburban, use-segregated developments found throughout the Inland Empire, which is consistent with the goals and policies of the Vision, Policy Plan (General Plan), and City Council Priorities components of The Ontario Plan. Generally, mixed-use districts are intended for the creation of development projects that:

a. Create a dynamic, walkable, mixed-use environment;

b. Provide for a development pattern that encourages the use of public transportation;

c. Provide for a mix of housing types that are within close proximity to retail and service uses;

d. Establish high standards for the design and development of buildings, infrastructure, and landscaping;

e. Ensure a high degree of pedestrian and vehicular connectivity, and enhance the vitality of commercial corridors within the City;

f. Facilitate the development of housing, retail, and office uses within close proximity to one another, allowing residents to walk to retail and service uses, and transit services; and

g. In selected areas, locate buildings close to the street, so that streets and squares feel enclosed, establishing outdoor rooms.

2. The intent of each established mixed-use district is as follows:

a. *Downtown Mixed-Use Area*. The Downtown Mixed-Use District (MU-1 zoning district) is intended to accommodate an intensive mixture of vertical and horizontal retail and office uses at a development intensity of up to 2.0 FAR, and residential uses at a density of 25 to 75 DU/AC. The Downtown Mixed-Use District is intended to encourage the development and revitalization of the City's historic downtown district in such manner as to achieve the District's full potential as a unique shopping and residential area, as well as the City's focus for governmental, cultural, and educational activities.

b. *East Holt Mixed-Use Area*. The East Holt Mixed-Use District (MU-2 zoning district) is intended to accommodate the intensification of the East Holt Boulevard Corridor with low-rise (up to 5 stories) buildings housing a mixture of retail and office uses at a development intensity of up to 2.0 FAR and 1.0 FAR, respectively, and residential uses at a density of 14 to 40 DU/AC. The intent of this zoning district is to create identity and place along the Holt Boulevard Corridor and provide a connection between the Downtown Mixed Use Area and the Ontario Airport Metro Center.

c. *Euclid/Francis Mixed-Use Area*. The Euclid/Francis Mixed-Use District (MU-11 zoning district) is intended to accommodate a low-rise (up to 3 stories) mixture of retail uses at an intensity of up to 1.0 FAR, and residential uses at a density of 14 to 25 DU/AC, that will create identity and place along the Euclid Avenue corridor.

B. Applicability. The standards and guidelines established by this Section shall apply to each of the City's mixed-use zoning districts. Furthermore, the provisions of this Section shall apply to all land subdivisions for mixed-use purposes, and any new mixed-use construction, addition, remodel, or reallocation requiring a building permit or other similar entitlement by the City.

C. Mixed Use Zoning District Development Standards. Development within the MU-1, MU-2, and MU-11 mixed-use zoning districts shall comply with the following standards:

1. MU-1 (Downtown Mixed Use Area) Zoning District.

a. *Planned Unit Development Required*. Within the MU-1 zoning district, development shall occur only after a Planned Unit Development has first been adopted for the affected property pursuant to Section 4.01.030 (Planned Unit Developments and Amendments) of this Development Code.

b. *Area Plan and Form-Based Development Standards In Lieu of Planned Unit Development Adoption*. In lieu of Planned Unit Development adoption, the City may elect to prepare and adopt an Area Plan to provide additional policy-level guidance for development

within MU-1 zoning district, in conjunction with the inclusion of appropriate form-based development standards within this Section, to be established on a minimum per block basis.

c. *Allowed Development Density/Intensity*. Within the MU-1 zoning district, residential development shall range from a minimum allowed density of 25 dwelling units per acre, to a maximum allowed density of 75.0 dwelling units per acre. Commercial-retail and/or office development shall not exceed 2.0 FAR.

d. *Downtown Ontario Design Guidelines*. In August 1998, the City Council adopted the Downtown Ontario Design Guidelines, included as Reference "C" of this Development Code, which establishes a set of architectural, graphic, and lighting design principles, to provide guidance to business owners, homeowners, City staff, and design professionals, for the development and/or rehabilitation of properties within the City's historic original downtown area (project area). The project area is bordered by "I" Street on the north, Vine Street on the west, Sultana Avenue on the east, and railroad tracks on the south, and is defined in Figure 1.4 (Land Use Districts) of the Downtown Ontario Design Guidelines. The design guidelines also apply to those properties located across the street from, and directly abut, the project area.

2. MU-3 (East Guasti Mixed Use) Zoning District.

a. *Planned Unit Development Required*. Within the MU-3 zoning district, development shall occur only after a Planned Unit Development has first been adopted for the affected property pursuant to Section 4.01.030 (Planned Unit Developments and Amendments) of this Development Code.

b. *Allowed Development Density/Intensity*. Within the MU-3 zoning district, commercial and residential development shall be low-rise, not to exceed 5 stories in height. Residential development shall range from a minimum allowed density of 20.0 dwelling units per acre, to a maximum allowed density of 65.0 dwelling units per acre. Commercial-retail and office development shall not exceed 1.0 FAR.

3. MU-6 (East Holt Boulevard Mixed Use Area) Zoning District.

a. *Planned Unit Development Required*. Within the MU-6 zoning district, development shall occur only after a Planned Unit Development has first been adopted for the affected property pursuant to Section 4.01.030 (Planned Unit Developments and Amendments) of this Development Code.

b. *Allowed Development Density/Intensity*. Within the MU-6 zoning district, residential development shall range from a minimum allowed density of 14.1 dwelling units per acre, to a maximum allowed density of 40.0 dwelling units per acre. Commercial-retail development shall not exceed 1.0 FAR and commercial-office development shall not exceed 2.0 FAR.

4. MU-8B (Mountain/Fourth Mixed Use) Zoning District.

a. *Planned Unit Development Required*. Within the MU-8B zoning district, development shall occur only after a Planned Unit Development has first been adopted for the affected property pursuant to Section 4.01.030 (Planned Unit Developments and Amendments) of this Development Code.

b. *Allowed Development Density/Intensity.* Within the MU-8B zoning district, commercial and residential development shall be low-rise, not to exceed 5 stories in height. Residential development shall range from a minimum allowed density of 20.0 dwelling units per acre, to a maximum allowed density of 75.0 dwelling units per acre. Commercial-retail and office development shall not exceed 1.0 FAR.

5. MU-8C (West Holt Boulevard Mixed Use) Zoning District.

a. *Planned Unit Development Required.* Within the MU-8C zoning district, development shall occur only after a Planned Unit Development has first been adopted for the affected property pursuant to Section 4.01.030 (Planned Unit Developments and Amendments) of this Development Code.

b. *Allowed Development Density/Intensity.* Within the MU-8C zoning district, commercial and residential development shall be low-rise, not to exceed 5 stories in height. Residential development shall range from a minimum allowed density of 14.0 dwelling units per acre, to a maximum allowed density of 40.0 dwelling units per acre. Commercial-retail development shall not exceed 1.0 FAR and commercial-office development shall not exceed 2.0 FAR.

6. MU-8D (Euclid/Francis Mixed Use Area) Zoning District.

a. *Residential Development.* Within the MU-8D zoning district, low-rise (up to 5 stories) residential development shall be allowed pursuant to the standards of the HDR-45 zoning district and shall range from a minimum allowed density of 20.0 dwelling units per acre, to a maximum allowed density of 75.0 dwelling units per acre.

b. *Nonresidential Development.* Within the MU-8D zoning district, nonresidential development shall be allowed pursuant to the requirements of the CC zoning district, and shall not exceed 1.0 FAR.

7. MU-8E (Euclid/Walnut Mixed Use) Zoning District.

a. *Planned Unit Development Required.* Within the MU-8E zoning district, development shall occur only after a Planned Unit Development has first been adopted for the affected property pursuant to Section 4.01.030 (Planned Unit Developments and Amendments) of this Development Code.

b. *Allowed Development Density/Intensity.* Within the MU-3 zoning district, commercial and residential development shall be low-rise, not to exceed 5 stories in height. Residential development shall range from a minimum allowed density of 20.0 dwelling units per acre, to a maximum allowed density of 75.0 dwelling units per acre. Commercial-retail and office development shall not exceed 1.0 FAR.

6.01.025: Industrial Zoning Districts

A. **Purpose.** The purpose of this Section is to ensure that development within the industrial zoning districts of the City will contribute toward an urban environment of stable, desirable character, which is harmonious with existing and future development, and is consistent with the goals and policies of the Policy Plan (General Plan) component of The Ontario Plan. These regulations are further established to:

1. Reserve appropriate areas in the community for a full range of industrial uses, which are grouped to achieve maximum compatibility with respect to the characteristics of the various types of industrial activities and processes;

2. Encourage the development of all types of industrial establishments in a manner that is consistent with sound standards of public health and safety;

3. Allow certain types of light industrial uses that are relatively free of nuisance or hazardous features, which may be located in areas nearest to residential, office, and commercial areas, while providing space for industrial uses with more severe impacts in more remote locations;

4. Protect areas appropriate for industrial development from intrusion by residences and other incompatible uses, while providing opportunities for various types of industrial establishments and similar uses to concentrate in mutually beneficial relationships to each other;

5. Ensure the provision of adequate space to meet the needs of industrial development, including landscaped setbacks, off-street parking and truck loading areas;

6. Strengthen the City's economic base and jobs-housing balance by increasing employment opportunities close to home for residents of the City and surrounding communities;

7. Ensure that the appearance of industrial buildings and uses is compatible with the visual character of the area in which they are located; and

8. Provide a sufficient number of appropriately located sites for adult businesses within the IH (Heavy Industrial) zoning district.

B. Applicability. The standards and guidelines established by this Section shall apply to each of the City's industrial zoning districts. Furthermore, the provisions of this Section shall apply to all industrial land subdivisions and any new industrial construction, addition, remodel, or reallocation requiring a building permit or other similar entitlement by the City.

C. Development Standards. Development within industrial zoning districts shall comply with the requirements of Table 6.01-10 (Industrial Zoning District Development Standards), below, which specifies standards for the development of structures within the BP, IP, IL, IG, and IH zoning districts.

Table 6.01-10: Industrial Zoning District Development Standards

Requirements	*Industrial Zoning Districts*					*Additional Regulations*
	BP	*IP*	*IL*	*IG*	*IH*	
A. SITE DEVELOPMENT STANDARDS						
1. Minimum Lot Area	1.0 AC		10,000 SF			Note 1
2. Maximum Floor Area Ratio (FAR)	0.60		0.55			Note 7
3. Minimum Lot Dimensions	100 FT – Lot Width 100 FT – Lot Depth					Note 1
4. Minimum Landscape Coverage	Refer to Division 6.05 (Landscaping)					
a. Interior Lots	15%	10%				Notes 2 and 3

Table 6.01-10: Industrial Zoning District Development Standards

Requirements	Industrial Zoning Districts					Additional Regulations
	BP	IP	IL	IG	IH	
b. Corner Lots	20%	15%				Notes 2 and 3
c. Off-Street Parking Areas	7%					See Section 6.05.040.D (Landscaping of Off-Street Parking Facilities)
5. Minimum Parking Space and Drive Aisle Separations						
a. Parking Space or Drive Aisle to Street Property Line	20 FT		10 FT			
b. Parking Space or Drive Aisle to Interior Property Line	5 FT					Notes 4 and 5
Exception: From property line common with residential district	10 FT (area shall be densely landscaped)			n/a		
c. Parking Space to Buildings, Walls, and Fences	10 FT - Areas adjacent to public entries and office areas 5 FT - Areas adjacent to other building areas					Note 5
Exception: Within screened loading and storage yard areas	0 FT					
d. Drive Aisles to Buildings, Walls, and Fences	10 FT					Note 5
Exception: Within screened loading and storage yard areas	0 FT					
6. Minimum Screened Loading and Storage Yard Separations						
a. Enclosed Loading and Storage Yard to Street Property Line	20 FT - Freeways 20 FT - Arterial Streets 10 FT - Collector/Local Streets					
b. Screened Loading and Storage Yard to Interior Property Line	0 FT					
Exception: From interior property line common with residential district	10 FT (area shall be densely landscaped)				n/a	
c. Screened Loading and Storage Yard to Buildings, Walls, and Fences	0 FT					
7. Walls, Fences and Obstructions	Refer to Section 6.02.025 (Design Standards for Nonresidential Zoning Districts).					
8. Off Street Parking	Refer to Division 6.03 (Off-Street Parking and Loading).					
9. Property Appearance and Maintenance	Refer to Division 6.10 (Property Appearance and Maintenance).					

Table 6.01-10: Industrial Zoning District Development Standards

Requirements	Industrial Zoning Districts					Additional Regulations
	BP	IP	IL	IG	IH	
10. Historic Preservation	Certain portions of commercial zoning districts are identified as historic or potentially historic, and are listed on the City's Historic Resources Eligibility List. Development regulations set forth in Division 7.01 (Historic Preservation), and application processing and permitting regulations set forth in Division 4.02 (Discretionary Permits and Actions) and of this Development Code, shall apply in these instances.					
11. Signs	Refer to Division 8.1 (Sign Regulations).					
12. Security Standards	Refer to Ontario Municipal Code Title 4, Chapter 11 (Security Standards for Buildings).					
13. Noise	Buildings shall be designed and constructed to mitigate noise levels from exterior sources. Refer to OMC, Tile 5 (Public Welfare, Morals, and Conduct), Chapter 29 (Noise).					
14. Airport Safety Zones	Properties within the Airport Influence Area (AIA) established by the LA/Ontario International Airport Land Use Compatibility Plan (ALUCP) shall be subject to the requirements and standards of the ALUCP.					
B. BUILDING DEVELOPMENT STANDARDS						
1. Maximum Area Per Building	45,000 SF - Single-Tenant 60,000 SF - Multi-Tenant		See Note 9	n/a		
2. Minimum Street Setback						
a. From Freeway Property Line	20 FT					
b. From Arterial Street Property Line	10 FT - Holt Boulevard 20 FT - All Other Arterial Streets					
c. From Collector and Local Street Property Line	10 FT					
3. Minimum Interior Property Line Setback	0 FT					Note 6
Exception: Property line common with residential districts	30 FT					
4. Maximum Height	45 FT		55 FT			Note 7
5. Minimum Setback From Major Pipelines (to habitable structures)	50 FT					Note 8

Notes:

1. *There is no minimum lot area or dimension for common interest subdivisions established pursuant to Section 6.08.010 (Common Interest Subdivisions) of this Development Code.*
2. *Landscaped areas with a minimum dimension of less than 5 FT shall not contribute toward the "minimum landscape coverage" calculation.*
3. *The "minimum landscape coverage" calculation for interior and corner lots shall exclude all landscaped areas located within public rights-of-way.*
4. *Within yard areas fully screened by a decorative wall, there shall be no minimum drive aisle or parking space setback required, unless adjacent to residentially zoned properties.*

5. *The minimum separation area between a building, wall, or fence, and a parking space or drive aisle, shall be fully landscaped. The separation area may include pedestrian walkways, as necessary; however, a minimum 3-FT wide planter area shall be maintained between a building wall and a pedestrian walkway. The minimum separation dimension does not include any area devoted to vehicle overhang.*
6. *There shall not be a minimum required building setback from property lines that are interior to a business park, or industrial park or complex.*
7. *The maximum building height and FAR may be restricted pursuant to the Ontario International Airport Land Use Compatibility Plan (ALUCP). Refer to the ALUCP for properties affected by airport safety zones.*
8. *Includes major high pressure pipelines for fuel oil, gasoline, and diesel and aviation fuels within the City. Existing pipelines include:*
    a. *Two parallel pipelines (a 16-inch and a 20-inch) that enter the City at Benson Avenue, traveling parallel to the northerly side of the Southern Pacific right-of-way to Ontario International Airport, then parallel to the southerly side of the Southern Pacific right-of-way, then parallel to the northerly side of the right-of-way beyond Ontario International Airport, then exiting the City at Etiwanda Avenue; and*
    b. *Two parallel pipelines that traverse the easterly portion of the City, entering the City at the southerly portion of Milliken Avenue, then traveling north under Milliken Avenue to Inland Empire Boulevard, then east to Rochester Avenue, then north to the City Limits.*
9. *Within the IL zoning district, lots abutting, or directly across the street from, a residentially zoned property, shall comply with the "Maximum Height" applicable to the BP and IP zoning districts.*

D. Exceptions to Development Standards. The following exceptions from the industrial zoning district development standards stipulated in Table 6.01-8 (Industrial Zoning District Development Standards) shall be permitted:

1. Building Height.

a. *Aerials and Antennas, Chimneys, Cupolas, Elevator Penthouses, Flagpoles, Monuments, Parapet Walls, Spires, Towers, Water Tanks, and Other Similar Structures*. Aerials and antennas, chimneys, cupolas, elevator penthouses, flagpoles, monuments, parapet walls, spires, towers, water tanks, and other similar structures may be erected to a height of up to 25 percent above the prescribed height limit of the base zoning district.

b. *Amateur (HAM) Radio Antennas*. HAM radio antennas may exceed the maximum prescribed height limit of a zoning district by a maximum of 10 FT. The Zoning Administrator, however, may allow HAM radio antennas to exceed this height limitation if it is necessary to accommodate amateur radio service communications. A HAM radio antenna that exceeds the maximum prescribed height limit of the zoning district in which it is located shall not exceed the minimum height and dimensions necessary to accommodate amateur radio service communications.

c. *Wireless Telecommunication Facilities*. Wireless telecommunication facilities shall comply with Section 5.03.42 (Wireless Telecommunications Facilities) of this Development Code.

2. Encroachments into Required Setback Areas.

a. *Cornices, Eaves, Canopies, Decorative Wall Elements, and Similar Architectural Features*. Cornices, eaves, canopies, decorative wall elements, and similar architectural features may extend into a required street or interior property line setback area a maximum of 50 percent of the required setback, not to exceed 4 FT.

b. *Signs*. Signs and advertising structures may encroach into a required front street setback area pursuant to Division 8.1 (Sign Regulations) of this Development Code.

c. *Walls, Fences, and Obstructions.* Walls, fences, and obstructions may be permitted within required setback areas pursuant to the provisions of Division 6.02 (Fences, Walls, and Obstructions) of this Chapter.

E. **General Provisions.** The following general regulations shall be applicable to all land uses, activities, and facilities within each industrial zoning district:

1. Building Setback Areas Adjoining Streets. Except as otherwise specifically provided by this Development Code, required setback areas adjoining streets shall only be used for the placement of landscaping and irrigation installed pursuant to Division 6.05 (Landscaping), . vehicular and pedestrian accesses, off-street parking and vehicular circulation, and site lighting pursuant to Division 6.03 (Off-Street Parking and Loading), walls and fences installed pursuant to Division 6.02 (Walls, Fences, and Obstructions), and signs installed pursuant to Division 8.1 (Sign Regulations) of this Development Code.

2. Parking Space and Drive Aisle Setback Areas. Parking space and drive aisle setback areas required pursuant to Table 6.01-10 (Industrial Zoning District Development Standards) shall only be used for landscaping and irrigation installed pursuant to Division 6.05 (Landscaping), walls and fences installed pursuant to Division 6.02 (Walls, Fences, and Obstructions), and signs installed pursuant to Division 8.1 (Sign Regulations) of this Development Code.

3. Refuse Storage Areas (Trash Enclosures).

a. Within industrial zoning districts, refuse and recyclable materials shall be stored in an appropriate container, out of view of public or private streets, and adjacent properties.

b. Refuse and recyclable materials container storage shall be within City-approved enclosures designed to contain separate containers for the collection of refuse and recyclable materials. The number of trash enclosures required, their precise locations and dimensions, and their design shall be pursuant to the City's Refuse and Recycling Planning Manual. The requirement for refuse container storage areas may be reduced or waived by the Approving Authority if a trash compactor is used, which is screened from public view.

c. Trash enclosures shall consist of a minimum 6-FT high decorative masonry wall, with appropriate view-obstructing gates for container access, and separate pedestrian access, which is designed to screen the interior of the enclosure from view from the exterior and prevent refuse dispersion. The enclosure design shall be consistent with the architectural design of adjacent buildings and shall include a decorative overhead roof structure to protect bins containing recyclable materials from adverse environmental conditions, which might render the collected materials unusable.

d. To the extent practicable, trash enclosures shall be located away from property lines common with sensitive uses, such as, but not limited to, dwellings, schools, playgrounds, childcare centers, health care facilities, rehabilitation centers, convalescent centers, and retirement homes.

e. Trash enclosure dimensions shall be of adequate size to accommodate containers consistent with the City's current methods of collection within the area in which the project is located.

f. Signs clearly identifying all recycling and refuse collection areas, and the materials accepted for recycling shall be posted adjacent to all points of access to each trash enclosure.

g. Trash enclosures shall be bordered by a minimum 5-FT wide planter and screened with landscaping on all exposed sides, excluding the side with bin access gates, except when located out of public view.

h. Prior to the issuance of an occupancy permit, a developer or property owner(s) may be required to develop a written recycling plan, which specifies the identification of targeted materials to be recycled, and methods of recycling program promotion to tenants.

4. Lighting. Commercial development shall incorporate lighting fixtures that are decorative and are designed to eliminate adverse impacts of light spillover and promote safe vehicular and pedestrian access.

a. Light fixtures shall be full cut-off fixtures to prevent glare and light spill off the project site onto adjacent properties, buildings, and roadways.

b. Parking lot lighting shall comply with Section 6.03.050 (Parking Lot Lighting) of this Development Code and OMC Section 4-11.09(j).

c. Lighting fixtures shall be color-correct types, such as halogen, metal halide, or LED, to ensure true-color at night, visual comfort for pedestrians, and energy efficiency.

d. Pedestrian-level pole-mounted lighting, bollard lighting, ground-mounted lighting, or other low, glare-controlled fixtures mounted on buildings or walls shall be used to light pedestrian walkways. Pole-mounted, building-mounted, or tree-mounted lighting fixtures shall be no more than 14 FT in height. Bollard-type lighting shall be no more than 4 FT in height.

e. Steps, ramps, and seatwalls shall be illuminated with built-in light fixtures, were possible.

5. Equipment Screening.

a. All exterior roof-mounted mechanical, heating and air conditioning equipment, and all appurtenances thereto, shall be completely screened from public view by parapet walls or roof screens that are architecturally treated so as to be consistent with the building architecture.

b. All ground-mounted utility equipment and structures, such as tanks, transformers, HVAC equipment, and backflow prevention devices, shall be located out of view from a public street, or adequately screened through the use of landscaping and/or decorative low garden walls.

6. Outdoor Loading and Storage Areas.

a. Loading facilities shall be designed and constructed pursuant to Division 6.03 (Off-Street Parking and Loading) of this Chapter.

b. Areas designated for open space, landscaping, off-street parking, loading, and vehicular circulation and maneuvering, shall not be used for the outdoor storage of materials or equipment.

c. The outdoor storage of materials and equipment shall be permitted only within the IL, IG, IH, and ONT zoning districts in conjunction with, and ancillary to, the primary allowed land use, except as otherwise allowed pursuant to Table 5.02-1 (Land Use Matrix) of this Development Code.

d. Outdoor loading and storage areas, and loading doors, shall be screened from public view by a decorative masonry wall with view-obstructing gates, pursuant to Paragraph 6.02.025.A.2 (Screening of Outdoor Loading and Storage Areas, and Loading Doors) of this Development Code. Furthermore, loading and storage areas, and loading doors, shall not face a freeway, Euclid Avenue, or Mission Boulevard, unless fully screened from view of the freeway or street.

e. The outdoor storage of materials or equipment shall not be allowed within the BP and IP zoning districts.

7. Outdoor Manufacturing and Processing.

a. Manufacturing and processing activities shall be conducted within a wholly enclosed building, except that outdoor manufacturing and processing activities may be allowed within the IG, IH, and ONT zoning districts in conjunction with, and ancillary to, the primary allowed land use, subject to the approval of a Conditional Use Permit pursuant to Section 4.02.015 (Conditional Use Permits) of this Development Code.

b. Outdoor manufacturing and processing activities allowed pursuant to Subparagraph C.7.a, above, shall be screened from public view by buildings and/or decorative masonry walls with view-obstructing gates.

8. Outdoor Sales and Display. Within industrial zoning districts, all sales and display activities shall be conducted within a wholly enclosed building, except as follows:

a. Sale or display of new or used automobiles, boats, trucks, recreational vehicles and similar large equipment;

b. Outdoor cafes and eating areas;

c. Sale or display of building material, lumber, nursery stock and similar bulk stock, subject to the location and screening requirements of this Section;

d. Temporary activities, such as Christmas tree sales, sidewalk sales and other temporary or seasonal activities, subject to the issuance of an Administrative Use Permit for temporary uses, activities, and facilities pursuant Section 4.03.015 (Administrative Use Permits) of this Development Code;

e. Off-street parking facilities, and outdoor loading and storage areas, which are properly screened pursuant to Paragraph 6.02.025.A.2 (Screening of Outdoor Loading and Storage Areas, and Loading Doors) of this Chapter; and

f. As allowed pursuant to the standards contained in Division 5.03 (Standards for Specific Land Uses, Activities as Facilities) of this Development Code.

9. Building Color. Building exteriors shall incorporate colors that are of compatible hues and intensities. Color schemes shall tie building elements together, relate separate buildings within the same development, and enhance the architectural form of a building.

a. Exterior building colors shall be low-reflecting and subtle. Furthermore, overly intense, overly bright, or fluorescent or Day-Glo colors, shall not be used on a building exterior, as determined by the Planning Director.

b. The exterior building color of a new development project shall be reviewed and approved in conjunction with the approval of the structure by the Approving Authority. Development projects consisting of multiple buildings shall incorporate colors that are coordinated between structures, utilizing compatible hues and intensities. The final review and approval of paint colors, utilizing a color test, may be required by the City, prior to painting a building.

c. All building mechanical equipment and appurtenances, including, but not limited to, meters, flues, vents, gutters, and utilities, shall match or complement the permanent color of the surface from which they are attached or project.

10. Roof Access Ladders. Ladders for roof access shall be mounted on the inside of the building, or if located on the building exterior, shall be completely concealed from public view.

11. Gutters and Downspouts. Gutters and downspouts shall be concealed from public view, unless designed as a continuous architectural feature. Exposed gutters and downspouts used as architectural features should be colored to match the fascia or wall material to which they are attached.

12. Trip Reduction. All new development projects shall fully implement trip reduction measures in compliance with Division 6.04 (Congestion Management and Trip Reduction) of this Chapter.

13. Noise. Within all industrial zoning districts, structures and equipment shall be designed, located, constructed, and operated in a manner so as not to exceed the maximum interior and exterior noised levels set forth in OMC Title 5 (Public Welfare, Morals, and Conduct), Chapter 29 (Noise).

14. Airport Safety Zones. Industrially zoned properties located within the Airport Influence Area (AIA) established by the LA/Ontario International Airport Land Use Compatibility Plan (ALUCP) shall be subject to the requirements and standards of the ALUCP.

15. Security Standards. Within industrial zoning districts, any lot, and any building or structures thereon, shall comply with all applicable requirements of OMC Title 4 (Public Safety), Chapter 11 (Security Standards for Buildings).

F. Industrial Design Guidelines.

1. The City Council adopted Industrial Design Guidelines, included as Reference "F" of this Development Code, applicable to all industrial zoning districts, which are intended as a reference to assist the designer in understanding the City's goals and objectives for industrial development. The guidelines compliment the mandatory industrial development regulations contained in this Section, by providing examples of potential design solutions and by providing design interpretations of the various mandatory regulations contained herein.

2. The design guidelines authorized herein shall be enforceable in the same manner and to the same extent as any other applicable requirement of this Development Code.

6.01.030: Specialized Use Zoning Districts

A. **Purpose.** The purpose of this Section is to ensure that development within each Special Purpose zoning district of the City will contribute toward an urban environment of stable, desirable character, which is harmonious with existing and future development, and is consistent with the goals and policies of the Policy Plan (General Plan) component of The Ontario Plan.

B. **Applicability.** The standards and guidelines established by this Section shall apply to each of the City's special purpose zoning districts. Furthermore, the provisions of this Section shall apply to all subdivisions of land and any new construction, addition, remodel, or reallocation requiring a building permit or other similar entitlement by the City, within a Special Purpose zoning district.

C. **Specialized Use Zoning District Standards.** The design and development of properties located within specialized use zoning districts shall comply with the following:

1. CIV (Civic) Zoning District. The CIV zoning district is established to accommodate permanent public facilities such as City Hall, public libraries, museums, public and private schools and colleges/universities, police and fire stations, and other similar facilities utilized by the public. Properties within the CIV zoning district shall be developed pursuant to the standards and guidelines applicable to the OH zoning district (see Section 6.01.015 (Commercial Zoning District) of this Division).

2. MHP (Mobile Home Park) Zoning District. The MHP zoning district is established to accommodate communities consisting of mobile homes and manufactured housing. All development within the MHP zoning district shall be designed and constructed pursuant to the requirements of Section 5.03.295 (Mobilehome Parks) of this Development Code.

3. ONT (Ontario International Airport) Zoning District. The ONT zoning district is established to accommodate on-going development of Ontario International Airport and surrounding properties directly impacted by airport operations. All development within the ONT zoning district shall be designed and constructed pursuant to the applicable requirements of Section 5.03.020 (Air Transportation) of this Development Code.

4. OS-C (Open Space-Cemetery) Zoning District. The OS-C zoning district is established to accommodate cemetery sites. Properties within the OS-C zoning district shall be developed pursuant to the standards and guidelines applicable to the OL zoning district (see Section 6.01.015 (Commercial Zoning District) of this Division).

5. OS-R (Open Space-Recreation) Zoning District. The OS-R zoning district is established to accommodate open space uses, such as public parks and recreation centers.

Properties within the OS-R zoning district shall be developed pursuant to the standards and guidelines applicable to the OL zoning district (see Section 6.01.015 (Commercial Zoning District) of this Division).

6. PUD (Planned Unit Development) Zoning District. The PUD zoning district is established to accommodate the development and use of properties that require Planned Unit Development approval pursuant to Exhibit LU-05 (Additional Plans Map) of the Policy Plan component of The Ontario Plan. All development within the PUD zoning district shall only be allowed pursuant the applicable Planned Unit Development document.

7. RC (Rail Corridor) Zoning District. The RC zoning district is established to accommodate permanent rail or fixed transit corridors through the City, as well as stations and similar ancillary facilities. Properties within the RC zoning district shall be developed pursuant to the standards and guidelines applicable to the IH zoning district (see Section 6.01.025 (Industrial Zoning District) of this Division).

8. SP (Specific Plan) Zoning District. The SP zoning district is established to accommodate the adoption of Specific Plans pursuant to Exhibit LU-05 (Additional Plans Map) of the Policy Plan component of The Ontario Plan. All development within the SP zoning district shall be designed and constructed pursuant to the standards and guidelines of the applicable Specific Plan document. (Note: If no specific plan has been adopted for a property within the SP zoning district, a new specific plan shall be adopted for the property, or the property shall be annexed to an existing neighboring specific plan, prior to the issuance of any grading or building permits.)

9. UC (Utility Corridor) Zoning District. The UC zoning district is established to accommodate flood control channels, retention and detention basins, electrical transmission corridors, and landfills, and may include ancillary recreational facilities in conjunction with the primary use of the site. Properties within the UC zoning district shall be developed pursuant to the standards and guidelines applicable to the OL zoning district (see Section 6.01.015 (Commercial Zoning District) of this Division).

6.01.035: Overlay Zoning Districts

A. **Purpose.** The purpose of this Section is to ensure that development within each Overlay zoning district of the City will contribute toward an urban environment of stable, desirable character, which is harmonious with existing and future development, and is consistent with the goals and policies of the Policy Plan (General Plan) component of The Ontario Plan.

B. **Applicability.** The standards and guidelines established by this Section shall apply to each of the City's overlay districts. Furthermore, the provisions of this Section shall apply to all subdivisions of land and any new construction, addition, or remodel requiring a building permit or other similar entitlement by the City, within an overlay district.

C. **Overlay Zoning District Standards.** The design and development of properties located within overlay zoning districts shall comply with the following:

1. AG (Agricultural) Overlay Zoning District.

a. *Purpose*. The purpose of the AG Overlay zoning district is to accommodate the continuation of agricultural uses within the City, on an interim basis, until such time that the Overlay District is developed consistent with the goals and policies of The Ontario Plan. The

transition of the AG Overlay zoning district will be gradual, requiring the establishment of regulations intended to guide agricultural-related development activities for the interim period. It is the intent of the AG Overlay zoning district to allow for the continuation of agricultural uses and related support uses as defined herein. The AG Overlay zoning district is further intended to protect vital agricultural uses by limiting land use activity to those uses which are compatible and supportive of agriculture and related uses, and/or their products.

b. *Applicability*.

(1) The herein established rights and responsibilities applicable to the AG Overlay District shall apply to all property located within the boundary of the Overlay District, as shown on the official Zoning Map of the City. The AG Overlay zoning district provisions established herein, shall apply to all existing and new building construction, additions, remodels, or reallocations, whether or not a building permit, or other similar entitlement, is required by the City.

(2) Any new building construction, excepting buildings to accommodate agricultural uses or agricultural-related activities, and single-family homes and buildings ancillary thereto on lots 10 acres or more in area, shall first require the adoption of a Specific Plan pursuant to Section 4.01.035 (Specific Plans and Amendments) of this Development Code, which prescribes the allowed land uses, development regulations and guidelines, and sign regulations applicable to the project.

(3) All rights pertaining to the AG Overlay zoning district established herein, shall run with the land and shall be transferable to any future owner(s) of property within the AG Overlay district, and their assigns.

c. *Definitions.* For the purpose of the AG Overlay zoning district, the words or phrases listed below, in correct alphabetical order, shall have the meanings hereafter specified:

Agricultural Support Services. These uses are supportive of the farm community and are fully compatible with agricultural uses. Agricultural support services are uses which directly support, or which are accessory or incidental to, established agricultural uses within the AG Overlay zoning district. These include, but are not limited to the following:

1) Agricultural chemicals, fuel and fuel oil, nonflammable bottled gas;

2) Animal husbandry services veterinary services for large and small animals, and horseshoeing;

3) Farm machinery equipment and supplies, sale and repair;

4) Farm produce sales and supply (feed, hay, grain and grain products, fertilizer);

5) Farm products packaging and processing;

6) Feed storage, farm products warehousing and storage (except stockyards); and

7) Waste management facilities and fertilizer operations in accordance with applicable local, State and Federal regulations.

Animal Confinement Facility. Where used, the term "animal confinement facility" includes animal barns, corrals, or pens.

Commercial Kennels and Catteries. The keeping of more than 5 dogs or 5 cats over the age of 4 months for breeding, boarding, training, or sale on a lot minimum 2.5 acres in area.

Cow and Goat Dairies. Any premises where milk is produced for wholesale distribution and where 10 or more cows or goats are in lactation.

Crop Production. A primary use of the land which includes cultivation of open field or greenhouse crops, fruits, vegetables, grain, fibers, flowers, ornamental and nursery plant materials for wholesale or retail sales and ultimate consumption by others.

Expanded Use. An expanded use consists of a building expansion or new construction in excess of 5,000 square feet.

Trade of Livestock. Sale of livestock to general public (e.g. animal auctions).

d. *Uses Generally*. No building, structure, or land shall be used, and no building or structure shall be hereafter erected, structurally altered, or enlarged, except for the purposes set out in this Paragraph C.1 (AG (Agricultural) Overlay Zoning District) of this Section.

e. *Permitted Land Uses.* In addition to those land uses allowed in the AG Overlay District as prescribed by Table 5.01-1 (Land Use Matrix) of this Development Code, the following land uses are permitted by right of being within the correct zoning district:

(1) Row, field, tree, and crop production;

(2) Plant nurseries (retail and wholesale);

(3) Single dwelling unit on a lot not less than 10 acres in area; a specific plan is required for any subdivision or master planned development; and

(4) Animal keeping activities, excepting household pets, shall comply with the following:

(a) Animal keeping shall be on a legally recognized lot no less than 2 acres in area. Lot area used to qualify one animal type shall not be reused to qualify another animal type;

(b) Proper management of animal waste shall be carried out in accordance with all requirements of the State Regional Water Quality Control Board or regulating agency;

(c) Small animal keeping. Aviary or similar small animal ranches or farms (excluding chicken and hog ranches) shall be permitted on lots that are at least one-half acre in area. Fish raising shall be limited to one pond per acre, with a maximum of 4 ponds per parcel. Each pond shall not exceed one-half acre in area; and

(d) Refer to Table 6.01-11 (Animal Types and Densities), below, for animal density requirements and Section 5.03.410 (Urban Agriculture) of this Development Code, for animal separation/setback requirements.

Table 6.01-11: Animal Types and Maximum Densities

Animal Type	Maximum Animal Density	Additional Regulations
A. Dairy Cow	As permitted by Approving Authority	Note 1
B. Non-dairy Cattle/Buffalo	1/6,000 SF of lot area	
C. Horses	1/6,000 SF of lot area	
D. Swine (5 maximum)	1/12,000 SF of lot area	
E. Sheep, female goats and similar livestock	1/3,000 SF of lot area	
F. Male adult goats		
1. Parcel < 10 acres	One maximum	
2. 10 acres and above	1/5 acres of lot area (not to exceed 4 maximum)	
G. Rabbits and chinchillas (200 maximum)	50/10,000 SF of lot area	
H. Ostriches	1/6,000 SF of lot area	
I. Emus and rheas	1/6,000 SF of lot area	
J. Poultry		
1. Female		
a. Parcel < 10 acres	25 maximum	
b. 10 acres and above	25/ 10 acres of lot area (50 maximum)	
2. Male (9 maximum)		
a. Parcel < 10 acres	2 species/parcel	
b. 10 acres and above	2 species/5 acres	

Notes:

1. *New or expansions to existing dairy or other animal confinement facilities shall be considered on a case-by-case basis, subject to the approval of a Conditional Use Permit pursuant to Section 4.02.015 (Conditional Use Permits) of this Development Code. Animal density shall be as determined by the appropriate approving authority (i.e. Regional Water Quality Control Board) which may impose special operational conditions, requirements or standards deemed necessary to insure the public health, safety, and general welfare. Animal density shall be based on measures to prevent the unacceptable nitrification or salt pollution of soils, and the pollution of groundwater by nitrates and salts emanating from the facility, as defined by the Regional Water Quality Control Board.*

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f. *Conditionally Permitted Land Uses.* In addition to those land uses allowed in the AG Overlay District as prescribed by Table 5.01-1 (Land Use Matrix) of this Development Code, the following land uses shall be allowed subject to the approval of a Conditional Use Permit pursuant to the requirements of Section 4.02.015 (Conditional Use Permits) of this Development Code:

(1) Agricultural Support Services;

(2) Animal raising of densities greater than or the raising of animal types different than those specified by this Paragraph C.1 (AG (Agricultural) Overlay Zoning District), subject to review by the appropriate Approving Authority (such as Regional Water Quality Control Board); and fish raising using ponds or lakes that are of greater surface area or number than those specified by this Paragraph C.1 (AG (Agricultural) Overlay Zoning District);

(3) Animal hospitals and veterinary clinics;

(4) Antennas and wireless telecommunications facilities;

(5) Apiaries;

(6) Calf growing ranches (lots shall be 5 or more acres in area);

(7) Places of worship within an existing building, and expansions to existing facilities (establishment of new places of worship in new structures shall only be permitted as part of a specific plan);

(8) Dairies, including expansions to existing dairies;

(9) Educational facilities and institutions;

(10) Fertilizer operations;

(11) Kennels (requires a 2.5-acre minimum lot size);

(12) Mushroom farms (the use of manure as a planting/growing medium is prohibited);

(13) Rodeos;

(14) Trade of livestock; and

(15) Waste management facilities.

g. *Time Limit for Conditionally Permitted Land Uses.* Conditionally permitted uses may be subject to a 5-year time limit through an agreement with the applicant, in order to assess potential impacts from the conditional use upon surrounding land uses. Under such time limit, a time extension application may be filed at least 6 months prior to the end of the 5-year period. Approval of a time extension request shall be based on the continued compatibility of the project with surrounding land uses.

h. *Temporary Uses.* The following temporary uses are permitted, subject to the requirements of Section 5.03.395 (Temporary and Interim Land Uses, Buildings and Structures) of this Development Code:

(1) Christmas tree and Halloween pumpkin sales, or other similar seasonal sales authorized by the City, not to exceed a period of 30 days, each;

(2) Temporary produce stands in conjunction with an Urban Farm established pursuant to Section 5.03.410.F (Urban Farms) of this Development Code; and

(3) Temporary Wireless Telecommunications Facilities.

i. *Accessory Uses.* The following accessory uses, and structures are permitted when customarily associated with, and subordinate to, a permitted use on the same lot:

(1) Barns, stables, storage tanks, and other farm buildings;

(2) Accessory dwelling unit or guesthouse, not to exceed one per lot, pursuant to the requirements of Section 5.03.030 (Accessory Residential Structures) of this Development Code. Any guesthouse or accessory dwelling unit shall meet the setbacks of the main structure as listed in Table 6.01-12 (AG (Agricultural) Overlay Zoning District Development Standards);

(3) Accessory building(s) not usable as a guesthouse or accessory dwelling unit. There shall be no maximum size for accessory structures in the AG Overlay District. Accessory Structures in the AG Overlay District in excess of 650 SF shall not require the approval of a Conditional Use Permit;

(4) Office unit in conjunction with row, field, tree, plant nursery, or crop production operation, not to exceed 1,500 SF in area (maximum one building per lot). An office unit shall meet the setbacks of the main structure as listed in Table 6.01-12 (AG (Agricultural) Overlay Zoning District Development Standards);

(5) Caretaker's unit, not to exceed 650 SF in area (maximum one building per lot). Any caretaker's unit shall meet the setbacks of the main structure as listed in Table 6.01-12 (AG (Agricultural) Overlay Zoning District Development Standards);

(6) Garages and carports;

(7) Fences and walls;

(8) Patio covers;

(9) Swimming pools; and

(10) Stands for the sale of agricultural products grown or produced on the same premises (excluding milk and meat products), subject to the following conditions:

(a) Stand shall be permitted only on lots containing a minimum of 10,000 SF;

(b) The floor area of the stand shall not exceed 100 SF;

(c) The stand shall not have a permanent foundation;

(d) The owner(s) shall remove such stand at their expense when the use has terminated;

(e) Stands shall be located a minimum of twenty (20) feet from the right-of-way line of any street or highway;

(f) Adequate provision for traffic circulation, off-street parking, and pedestrian safety shall be provided to the satisfaction of the Planning Director; and

j. *Prohibited Uses.* Notwithstanding Subparagraphs d through f of Paragraph C.1 (AG (Agricultural) Overlay Zoning District) of this Section, the following uses shall be specifically prohibited:

(1) Animal slaughter operations;

(2) Commercial poultry ranches;

(3) Commercial hog ranches; and

k. *Uses Not Specifically Listed.* The Zoning Administrator may make a land use determination pursuant to Section 1.02.010 (Interpretations and Land Use Determinations) of this Development Code, for those uses not specifically listed herein as permitted or conditionally permitted uses, based on the similarity of the subject use to one of the categories listed in Subparagraphs d through f of this Paragraph C.1 (AG (Agricultural) Overlay Zoning District), and the herein stated purpose of the AG Overlay District.

l. *Nonconforming Uses and Structures.* Nonconforming uses and structures within the AG Overlay District shall be governed by Division 3.01 (Nonconforming Lots, Land Uses, and Structures) of this Development Code, except as follows:

(1) **Abandonment.** Whenever a nonconforming use or structure has been abandoned, the nonconforming use or structure shall not be reestablished, and the use of the structure and the site thereafter shall be in conformity with the regulations of the AG Overlay District. For the purposes of this Paragraph C.1 (AG (Agricultural) Overlay Zoning District), discontinuance of the nonconforming use for a continuous period of 180 days shall be conclusive evidence of abandonment of such nonconforming use regardless of the landowner's intent.

(2) **Special Hardship Circumstances.** The Zoning Administrator may extend the 180-day period for up to an additional 180 days. To receive such consideration, the property owner shall request an extension, in writing, prior to the expiration of the initial 180-day period, including a full explanation of the reason why the extension should be granted.

m. *Animal Keeping/Separation Standards.* The following site development standards shall apply to the keeping of animals, except household pets:

(1) Animals shall be restrained a distance of at least 40 FT, measured in a straight line, from any habitable structure or structure used for public assembly located on adjoining property. For dairies, refer to Subparagraph n of this Paragraph C.1 (AG (Agricultural) Overlay Zoning District), for separation requirements;

(2) Animals shall be restrained a distance of at least 5 FT from interior side and rear property lines, and 15 feet from street side property lines;

(3) Animals shall be secured by a fence or wall at least 5 FT in height, made of chain link, wood with horizontal members no less than 6 inches apart, solid masonry or other appropriate solid confining material. Property line walls and fences may be used to secure animals, provided the appropriate restraint distances are maintained;

(4) Animals shall be kept a minimum of 100 FT from any domestic water well;

(5) For new diaries/feed lots, a separation of 500 FT shall be required between an animal feed trough, corral/pen from new development and/or from property with a residential or nonresidential tract map recorded after January 1, 2000, as measured from the building setback line; and

(6) A reduction in animal separation requirements may also be considered for facilities with proven means of reducing odors, such as covering lagoons, substituting concrete-lined pits for lagoons, and employing recommended ventilation systems for animal confinement buildings. Consideration of alternative setbacks shall be subject to consultation with qualified agricultural engineers to ensure that the measure will reliably accomplish the intended purpose.

n. *Separation Requirements for New Development.* The following separation requirements from existing dairies/feed lots shall apply to new residential, commercial, and/or industrial development or structures used for public assembly purposes from existing dairies/feed lots:

(1) A minimum 100-FT separation shall be required between a new residential, commercial, or industrial development or structure used for public assembly and an existing animal feed trough, corral/pen or an existing dairy/feed lot including manure stockpiles and related wastewater detention basins. The 100-FT separation requirement may be satisfied by an off-site easement acceptable to the Planning Director with adjacent properties, submitted with the initial final map and recorded prior to or concurrent with the final map; and

(2) Separation requirements between dairies within a proposed specific plan area and new development will be addressed through the specific plan review procedure which may include buffers, expanded parkways, open space, and other approved measures to mitigate potential impacts.

o. *Permanent Structures.* A Development Plan is required pursuant to Section 4.02.025 (Development Plans) of this Development Code, for all new, altered, or expanded structures/uses, including all new structures in excess of 5,000 SF in area.

p. *Development Standards and Guidelines.*

(1) The development of buildings to accommodate agricultural uses or agricultural-related activities, and single-family homes and buildings ancillary thereto, on lots 10 acres or more in area, shall be designed and constructed pursuant to the standards contained in Table 6.01-12 (AG (Agricultural) Overlay Zoning District Development Standards), below.

Table 6.01-12: AG (Agricultural) Overlay Zoning District Development Standards

Requirements	Standards	Additional Regulations
A. SITE DEVELOPMENT STANDARDS		
1. Minimum Lot Size	10 acres	Note 1
2. Maximum Lot Coverage		
3. Allowed Density Range	One dwelling per 10 acres	

Table 6.01-12: AG (Agricultural) Overlay Zoning District Development Standards

Requirements	Standards	Additional Regulations
4. Minimum Lot Dimensions		
a. Ratio (lot width to lot depth)	1:4	
b. Lot Width	300 FT	Note 1
c. Lot Depth	300 FT	Note 1
5. Equestrian Trails Required	No	
6. Walls, Fences, and Obstructions	Refer to Section 6.02.020 (Design Standards for Residential Zoning Districts) of this Development Code.	
7. Off Street Parking	Refer to Division 6.03 (Off-Street Parking and Loading) of this Development Code.	
8. Landscaping	Refer to Division 6.05 (Landscaping) of this Development Code.	
9. Property Appearance and Maintenance	Refer to Division 6.10 (Property Appearance and Maintenance) of this Development Code.	
10. Historic Preservation	Certain portions of residential zoning districts are identified as historic or potentially historic and are listed on the City's Historic Resources Eligibility List. Development regulations set forth in Division 7.01 (Historic Preservation), and application processing and permitting regulations set forth in Division 4.02 (Discretionary Permits and Actions) and of this Development Code, shall apply in these instances.	
11. Signs	Refer to Subparagraph q (Sign Standards) of this Paragraph C.1 (AG (Agricultural) Overlay Zoning District) and Division 8.1 (Sign Regulations) of this Development Code.	
12. Security Standards	Refer to Ontario Municipal Code Title 4, Chapter 11 (Security Standards for Buildings).	
13. Noise	Habitable structures shall be designed and constructed to mitigate noise levels from exterior sources. Refer to OMC, Tile 5 (Public Welfare, Morals, and Conduct), Chapter 29 (Noise).	
14. Airport Safety Zones	Properties within the Airport Influence Area (AIA) established by the Ontario International Airport Land Use Compatibility Plan (ALUCP) shall be subject to the requirements and standards of the ALUCP.	
B. BUILDING DEVELOPMENT STANDARDS		
1. Minimum Building Setbacks		
a. From Front Property Line	25 FT	
b. From Street Side Property Line	25 FT	
c. From Interior Side Property Line	15 FT	
d. From Rear Property Line	15 FT	
2. Minimum Building Separations	6 FT	
3. Maximum Building Height	35 FT	Note 2

Notes:

1. *An existing lot of record that is substandard as to minimum "lot" area and/or dimension(s) shall be granted all development rights of the zoning district in which it is located (refer to Subsection 3.01.010.B of this Development Code).*
2. *The maximum building height and FAR may be restricted pursuant to the Ontario International Airport Land Use Compatibility Plan (ALUCP). Refer to the ALUCP for properties affected by Airport Safety Zones.*

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(2) Development within the AG Overlay District shall be consistent with the Residential Design Guidelines established by resolution of the City Council, which are intended as a reference to assist the designer in understanding the City's goals and objectives for residential development. Such guidelines shall be enforceable in the same manner and to the same extent as any other applicable requirement of this Development Code.

q. *Sign Standards.* Notwithstanding the sign regulations contained in Division 8.1 (Sign Regulations) of this Development Code, signs installed within the AG Overlay District shall comply with the following:

(1) **Freestanding Signs.** One unlighted single or double faced sign shall be permitted, not to exceed 6 FT in height and 12 SF in area, for each 60 FT of street frontage, and shall be placed behind the street property line.

(2) **Wall Mounted Signs.** One wall-mounted sign shall be permitted on each building elevation facing a street, not to exceed one SF of sign area for each lineal foot of building elevation length, not to exceed 50 SF.

2. EA (Euclid Avenue) Overlay Zoning District.

a. *Purpose.* The purposes of the EA Overlay zoning district is to recognize and protect Euclid Avenue as a major scenic and historic resource of the City, and major contributor to Ontario's historic downtown. Furthermore, the EA Overlay zoning district is intended to help identify and safeguard Euclid Avenue's position on the National Register of Historic Places.

b. *Applicability.* The herein established rights and responsibilities applicable to the EA Overlay zoning district shall apply to all property located within the boundary of said Overlay District, as shown on the official Zoning Map of the City. The EA Overlay zoning district provisions established herein, shall apply to all existing and new building construction, additions, remodels, or reallocations, whether or not a building permit is required, or other similar entitlement by the City.

c. *Development Standards and Guidelines.* Land development within the EA Overlay zoning district shall be designed and constructed pursuant to the standards and guidelines applicable to the underlying base zoning district and the requirements of the Downtown Ontario Design Guidelines (see Reference C—Downtown Ontario Design Guidelines), as applicable.

d. *Certificate of Appropriateness Required.* A development project within the EA Overlay zoning district, which requires Development Plan approval pursuant to Section 4.02.025 (Development Plans) of this Development Code, shall require the approval of a Certificate of Appropriateness pursuant to Section 4.02.050 (Historic Preservation—Certificates of Appropriateness and Demolition of Historic Resources).

e. *Medical Offices and Clinics*. Medical offices and clinics within the EA Overlay zoning district, and which are located in the MU-1 zoning district and have street frontage on Euclid Avenue, shall be allowed only on the second floor of a building or above (occupancy of the ground/first floor shall not be allowed). Medical offices and clinics within the EA Overlay zoning district, which are not located in the MU-1 zoning district, or do not have street frontage on Euclid Avenue, may occupy the ground/first floor of a building.

3. ES (Emergency Shelter) Overlay Zoning District.

a. *Purpose*. The purpose of the ES Overlay zoning district (established pursuant to Section 5.01.010.F.3 (ES (Emergency Shelter) Overlay District) is to accommodate the establishment of emergency shelters, supportive housing, and transitional housing land uses within the City.

b. *Applicability*.

(1) The herein established rights and responsibilities applicable to the ES Overlay zoning district shall apply to all property located within the boundary of said Overlay District, as shown on the official Zoning Map of the City. The ES Overlay zoning district provisions established herein, shall apply to all existing and new building construction, additions, remodels, or reallocations, whether or not a building permit is required, or other similar entitlement by the City.

(2) The ES Overlay zoning district shall be located within areas of the City that are predetermined by the Housing Element, pursuant to GC Section 65583 and contained within the Policy Plan component of The Ontario Plan. Alternate locations may be established by resolution of the City Council, upon recommendation of the Planning Commission.

c. *Development Standards and Guidelines.* Within the ES Overlay zoning district, land and improvements thereon shall be designed and developed pursuant to the standards and guidelines of the underlying base zoning district.

4. MTC (Multimodal Transit Center) Overlay Zoning District.

a. *Purpose*.

(1) The multimodal transit facility anticipated by the Policy Plan component of The Ontario Plan is generally located south of Interstate 10, north of the railroad tracks, east of Guasti Road and west of Archibald Avenue. The multimodal center will serve as a transit hub for local buses, BRT, the Gold Line, high-speed rail, the proposed Ontario Airport Metro Center circulator, and other future transit modes. Many of these transit modes require extensive capital outlay and years of planning, environmental review, design, and, ultimately, construction. Much of the financing of these facilities is beyond the control of the City, being handled by other local, regional, State and federal agencies. The development of a multimodal facility and related services is a long term endeavor, anticipated to take years, if not decades, to bring to fruition.

(2) The MTC Overlay zoning district (established pursuant to Section 5.01.010.F.4 (MTC (Multimodal Transit Center) Overlay District) of this Development Code) is currently developed with a ±425,000 SF warehouse/distribution building with ancillary offices, and a ±6,000 SF building used as a contractor's office and yard. These buildings are not suited for residential, retail, or office uses as envisioned by the Policy Plan, and use of these facilities in the

near term would be somewhat limited, until the property is redeveloped as a multimodal transit center. Consequently, the City wishes to authorize the use of the existing buildings for the purpose for which they were previously used.

(3) The purpose of the MTC Overlay zoning district is to allow for the establishment of warehouse and distribution land uses, on an interim basis, within existing buildings located within the overly district boundary.

b. *Applicability*.

(1) The herein established rights and responsibilities applicable to the MTC Overlay zoning district shall apply to all property located within the boundary of said Overlay District, as shown on the official Zoning Map of the City. The MTC Overlay zoning district provisions established herein, shall apply to all existing and new building construction, additions, remodels, or reallocations, whether or not a building permit is required, or other similar entitlement by the City.

(2) Allowed land uses within the MTC Overlay zoning district shall be limited to warehouse/distribution facilities, ancillary offices, and those temporary land uses allowed within the IG zoning district pursuant to Table 5.02-1 (Land Use Matrix) of this Development Code.

(3) Any expansion of existing buildings or proposals for new building construction shall require the adoption of a Specific Plan pursuant to Section 4.01.035 (Specific Plans and Amendments) of this Development Code, which prescribes the allowed land uses, development regulations and guidelines, and sign regulations applicable to the project.

(4) The MTC Overlay zoning district shall remain in effect until June 30, 2027, unless otherwise extended pursuant to Section 4.01.020 (Development Code Amendments) of this Development Code, or the existing buildings are removed.

(5) All rights pertaining to the MTC Overlay zoning district established herein, shall run with the land and shall be transferable to any future owner(s) of property within the MTC Overlay zoning district, and their assigns.

5. ICC (Interim Community Commercial) Overlay Zoning District.

a. *Purpose*. The purpose of the ICC Overlay zoning district (established pursuant to Section 5.01.010.F.5 (ICC (Interim Community Commercial) Overlay District) of this Development Code) is to allow for the establishment of Community Commercial land uses, on an interim basis, within existing buildings located within the overlay district boundary.

b. *Applicability*.

(1) The herein established rights and responsibilities applicable to the ICC Overlay zoning district shall apply to all property located within the boundary of said Overlay District, as shown on the official Zoning Map of the City. The ICC Overlay zoning district provisions established herein, shall apply to all existing and new building construction, additions, remodels, or reallocations, whether or not a building permit is required, or other similar entitlement by the City.

(2) The ICC Overlay zoning district may be established pursuant to the requirements of Section 4.01.040 (Zone Changes) of this Development Code, on property containing existing buildings constructed for occupancy by commercial land uses.

(3) The ICC Overlay zoning district shall allow those commercial uses allowed in the CN and CC zoning districts pursuant to Table 5.02-1 (Land Use Matrix) of this Development Code, while at the same time preserving the City's vision for the development and use of property consistent with the underlying Policy Plan (general plan) land use designation.

c. *Expansion of Existing Commercial Structures and Uses.*

(1) Within the ICC Overlay zoning district, building expansion, shall only be allowed for the purpose of expanding an existing, legally established commercial land use, which is allowed pursuant to Subparagraph B.5.b(3) of this Section.

(2) The expansion of an existing commercial building shall be allowed pursuant to the requirements of Subsection 3.01.020.J (Alteration and/or Expansion of a Nonconforming Nonresidential Structure) of this Development Code and shall be developed consistent with the standards of the CC zoning district.

(3) *New Residential Development.* New residential development, which is proposed consistent with the Official Land Use Plan (Exhibit LU-01) of the Policy Plan component of The Ontario Plan, shall first require a zone change to the HDR-45 zoning district pursuant to Section 4.01.040 (Zone Changes) of this Development Code, and full compliance with the land use requirements, and development standards and guidelines of the HDR-45 zoning district.

(4) *Protection of ICC Overlay zoning district Land Use and Development Rights.* All land use and development rights granted by the ICC Overlay zoning district shall be transferable to any future owner(s) of property within the ICC Overlay zoning district, and their assigns.

6. AH (Affordable Housing) Overlay Zoning District.

a. *Purpose*. The purpose of the AH Overlay zoning district is to facilitate housing opportunities within the community via implementation of required rezone programs pursuant to the City's adopted Housing Element where required for compliance with State Housing Element law.

b. *Applicability*. The herein established rights and responsibilities applicable to the AH Overlay District shall apply to sites identified in the housing inventory, part of the City's Housing Element, located 1) south of Riverside Drive, 2) along East Holt Boulevard between the Cucamonga Creek Channel and Corona Avenue, and 3) areas designated as MU-8C at the northeast corner of West Holt Boulevard and Mountain Avenue.

c. *Definitions.* For the purpose of the AH Overlay zoning district, the words or phrases listed below, in correct alphabetical order, shall have the meanings hereafter specified:

Affordable Housing Project. Affordable housing projects for the purposes of the affordable housing overlay are defined as follows:

- Tier 1. Any projects with a residential component with at least 20 percent of total units are designated as affordable to lower incomes via deed restriction or another mechanism to guarantee affordability for a minimum of 30 years.

- Tier 2. Any projects with a residential component with at least 25 percent of total units are designated as affordable to lower incomes via deed restriction or another mechanism to guarantee affordability for a minimum of 30 years.

d. *Development Standards.* The development standards applicable to proposed development in the Affordable Housing Overlay District shall be in accordance with the applicable base zone, other overlay zones, and all applicable provisions of the Development Code, unless otherwise indicated herein, or where necessary to comply with Federal and State law.

(1) **Minimum Density.** Within the AH Overlay zoning district, all new residential development, regardless of affordability, requires a minimum density of 20 dwelling units per acre. The minimum density shall be calculated as an average over the entire project area on sites south of Riverside Drive.

(2) **Affordable Housing Projects.** The development of affordable housing projects within the AH Overlay zoning district shall be allowed by right and are encouraged in accordance with the following provisions:

(a) Tier 1 Affordable Housing Projects. Tier 1 Affordable Housing Projects on property having a base zoning designation of SP, may be developed as follows:

(i) *Medium Density Residential (MDR)*. Affordable housing projects on property designated as MDR by the Land Use Plan (Figure LU-01) of the Policy Plan, may be developed pursuant to the requirements of either the SP zoning district or the MDR-25 zoning district.

(ii) *Mixed Use (MU)*. Affordable housing projects on property designated as MU by the Land Use Plan (Figure LU-01) of the Policy Plan, may be developed pursuant to the requirements of either the SP zoning district or a comparable existing zoning implementation tool that aligns with the density and intensity of the proposed project, except that the maximum density allowed shall be equivalent to the maximum density identified for the applicable Mixed Use area in the Land Use Designations Summary Table (Figure LU-02) of the Policy Plan.

(iii) *Calculating Minimum Density*. If a project with a base designation of SP develops without a specific plan, minimum density shall be calculated as an average over the entire portion of the project area that is within the AH Overlay zoning district.

(b) Tier 2 Affordable Housing Projects. Tier 2 Affordable Housing Projects on property having a base zoning designation of SP, may developed in the same manner as Tier 1 Affordable Housing Projects, with the following additions:

(i) *Medium Density Residential.* Affordable housing projects on property designated as MDR by the Land Use Plan (Figure LU-01) of the Policy Plan shall allow a maximum density of 25 to 30 dwelling units per acre.

Division 6.02—Walls, Fences, and Obstructions

Sections:

6.02.000: Purpose
6.02.005: Applicability
6.02.010: Prohibited Materials
6.02.015: General Requirements
6.02.020: Design Standards for Residential Zoning Districts
6.02.025: Design Standards for Nonresidential Zoning Districts
6.02.030: Protection of Intersection Visibility
6.02.035: Temporary Security or Construction Fencing

6.02.000: Purpose

The purpose of this Division is to establish standards regulating the construction and maintenance of walls, fences, and other obstructions to allow for the maximum enjoyment and use of property, and to ensure the maximum safety of persons using streets and sidewalks.

6.02.005: Applicability

A. The provisions of this Division shall apply to the construction, addition or remodel of any wall or fence, and the placement of landscaping, signs, poles, equipment, or any other object that may pose an obstruction to pedestrian or vehicular travel or visibility.

B. The design and location of all walls, fences, and gates shall be subject to review and approval by the Planning Director, regardless of whether a building permit is required for its construction.

6.02.010: Prohibited Materials

The following materials shall be prohibited in the construction and/or installation of walls, fences, and obstructions:

A. Walls or fences containing razor wire or any other material or application considered by the Planning Director to be unsafe, shall be prohibited.

B. Walls and/or fences containing barbed wire shall be prohibited within residential and commercial zoning districts, and within mixed-use zoning districts and overlay districts for residential or commercial purposes.

C. Walls and/or fences containing electrified wire, and the installation of electrified fences, shall be prohibited within residential zoning districts, and in conjunction with residential development in mixed-use zoning districts and overlay districts for residential purposes.

6.02.015: General Requirements

A. No hedge, fence, wall, merchandise, sign, or any other equipment may be constructed, placed, grown, or permitted on any sidewalk, excepting newsstands, public trash receptacles, U.S. Government mailboxes, public utility poles, public transit shelters and/or seating, or any other object that is deemed no more objectionable than the foregoing by resolution of the City Council. The authorized equipment shall be placed out of the normal flow of pedestrian traffic and shall not be so placed as to constitute a hazard or nuisance.

B. No hedge, fence, wall, merchandise, sign, or any other equipment shall be permitted in or on any parkway adjacent to any sidewalk, except as allowed by the City Engineer, or excepting newsstands, public trash receptacles, U.S. Government mailboxes, public utility poles, public transit shelters and/or seating, or any other object that is deemed no more objectionable than the foregoing by the City Engineer. The authorized equipment shall be placed out of the normal flow or pedestrian traffic and shall not be so placed as to constitute a hazard or nuisance.

C. No fence, wall, shrub, sprinkler system, or any construction may be placed within any street right-of-way without first obtaining an encroachment permit from the City Engineer.

D. Any fence, shrub, sprinkler system, or any construction placed within the street right-of-way without permission of the City Engineer shall be removed by the owner upon request of the City Engineer within 7 days of notification, at no expense to the City. Upon failure to comply with an order for removal, the City may cause removal at the expense of the owner.

E. No fence shall be constructed of metal other than ornamental iron or tube steel, chain link, or wire mesh having a minimum size and thickness of 4-inches by 4-inches by 12.5 gauge.

F. Walls, fences, hedges or other plant growth that, in the opinion of the Planning Director or City Engineering, adversely affects the safe ingress or egress of pedestrians or vehicles shall not exceed 3 FT in height within any required front or street side yard setback area.

G. A 6 FT high wall or fence shall be constructed along the perimeter of all areas determined by the Planning Director, Building Official, or City Engineer, to pose a danger to the public health or safety.

6.02.020: Design Standards for Residential Zoning Districts

Within residential zoning districts, walls and fences shall be constructed as follows:

A. Required Walls and Fences.

1. Single-Family Development Projects and Subdivisions. Single-family residential development projects and subdivisions, regardless of the number of dwellings proposed, shall provide 6-FT high walls, as follows:

a. A decorative masonry block wall shall be constructed along the perimeter of single-family development projects and subdivisions, including all interior side and rear project boundaries, and street frontages without front-on units.

b. A decorative masonry block wall shall be constructed along all street side property lines and along the rear property line of through lots and shall be setback a minimum of 5 FT behind the sidewalk.

c. A masonry block wall shall be constructed along interior side and rear property lines. Walls shall not be required along property lines that abut a property zoned or used as open space or maintained for recreation purposes.

d. A decorative masonry block wall shall be constructed between side yard walls and the adjacent dwelling. Appropriate gates for rear yard access shall be provided.

2. Multiple-Family Development Projects and Subdivisions. Multiple-family residential development projects and subdivisions, regardless of the number of dwellings proposed, shall provide 6-FT high walls or fences, as follows:

a. A decorative masonry block wall, or decorative tube steel fence with decorative masonry pilasters, shall be constructed along the interior side and rear project boundaries of multiple-family development projects and subdivisions. Walls or fences shall not be required along property lines that abut a property zoned or used as open space or maintained for recreation purposes.

b. A minimum 6-FT high decorative masonry wall shall be constructed along property lines that separate multiple-family development projects from neighboring residential developments. The wall height shall be measured from the highest adjacent grade.

3. Swimming Pools, Hot Tubs, Spas, Ponds, and Decorative Bodies of Water. Any swimming pool, hot tub, spa, pond, or decorative body of water that is more than 1.5 FT in depth, whether located above or below ground, shall be fully enclosed by a minimum 5-FT high decorative nonclimbable fence or wall, with decorative entrance and exit gates, and shall be constructed/installed pursuant to building code requirements.

B. Materials and Design.

1. All walls and fences visible to the public shall be designed to be compatible with the architecture of the buildings on the same lot.

2. All walls that are visible to the public shall be constructed of decorative masonry that is complimentary to the exterior finishes of adjacent buildings, such as, but not limited to, brick, split-face or slump concrete block, or other materials approved by the Planning Director that are consistent with industry standards, and shall include a decorative cap. The use of a grout cap shall not be permitted.

3. Fences shall be constructed of ornamental steel or iron, wood, or PVC materials, which are consistent with industry standards. Other materials may be used if the Planning Director determines the design to be compatible with the architecture of adjacent buildings and with buildings in the surrounding neighborhood.

4. Special design considerations shall be provided on walls and fences located within front yards and areas visible from public streets to ensure compatibility with the architecture of adjacent buildings, as well as with buildings in the surrounding neighborhood.

5. Long expanses of wall or fence (ranging from 150 FT to 200 FT in length) that is adjacent to a public right-of-way shall have offset areas (decorative pilasters or a horizontal change in the plane) and shall be architecturally designed to prevent monotony. The design of walls shall emphasize the highest quality of materials and design features.

6. Within existing neighborhoods, fences located within the front and street side yards of single-family homes may be constructed of chainlink if it is the predominate material used in the neighborhood, as determined by the Planning Director. If chainlink fencing is determined to be appropriate, it shall be installed in accordance with industry standards.

C. Height. The maximum height of a walls or fences located within a residential zoning district shall be as listed below. The wall height shall be measured on the street side or exterior side of the wall, from the top of the wall to the lowest adjacent finished grade.

1. Subdivision Perimeter Walls and Fences. Subdivision perimeter walls shall not exceed 6 FT in height, except as permitted by Paragraphs C.5 (Walls and Fences in Conjunction with Retaining Walls) and C. 7 (Sound Attenuation Walls) of this Section.

2. Street Side Yard Walls and Fences. Street side yard walls or fences shall not exceed 6 FT in height, except as permitted by Paragraphs C.5 (Walls and Fences in Conjunction with Retaining Walls) and C. 7 (Sound Attenuation Walls) of this Section.

3. Interior Side and Rear Property Line Walls and Fences. Interior side and rear yard property line walls or fences shall not exceed 6 FT in height, except as permitted by Paragraphs C.5 (Walls and Fences in Conjunction with Retaining Walls) and C. 7 (Sound Attenuation Walls) of this Section.

4. Front Yard Walls and Fences. Walls or fences within a front yard area shall not exceed 3 FT in height, except as permitted by Paragraphs C.5 (Walls and Fences in Conjunction with Retaining Walls) and C. 7 (Sound Attenuation Walls) of this Section.

5. Walls and Fences in Combination with Retaining Walls. To accommodate possible differences in grade between two properties, or between a property and a public right-of-way, the Planning Director may approve walls and fences constructed in combination with retaining walls, which have an overall height in excess of the maximum wall height allowed by Paragraphs C.1 through C.4 of this Section. However, walls and fences constructed in combination with retaining walls, which are located adjacent to a public right-of-way, shall: have a maximum retaining wall height of 3 FT and a maximum free wall height equal to the maximum wall heights allowed by Paragraphs C.1 through C.4 of this Section.

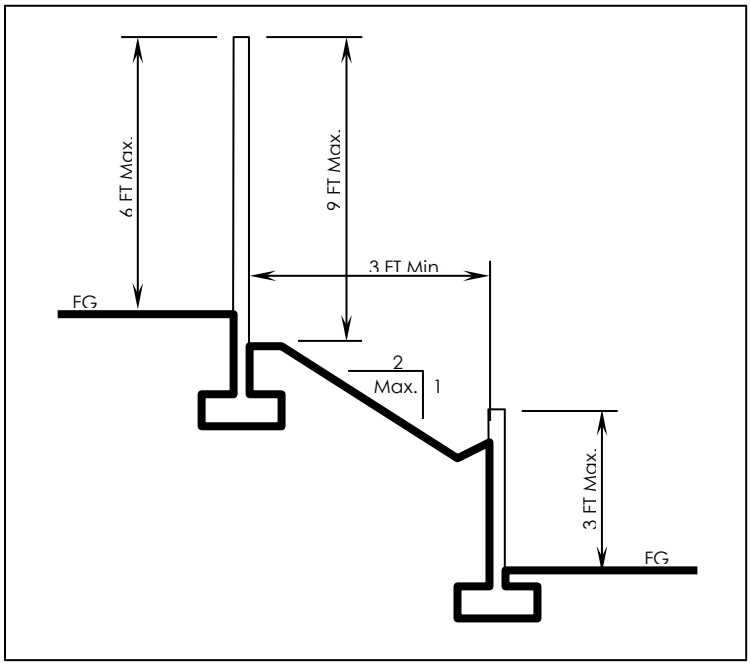

Figure 6.02-1: Tiered Retaining Wall Design Concept

6. Tiered Retaining Wall Design. In cases where more than 3 FT of earth retention is necessary adjacent to a public right-of-way, retaining walls shall be tiered as exemplified in Figure 6.02-1 (Tiered Retaining Wall Design Concept), above.

7. Sound Attenuation Walls. Walls constructed for sound attenuation pursuant to an impact study prepared by an acoustic engineer, shall be the minimum height necessary to ensure adequate sound attenuation. The design and construction of a noise attenuation wall in excess of 6 FT in height shall be approved by the Planning Director prior to building permit issuance.

8. Walls and Fences within the Buildable Area of a Lot (Behind Setback Areas). Fences and walls constructed within the buildable area of a lot shall be subject to the height limitations of the applicable base zoning district.

D. Location.

1. Interior Property Lines (Side and Rear). Where the side or rear property line of a lot is common with another lot's side or rear property line, a wall or fence may be constructed along the common property line for purposes of property division or security.

2. Street Side Property Lines. On a corner lot or reverse corner lot, where a side and rear property line of a lot is common with a side or rear property line of another lot, a wall or fence may be constructed along the street side property line. The area between the wall or fence and the sidewalk (or curb) shall be fully landscaped and maintained.

3. Front Yard Walls or Fences. Within a front yard area, walls and fences up to 3 FT in height may be constructed along a front or street side property line. The area between the wall or fence and sidewalk (or curb) shall be fully landscaped and maintained.

4. Through-Lots. On a single lot having two street frontages, each frontage at opposite ends of the lot, for the purposes of wall placement, one frontage shall be a front yard

and the other a rear yard. A wall or fence shall be constructed a minimum of 5 FT behind the rear property line. The area between the wall or fence and sidewalk shall be fully landscaped and maintained.

6.02.025: Design Standards for Nonresidential Zoning Districts

Within nonresidential zoning districts, walls and fences shall be constructed as follows:

A. Required Walls and Fences.

1. Zoning District Boundary Separation.

a. A decorative masonry block wall shall be constructed along property lines that separate nonresidential zoning districts from neighboring residential zoning districts. The wall height on the nonresidential side of the wall shall be a minimum of 8 FT and shall be a minimum of 6 FT in height on the residential side of the wall.

b. A decorative tube steel fence with a sheppard's hook shall be constructed between railroad rights-of-way and development projects within nonresidential zoning districts.

2. Screening of Outdoor Loading/Storage Areas and Loading Doors.

a. Outdoor loading and storage areas, and loading doors shall be screened from public view by a decorative masonry wall with view-obstructing access gates

b. Screen walls shall be designed as an integral part of the architecture of the buildings on the lot.

c. Screen walls shall be of sufficient height to completely screen loading and storage activities, facilities, and equipment, but shall be no less than 8 FT in height.

d. Screen walls shall be constructed of tilt-up or poured-in-place concrete, brick, concrete block (split-face or slump), or other materials approved by the Planning Director.

B. Materials and Design.

1. All walls and fences visible to the public shall be designed to be compatible with the architecture of the buildings on the same lot.

2. Walls that are visible to the public shall be constructed of decorative masonry that is complimentary to the exterior finishes of adjacent buildings, such as brick; split-face concrete block; or ribbed, scored, or sandblasted tilt-up or poured-in-place concrete. Ceramic tile and natural stone veneers may also be used. Precision block shall not be used in areas visible to the public.

3. Concrete block walls shall incorporate a decorative cap. The use of a grout cap shall not be permitted.

4. Fences that are visible to the public shall be constructed of decorative wrought iron or tube steel, with decorative masonry pilasters spaced at regular intervals. Other materials

may be used if the Planning Director determines the design to be compatible with the architecture of adjacent buildings. Chainlink shall not be used in areas visible to the public.

5. Long expanses of wall or fence (ranging from 150 FT to 200 FT in length) that is adjacent to a public right-of-way shall have offset areas (decorative pilasters or a horizontal change in plane) and shall be architecturally designed to prevent monotony. The design of walls shall emphasize the highest quality of materials and design features.

6. Walls or fences containing barbed wire may be used within industrial zoning districts; however, the barbed wire shall not project above the top of walls or fences so as to be visible from public areas.

C. Height. The maximum height of a wall or fence located within nonresidential zoning districts shall be as listed below. The wall height shall be measured on the street side or exterior side of the wall, from the top of the wall to the lowest adjacent finished grade.

Table 6.02-1: Maximum Height of Interior Side and Rear Property Line Walls and Fences

Zoning District	Maximum Height
Commercial and Mixed-Use Zoning Districts:	8 FT
Industrial Zoning Districts:	14 FT
All Other Nonresidential Zoning Districts:	6 FT

1. Interior Side and Rear Property Line Walls and Fences. Interior side and rear yard property line walls or fences shall not exceed the following heights shown in Table 6.02-1 (Maximum Height of Interior Side and Rear Property Line Walls and Fences), above, except as permitted by Paragraphs A.1 (Zoning District Boundary Separation), C.4 (Walls and Fences in Combination with Retaining Walls) and C.6 (Sound Attenuation Walls) of this Section.

2. Walls or Fences within Front and Street Side Setback Areas. Walls or fences located within front or street side setback areas shall not exceed the following heights shown in Table 6.02-2 (Maximum Height of Walls or Fences within Front and Street Side Setback Areas), below, except as permitted by Paragraphs C.4 (Walls and Fences in Combination with Retaining Walls) and C.6 (Sound Attenuation Walls) of this Section.

Table 6.02-2: Maximum Height of Walls or Fences within Front and Street Side Setback Areas

Zoning District	Maximum Height
Commercial and Mixed-Use Zoning Districts:	3 FT
Industrial Zoning Districts:	6 FT maximum, constructed with at least 90 percent of the vertical surface designed to be open and not view-obstructing.
All Other Nonresidential Zoning Districts:	6 FT maximum, except that the portion of a wall or fence in excess of 3 FT in height shall be constructed with at least 90 percent of the vertical surface designed to be open and not view-obstructing.

3. Walls and Fences in Combination with Retaining Walls. To accommodate possible differences in grade between two properties or between a property and a public right-of-way, the Planning Director may approve walls and fences constructed in combination with retaining walls, which have an overall height in excess of the maximum wall height allowed by Paragraphs C.1 (Interior Side and Rear Property Line Walls and Fences) and C.2 (Walls or Fences Within Front

and Street Side Setback Areas) of this Section. However, walls and fences constructed in combination with retaining walls, which are located adjacent to a public right-of-way, shall: **[i]** have a maximum retaining wall height of 3 FT, **[ii]** have a maximum free wall height of 6 FT, and **[iii]** have a maximum overall height of 9 FT.

4. Tiered Retaining Wall Design. In cases where more than 3 FT of earth retention is necessary adjacent to a public right-of-way, retaining walls shall be tiered pursuant to Figure 6.02-1 (Tiered Retaining Wall Design Concept).

5. Sound Attenuation Walls. Walls constructed for sound attenuation pursuant to an impact study prepared by an acoustic engineer, shall be the minimum height necessary to ensure adequate sound attenuation. The design and construction of a noise attenuation wall in excess of 6 FT in height shall be approved by the Planning Director, prior to building permit issuance.

6. Walls and Fences within the Buildable Area of a Lot (Outside of Setback Areas). Fences and walls constructed within the buildable area of a lot shall be subject to the height limitations of the applicable base zoning district.

D. Location.

1. Interior Property Lines (Side and Rear). Where the side or rear property line of a lot is common with another lot's side or rear property line, a wall or fence may be constructed along the common property line for purposes of property division or security.

2. Street Side Property Lines. On a corner lot or reverse corner lot, a wall or fence may be constructed for property security a minimum of 5 FT behind the street side property line. The area between the wall or fence and the sidewalk (or curb if no sidewalk is present) shall be fully landscaped and maintained.

3. Front Yard Walls or Fences. Within a front yard area, a wall or fence may be constructed for property security a minimum of 5 FT behind the front property line. The area between the wall or fence and sidewalk (or curb if no sidewalk is present) shall be fully landscaped and maintained.

4. Through-Lots. On a single lot having two street frontages, with each frontage at opposite ends of the lot, for the purposes of wall placement, one frontage shall be a front yard and the other a rear yard. A wall or fence shall be constructed a minimum of 10 FT behind the rear property line. The area between the wall or fence and the sidewalk (or curb if no sidewalk is present) shall be fully landscaped and maintained.

E. Electrified Fences.

1. No electrified fence shall be installed or used unless first approved by the Planning Director. As used herein, "electrified fence" means any fence that meets the following requirements.

a. The fence is powered by an electrical energizer with both of the following output characteristics:

(1) The impulse repetition rate does not exceed 1 Hz.

(2) The impulse duration does not exceed 10 milliseconds (10/10,000 of a second).

b. The fence is used to protect and secure commercial or industrial property.

2. An owner of real property may install and operate an electrified fence on their property subject to all of the following:

a. The property is not located in a residential zone.

b. The fence meets the 2006 international standards and specifications of the International Electrotechnical Commission for electric fence energizers in "International Standard IEC 60335, Part 2-76."

c. The fence is identified by prominently placed warning signs that are legible from both sides of the fence. At a minimum, the warning signs shall meet all of the following criteria:

(1) The warning signs are placed at each gate and access point, and at intervals along the fence not exceeding 30 FT.

(2) The warning signs are adjacent to any other signs relating to chemical, radiological, or biological hazards.

(3) The warning signs are marked with a written warning or a commonly recognized symbol for shock, a written warning or a commonly recognized symbol to warn people with pacemakers, and a written warning or commonly recognized symbol about the danger of touching the fence in wet conditions.

d. Within nonresidential zoning districts, except industrial zoning districts, an electrified fence shall not exceed 10 FT in height and shall be located behind a fully enclosed perimeter wall or fence that is no less than 2 FT below the height of the electrified fence.

e. Within industrial zoning districts, an electrified fence shall not exceed 16 FT in height and shall be located behind a fully enclosed perimeter wall or fence that is no less than 2 FT below the height of the electrified fence.

f. A "Knox Box Electrical Shunt Switch" and a "Knox Box" or other similarly approved device, shall be installed for emergency access of Police and Fire Departments.

g. By issuance of a building and/or electrical permit to install or use an electric fence as provided by this Subsection, the applicant and property owner shall agree, as a condition of permit issuance, to defend, indemnify and hold harmless the City of Ontario and its agents, officers, consultants, independent contractors, and employees, from any and all claims, actions, or proceedings arising out of any personal injury, including death or property damage caused by the electrified fence.

h. In the event that access by the City of Ontario Fire Department and/or Police Department personnel to a property where a permitted electrified fence has been installed and is operating required due to an emergency or urgent circumstances, and the Knox Box or other similar approved device referred to in this Subsection is absent or non-functional, and an owner, manager, employee, custodian, or any other person with control over the property, is not present to disable the electric fence, the fire or police personnel shall be authorized to disable the

electrified fence in order to gain access to the property. As a condition of permit issuance, all applicants issued permits to install or use an electrified fence as provided in this Subsection will agree to waive any and all claims for damages to the electrified fence against the City of Ontario and/or its personnel under such circumstances.

i. It shall be unlawful, and a misdemeanor, for any person to install, maintain, or operate an electrified fence in violation of this Subsection.

6.02.030: Protection of Intersection Visibility

There shall be no visual obstructions within the areas specified below. For the purposes of this Section, a visual obstruction shall be defined as any wall, fence, obstacle, mature landscaping, or thing allowed, installed, set out, or maintained, which exceeds a height of 3 FT above the nearest street pavement surface, excepting existing or future permanent buildings that are otherwise constructed or maintained in accordance with applicable zoning and building regulations, public utility poles, trees trimmed at the trunk to a point at least 8 FT above the level of the street (provided that trees are spaced so that trunks do not create a visual barrier), and official traffic or other government signs.

A. **Intersecting Streets.** At intersecting streets, an area (corner clearance) shall be maintained free of visual obstructions to ensure adequate sight distance for vehicular and pedestrian traffic. The corner clearance shall be provided pursuant to the Engineering Department's Traffic and Transportation Guidelines.

B. **Intersecting Private Driveway with a Street or Alley.** Where a private driveway intersects a street or alley, the Planning Director or City Engineer may require that a clear area (corner cutoff) be maintained free of visual obstructions to ensure adequate sight distance for vehicular and pedestrian traffic. The corner cutoff is defined by a line in a horizontal plane, taken at a 45-degree angle with the street or alley, which line passes through a point on the street or alley 20 FT from the intersection.

C. **Driveway Adjacent to a Reverse Corner Lot.** Where a key lot has a private driveway located along the side yard which abuts the rear yard of a reverse corner lot, the Planning Director or City Engineer may require that a clear area (corner cutoff) be provided on the reverse corner lot pursuant to Subsection B (Intersecting Private Driveway With a Street or Alley), above, to assure adequate sight distance for vehicular and pedestrian traffic. Generally, new developments containing reverse corner lots shall locate the key lot driveway in the side yard opposite the rear property line of the reverse corner lot, unless determined by the Planning Director or City Engineer that the location of the driveway, as it relates to the adjoining property, will maintain adequate visibility at the intersecting driveway and street.

6.02.035: Temporary Security or Construction Fencing

A. **Purpose.** Temporary security or construction fences are typically used to secure vacant property from theft, vandalism and/or trespass; or to secure a construction site from the theft or vandalism of construction equipment and/or materials, protect work in progress, and to protect the public from injury while construction is underway. The herein stated regulations are intended to establish procedures and standards regarding the use of temporary security and construction fencing on sites with construction activity, on undisturbed land, around vacant buildings, on vacant sites, and for special events.

B. **Applicability.** Temporary security or construction fencing may be installed as follows:

1. Temporary construction fencing may be installed in conjunction with: **[i]** a building permit for the construction of a vacant property, **[ii]** the vacant portion of a partially developed property, or **[iii]** exterior improvements to an existing occupied or unoccupied building.

2. Temporary security fencing may be installed in conjunction with: **[i]** a vacant/unimproved property, **[ii]** a vacant building, or **[iii]** the vacant/unimproved portion of a partially developed property.

C. **Temporary Security or Construction Fencing Design Requirements.**

1. Temporary security or construction fencing shall not include barbed wire, razor wire, or any other material or application considered by the Planning Director to be unsafe.

2. Temporary security or construction fencing shall be built and maintained in good order, in full compliance with applicable Building Code and Development Code provisions.

3. The maximum height of temporary security or construction fencing shall be 6 FT within residential zoning districts, and 8 FT within nonresidential zoning districts, measured on the exterior side of the fence, from the top of the fence to the lowest adjacent finished grade.

4. All temporary security or construction fencing shall include a green fabric mesh screen or other view-obstructing material approved by the Planning Director, which shall be maintained in a neat and undamaged condition and shall include emergency identification and proper safety identification.

5. Fence openings for pedestrian access shall be provided, which consists of a lockable gate that swings into the property.

6. Fence openings for vehicular access shall be provided with a lockable rolling gate. The opening shall be no wider than the adjacent driveway approach.

7. Fencing shall not be installed in a manner that prohibits the safe and continued operation of a building pursuant to the Building Code. Required exits, existing structural elements, fire protection devices, and sanitary safeguards shall be maintained at all times, pursuant to Building Code requirements.

8. Existing streets, public transportation stops, fire hydrants, and/or public sidewalks shall not be enclosed by temporary security or construction fencing, unless the Building Official determines that the facilities are required to be fenced to protect the public health, safety, or welfare, and an encroachment permit has been obtained from the City.

9. The installation of temporary security or construction fencing shall not result in a diversion of water onto a separately owned parcel, tract, right-of-way, right-of-way easement, roadway easement, and/or private street."

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Division 6.03—Off-Street Parking and Loading

Sections:

6.03.000: Purpose
6.03.005: Applicability
6.03.010: General Requirements
6.03.015: Required Number of Off-Street Parking Spaces
6.03.020: Reduction in the Required Number of Parking Spaces
6.03.025: Tandem Parking
6.03.030: Parking for the Physically Disabled
6.03.035: Bicycle Parking
6.03.040: Parking for Fuel Efficient Vehicles
6.03.045: Off-Street Parking Design Standards
6.03.050: Parking Lot Lighting
6.03.055: Off-Street Loading Standards

6.03.000: Purpose

The off-street parking and loading regulations prescribed by this Article have been established to achieve the following purposes:

A. Provide accessible, attractive, secure, properly lighted, and well maintained parking facilities;

B. Reduce traffic congestion and hazards caused by the loading and unloading of trucks on public streets and the shortage of parking spaces;

C. To alleviate or to prevent traffic congestion caused by shortage of parking spaces and the loading and unloading of trucks on public streets;

D. Ensure that off-street parking and loading facilities are provided for new land uses and the expansion of existing land uses in proportion to the needs of the land uses they serve; and

E. To ensure that off-street parking and loading facilities are designed in a manner that will result in maximum efficiency, protect the public safety, provide for the special needs of the physically handicapped, and where appropriate, insulate surrounding land uses from their impact.

6.03.005: Applicability

A. Off-street parking and loading facilities, and parking lot lighting shall be provided pursuant to the provisions of this Division when:

1. Any lot is developed, any new building is constructed, or any existing building or structure is added to or expanded, which requires Development Plan approval pursuant to Section 4.02.025 (Development Plans) of this Development Code;

2. Any new use is established, or any existing use is expanded or intensified, which requires Conditional Use Permit approval pursuant to Section 4.02.015 (Conditional Use Permits) of this Development Code;

3. The gross floor area of any existing building or structure is increased or enlarged by more than 5 percent (cumulative) of the existing floor area or permanent seating (off-street parking shall be provided for the total resulting buildings, structures and capacities of uses);

4. Permanent seating for an assembly use is increased or enlarged; (off-street parking shall be provided for the total resulting seating and capacities of uses); and

5. Any intensification of use or change in the occupancy of any building or in the manner in which any use is conducted, that would result in additional parking spaces being required.

B. No existing land use shall be deemed nonconforming solely based upon the lack of off-street parking or loading spaces required by this Division.

6.03.010: General Requirements

A. All off-street parking facilities required by this Division shall be designed and maintained to be fully usable for the duration of the use requiring the facilities.

B. Areas provided to meet applicable parking requirements, including off-street parking and loading spaces, access drives, and maneuvering areas, shall not be used for the outdoor storage of materials and equipment, nor shall it be used for any other purpose than parking.

C. Requirements for uses not specifically addressed by this Division shall be determined by the Zoning Administrator, based upon the requirements for comparable uses and the particular characteristics of the use.

D. All off-street parking and loading spaces required by this Division shall be located on the same lot as the use that they are intended to serve, except that nonresidential uses that cannot accommodate the required number of parking spaces on the same lot may provide parking spaces at a separate off-site location, not more than 500 FT from the use the parking spaces are intended to serve, as measured in a straight line from any point from the outer boundaries of the property or lease space containing the use.

E. The required number of off-street parking spaces and/or loading spaces shall be provided at the time of site and/or building occupancy, or at the time of occupancy of any building addition or intensification of use. All parking and loading spaces shall be maintained in good condition for the duration of the building or use.

F. No vehicle shall be parked upon a public or private parking lot, or public property, for the purpose of displaying the vehicle for sale, hire, or rental, unless the property is appropriately zoned, the vendor is licensed to transact the applicable business at that location, and the vendor has obtained all appropriate land use approvals.

G. All parking stalls shall have direct access from a drive aisle, driveway or alley, and shall be designed in a side-by-side or parallel configuration, except as permitted by Section 6.03.030 (Tandem Parking) of this Division.

6.03.015: Required Number of Off-Street Parking Spaces

A. Off-Street Parking Requirements. Off-street parking spaces shall be provided pursuant to Table 6.03-1 (Off-Street Parking Requirements) of this Division, except that within the MU-1 (Downtown Mixed Use) zoning district, off-street parking shall not be required for existing buildings having a GFA less than 10,000 SF. If more than one land use is established on a lot or project site, the number of off-street parking spaces required shall be equal to the sum of the requirements prescribed for each individual land use.

B. Minimum Standards. The parking requirements of Table 6.03-1 (Off-Street Parking and Loading Requirements) are expressed as minimum standards, which should be met and not exceeded. Nevertheless, if additional parking is essential to a project, the minimum parking standard may be exceeded as follows:

1. Residential Uses—Additional Parking Allowed Without Limit. For residential uses, there is no maximum limit as to the number of parking spaces that may be provided. As such, any additional parking may be provided as a matter of right.

2. Nonresidential Uses—Limited Additional Parking Allowed. Additional parking spaces provided in excess of the number required pursuant to Table 6.03-1 (Off-Street Parking and Loading Requirements) of this Section may be provided for nonresidential uses or the nonresidential portions of mixed-use projects, as follows:

a. Parking spaces may be provided up to a maximum of 10 percent above the required number as a matter of right, without any discretionary review by the City.

b. Parking spaces provided in excess of 10 percent above the required number shall be allowed only upon approval by the Planning Commission, based upon proven need.

C. Gross Floor Area (GFA). References to spaces per square foot are to be computed based upon GFA, unless otherwise specified, and includes allocations of shared restrooms, and circulation and storage areas, and other similar common facilities.

D. Rounding of Off-Street Parking Calculations. If a fractional number results from calculations performed in compliance with this Section, one parking space shall be required for a fractional unit of 0.50 or greater, and no space shall be required for a fractional unit of less than 0.50.

E. Uses Not Listed.

1. Land uses not specifically listed in Table 6.03-1 (Off-Street Parking Requirements) of this Division, shall provide parking as required by the Zoning Administrator or Approving Authority pursuant to Table 2.02-1 (Review Matrix) of this Development Code, as applicable.

2. The Approving Authority shall rely upon the requirements of Table 6.03-1 (Off-Street Parking Requirements), and the standards recommended by the Institute of Transportation Engineers, as a guide in determining the necessary number of off-street parking spaces to be provided.

F. Parking Management Plan.

1. Parking Management Plan Required for Multiple-Family Residential Projects. A Parking Management Plan shall be submitted in conjunction with any Development Plan application for the construction of a multiple-family residential development project, or the residential portion of any mixed-use development project, which consists of 3 or more dwelling units. The Plan shall identify the number and location of resident parking spaces (existing and proposed) provided pursuant to Table 6.03-1 (Off-Street Parking and Loading Requirements) of this Section and establish to which dwelling each required resident parking space is to be assigned.

2. Parking Management Plan Shall Be Included in CC&Rs. The Parking Management Plan required pursuant to Paragraph F.1, above, shall be included in any CC&Rs required by the City as a condition of project approval.

3. Required Resident Parking Spaces Cannot Be Separately Rented/Leased. It shall be unlawful to rent or lease a required residential parking space, or any parking space required for the residential portion of any mixed-use development project, separately from the dwelling for which a parking space has been provided pursuant to Table 6.03-1 (Off-Street Parking and Loading Requirements) of this Section, and/or assigned by a Parking Management Plan prepared pursuant to Paragraph F.1 (Parking Management Plan Required for Multiple-Family Residential Projects) of this Section.

Table 6.03-1: Off-Street Parking Requirements

Land Uses, Activities, and Facilities	*No. of Parking Spaces Required*
A. Residential	
1. Caretaker Quarters	One space within a garage
2. Live/Work Developments	3 spaces per 1,000 SF (0.003/SF) of GFA
3. Mobile Home Parks	
a. Resident Parking Spaces	2 spaces per dwelling
b. Guest/Visitor Parking Spaces	**[1]** Portion of dwellings < 50: 0.25 spaces per dwelling; **[2]** Portion of 50 to 100 dwellings: 0.20 spaces per dwelling; **[3]** Portion of dwellings > 100: 0.17 spaces per dwelling; and **[4]** A minimum of 3 guest spaces shall be provided for developments consisting of more than 8 dwellings.
4. Model Homes	2 spaces per model home
5. Multiple-Family Residential	
a. Resident Parking Spaces	**[1]** Studio: 1.5 spaces per dwelling, including one space in a garage or carport; **[2]** One-Bedroom: 1.75 spaces per dwelling, including one space in a garage or carport; **[3]** Two-Bedrooms: 2.0 spaces per dwelling, including one space in a garage or carport; and **[4]** Three or more Bedrooms: 2.5 spaces per dwelling, including one space in a garage or carport.
b. Guest/Visitor Parking Spaces	**[1]** Portion of dwellings < 50: 0.25 spaces per dwelling; **[2]** Portion of 50 to 100 dwellings: 0.20 spaces per dwelling; **[3]** Portion of dwellings > 100: 0.17 spaces per dwelling; and **[4]** A minimum of 3 guest spaces shall be provided for developments consisting of more than 8 dwellings.

Table 6.03-1: Off-Street Parking Requirements

Land Uses, Activities, and Facilities	*No. of Parking Spaces Required*
6. Senior Citizen Housing (as defined pursuant to CC Section 51.3 and CC Section 51.12)	
a. Income Qualified Development	0.7 resident space per dwelling, plus, guest/visitor parking spaces pursuant to the Multiple-Family Residential standards (Subparagraph A.5.b of this Table).
b. Market Rate Development	One resident space per dwelling, plus, guest/visitor parking spaces pursuant to the Multiple-Family Residential standards (Subparagraph A.5.b of this Table).
7. Single-Family Dwellings	
a. Traditional Development	2 spaces per dwelling within a garage
b. Small Lot and Common Interest Developments	2 resident spaces per dwelling within a garage, plus, 0.2 guest/visitor spaces per dwelling. Guest parking spaces may be provided on-street, immediately adjacent to the development boundary, if available. A minimum of 2 guest spaces shall be provided regardless of the number of dwellings proposed.
8. Single Room Occupancy Facilities	One resident space per room; plus, 2 spaces for the resident manager, plus, guest/visitor parking spaces pursuant to the Multiple-Family Residential standards (Subparagraph A.4.b of this Table).
B. Commercial Agriculture	
1. Commercial Crop Production and Farming	Determined by the Zoning Administrator
2. Commercial Animal Production	Determined by the Zoning Administrator
3. Support Activities for Agriculture	Determined by the Zoning Administrator
C. Utilities	One space per employee during the largest shift.
D. Construction	Required parking for "general warehousing;" plus 0.1 space per 1,000 SF (0.0001/SF) of outside storage yards.
E. Manufacturing	See parking standards for "Industrial and Business Park Developments".
F. Retail Trade	
1. General and Convenience Retail	4 spaces per 1,000 SF (0.004/SF) of GFA
2. Grocery Stores	4 spaces per 1,000 SF (0.004/SF)
3. Motor Vehicle Dealers	Interior show rooms: 2.5 spaces per 1,000 SF (0.0025/SF) of GFA; plus, outdoor display areas: one space per 1,000 SF of GFA; plus, required parking for "motor vehicle repair;" plus, required parking for "offices".
4. Motor Vehicle Parts and Accessories	4 spaces per 1,000 SF (0.004/SF) of GFA
5. Tire Stores	2.5 spaces per 1,000 SF (0.0025/SF) of GFA
6. Furniture and Home Furnishings Stores	2.5 spaces per 1,000 SF (0.0025/SF) of GFA
7. Electronics and Appliance Stores	4 spaces per 1,000 SF (0.004/SF) of GFA
8. Building Materials, Garden Equipment, and Supplies	2.5 spaces per 1,000 SF (0.0025/SF) of GFA; plus, one space per 1,000 SF of outdoor display and storage areas.
9. Food and Beverage Stores	4 spaces per 1,000 SF (0.004/SF) of GFA
10. Health and Personal Care Stores	4 spaces per 1,000 SF (0.004/SF) of GFA
11. Gasoline and Fueling Stations	

Table 6.03-1: Off-Street Parking Requirements

Land Uses, Activities, and Facilities	*No. of Parking Spaces Required*
a. Self-Serve and Full Service Fueling Stations	3 spaces minimum; plus, parking requirements for combination uses (e.g., convenience store, food services, motor vehicle repair, etc.). Fueling stations operating in conjunction with other uses may be granted shared parking credit at the rate of one space for each fuel dispenser.
b. Automated Fueling Facilities	Determined by the Zoning Administrator
c. Truck Stops	Determined by the Zoning Administrator
12. Clothing and Clothing Accessory Stores	4 spaces per 1,000 SF (0.004/SF) of GFA
13. Sporting Goods, Hobby, Book, and Music Stores	4 spaces per 1,000 SF (0.004/SF) of GFA
14. General Merchandise Stores	
a. General and Convenience Retail	4 spaces per 1,000 SF (0.004/SF) of GFA
b. Discount and Specialty Superstores	5 space per 1,000 SF (0.005/SF) of GFA
G. Transportation and Warehousing	
1. Airports	Determined by the Zoning Administrator
2. Railroad Passenger Terminals	Determined by the Zoning Administrator
3. Truck Transportation—General and Specialized Freight Trucking	One space per employee during the largest shift
4. Warehousing and Storage	
a. Warehousing and General Storage	See U.1.a (Warehousing/Distribution) of this Table.
b. Motor Vehicle Storage	0.1 space per 1,000 SF (0.0001/SF) of GFA devoted to storage; plus, required parking for "general business offices".
c. Self-Storage	0.1 spaces per 1,000 SF (0.0001/SF) of GFA; plus, required parking for "caretaker quarters" (if provided).
H. Information	
1. Publishing Industries	4 spaces per 1,000 SF (0.004/SF) of GFA
2. Motion Picture and Video Industries (except movie theaters)	Determined by the Zoning Administrator
3. Movie Theaters	0.33 spaces per fixed seat
4. Sound Recording Facilities	4 spaces per 1,000 SF (0.004/SF) of GFA
5. Broadcasting	4 spaces per 1,000 SF (0.004/SF) of GFA
6. Wireless Telecommunications Antennas	One space per facility
7. Data Processing, Hosting, and Related Services	6 spaces per 1,000 SF (0.006/SF) of GFA
8. Libraries and Archives	Determined by the Zoning Administrator
I. Finance and Insurance	
1. Banks, Savings Institutions, and Credit Unions	4.6 per 1,000 SF (0.0046/SF) of GFA
2. Pawn Shops and Pawnbrokers	4 spaces per 1,000 SF (0.004/SF) of GFA
3. Insurance Carriers	4 spaces per 1,000 SF (0.004/SF) of GFA
J. Real Estate, Rental, and Leasing	

Table 6.03-1: Off-Street Parking Requirements

Land Uses, Activities, and Facilities	*No. of Parking Spaces Required*
1. Real Estate Lessors, Agents and Brokers, Property Managers and Appraisers, and Escrow and Listing Services	4 spaces per 1,000 SF (0.004/SF) of GFA
2. Rental and Leasing Services	4 spaces per 1,000 SF (0.004/SF) of GFA
K. Professional, Scientific, and Technical Services	
1. Professional, Scientific, and Technical Services	4 spaces per 1,000 SF (0.004/SF) of GFA
2. Scientific, Research, and Development Services	4 spaces per 1,000 SF (0.004/SF) of GFA
3. Veterinary and Animal Hospital Services	5.7 spaces per 1,000 SF (0.0057/SF) of GFA
L. Management of Companies and Enterprises	4 spaces per 1,000 SF (0.004/SF) of GFA
M. Administrative and Support, and Waste Management and Remediation Services	
1. General Business Offices	4 spaces per 1,000 SF (0.004/SF) of GFA
2. Telephone Call Centers	6 spaces per 1,000 SF (0.006/SF) of GFA
3. Waste Management and Remediation Service	Determined by the Zoning Administrator
N. Education Services	
1. Elementary and Middle Schools	0.28 spaces per student, based upon maximum enrollment.
2. High schools	0.26 spaces per student, based upon maximum enrollment.
3. Colleges and Universities	0.5 spaces per student, based upon maximum enrollment; plus, one space per employee or staff during the largest shift.
4. Business, Technical and Trade Schools	6 spaces per 1,000 SF (0.006/SF) of GFA
5. Instructional Dance Studios	5 spaces per 1,000 SF (0.005/SF) of GFA
O. Health Care and Social Assistance	
1. Medical Offices	5.7 spaces per 1,000 SF (0.0057/SF) of GFA
2. Hospitals and Medical Centers	1.8 spaces per bed; plus, one space per employee or staff during the largest shift; plus, required parking for associated "medical offices".
3. Child and Youth Services	Determined by the Zoning Administrator
4. Services for the Elderly and Persons with Disabilities	Determined by the Zoning Administrator
5. Other Residential Care Facilities (more than 6 persons)	0.5 spaces per bed; plus, one space per employee or staff.
6. Child Day Care Services, excluding Small Family Residential Facilities	0.2 spaces per child, based upon maximum licensed enrollment capacity; plus, one space per employee during the largest shift.
P. Arts, Entertainment, and Recreation	
1. Performing Arts and Spectator Sports	0.33 spaces per fixed seat
2. Convention Centers, Auditoriums and Other Public Assembly Facilities	0.25 spaces for each fixed seat or 25 spaces per 1,000 SF (0.025/SF) of GFA.
3. Amusement and Theme Parks	Determined by the Zoning Administrator
4. Game Arcades	10 spaces per 1,000 SF (0.01/SF) of GFA

Table 6.03-1: Off-Street Parking Requirements

Land Uses, Activities, and Facilities	*No. of Parking Spaces Required*
5. Golf Courses and Country Clubs	8 spaces per hole; plus, required parking for associated uses.
6. Golf Driving Range	One space per tee
7. Miniature Golf Course	3 spaces per hole
8. Fitness and Recreational Sports Centers	
a. Health Clubs and Gyms	5 spaces per 1,000 SF (0.005/SF) of GFA
b. Swim Clubs	3.3 spaces per 1,000 SF of pool surface area (0.0033/SF)
c. Tennis Clubs	3 spaces per tennis court
9. Bowling Centers	4 spaces per lane
10. Batting Cages	Determined by the Zoning Administrator
11. Billiard Parlors and Pool Halls	2 spaces per table
12. Dance Clubs and Halls, Ball Rooms, and Discotheques	25 spaces per 1,000 SF (0.025/SF) of GFA
13. Skating Rinks	3.3 spaces per 1,000 SF (0.0033/SF) of GFA
14. Stables (Commercial)	0.2 spaces per horse maintained on-site
Q. Accommodation and Food Services	
1. Lodging Facilities (bed and breakfast inns, boarding and rooming houses, hotels and motels, and residence inns)	One space per sleeping room; however, provide no fewer than one space per 2 beds; plus, required parking for associated uses.
2. Full Service Restaurants	10 spaces per 1,000 SF (0.01/SF) of GFA (includes outdoor seating area up to 25 percent of GFA).
3. Fast Food Restaurants	13.3 spaces per 1,000 SF (0.0133/SF) of GFA (includes outdoor seating area up to 25 percent of GFA). Restaurants with drive-thru may be credited one space for each 24 lineal FT of drive-thru lane behind the pickup window.
4. Banquet Facilities	25 spaces per 1,000 SF (0.025/SF) of GFA
5. Caterers	2 spaces per 1,000 SF (0.002/SF) of GFA
6. Drinking Places (bars, cocktail lounges, and nightclubs)	10 spaces per 1,000 SF (0.01/SF) of GFA
R. Other Services	
1. Motor Vehicle Repair and Maintenance	2.5 spaces per 1,000 SF (0.0025/SF) of GFA
2. Car Washes, Full-Service and Self-Service	One space per employee, minimum 10 spaces; plus, required parking for accessory uses (i.e., motor vehicle repair and service, and retail uses).
3. Upholstery and Furniture Repair	2.5 spaces per 1,000 SF (0.0025/SF) of GFA
4. Footwear and Leather Goods Repair	2.5 spaces per 1,000 SF (0.0025/SF) of GFA
5. Personal Care Services	4 spaces per 1,000 SF (0.004/SF) of GFA
6. Death Care Service	
a. Cemeteries	Determined by the Zoning Administrator
b. Funeral Homes and Services	25 spaces per 1,000 SF (0.025/SF) of GFA of assembly area; plus, required parking for "general offices".

Table 6.03-1: Off-Street Parking Requirements

Land Uses, Activities, and Facilities	*No. of Parking Spaces Required*
7. Religious Assembly and Wedding Chapels	0.33 spaces per fixed seat or 25 spaces per 1,000 SF (0.025/SF) of GFA
S. Public Administration	Determined by the Zoning Administrator
T. Temporary and Interim Land Uses	Determined by the Zoning Administrator
U. Industrial and Business Park Developments	
1. Industrial	
a. Warehousing and Distribution	**[1]** Portion of GFA 20,000 SF or Less: One space per 1,000 SF (0.001/SF); **[2]** Portion of GFA Greater Than 20,000 SF: 0.5 space per 1,000 SF (0.0005/SF); **[3]** Tractor-Trailer Parking: One tractor-trailer parking space per 4 dock-high loading doors; **[4]** Parking for "general business offices" and other associated uses shall be provided when those uses exceed 10 percent of the building GFA; and **[5]** The Approving Authority may require a restrictive covenant running with the land, filed with the office of the County Recorder, which restricts the use of a property/building to warehousing and distribution, unless an alternate parking plan is provided, which demonstrates that on-site parking can be provided in compliance with the "General Industrial" parking requirements (see U.1.c of this Table), to support more intense industrial land uses.
b. Manufacturing	**[1]** General Requirement: Provide1.85 spaces per 1,000 SF (0.00185/SF) of GFA; **[2]** Tractor-Trailer Parking: One tractor-trailer parking space per 4 dock-high loading doors; and **[3]** Parking for "general business offices" and other associated uses shall be provided when those uses exceed 10 percent of the building GFA.
c. General Industrial (speculative buildings)	**[1]** Portion of GFA < 50,000 SF: 1.85 spaces per 1,000 SF (0.00185/SF); **[2]** Portion of GFA 50,000 SF to 100,000 SF: One space per 1,000 SF (0.001/SF); **[3]** Portion of GFA > 100,000 SF: 0.5 space per 1,000 SF (0.0005/SF); **[4]** Tractor-Trailer Parking: One tractor-trailer parking space per 4 dock-high loading doors; and **[5]** Parking for "general business offices" and other associated uses shall be provided when those uses exceed 10 percent of the building GFA.
2. Multi-Tenant Business Park	3 spaces per 1,000 SF (0.003/SF); plus, required parking for "general business offices" when exceeding 10 percent of GFA; plus, one trailer parking space per 4 dock-high loading doors.

6.03.020: Reduction in the Required Number of Parking Spaces

A reduction in the number of parking spaces required by Section 6.03.020 (Number of Off-Street Parking Spaces Required) of this Division may be granted as follows:

A. Shared Parking. Any project site where the hours of operation allow the shared use of off-street parking spaces to occur without conflict, the number of parking spaces required may be reduced pursuant to the following conditions:

1. Approval Required. Shared parking may be allowed upon the approval of a Shared Parking Agreement by the applicable Approving Authority pursuant to Table 2.02-1 (Review Matrix) of this Development Code.

2. Reasonable Walking Distance Required to Shared Parking Facilities. Shared off-street parking facilities shall be provided within a reasonable walking distance from the uses they serve, and shall be located no further than 500 FT from the uses served, measured from the nearest point of the parking facility to the entrance of each use served via the shortest pedestrian route.

3. Shared Parking Agreement.

a. A Shared Parking Agreement by and between the City, the applicant, and all other affected property owners, shall be executed and recorded with the County Recorder, which shall ensure the availability of the number of parking spaces designated for joint use, during the hours specified in the Agreement, for the duration of the uses subject to the shared parking arrangement.

b. The Agreement shall be subject to City Attorney review and approval, as to form and content.

4. Parking Analysis. The Approving Authority may require the applicant to submit a parking demand analysis, prepared by a person/firm experienced in preparing such analyses, to assist the Zoning Administrator in determining the appropriate shared parking reduction. A parking demand analysis shall be prepared pursuant to the Urban Land Institute's *Shared Parking* publication. The methodology of the *Shared Parking* publication may be used as a guide in reviewing a shared parking proposal.

5. Shared Loading Spaces. Loading spaces required by this Division may be shared pursuant to this Section.

B. Low Demand. Any project site where it can be demonstrated that the land use thereon will not utilize the required number of parking spaces due to the nature of the specific land use, or the manner in which the specific land use is conducted, the number of parking spaces required by Table 6.03-1 (Off-Street Parking Requirements) of this Division may be reduced pursuant to the following:

1. Approval Required. A parking reduction based upon low parking demand may be allowed upon the approval of a Low Demand Parking Reduction Agreement by the applicable Approving Authority pursuant to Table 2.02-1 (Review Matrix) of this Development Code.

2. Alternate Parking Plan. In approving a parking reduction, the Approving Authority may require the preparation of an Alternate Off-Street Parking Plan, which demonstrates that additional parking spaces can be provided on-site, as necessary, to accommodate future land use changes or intensifications in land use. Alternately, a restrictive covenant that runs with the land may be required by the Approving Authority, which restricts the use of the subject property for the duration of the parking reduction.

3. Low Demand Parking Reduction Agreement. A Low Demand Parking Reduction Agreement by and between the City, the applicant, and all other affected property owners, shall be executed and recorded with the County Recorder, which, at a minimum, shall: **[i]** provide confirmation that the parking supply proposed will be adequate during periods of maximum demand, **[ii]** confirm that the parking demand is provided within a reasonable walking distance to the use it serves, and **[iii]** identify parking management strategies that are necessary to ensure the availability of the necessary number of parking spaces for the duration of the current use and future users of the project site. The Low Demand Parking Reduction Agreement shall be subject to City Attorney review and approval as to form and content.

4. Parking Analysis. The Approving Authority may require the applicant to submit a parking analysis, prepared by a person/firm experienced in preparing such analyses, to assist the Approving Authority in determining the appropriate reduction.

5. Loading Space Reduction. The number of loading spaces required by this Division may be reduced pursuant to this Section.

6.03.025: Tandem Parking

Tandem parking spaces may be allowed as follows:

A. **Family Child Day Care.** Family child day care homes may provide tandem parking spaces to satisfy the minimum parking requirement for the use.

B. **Mobile Home Parks.** Mobile home parks may provide tandem parking spaces to satisfy the minimum resident parking requirement for the use. The use of tandem parking spaces shall not be permitted for guest parking spaces.

C. **Multiple-Family Projects.**

1. Multiple-family development projects may provide tandem parking spaces to satisfy unenclosed (not within a garage or carport) on-site resident parking requirements (i.e., a driveway space located behind a garage or carport space). Multiple-family projects may also provide tandem parking spaces within a parking structure, which meet both enclosed (within garage or carport) and unenclosed resident parking requirements. Guest/visitor parking spaces shall not be designed in a tandem configuration.

2. A tandem parking space shall consist of no more than 2 automobile parking spaces. Both automobile spaces shall be assigned for use by the same dwelling unit.

3. Tandem parking spaces may be counted toward a maximum of 12 percent of the resident parking space requirement established by Section 6.03.020 (Number of Off-Street Parking Spaces Required) of this Division.

D. **Residential Component of Mixed-Use Projects.** Tandem parking spaces may be provided to satisfy resident parking requirements for the residential component of mixed-use projects and shall comply with the requirements for multiple-family projects, stated Subsection C (Multiple-Family Projects) of this Section.

E. **Single-Family Dwellings.** Tandem parking spaces may be provided in conjunction with single-family dwellings, when such parking spaces are provided in excess of the minimum parking

requirement for the use (i.e., driveway spaces and tandem garage spaces), as required by Table 6.03-1 (Off-Street Parking Requirements) of this Division.

F. Valet Parking. The Zoning Administrator may authorize valet parking as a means of satisfying the applicable off-street parking requirements of this Division, provided that:

1. Valet parking may be counted toward a maximum of 15 percent of the minimum parking space requirements established by Section 6.03.020 (Number of Off-Street Parking Spaces Required) of this Division.

2. Valet parking facilities shall be provided within a reasonable walking distance from the uses they serve and shall be located no further than 500 FT from the uses served, measured from the nearest point of the parking facility to the entrance of each use served via the shortest pedestrian route.

3. An automobile shall be retrievable from its parking space with the movement of a maximum of 2 additional vehicles;

4. An equivalent number of valet parking spaces shall be available to replace the parking spaces required by Section 6.03.020 (Number of Off-Street Parking Spaces Required) of this Division; and

5. Valet parking spaces shall not require individual striping.

6.03.030: Parking for the Physically Disabled

A. Parking spaces specifically designated and conveniently located for use by the physically disabled shall be provided pursuant to current accessibility regulations contained in State law (CCR Title 24, Part 2, Chapters 2B71, and CVC Section 22507.8).

B. Parking spaces for the physically disabled required by this Section shall count toward fulfilling the minimum off-street parking requirements.

C. For existing parking facilities, the Zoning Administrator may approve a reduction in the number of parking spaces in an existing parking lot below the minimum required by this Section, in order to accommodate required parking spaces for the physically disabled.

6.03.035: Bicycle Parking

Bicycle parking facilities, including bicycle racks, lockers, and other secure facilities, shall be provided in conjunction with development projects pursuant to current regulations contained in CALGreen (CAC Title 24, Part 11).

6.03.040: Parking for Fuel Efficient Vehicles

Parking spaces specifically designated and conveniently located for fuel-efficient vehicles shall be provided in conjunction with development projects pursuant to current regulations contained in CALGreen (CAC Title 24, Part 11).

6.03.045: Off-Street Parking Design Standards

A. Minimum dimensions and design.

1. Minimum Dimensions. The minimum dimensions for off-street parking and loading spaces and access drives shall be as prescribed in Table 6.03-2 (Standards for Parking Spaces, Drive Aisles, and Driveways), below.

Table 6.03-2: Standards for Parking Spaces, Drive Aisles, and Driveways

Requirement	*Standard*
A. Garage or Carport Space Dimensions (enclosed space)	10 FT wide by 20 FT long
B. Parking Space Dimensions (unenclosed space)	
1. Standard Parking	9 FT wide by 18 FT long [1][2]
2. Parallel Parking	8 FT wide by 24 FT long [1]
3. Tandem Parking	9 FT wide by 34 FT long (consists of 2 parking spaces) [1]
4. Trailer Parking	12 FT wide by 45 FT long
C. Loading Space Dimensions	12 FT wide by 18 FT long, unless otherwise specified by this Division
D. Minimum Drive Aisle and Driveway Widths	
1. Driveways for Single-Family Dwellings	10 FT wide
2. One-Way Drive Aisles and Driveways for Multiple-Family and Nonresidential Projects	12 FT wide
3. Two-Way Drive Aisles for Multiple-Family and Nonresidential Projects	24 FT wide, except that fire lanes required pursuant to the Ontario Fire Code shall be designed pursuant to Ontario Fire Department standards. Furthermore, two-way drive aisles may be reduced to 20 FT in width along segments that are not directly accessed by parking spaces.
4. Two-Way Driveways for Residential Projects	20 FT wide

Notes:

[1] An additional foot of width shall be provided for each side of a parking space that is contiguous with a fence, structure, wall, or other obstruction.

[2] The standard parking space length may be reduced to 16 feet, if 2 feet of width is added to adjacent sidewalk and/or landscape areas, to accommodate motor vehicle overhang. Vehicle overhang shall not encroach into a pedestrian path of travel.

2. End of a Drive Aisle. A drive aisle providing access to a parking space that is perpendicular to the drive aisle shall extend 5 FT beyond the side of the last parking space in the drive aisle to provide adequate area for the backing-up of parked vehicles.

3. Minimum Vertical Clearances Required.

a. *All Off-Street Parking Spaces.* A minimum 7-FT vertical clearance shall be maintained for all off-street parking spaces, including entrances, except that the vertical

clearance for the front 4 FT of a parking space serving a single-family dwelling or multiple-family residents may be reduced to not less than 4.5 FT in height.

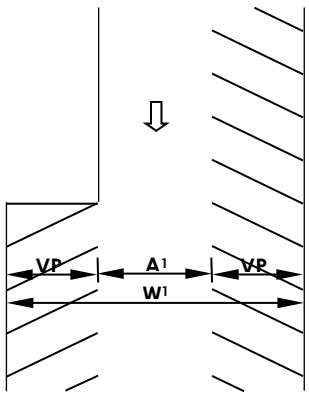
b. *Off-Street Parking Spaces for the Physically Disabled.* A minimum 98-inch vertical clearance shall be maintained for all off-street parking spaces for the physically disabled, including entrances and accesses to the spaces.

c. *All Off-Street Loading Spaces.* A minimum 14-FT vertical clearance shall be maintained for all off-street loading spaces, including entrances and accesses to the spaces.

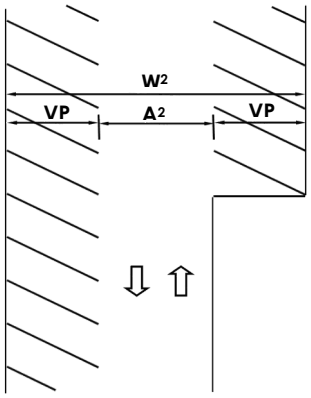
4. Parking Bays and Drive Aisles. The minimum dimension and design of parking bays and maneuvering drive aisles shall be as prescribed in Table 6.03-3 (Dimensions for Parking Facilities), below.

Table 6.03-3: Dimensions for Parking Facilities

Parking Angle	Vehicle Projection (VP)	Aisle Width		Base Module	
		One-Way (A^1)	Two-Way (A^2)	One-Way (W^1)	Two-Way (W^2)
45°	17'-7"	11'-10"	24'-0"	47'-0"	59'-2"
50°	18'-2"	12'-2"	24'-0"	48'-6"	60'-4"
55°	18'-8"	12'-8"	24'-0"	50'-0"	61'-4"
60°	19'-0"	13'-6"	24'-0"	51'-6"	62'-0"
65°	19'-2"	14'-8"	24'-0"	53'-0"	62'-4"
70°	19'-3"	15'-6"	24'-0"	54'-0"	62'-6"
75°	19'-1"	16'-10"	24'-0"	55'-0"	62'-2"
90°	18'-0"	24'-0"	24'-0"	59'-0"	60'-0"



One-Way Drive Aisle



Two-Way Drive Aisle

B. Parking Lot Access and Location of Parking Spaces.

1. The design and location of all vehicle accesses from a public street or alley to an off-street parking facility shall be approved by the City Engineer.

2. Each parking space shall be accessible from a street or alley, provided no parking space shall be designed to require that vehicles back into a street, excepting parking that serves a single-family dwelling.

3. No parking space shall be located so that a vehicle will be required to maneuver for position to enter or exit the space within 30 FT of a vehicular entrance from a public street.

4. Commercial or office developments with parking for at least 150 or more vehicles shall be designed with primary drive aisles unencumbered by parking spaces, intersecting parking aisles, or other access drives, for a distance of at least 100 FT behind the street property line or 112 FT behind the street curb face, whichever is greater.

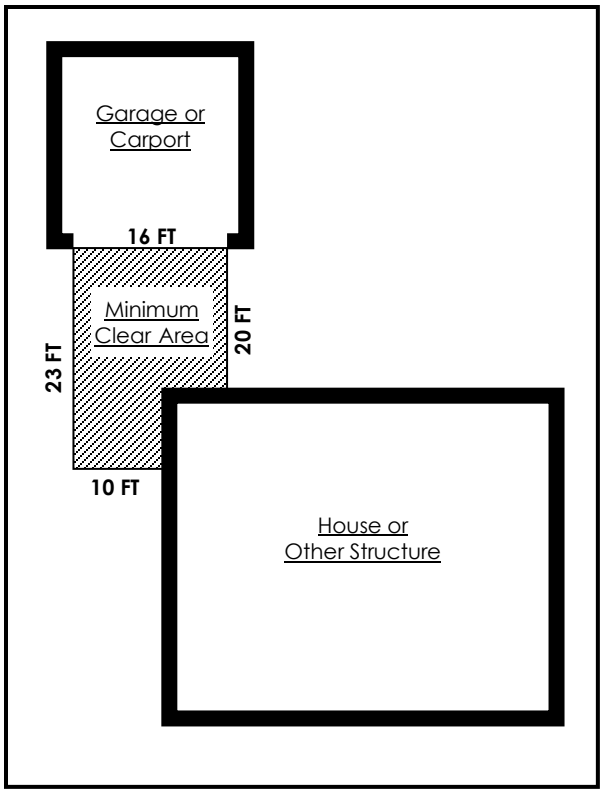


Figure 6.03-1: Garage/Carport Entrance Clear Area

5. Carpool and high occupancy vehicle spaces should be located in the most advantageous and reasonable location, as close as possible to the primary employee entrance(s) of the user(s) which they are intended to serve.

6. Parking spaces for dwellings shall be located within 150 FT from the dwelling (front or rear door) for which the space is provided, excluding structures containing 3 or more stories.

7. Bicycle and automobile parking areas shall be separated from one another by a physical barrier or sufficient distance to protect bicycles and their riders from damage by maneuvering automobiles.

8. A garage facing a public street shall provide a clear space of at least 20 FT between the garage entrance and the street property line.

9. The minimum clear area for vehicle access in front of a garage or carport entrance shall be as shown in Figure 6.03-1 (Garage/Carport Entrance Clear Area).

10. Except as otherwise provided in this Development Code, off-street parking spaces are not to be located within a required front or street side setback area, or the required rear setback area of a through lot.

11. All drive aisles entering a site shall be provided with an enhanced pavement treatment, excepting lots containing single-family dwellings. The enhanced paving shall extend

from the back of the drive approach apron to the first intersecting drive aisle, driveway, or parking space.

C. Striping and Identification.

1. All automobile parking spaces within commercial zoning districts shall be clearly outlined with double lines on the parking area surface. Within all other zoning districts, automobile parking shall be clearly outlined with single lines on the parking area surface (double lines may be used).

2. All parking area striping shall be permanently maintained in a clear and visible manor.

3. All parking spaces for the physically disabled shall be striped and marked in accordance with applicable State laws and standards.

4. All parking spaces reserved for low emissions vehicles shall be clearly marked with the words "Low Emissions Vehicles Only" either on the wheel stop or curb, or on the pavement at the opening of the space.

5. All spaces reserved for carpools and high occupancy vehicles shall be clearly marked with the words "Carpool/HOV Only" on either the wheel stop or curb at the back of each space, or on the pavement at the opening of the space.

6. Within multiple family residential developments, required guest parking spaces shall be clearly marked with the word "Guest" on either a wheel stop or curb at the head of each space, or on the parking surface at the opening of each space.

D. Parking, Drive Aisle, and Driveway Surface Paving. All permanent parking spaces, drive aisles, and driveways shall be paved with asphalt, concrete, or other all-weather surface approved by the Planning Director, Fire Marshall, and City Engineer.

E. Wheel Stops and Curbs.

1. Drive aisles and parking surfaces contiguous with planter areas shall have a 6-inch concrete curb separation constructed per City standards, except where a landscape area is parallel and adjacent to a parking stall the curb separation be increased to a minimum of 12 inches in width to provide a step-out area from motor vehicles.

2. All parking spaces located adjacent to buildings or walls shall have concrete wheel stops located from a minimum of 2.0 FT, to a maximum of 2.5 FT, from the building or wall.

F. Maintenance. All parking facilities shall be permanently maintained, free of weeds, liter, and debris.

6.03.050: Parking Lot Lighting

A. Parking Lot Lighting Required. All off-street parking facilities shall be provided with nighttime security lighting pursuant to OMC Section 4-11.08 (Special Residential Building Provisions) and Section 4-11.09 (Special Commercial/Industrial Building Provisions), designed to confine emitted

light to the parking areas. Parking facilities shall be lighted from sunset until sunrise, daily, and shall be operated by a photocell switch.

B. Lighting Level Measurement. Lighting levels shall be measured with a direct-reading portable light meter. The equipment used shall allow accurate measurements, with all measurements made after dark with the lights on and then again with the lights off. The difference between the two readings shall then be compared to the applicable standard for maximum permitted illumination.

C. Light Fixtures Shall Be Decorative. All parking lot lighting fixtures shall be decorative.

D. Lighting Along Pedestrian Corridors. Along pedestrian movement corridors, the use of decorative low-mounted bollard light standards, which reinforce pedestrian scale, shall be used.

E. Illumination on Adjacent Property. Unless intended as part of a master lighting program, no operation, activity, or lighting fixture shall create illumination on any adjacent property.

F. Maximum Luminaire Heights. The maximum permitted height of luminaires within a parking lot shall be as follows:

1. No Cutoff Luminaire. When a light source or luminaire has no cutoff (the point at which all light rays are completely shielded), the maximum permitted height of the luminaire shall be 14 FT.

2. Ninety Degree or More Cutoff Luminaire. When a luminaire has a total cutoff of light at an angle of 90 degrees or greater, the maximum permitted height of the luminaire shall be 24 FT.

3. Less than 90-Degree Cutoff Luminaire. When a luminaire has a total cutoff of light at an angle of less than 90 degrees, the maximum permitted height of the luminaire shall be 30 FT.

6.03.055: Off-Street Loading Standards

A. Number of Loading Spaces Required. Full-service and limited-service eating places, drinking places, convenience stores, hotels and motels, and all other traveler accommodations, and any other use deemed by the Zoning Administrator to be in need of off-street loading facilities, shall be provided a minimum of one off-street loading space.

B. Minimum Dimensions and Design.

1. At-Grade Loading Facilities. At-grade loading doors shall be provided with an off-street loading space located immediately in front of the door measuring a minimum of 12 FT in width and 18 FT in length, and having a minimum vertical clearance of 14 FT, measured from the finish grade of the space. The loading space may be provided either perpendicular or parallel to the loading door.

2. Dock-High Loading Facilities.

a. Dock-high loading doors shall be provided with an off-street loading space located immediately in front of the door measuring a minimum of 12 FT in width and 45 FT in length,

and having a minimum vertical clearance of 14 FT, measured from the finish surface of the loading dock.

b. A truck maneuvering area equal to the width of the loading door and a minimum of 120 FT in depth shall be provided in front of dock-high loading doors, and, at a minimum, the maneuvering area shall be designed to accommodate the minimum practical turning radius of a 55-FT semi-trailer and tractor combination. Deviations from this minimum maneuvering standard may be permitted if it can be shown that the spatial needs are less than the minimum required due to the truck size and type that will be utilized in the operation of a specific use; however, in permitting such deviation(s), a covenant of restriction to run with the land may be required, which specifies limitations relating to truck size and/or type. Larger maneuvering areas shall be required if the use of a larger semi-trailer and tractor combination is proposed.

c. Truck maneuvering areas shall not encroach into required off-street parking areas and landscaped areas.

C. Loading Facilities Prohibited Within Setback Areas. Except as otherwise provided by this Chapter, off-street loading spaces and areas, and associated vehicle maneuvering areas shall not be located within required front or street side setback areas, the rear setback area of a through lot, or any other required setback area located within 25 FT of a residentially zoned property.

D. Screening of Loading Facilities. Loading facilities should be located at the rear or interior side of buildings and shall be screened from public view or view from residential, retail and office uses, and the offices of industrial uses on adjacent properties. When it is not possible or desirable to locate loading facilities at the rear or interior side of buildings, loading facilities may be located on the street side or front of buildings, provided they are screened from public view by a decorative masonry wall with view-obstructing access gates pursuant to Division 6.02 (Walls, Fences, and Obstructions) of this Development Code.

E. Loading Space Ingress and Egress. All loading spaces shall have adequate ingress and egress as approved by the City Engineer and shall be designed and maintained so that vehicle maneuvering and loading/unloading activities do not interfere with the orderly movement of traffic and pedestrians on any public street or alley.

F. Screening of At-Grade Loading Doors and associated Loading Spaces. All at-grade loading doors shall be decorative, unless located within an enclosed yard area and screened from public view by a decorative masonry wall with view-obstructing access gates pursuant to Division 6.02 (Walls, Fences, and Obstructions) of this Development Code.

G. Screening of Dock-High Loading Doors and Associated Loading Spaces and Truck Maneuvering, Parking, and Staging Areas. All dock-high loading doors and associated loading spaces and truck maneuvering, parking, and staging areas, shall be located within an enclosed yard area and screened from public view by a decorative masonry wall with view-obstructing access gates pursuant to Division 6.02 (Walls, Fences, and Obstructions) of this Development Code.

H. No Backing onto or from a Public Street. All loading spaces shall be designed and maintained so that vehicles do not back in from, or onto, a public street.

I. Match Loading Bay and Roll-Up Door Color to Adjacent Building Finish. The loading bays and roll-up doors shall be painted to blend with the adjacent exterior building finishes.

J. Concealment and Screening of Loading Areas. Areas for loading and unloading shall be designed to avoid potential adverse noise, visual, and illumination impacts on neighboring residences. These areas shall be concealed from view by the public and adjoining land uses. Concealment and screening may be accomplished by use of any of the following methods, subject to Zoning Administrator approval:

1. Orient loading spaces, areas, and doors such that they are concealed from public view by buildings; and

2. Screen loading spaces, areas, and doors pursuant to Division 6.02 (Walls, Fences, and Obstructions) of this Development Code, with walls and view-obstructing gates, which are architecturally coordinated with adjacent buildings. In addition, incorporate intense on-site landscaping to block public views of loading areas.

K. Loading Facilities in Close Proximity to Dwellings. Special orientation or design treatment of loading bays and doors located in close proximity to dwellings shall be required in order to reduce associated light and noise impacts to less-than-significant levels.

L. Striping and Identification. Loading spaces shall be striped, indicating the loading spaces and identifying the spaces for "Loading Only." The striping shall be permanently maintained by the property owner/tenant in a clear and visible manner at all times.

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Division 6.04—Congestion Management and Trip Reduction

Sections:

6.04.000: Purpose and Intent
6.04.005: Applicability
6.04.010: Trip Reduction Measures

6.04.000: Purpose

Use of the private automobile in Southern California has created serious traffic congestion and air quality problems. At the regional and local levels, government agencies have adopted policies and programs aimed at reducing the number of single-passenger vehicles traveling along the region's highways, thereby alleviating congestion and improving air quality within the region. The trip reduction measures contained in this Division are intended to help meet congestion management and air quality goals of the region.

6.04.005: Applicability

A project requiring the approval of a tentative tract or parcel map pursuant to Section 4.02.100 (Subdivisions—Tentative Tract and Parcel Maps, and Vesting Maps), Development Plan pursuant to Section 4.02.030 (Development Plan), and/or Conditional Use Permit pursuant to Section 4.02.015 (Conditional Use Permits) of this Development Code, and for which an application was submitted on or after January 1, 1994, provision shall be made for the applicable trip reduction measures required by this Division.

6.04.010: Trip Reduction Measures

The following trip reduction measures shall be implemented:

A. Non-Residential Projects.

1. Bicycle Parking and Shower/Changing Rooms. Safe and convenient access to bicycle racks shall be provided from public streets. Bicycle racks or other secure bicycle parking, and shower/changing rooms, shall be provided pursuant to current regulations contained in CALGreen (CAC Title 24, Part 11).

2. On-Site Pedestrian Walkways. On-site pedestrian walkways shall be provided, which connect each building in a development to bicycle parking facilities (if required) and public streets.

3. Passenger Loading Areas. Passenger loading areas shall be provided pursuant to current regulations contained in CALGreen (CAC Title 24, Part 11).

4. Carpool/Vanpool Parking Spaces. Parking spaces reserved for use by carpool/vanpool vehicles shall be provided pursuant to current regulations contained in CALGreen (CAC Title 24, Part 11).

5. Transit Facilities. Transit facilities, such as bus shelters, bus pullouts, and bus pads, shall be provided if the Planning Director, in consultation with local transit providers, determines they are needed to serve the development.

6. On-Site Video Conferencing Facilities. On-site video conferencing facilities shall be provided for office buildings with a capacity of 1,000 employees or greater.

B. **Multiple-Family Residential Projects** (consisting of 10 or more dwellings)**.**

1. Bicycle Parking and Shower/Changing Rooms. Safe and convenient access to bicycle racks shall be provided from public streets. Bicycle racks or other secure bicycle parking, and shower/changing rooms, shall be provided pursuant to current regulations contained in CALGreen (CAC Title 24, Part 11).

2. On-Site Pedestrian Walkways. On-site pedestrian walkways shall be provided, which connect each building in a development to bicycle parking facilities (if required) and public streets.

3. Passenger Loading Areas. Passenger loading areas shall be provided pursuant to current regulations contained in CALGreen (CAC Title 24, Part 11).

4. Transit Facilities. Transit facilities, such as bus shelters, bus pullouts, and bus pads, shall be provided if the Planning Director, in consultation with local transit providers, determines they are needed to serve the development.

C. **Single-Family Residential Projects of 500 or More Dwellings.** Facilities shall be provided to give residents an opportunity to telecommute, or an in-lieu contribution, shall make provision for telecommuting facilities, or an alternate strategy for reducing an equal amount of trips as would have occurred from provision of telecommuting facilities shall be implemented per Subsection D (Modification of Trip Reduction Measures) of this Section.

D. **Modification of Trip Reduction Measures.** The Approving Authority may modify all or part of the trip reduction measures for new projects, if the following findings can be clearly established:

1. One or more of the measures are not applicable due to special circumstances, including, but not limited to, the location or configuration of the project, the implementation of existing trip reduction measures and transportation demand strategies, or other specific factors that make implementation infeasible or reduce the effectiveness of the prescribed measures.

2. An alternative trip reduction and transportation demand management strategy will be implemented to reduce an equal number of trips as would have occurred as a result of imposition of the prescribed measures. Implementation of the alternative strategy shall be a condition of project approval.

E. **Trip Reduction and Transportation Demand Management Program/Facility Credit.** Credit may be granted for trip reduction and transportation demand management programs and facilities, as follows:

1. Existing trip reduction and transportation demand programs and facilities in a development program may satisfy all or part the requirements of this Section pertaining to new construction, subject to the approval of the Approving Authority. The amount of credit given shall

be determined through an assessment of how the existing facilities would meet the requirements of this Section if based upon the GFA of the entire complex.

2. The Planning Commission may determine that a reduction in the required number of parking spaces for the proposed use or uses is acceptable because implementation of the trip reduction and transportation demand management measures would eliminate some of the demand for parking.

F. **Certificate of Occupancy.** Prior to the issuance of a certificate of occupancy for any new building or addition to an existing building, all facilities and improvements required by this Section shall be constructed or otherwise provided.

G. **Improvements and Facilities to be Maintained in Good Repair.** All facilities and improvements constructed or otherwise required by this Section shall be maintained in a state of good repair.

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Division 6.05—Landscaping

Sections:

6.05.000: Purpose
6.05.005: Applicability
6.05.010: Landscape Design Principles
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6.05.020: Tree Preservation Policy and Protection Measures
6.05.025: Heritage Tree Preservation Mitigation Fee
6.05.030: Heritage Tree Preservation Trust Fund
6.05.035: Violation—Penalty
6.05.040: Required Landscaped Areas
6.05.045: Landscape Development Standards
6.05.050: Landscape Maintenance
6.05.055: Landscape Design and Construction Guidelines

6.05.000: Purpose

The purpose of this Division is to establish standards regulating landscaping and irrigation systems, which:

A. Improve the connection between the built and natural environments, increase the function of outdoor spaces and buffer land use compatibility conflicts;

B. Enhance the aesthetic appearance of development in all areas of the City by providing standards relating to the quality, quantity, and functional aspects of landscaping;

C. Reduce heat and glare generated by development;

D. Promote public health, safety, and welfare, by minimizing the impacts of all forms of physical and visual pollution, preserving the integrity of neighborhoods, and enhancing pedestrian and vehicular traffic safety;

E. Reduce energy use and associated costs from heating and air conditioning buildings and the transportation and pumping of water.

F. Preserve existing protected trees and topsoil where possible, incorporate native plant communities, and ecosystems into landscape design, and control soil erosion;

G. Promote the conservation of water by establishing provisions for water management practices, and techniques for the installation and maintenance of appropriate landscape materials and efficient irrigation systems as required by the Water Conservation in Landscaping Act of 2006 (AB 1881) and Executive Order No. B-29-15 (updated 2015), Model Water Efficient Ordinance (MWELO), commencing with GC Section 65591.

6.05.005: Applicability

A. Landscaping Required. All projects shall provide and maintain landscaping and irrigation systems in compliance with the provisions of this Division.

B. Landscape and Irrigation Plans Subject to City Review.

1. Submittal of Landscape and Irrigation Plans Required. Landscape and irrigation plans shall be submitted to the City for review for compliance with the requirements of this Division.

2. Plan Approval Required. Landscaping shall not be installed until the Landscape and Irrigation Construction Documentation Plans required by this Division have been approved by the Approving Authority. The Approving Authority is established by Table 2.02-1 (Review Matrix) of this Development Code and shall be empowered to approve or deny Landscape and Irrigation Documentation Plans.

3. Changes to Approved Landscape and Irrigation Plans. Changes to approved Landscape and Irrigation Documentation Plans, which affect the character or quantity of the plant material or irrigation system design, shall be resubmitted for approval of the revision by the Approving Authority, prior to the commencement of the changes.

6.05.010: Landscape Design Principles

Landscaping is an important part of the aesthetic quality of the City and is important to create a sense of the City as a pleasant and safe place to live and work. The standards prescribed by this Division are intended to pursue sustainable, high quality landscaping, which is associated with the varying land use characteristics of the community. It is further intended that implementation of these guidelines will serve to enhance the street environment for motorists, as well as to contribute to convenient pedestrian connections throughout the City.

1. Use landscaping to define and create usable spaces throughout each development. Landscaping should be used to guide the user through the site and incorporate appropriate design elements for spaces such as entrances, walkways, gathering spaces, seating areas, utility areas, view corridors, open spaces, play spaces, and foregrounds and backdrops. Landscape design can be accomplished by utilizing form, function, scale, unity, contrast, varying the density of landscape material, use of color, layering, vertical and horizontal contrasts, and varying the texture of planting. Individual building projects can be enhanced through larger and more intensely developed landscaping.

2. Use landscaping to reduce the massing of buildings and eliminate large blank walls. Landscaping should be used to reduce the massing or bulk of buildings, particularly large industrial and warehouse/distribution buildings. Reductions in massing can be accomplished by using landscape treatments to provide vertical and horizontal contrast and to add visual interest. Major buildings should have foundation plantings adjacent to buildings such as hedgerows or shrub masses to break the horizontal ground plane from the vertical plane of the building.

3. Use landscaping to soften the effect of paved areas. Landscaping should be provided in all parking areas to reduce the visual impact of parking areas and reduce associated heat build-up. Parking lot landscaping should be integrated with, and an extension of, other on-site landscape features.

4. Landscapes should be designed to achieve harmony and unity between indoor and outdoor spaces. Designs should create both pleasing and economical layouts, incorporating durable and natural materials while ensuring safety and providing guidance for pedestrians and vehicles to their destinations. High quality landscapes should be attractive with open accessibility to nature while incorporating measures to promote sustainability: environmentally, economically, and socially.

5. Environmentally sustainable landscapes efficiently manage stormwater by capturing, and infiltrating runoff into dry wells, french drains, vegetated swales, or basins in planter areas or into porous hardscapes. Hardscape areas should be planted with canopy trees to clean air and mitigate the urban heat island effect and use California native and Mediterranean type plants to conserve water.

6. Economically sustainable landscapes are energy efficient by using large trees to buffer summer sun and winter wind on buildings or outdoor seating areas. They use resources carefully by incorporating low water using plants and efficient irrigation systems. Turfgrass areas are limited to parks and open spaces for active play which help reduce maintenance, pollution and water resource costs.

7. Socially sustainable landscapes create unique environments that enhance places to work, shop or dine and lend significant value to development. High quality landscapes have a profound impact on people's attitude and work performance as well as their enjoyment of a place. Open spaces, plazas, employee lunch areas and trails offer places to unwind, and meet people. Accessible paths and trails improve health through walking and biking.

6.05.015: Landscape Plans

A. Preliminary Landscape Plans.

1. Plan Required. A preliminary landscape plan shall be submitted with a Development Plan application or any other discretionary permit or action that proposes new or revised landscaped area. Where no discretionary permit or action is required, Landscape and Construction Irrigation Documentation Plans prepared pursuant to Subsection B (Landscape and Irrigation Construction Documentation Plans) of this Section, may be required by the City prior to the issuance of a Building Permit, as a requirement of any landscaped area proposed in fulfillment of the requirements of this Development Code.

2. Preliminary Landscape Plan.

a. The preliminary landscape plan shall meet the purposes of this Division by exhibiting a design layout that demonstrates the desired landscaping program in terms of function, location, size, scale, theme, and similar attributes.

b. The preliminary landscape plan shall provide the Approving Authority with a clear understanding of the landscaping program prior to preparation of the detailed Landscape and Irrigation Documentation Plans.

c. The preliminary landscape plan shall meet the purposes of OMC Title 10 (Parks and Recreation), Chapter 2 (Parkway Trees), commencing with Section 10-2.01.

d. The preliminary landscape plan shall include the Maximum Applied Water Allowance (MAWA) calculation, based upon the area devoted to landscaping as shown on the preliminary landscape plan. See worksheets contained in the Landscape Design and Construction Guidelines (Development Code Reference G) for the MAWA calculation formula.

3. Plan Preparation by a Qualified Design Professional is Required. Preliminary landscape plans shall be prepared by a California-registered landscape architect, or the architect that designed the on-site structures and improvements, or other qualified design professional.

4. Waiver of Requirements. The Approving Authority may waive the requirement for a preliminary landscape plan for building additions and remodels if no alterations, or minor alterations, are proposed to existing landscape areas or site topography.

B. Landscape and Irrigation Construction Documentation Plans.

1. Landscape and Irrigation Construction Documentation Plans Required.

a. Prior to the installation of landscaping and irrigation systems required by this Division, Landscape and Irrigation Construction Documentation Plans shall be submitted to the City for review and approval by the Approving Authority.

b. The required plans shall be prepared by, and bear the seal of, a landscape architect registered with the State of California.

c. Landscape and Irrigation Construction Documentation Plans shall be provided for each of the following project types:

(1) New and rehabilitated public or private development projects with landscaping;

(2) Developer-installed landscaping for all single-family and multiple-family development projects; and

(3) New and rehabilitated homeowner-installed or homeowner-hired projects with landscaping totaling 5,000 SF or more in area, on any lot containing a single-family or multiple-family dwelling.

2. Water Conservation Concept Statement. A Water Conservation Concept Statement shall be provided on the cover sheet of the Landscape and Irrigation Construction Documentation Plan set required by Paragraph B.1 (Landscape and Irrigation Documentation Plans Required) of this Section, which serves as a checklist to verify that all required elements of the Landscape and Irrigation Construction Documentation Plans have been provided. A Water Conservation Concept Statement shall have the form and content shown in the Landscape Design and Construction Guidelines (Development Code Reference G).

3. Water Budget Worksheet. A Water Budget Worksheet for new landscape areas shall be provided with each Landscape and Irrigation Construction Documentation Plan set submitted for areas to be newly landscaped, as required by Paragraph B.1 (Landscape and Irrigation Documentation Plans Required) of this Section. Said worksheet shall have the form and content shown in the Landscape Design and Construction Guidelines (Development Code Reference G), and shall include: **[i]** calculation of the Maximum Applied Water Allowance

(MAWA), **[ii]** calculation of the Estimated Total Water Use (ETWU), and **[iii]** calculation of the Water Budget Comparison.

4. Requirements for Existing Landscape Areas.

a. All existing landscape areas that are one or more acres in size, and were installed prior to January 1, 2010, shall provide a project's MAWA for existing landscaping. A Water Budget Worksheet for Existing Landscape Areas shall be provided with the Landscape and Irrigation Construction Documentation Plans, which shall be consistent with the form and content shown in the Landscape Design and Construction Guidelines (Development Code Reference G).

b. Existing landscape areas and landscape areas that do not have a dedicated water meter shall employ techniques, equipment and procedures to reduce water use and meet the MAWA for existing landscapes.

c. Landscape areas that do not meet the MAWA shall utilize: **[i]** an irrigation survey; **[ii]** an audit performed by a Certified Landscape Irrigation Auditor or a Landscape Industry Technician certified in irrigation, to provide recommendations, such as replacement or repairing of irrigation equipment as recommended in order to prevent water waste and meet the water budget; or **[iii]** other methods acceptable to the City.

5. Planting Plan. The Planting Plan shall be included in the Landscape and Irrigation Construction Documentation Plans and shall contain all required information prescribed by this Division and the Landscape Design and Construction Guidelines (Development Code Reference G).

6. Irrigation Plan. The Irrigation Plan shall be included in the Landscape and Irrigation Construction Documentation Plans and shall contain all required information prescribed by this Division and the Landscape Design and Construction Guidelines (Development Code Reference G).

7. Precise Grading Plan. A Precise Grading Plan shall be included in the Landscape and Irrigation Documentation Plans and shall contain all required information prescribed by this Division and the Landscape Design and Construction Guidelines (Development Code Reference G). To promote the efficient use of water, the grading of a project site shall be designed to minimize soil erosion, runoff, and water waste, and shall avoid soil compaction in landscape areas. Furthermore, said plans shall show grading techniques and stormwater devices that increase rainwater capture for infiltration and/or on-site storage coordinated with the landscape design.

8. Soil Management Report. Agronomical soil testing shall be performed, and test results and recommendations shall be included on the Landscape Documentation Plans. Testing shall be performed, and recommendations shall be implemented, prior to landscape installation.

9. Irrigation Schedules. Irrigation Schedules shall be included in the Landscape and Irrigation Construction Documentation Plans.

10. Maintenance Schedules. Landscaping and irrigation systems shall be maintained to ensure water use efficiency, plant health, and a well maintained, attractive appearance. A regular maintenance schedule shall be included in the Landscape and Irrigation Construction Documentation Plans.

11. Certificate of Completion. Upon completion of landscaping and irrigation system installation, the licensed landscape architect of record, or their designee, shall conduct a final field inspection and shall prepare a Certificate of Completion, which shall be filed with the City. The Certificate of Completion shall specifically indicate that the landscaping and the irrigation system were installed as shown on the approved Planting and Irrigation Plans, and that the soil testing and amendments have been installed as specified by the soil management plan. If the irrigation system was not installed pursuant to plans, or if water use exceeds the water budget, a certified landscape irrigation auditor shall conduct an irrigation audit, and the recommendations to ensure water efficiency shall be provided, prior to permit approval.

12. Required Plans, Maps, Reports, Schedules, and Other Necessary Information. All plans, maps, reports, schedules, and other information required to be contained in the Landscape and Irrigation Construction Documentation Plan set by this Section, shall include all information stipulated by the Landscape Design and Construction Guidelines (Development Code Reference G), which prescribes the minimum information to be submitted, together with any required plans, maps, reports, special studies, exhibits, and any other information deemed necessary by the City to review and act upon the required plans and information.

13. Public Education. All model homes that are landscaped shall incorporate signs and written information to demonstrate the principals of water efficient landscapes described in this Division. Signs shall feature elements such as hydrozones, irrigation equipment, and plants that contribute to the overall water efficient theme. Written information shall be provided about plant types, irrigation systems and managing and maintaining water efficient landscapes.

6.05.020: Tree Preservation Policy and Protection Measures

A. **Purpose.** The purpose of this Section is to establish policies and measures that will further the preservation, protection, and maintenance of established and healthy heritage trees within the City, to improve the community forest that provides environmental, aesthetic and economic benefits, and enhances the quality of life. It is pertinent to the public welfare that such trees be protected from indiscriminate cutting or removal.

B. **Applicability.** The City Council hereby establishes that it is the policy of the City to preserve, protect, and maintain established and healthy trees within the City, to the extent practicable. Consideration shall be afforded Heritage Trees, as set forth in this Section.

C. **Definitions.** As used in this Section**, the following** words, terms, and phrases are defined as follows:

1. Heritage Tree. The term "Heritage Tree" means a tree of historic or cultural significance, or a tree of importance to the community due to any one of the following factors:

a. A tree designated for preservation pursuant to Section 4.02.040 (Historic Preservation—Historic Landmark and District Designations, and Architectural Conservation Areas) of this Development Code.

b. It is one of the largest or oldest trees of the species located in the City, with a trunk diameter of 18 inches or greater, measured at 54 inches above natural grade; or

c. It has historical significance due to an association with an historic building, site, street, person, or event; or

d. It is a defining landmark or significant outstanding feature of a neighborhood or district, or typical of early Ontario landscapes, including **[i]** Cinnamomum camphora (Camphor Tree), **[ii]** Cedrus deodara (Deodar Cedar), **[iii]** Platanus acerifolia, **[iv]** Quercus suber (Cork Oak), **[v]** Quercus ilex (Holly Oak), or **[vi]** Schinus molle (California Pepper); or

e. It is a Native Tree. The term "Native Tree" means any one of the following California native tree species, which has a trunk diameter of more than 8 inches, measured at 54 inches above natural grade, including **[i]** Platanus racemosa (California Sycamore), **[ii]** Pinus torreyana (Torrey Pine), **[iii]** Quercus agrifolia (Coast Live Oak), **[iv]** Quercus engelmannii (Engelmann Oak), **[v]** Quercus lobata (Valley Oak), or **[vi]** Umbellularia californica (California Bay).

2. Tree Protection Area. The term "Tree Protection Area" (TPA) means the area of tree roots and canopy to be designated by fencing to prohibit access during construction activities. The tree protection area is typically equal to one foot of radius for each inch of trunk diameter measured at 54 inches above natural grade, but not less than an 8-FT radius. This term may also be referred to as "Protected Root Area" (PRA).

D. Tree Inventory and Preservation Plan.

1. Property proposed for development on which a Heritage Tree exists, shall require the submittal of a Tree Inventory and Preservation Plan prepared by a licensed landscape architect, horticulturalist, certified arborist, or other related professional. Said plan shall be submitted concurrent with a Development Plan or building permit request for alterations of a site and shall be reviewed and approved by the Approving Authority for the corresponding application request.

2. The Tree Inventory and Preservation Plan shall show all existing on-site trees, and those existing trees on abutting lots and public rights-of-way with a canopy or root zone that extends onto the site or within 8 FT of a construction, staging or storage area, or graded site. Furthermore, the Tree Inventory and Preservation Plan shall identify TPAs and trees requested to be removed and shall show replacement trees as required by this Division.

3. The Tree Inventory and Preservation Plan shall include a tree evaluation or arborist report of affected trees, prepared by a City-approved certified arborist or qualified horticulturalist, to determine health, structure, condition, and expected life span of all affected trees.

E. Tree Protection During Construction.

1. All trades performing work on property in which trees have been specifically identified for protection pursuant to this Section, shall be informed of the protected trees.

2. During site construction, no person in control of work shall leave any Heritage Tree(s) without sufficient protections in place to prevent injury to the tree(s). Furthermore, it shall be unlawful and a violation of this Section to leave any Heritage Tree protected pursuant to this Section without sufficient protections in place.

3. Any special Tree Protection During Construction requirements shall be included in the Tree Inventory and Preservation Plan, and on any Demolition, Grading, or Construction Plan(s) where existing trees may be impacted, along with the following Tree Protection During Construction standard notes:

a. Existing trees to be protected shall be identified with protective fencing to form a TPA. The TPA shall encircle the tree at the outer most edge of the root zone and canopy. The TPA is defined by its "Critical Root Radius," which is calculated by measuring the tree's diameter at 54 inches above natural grade (dbh) and allowing 1.5 FT of radius for each inch of tree diameter. In example, if a tree's dbh is 10 inches, its Critical Root Radius is 15 FT.

b. Protective fencing shall be installed prior to any earthwork and shall remain in place until all work is complete. Fencing shall be 3 FT to 4 FT in height and shall be installed at the outer most edge of the Critical Root Radius or TPA. The temporary fencing shall be of chain link or other approved durable material. Post "Tree Protection Zone – Keep Out" signs on TPA fencing.

c. No construction or staging equipment is allowed within a TPA, including heavy equipment that will compact and damage the roots.

d. No disposal of construction materials or by products including paint, plaster, or chemical solutions, is allowed within a TPA.

e. Natural or preconstruction grade shall be maintained within a TPA. At no time shall soil be in contact with a tree trunk above the root flare.

f. TPAs shall be irrigated sufficiently with clean potable water to keep the tree in good health and vigor before, during, and after construction. Deep watering may be necessary on a weekly basis. Verify that the depth of irrigation provided to roots is adequate.

g. Apply a 4-inch to 6-inch thick layer of mulch within the TPA, one foot away from the trunk, before construction begins.

h. Any work required to be conducted in the ground, within the TPA, shall be accomplished with hand tools or an air spade.

i. Pruning for clearance, if needed, shall be done to prevent damaging branches with large equipment. All pruning shall be in accordance with industry standards (International Society of Arboriculture ANSI A300) under the direction of a Certified Arborist.

j. Avoid cutting roots with a diameter larger than 2 inches. Cuts should be clean and made at right angles to the roots. When practical, cut roots back to a branching lateral root. Trenches for piping shall be bored under, at a minimum depth of 36 inches. Consult a Certified Arborist to be present if more than 33 percent of the root zone is impacted, or roots greater than 2 inches diameter within 5 FT of the trunk will be cut, to ensure tree stability and that health will not be affected.

k. Protect soil and roots from compaction in landscape areas used for driveways, storage, or parking, with a layer of geotextile fabric and 6 inches of crushed gravel.

4. All trades performing work on property in which trees have been specifically identified for protection pursuant to this Section, shall be informed of the Tree Protection and Inventory Plan and the Tree Protection During Construction requirements.

F. Waiver of Development Standards to Further Heritage Tree Preservation and Protection. When considering an application for any permit or approval that may adversely affect Heritage

Trees, the City may allow certain departures from established development standards to assist in their preservation, through the granting of an Administrative Exception pursuant to Section 4.02.020 (Departures from Development Standards) of this Development Code. Allowable exceptions specifically for the furtherance of tree preservation shall be limited to a maximum 15 percent reduction from minimum setback and separation requirements, and maximum 10 percent from off-street parking requirements. The Approving Authority may grant Administrative Exceptions from said setback, separation, and/or parking standards after first finding that:

1. The applicant has investigated alternative site designs and building configurations in strict compliance with the applicable development standards;

2. The tree(s) to be preserved is/are in good health and condition (taking into account species and longevity) as determined by a certified arborist;

3. The project includes a well-integrated and thoughtful design solution that enhances the property and its surroundings;

4. The project would not be injurious to adjacent properties or uses, or detrimental to the environment, quality of life, or the health, safety, and welfare of the public; and

5. The project is consistent with the purposes of the applicable zoning district, planned unit development, or specific plan, the applicable development standards and guidelines, and the Vision, Policy Plan, and City Council Priorities components of The Ontario Plan.

G. Heritage Tree Removal. It is the City's policy to protect and preserve healthy trees that provide benefits to the community, whenever possible. However, if it is determined through an arborist report, tree evaluation, or other city approved means, that a Heritage tree is dead, hazardous, diseased, or damaged beyond repair, or may pose an emergency or safety concern, the Approving Authority may order removal of the tree.

H. Heritage Tree Pruning. Pruning of any Heritage Tree protected pursuant to this Section shall be performed under the direction of a certified arborist, horticulturalist, or similar qualified licensed professional, following the most recent standards of the International Society of Arboriculture and ANSI A300 standards for tree care operations.

I. Heritage Tree Damage or Tree Removal without City Approval.

1. The damage or removal of a Heritage Tree protected pursuant to this Section, or encroachment into a protected root area or TPA, shall require an evaluation by a City-approved certified arborist as to the resulting condition, prescribed treatment to repair the damage, replacement trees if removed (as prescribed by this Division), and monetary value of the tree if removed or damaged beyond repair. Penalties pursuant to Section 6.05.035 (Violation—Penalty) of this Division shall apply.

2. For the purposes of this Subsection, the term "tree removal" shall include any act that causes the actual removal of a Heritage Tree, or the effective removal of a Heritage Tree by means of willful damage; damage resulting from excessive or improper pruning, excavation, or construction; poisoning; or any other direct or indirect action resulting in tree death within the 3-year period following said actions.

J. Heritage Tree Replacement. Healthy Heritage Trees that are approved for removal shall be replaced with new trees and shall be shown on required Landscape and Irrigation Construction

Documentation Plans. Replacement trees shall have a total trunk diameter (caliper) equal to the tree(s) removed, or as deemed appropriate by the Approving Authority based on the lot size and available planting space. Replacement trees shall be in addition to the quantity of trees required by this Division for landscaping. The Approving Authority shall review the landscape plan and approve appropriate species for tree replacement (see Section 6.05.045 (Landscape Development Standards) for required trees).

K. **Monetary Value.** The monetary value of Heritage Trees protected pursuant to this Division, which are removed, shall be based upon the "Guide for Plant Appraisal," which is available from the International Society of Arboriculture. Appraisals shall be performed by a City-approved professional plant appraiser or certified arborist skilled in tree appraisals.

L. **Prohibited Acts.** It shall be expressly prohibited to damage or to remove any Heritage Tree without prior specific authorization by the Zoning Administrator, except that tree removal specifically approved as a part of a Development Plan or Building Permit approval; Certificate of Appropriateness; pruning or removal to obtain adequate line-of-sight distances as specifically authorized by the City Engineer; pruning or removal as required for public safety as specifically authorized by City representatives; and/or actions taken by a public or private utility company for the protection of their existing electrical power or communication lines, or other property of a public utility.

6.05.025: Heritage Tree Preservation Mitigation Fee

A. **Purpose.** The purpose of this Section is to establish the Heritage Tree Preservation Mitigation Fee whereby the impacts resulting from the construction or demolition of heritage tree(s) may be mitigated by the collection of fees that will provide a source of funds for the conservation, preservation, restoration, replanting and reforestation of trees within the City.

B. **Applicability.**

1. A mitigation fee, in an amount established by this Section, shall be paid prior to the issuance of any permit for construction or demolition of any heritage tree(s). The mitigation fee shall be deposited in the Heritage Tree Preservation Trust Fund established pursuant to Section 6.05.030 (Heritage Tree Preservation Trust Fund) of this Division.

2. The mitigation fee shall be based on the Tree Inventory and Preservation Plan pursuant to Section 6.05.020 (Tree Preservation Policy and Protection Measures) of this division.

a. The mitigation fee for Healthy Heritage Trees that are approved for removal shall equal the replacement value of the total trunk diameter (caliper) equal to the tree(s) removed, or as deemed appropriate by the Approving Authority based on the Tree Inventory and Preservation Plan. The Approving Authority shall review the Tree Inventory and Preservation Plan and approve the replacement value.

b. The mitigation fee for the monetary value of Heritage Trees protected pursuant to this Division, which are removed, shall be based upon the "Guide for Plant Appraisal," which is available from the International Society of Arboriculture. Appraisals shall be performed by a City-approved professional plant appraiser or certified arborist skilled in tree appraisals.

6.05.030: Heritage Tree Preservation Trust Fund

A. Purpose. The purpose of the Heritage Tree Preservation Trust Fund is to provide funding, under direction of the City Council, for the conservation, preservation, restoration, replanting and reforestation within the City.

B. Applicability. The Heritage Tree Preservation Trust Fund is hereby established as means to receive and replenish monies to assist the funding of tree preservation and reforestation projects within the City. All funds deposited in the Heritage Tree Preservation Trust Fund shall be used solely for the conservation, preservation, restoration, replanting and reforestation of the City, as provided in this Section.

C. Trust Fund Administration.

1. The City Manager, or designee of the City Manager, shall have authority for establishing policy for Heritage Tree Preservation Trust Fund expenditures.

2. The City Manager, or designee of the City Manager shall have authority to make recommendations to the City Council regarding any action or activity necessary or appropriate to implement its powers or duties to fulfill the objectives of the Heritage Tree Preservation Trust Fund.

3. The City Manager, or designee of the City Manager, shall serve as financial administrator of the Heritage Tree Preservation Trust Fund and shall be responsible for management of its finances, which shall be carried-out pursuant to all applicable federal, State and local laws.

4. The Planning Director, or designee of the Planning Director, shall serve as program administrator of the Historic Preservation Trust Fund and shall be responsible for its day-to-day management and operations.

D. Heritage Tree Preservation Trust Fund Proceeds.

1. Deposits. All funds received by the City for heritage tree preservation purposes shall be deposited in the Heritage Tree Preservation Trust Fund. The City's Fiscal Services Department may establish separate accounts within the Trust Fund for the purpose of separating deposits according to their origin or intended purpose.

E. Heritage Tree Preservation Trust Fund Program Activities.

1. Qualifying Program Activities are hereby established for the following:

a. *New Tree Plantings.* Tree plantings in parkways or city right-of-way shall be per the Street Tree Master Plan or Ontario Ranch Streetscape Master Plan. Tree plantings in public projects such as parks and city facilities shall be determined by the Approving Authority.

b. *Reforestation Tree Plantings.* Reforestation tree plantings in parkways or city right-of-way shall be per the Street Tree Master Plan or Ontario Ranch Streetscape Master Plan. Tree plantings in public projects such as parks and city facilities shall be determined by the Approving Authority.

c. *Tree Removal Alternatives and Mitigation Measures.* Tree removal alternatives and mitigation measures such as root pruning, flexible paving material, other materials, protection measures, and mitigation measures recommended in the Certified Arborist's report.

d. *Acquisition, Planting and Maintenance of Trees.* Activities to acquire, plant and maintain existing and proposed heritage trees as determined by the Approving Authority, identified in the Certified Arborist's report.

2. Qualifying Projects that implement Trust Fund Program Activities are hereby established for the following project types:

a. *Capital Improvement Projects (CIP) for New Construction and Rehabilitation Projects. CIP* Construction projects allow for activities that contribute to the conservation, preservation, restoration, replanting and reforestation of heritage trees located within public spaces.

(1) Conservation, preservation and restoration of trees within public spaces, such as but not limited to parkways and rights-of-ways. Funds may support public projects and include activities directly contributing to the conservation, preservation, and restoration of existing heritage trees. Activities may include, but are not limited to, the installation of alternate sidewalk materials, meandering sidewalks, and any reports and analyses prepared by a certified arborist that identify protection measures that will contribute to extending the life and viability of existing heritage trees.

(2) Replanting and reforestation of trees within public spaces, such as but not limited to parkways and rights-of-ways. Any replanting or reforestation efforts must be identified in the certified arborist report and include circumstances that warrant tree removal. Such conditions that warrant the removal of heritage tree(s) may include tree(s) that are dead, hazardous, diseased, or damaged beyond repair, or may pose an emergency or safety concern relating to the health, safety, and welfare of the public. Funds shall be used to support the overall project and include activities directly contributing to the replanting and reforestation of trees where a certified arborist has recommended the removal of a heritage tree(s). Activities may include, but are not limited to, intermittent planting strategies and new tree plantings, as well as warranty and maintenance efforts that support the establishment and longevity of new tree plantings, such as tree staking, irrigation measures and other construction activities to support the viability of newly planted trees.

b. *Public Works Projects for New Construction and Rehabilitation Projects. Public Works* Construction projects that allow for activities that directly contribute to the conservation, preservation, restoration, replanting, and reforestation of heritage trees located within public spaces.

(1) Conservation, preservation and restoration of trees within public spaces, such as but not limited to public parks, parkways, rights-of-ways and city facilities. Funds may support public projects and include activities directly contributing to the conservation, preservation, and restoration of existing heritage trees. Activities may include, but are not limited to, the installation of alternate sidewalk materials, meandering sidewalks, and any reports and analyses prepared by a certified arborist that identify protection measures that will contribute to extending the life and viability of existing heritage trees.

(2) Replanting and reforestation of trees within public spaces, such as but not limited to public parks, parkways, rights-of-ways, and city facilities. Any replanting or reforestation efforts must be identified in the certified arborist report and include circumstances that warrant tree removal. Such conditions that warrant the removal of heritage tree(s) may include tree(s) that are dead, hazardous, diseased, or damaged beyond repair, or may pose an emergency or safety concern relating to the health, safety, and welfare of the public. Funds shall be used to support the overall project and include activities directly contributing to the replanting and reforestation where a certified arborist has recommended the removal of a heritage tree(s). Activities may include but are not limited to, intermittent planting strategies and new tree plantings as well as warranty and maintenance efforts that support the establishment and longevity of new tree plantings such as tree staking, irrigation measures and other construction activities to support the viability of newly planted trees.

c. *Planning Projects.* Studies and reports that analyze existing conditions and make recommendations on conservation and preservation of heritage trees and reforestation treatments; and

d. *Community Outreach.* Outreach campaigns consist of the creation of education material and media to raise awareness of tree preservation benefits.

3. Project Selection Criteria. The award of Heritage Tree Preservation Funds shall be based upon consideration of the following criteria:

a. Level of significance of the heritage tree(s) impacted.

b. Overall benefit to the community; and

c. Ability to ensure the longevity of the health of the trees and features through warranty and maintenance.

6.05.035: Violation-Penalty

A. **Violation.** Any violation of this chapter shall be a misdemeanor or infraction at the discretion of the City Attorney or District Attorney.

B. **Civil Penalties.** Irrespective of, and cumulative to, any criminal conviction for a violation of this Division, the City may, pursuant to GC Section 36901, impose a civil penalty in an amount not exceeding $1,000, or by imprisonment not to exceed 6 months, or both such fine and imprisonment on any person either through an administrative hearing or a civil action brought either by the City Attorney or a designated employee of the City. Each tree removed in violation of this Division shall constitute a separate offense.

C. **Restitution for Damage or Removal of Protected Trees within the City.** Irrespective of whether the City pursues criminal and/or civil action under this Division, nothing in this Division shall prevent the City from seeking restitution for damage or removal of trees within the City, which are protected by this Division, as an alternative to criminal action and/or civil action to recover a civil penalty in accordance with Subsection B of this Section.

D. **Assessment of Civil Penalties.** Civil penalties may be assessed against a responsible party as confirmed by resolution of the City Council, and shall constitute a special assessment against the property to which it relates and after its recording, as thus made and confirmed, the same

shall constitute a lien on the property in the amount of such assessment. The notices of such special assessment shall be provided to the responsible party by certified mail, as determined from the County Assessor's or County Recorder's records. The assessment shall be collected at the same time and in the same manner as ordinary City taxes are collected and shall be subject to the same penalties and the same procedure as provided for ordinary City taxes. All laws applicable to the levy, collection and enforcement of City taxes shall be applicable to the special assessment.

E. Appeals.

1. Within 10 days after mailing of a Notice of Violation, which states the civil penalties to be assessed, the owner or person having charge of affected premises may file an appeal of the assessed civil penalties and the violations upon which the civil penalties are based, with the Planning Department, on a City application form.

2. Within 45 days following receipt of an appeal request, the City Manager shall hold a hearing, which shall be open to the public. The City Manager shall hear and consider objections and/or protests from any owner or person having charge of affected premises, or other interested persons relative to the accrual of civil penalties, and shall hear and receive all relevant evidence and testimony relative to the violations upon which the civil penalties are based, and shall consider all of the related facts.

3. Upon conclusion of the appeal hearing, the City Manager shall determine the amount of civil penalties to be assessed. The decision of the City Manager shall be final and conclusive.

F. Penalties collected resulting from enforcement of this section shall be placed in the general fund and used solely for the purposes of the City to ensure and maintain the character and well-being of the City.

6.05.040: Required Landscape Areas

A. Residential Projects. Residential development projects shall be landscaped and irrigated as follows:

1. Conventional and Small Lot Single-Family Projects.

a. The front yard and any street side yard of a conventional or small lot single-family project site, and all parkway areas that abut the site, shall be fully landscaped and provided with an underground automatic irrigation system, and shall be maintained in compliance with the requirements of this Division.

b. A landscape and irrigation documentation plan shall be submitted for review and approval by the Approving Authority prior to building permit issuance, pursuant to Subsection 6.05.015.B (Landscape and Irrigation Construction Documentation Plans) of this Division.

2. Cluster Single-Family and Multiple-Family Projects.

a. The entirety of a cluster single-family or multiple-family project site, including street parkway and median areas that abut the project site, which is not otherwise devoted to

building area and paving, shall be fully landscaped and provided with an underground automatic irrigation system, and shall be maintained in compliance with the requirements of this Division.

b. A landscape and irrigation documentation plan shall be submitted for review and approval by the Approving Authority prior to building permit issuance, pursuant to Subsection 6.05.015.B (Landscape and Irrigation Construction Documentation Plans) of this Division.

B. Nonresidential Projects. Nonresidential development projects shall be landscaped and irrigated as follows:

1. The entirety of a nonresidential project site (excluding areas devoted to building area, paving, and/or outdoor loading and storage areas that are screened from public view), including street parkway and median areas that abut the project site, shall be fully landscaped, provided with an underground automatic irrigation system, and maintained in compliance with the requirements of this Division.

2. A landscape and irrigation construction documentation plan shall be submitted for review and approval by the Approving Authority prior to building permit issuance, pursuant to Subsection 6.05.015.B (Landscape and Irrigation Construction Documentation Plans) of this Division.

C. All Unused Areas of a Site shall be Landscaped and Irrigated.

1. All areas of a project site not intended for a specific use, including pad sites held for future development, shall be landscaped and provided with an automatic irrigation system, unless it is determined by the Approving Authority that landscaping is not necessary to fulfill the purposes of this Division. This requirement shall not apply to the side or rear yard area of a single-family residence, or that portion of a lot devoted to a legally established agricultural use.

2. The Approving Authority shall determine the level or intensity of landscaping to be provided for vacant pad sites, based upon an approved phasing plan.

D. Landscaping of Off-Street Parking Facilities. Outdoor off-street parking lots within residential developments, or within nonresidential developments that are visible from a public or private street, or are accessible by the public, shall be landscaped in the following manner:

1. At least 7 percent of the total area of a parking lot shall be landscaped, excluding perimeter landscaping or setback areas that may be required by the base zoning district.

2. Landscaping consistent with the landscape setback provisions of the base zoning district in which a parking lot is located, shall be provided adjacent to adjoining streets.

3. Landscaping shall be evenly distributed throughout the parking lot and shall not be concentrated in any one area.

4. No landscaped area is to have a dimension smaller than 5 FT clear in any direction, except as provided elsewhere by this Development Code.

5. Where parking lots occur along streets, a landscaped buffer element, minimum 10 FT in width, shall be constructed, which consists of a minimum 3-FT high hedge-like material to

screen views of parked cars from the street. To shade pedestrians and create an attractive streetscape, shade trees shall be planted within this landscaped buffer at an average spacing of 25 to 30 FT on center. Landscaping may be combined with low walls or dense plant material to mitigate the visual effects of parking lots and loading areas.

6. There shall be provided within each row of parking spaces, planter islands at least 5 FT in width (exclusive of curbs), which extend the full length of the abutting parking space(s), located so as to prevent no more than 10 vehicles from being parked side-by-side in an abutting configuration.

7. Planter islands for a single row of parking spaces shall be landscaped with at least one tree, appropriate shrubs, and groundcover. Planter islands for a double row of parking spaces shall contain not less than 2 trees, and appropriate shrubs and groundcover.

8. Throughout parking lots tree wells, tree diamonds or center planter strips shall be provided to facilitate the planting of shade trees at the minimum rate of one tree for each 4 parking spaces. Tree wells shall be a minimum of 5 FT in width and 5 FT in length (exclusive of curbs).

9. Shade trees shall have a minimum canopy of 30 FT in diameter at maturity, to provide an aesthetically pleasing area and relief from summer heat.

10. All rows of parking spaces shall be provided with landscape islands at each row terminus, at least 5 FT in width (exclusive of curbs) and extending the full length of the adjacent parking spaces, to protect parked vehicles, ensure visibility, confine moving traffic to drive aisles and driveways, and provide adequate space for landscaping.

11. Landscaped areas shall be delineated with a 6-inch wide concrete curb, except where a landscape area is parallel and adjacent to a parking stall, the curb shall be a minimum of 12-inches wide, to provide a step area for persons entering or exiting motor vehicles.

6.05.045: Landscape Development Standards

Landscaping required by this Division shall be designed, installed, and maintained in compliance with the following:

A. **Landscape Design Standards.** Landscaped areas shall comply with each of the following:

1. Landscaped areas shall have a minimum dimension of 5 FT (exclusive of curbs), excepting vine pockets, which shall have a minimum dimension of 1.5 FT, or as otherwise prescribed by this Development Code.

2. All landscaped areas shall be bordered by a concrete or masonry curb, or other means acceptable to the City, to prevent vehicles from entering landscape areas, and to define maintenance responsibilities or property ownership. Curbs along pavement may have openings to allow water infiltration into landscape areas.

3. Landscaped areas shall be comprised of living plant materials, planted at a spacing no greater than the mature plant diameter. Non-living ornamental features (e.g., boulders, dry stream beds, gravel, etc.) may comprise a maximum of 5 percent of a landscaped area and shall be of a permeable material.

4. All areas of a parkway that are not devoted to sidewalks shall be landscaped, irrigated, and permanently maintained pursuant to City standards.

5. All utilities shall be shown on plans to facilitate the landscape design and tree placement. Utilities such as backflow devices and transformers shall be located a minimum of 5 FT away from paving or other utilities to allow for landscape screening to cover at least 75 percent of the height of the equipment.

6. Accent landscape is required on all commercial or industrial corners including vehicular entries and major corner intersections. Accent trees shall be minimum 36-inch box size and palms shall be minimum 17-FT brown trunk height.

7. Foundation planting adjacent to buildings (hedgerows or shrub masses in a hierarchy pattern) is required at major building perimeters and residential front yards to break horizontal ground plane from the vertical plane of building.

8. Shade trees with irrigation shall be located in all appropriate areas where space permits to reduce the impacts of heat gain by shading large areas of paving, building walls, roof and windows also enhancing stormwater management and improving water quality.

9. Shade trees shall have a minimum canopy of 30 FT in diameter at maturity to provide an aesthetically pleasing area and relief from summer heat.

10. Trash enclosures shall be designed with adjacent planters for trees shrubs and vines for screening.

11. Accent landscape at monument signs shall be a hierarchy of ornamental shrubs or perennials.

B. Planting Requirements.

1. A variety of plant material appropriate for the project may be selected for planting, provided the ETWU for the landscape area does not exceed the MAWA (see Paragraph B.3.c (Calculation of the Budget Comparison) of this Division). The landscape plan shall be designed for the intended function of the project and for the efficient use of water, and shall include the following:

a. Protection and promotion of appropriate native species;

b. Selection of water conserving plant species; and

c. Selection of trees for shading buildings and paved surfaces and for stormwater management.

2. Plants shall be selected and appropriately planted based upon their adaptability to the climatic, geologic, and topographical conditions of the project site.

a. The Sunset Western Climate Zone System should be utilized, which takes into account temperature, humidity, elevation, terrain, latitude, and varying degrees of continental and marine influence on local climate;

b. Recognize the growth habit of plant types, such as mature plant size and invasiveness of surface roots, to minimize damage to property and infrastructure (e.g., buildings, sidewalks, power lines);

c. Disease and pest resistant plants should be used, to promote health and longevity;

d. Consider the solar orientation for tree placement to maximize summer shade and winter solar gain;

e. Plants with similar water needs and climatic requirements shall be grouped together and irrigated separately;

f. Graded but undeveloped areas within the project site shall be seeded with wildflower or ornamental grass mix and automatically irrigated to prevent soil erosion from rain and strong winds;

g. Avoid use of invasive species that have a negative effect upon public health or disrupt or destroy native ecosystems as identified by the California Invasive Species List; and

h. Additional planting requirements of a Specific Plan may be required based upon the project location.

3. Limit the use or quantity used of turf except where used for play or recreation.

C. Irrigation Requirements

1. The irrigation system and its related components shall be designed to be efficient and effective for the landscape proposed with no run-off or overspray.

2. Irrigation plans shall include a water budget with Maximum Applied Water Allowance (MAWA) and Estimated Total Water Use (ETWU) calculations shown pursuant to Paragraph 6.05.015.B.3 (Water Budget Worksheet) of this Division. The ETWU shall not exceed the MAWA.

3. Automatic irrigation controllers utilizing either evapotranspiration or moisture sensor data are required. A verification letter from the manufacturer certifying proper installation and sensor connection shall be provided prior to acceptance of the project.

4. Irrigation systems shall be designed with like plant material grouped together and proper solar orientation. Turf shall be on separate valves from shrub areas. Landscape areas in the shade (north or east sides of buildings) shall be controlled separately from areas in the sun (south or west).

5. Provide on plans all equipment required, sizes, notes and details, include water meter (note potable or recycled), static pressure, and maximum GPM. Contact the City's Utilities Department for City main pressure. Pressure regulating or boosting devices shall be installed to meet the pressure requirements of the system.

6. Backflow devices are required. Non–residential backflow devices shall be painted green and protected in a locking enclosure.

7. Spacing design for irrigation heads shall achieve 100 percent coverage, (head to head). Allow for wind velocities. Spacing shall achieve the highest possible distribution uniformity using the manufacturer's recommendations.

8. Narrow or irregularly shaped areas including turf, less than 8 FT in any direction shall be irrigated with subsurface irrigation or a low volume irrigation system. Low precipitation heads, rotators or drip systems shall be used in general to reduce water use and overspray.

9. Add check valves or anti-drain valves to prevent low head drainage.

10. Locate spray heads 2 FT from non-pervious paving to prevent overspray. Exception allowed if adjacent surface is permeable or if using alternative technology irrigation. Low precipitation rate heads less than 0.75 inches per hour may be located one FT from paving.

11. Trees in turf, 36-inch box and larger size trees in any area, and all palm trees, shall have pop-up stream bubbler heads. Trees in tree wells or permeable paving may use bubblers in a maximum 1.5 FT deep perforated root watering tube. Tree irrigation shall be on a separate valve, minimum 2 heads per tree.

12. Size all irrigation main lines and laterals on the plan, minimum 3/4 inch.

13. Under landscape, mainlines shall be buried with 1.5 FT minimum cover, laterals one FT minimum cover.

14. Under paving mainlines shall be buried with 2 FT minimum cover; lateral lines 1.5 FT minimum cover.

15. Pipe under roadways shall be installed 3 FT deep, sleeved and identified with marking tape installed one FT from the surface, identifying the type of line with APWA standard "Caution Waterline Buried Below" in blue, or "Caution Recycled Waterline Buried Below" in purple. Sleeves shall be Schedule 40 PVC, minimum 2 times the diameter of the pipe being sleeved.

16. Automatic Controllers shall contain a neatly drawn laminated irrigation layout chart, color coded to identify stations and valves as-built. Central controller shall include a manufacturer support page. Locate pedestals within planter areas with a 1.5 FT pad of DG or mulch at front for access.

17. An irrigation schedule shall be on the plan and layout chart noting irrigation cycles and run times per station or plant type (turf, shrub, trees, sun areas, shade areas, etc.) monthly or seasonally. Add multiple start times to prevent run off. Watering shall occur between 6:00PM and 6:00AM, excepting drip irrigation.

D. **Soil Testing.** Agronomical soil testing shall be performed to encourage healthy plant growth and reduce run off. One test shall be performed for each street frontage, or as otherwise required by the Approving Authority. Soil analysis shall include soil texture, infiltration rate, pH, total soluble salts, sodium, percent organic matter, and recommendations for amendments based upon the proposed plant material and tree types. Soil test results and recommendations for amendments shall be listed on the Landscape Planting Plan required pursuant to Paragraph 6.05.015.B.5 (Landscape Planting Plan) of this Division, noting the name, address, telephone number of the City-approved soils testing laboratory, and the test date.

E. Trees. Within required landscape areas, as prescribed by Section 6.05.040 Required Landscape Areas) of this Division, trees shall be provided as follows:

1. For cluster single-family or multiple-family residential development projects, and nonresidential development projects, a mix of tree sizes shall be provided on-site, for each development project, as prescribed in Table 6.05-1 (Minimum Tree Size Mix), below. Palm trees shall not be counted toward the minimum mix of required trees.

Table 6.05-1: Minimum Tree Size Mix

Requires Tree Sizes	*Minimum Mix of Required Trees*
48-inch box	5%
36-inch box	10%
24-inch box	30%
15-gallon	55%

2. For cluster single-family or multiple-family residential development projects, and nonresidential development projects, a mix of tree species shall be provided for each development project, as prescribed by Table 6.05-2 (Minimum Tree Species Mix), below. A minimum of 20 percent of the total number of trees provided shall be a California native species appropriate for the project site. Palm trees shall not be counted toward the minimum number of tree species required.

Table 6.05-2: Minimum Tree Species Mix

Number of Trees Provided	*Minimum Number of Tree Species Required*
20 or fewer	3
21 to 30	4
31 to 40	5
More than 40	6

3. All trees required by this Division shall conform to the minimum measurements prescribed by Table 6.05-3 (Minimum Tree Size Specifications), below.

Table 6.05-3: Minimum Tree Size Specifications

Tree Size	*Minimum Trunk Caliper*	*Minimum Height Range*	*Minimum Spread Range*
48-inch box	3.5 inches	14 to 16 FT	7 to 8 FT
36-inch box	2.5 inches	12 to 14 FT	6 to 7 FT
24-inch box	1.5 inches	9 to 11 FT	4 to 5 FT
15-gallon	1.0 inch	7 to 8 FT	2 to 3 FT
Palm trees		17-FT brown trunk height	

4. Existing trees shall be protected in place, whenever possible, pursuant to Section 6.05.020 (Tree Preservation Policy and Protection Measures) of this Division. Existing large canopy trees may be counted toward the 48-inch box tree requirement prescribed by Paragraph E.1. of this Section, provided the tree(s) to be preserved is/are in good health and condition (taking into account species and longevity), as determined by a certified arborist's report.

5. Tree planting shall maintain the following minimum setbacks and/or separations from permanent improvements as prescribed by Table 6.05-4 (Minimum Tree Setbacks/Separations), below.

Table 6.05-4: Minimum Tree Setbacks/Separations

Improvement	*Minimum Setback/Separation*
Beginning of Curb Returns at Street Intersections	25 FT
Light Standards, Power Poles, and Fire Hydrants	10 FT
Water and Sewer Lines	7 FT
Sidewalks (except within parkways), Driveways, and Buildings	5 FT

6. Trees shall not be placed where they interfere with site drainage or require frequent pruning in order to avoid interference with overhead utilities.

7. Shade trees shall have a mature canopy diameter of 30 FT, single dominant leader or a balanced arrangement of branches, and a healthy root system not girdled by the growing container.

8. Street trees shall be minimum 24-inch box or larger and shall be planted at an average spacing of 25 FT to 30 FT on center, except where necessary to meet the minimum tree setback/separations required by Table 6.05-4 (Minimum Tree Setbacks/Separations) of this Section.

9. Trees shall be planted with a visible trunk flare and rootball that is 2 inches higher than the adjacent grade. No soil shall be placed on top of the rootball, and mulch shall be maintained 6 inches clear of the trunk. Trees with kinked or girdling roots shall be rejected before installation or replaced if planted.

10. Root barriers shall not be required for use in parkways or City maintained areas; however, if used, they shall be a maximum of one FT in depth and shall not encircle the tree rootball. Furthermore, if the tree trunk is within 5 FT of paved areas, root barriers, if used, shall run adjacent and parallel to the pavement.

11. Palm trees may be used as accents, with a minimum brown trunk height of 17 FT, and shall not count toward the minimum tree species mix required pursuant to Table 6.05-2 (Minimum Tree Species Mix) of this Division.

12. Trees shall be staked or guyed to prevent wind damage and allow healthy growth. Ties shall be flexible, allowing some trunk movement while providing protection from damage.

13. Parking lot lighting and site utilities shall be designed to avoid conflict with required shade tree locations.

14. Solar collectors shall be designed and located to avoid conflict with tree canopy and future shading from the mature size of trees, as defined by the PRC Section 25980 through Section 25986 (The Solar Shade Act).

F. **Tree Staking and Tying.** Trees shall be staked and tied as follows:

1. Fifteen gallon and 24-inch box trees shall be double-staked perpendicular to the prevailing wind, or parallel to the street, as appropriate. Stakes shall be located to prevent branch damage and shall extend a minimum of 7 to 8 FT above grade and 3 to 4 FT below grade. Stakes shall be tied into the tree canopy for wind protection. Galvanized stakes are recommended for wind prone areas.

2. Box trees that are 36-inches or larger, shall be rootball guyed or anchored.

3. Flexible tree ties shall be used. Wire and hose, or metal rod-type braces shall not be used. Nursery stakes shall be removed at time of installation or loosened if they are to remain during the maintenance period and shall be removed by the end of maintenance period.

G. Shrubs. Within required landscape areas, as prescribed by Section 6.05.040 Required Landscape Areas) of this Division, shrubs shall be a minimum 5-gallon container size and shall be spaced at a rate equal to three-fourths of the shrub's mature size. One-gallon containers may be used for perennials and groundcovers.

H. Groundcovers. Within required landscape areas, as prescribed by Section 6.05.040 Required Landscape Areas) of this Division, one-gallon containers shall be used for groundcover areas. Perennials or annual color shall be spaced at a maximum of 8 inches on center.

1. Turf. Turf grass is typically a high water use plant and is best reserved for recreation and active play areas. Low water groundcovers or native or warm season turf grasses may be used in traditional turf areas, such as parkways or front yards. Concrete mow strips shall be used to separate turf from landscape areas, excepting single-family residential development projects, which may utilize wood or fabricated benderboard materials.

2. Mulch. Mulch shall be applied and maintained in all non-turf areas and shall be at least 3 inches in depth in shrub areas and at least one-inch in depth in groundcover areas. Mulch shall be of an organic material, such as shredded or chipped bark, as it will supply nutrients to the soil and plants over time. Native plants shall have mulch applied that is appropriate for the type of landscape. Synthetic mulch materials shall not be used.

I. Screening and Buffering.

1. Landscaping may be used to aid in the screening and buffering of mechanical equipment, trash collection areas, and loading docks and outside storage areas from public view, and the screening and buffering of differing land uses. Walls and/or fences used for screening and buffering purposes should incorporate landscaping over at least 60 percent of its surface area, which will serve to both buffer uses and "soften" the appearance of masonry walls.

2. Utility boxes and vaults shall be located away from entry driveways, corner accent landscapes and other highly visible areas, and shall be screened with a variety of landscape materials.

J. Defining of On-Site Circulation. Landscaping shall be used to define circulation patterns for safety and ease of use.

1. Landscaping shall be used to direct on-site vehicular and pedestrian circulation routes by providing clear direction, barrier planting (such as hedges), and accent planting, to define site entrances and pedestrian pathways.

2. Landscaping shall be designed to facilitate pedestrian circulation and access to buildings and shall be designed to buffer pedestrians from vehicular traffic, as well as to emphasize walkways.

3. Landscaping shall be designed to further pedestrian safety. Where provided, walkways shall have adequate width and be separated from parking lots, loading areas, and buildings (excepting building entries), with a landscape buffer. Furthermore, trees shall be planted along walkways to create shade and comfortable environments.

K. Grading Design and Stormwater Management.

1. Grading shall be designed to minimize soil erosion, water run-off or water waste, and increase on-site retention and infiltration. Grading shall ensure all irrigation and normal rainfall remains on-site and does not drain onto impermeable surfaces. Landscape areas shall be graded to be 1.5 inches below the grade of the adjacent finished surface.

2. Landscape plans shall include stormwater collection methods or devices that direct water into depressed landscape areas, such as vegetated swales, detention basins or infiltration areas. These areas shall incorporate proper plant materials and irrigation for success in saturated soils, drought conditions and to withstand possible erosion from the hydraulic impacts of stormwater collection. Manufactured drywells, pervious pavement, or storage chambers may also be used for stormwater infiltration.

3. Stormwater collection in landscape areas shall be designed with a natural appearance, utilizing curvilinear forms, native plants, varying sizes of boulders or river rock, and maximum 3:1 slope.

4. On-site landscape areas for stormwater management may utilize vegetated swales but shall not exceed 40 percent of the landscaped area width.

5. Landscaped slopes 3:1 or greater shall incorporate rolled erosion control products and landscape appropriate for slopes. Slopes shall be irrigated by a system with a low precipitation rate of 0.75 inches per hour or less. Turf is not allowed on slopes greater than 4:1, or where the toe of the slope is adjacent to an impermeable hardscape.

6. Compaction during site grading shall not occur within landscape areas. Compacted soils shall be repaired by deep tilling, or as directed by the soil analysis prescribed by Subsection D (Soil Testing) of this Section.

7. Vegetated swales, basins and sloped grades for stormwater management shall incorporate a level area adjacent to paved edges, at least 3 FT to 5 FT in width, to allow utilities, such as backflow devices, to be located on level ground, and to serve as a buffer from sloped edges for pedestrian safety purposes.

L. Decorative Water Features. Decorative water features shall be properly maintained to operate and function to meet the intent of the design. Furthermore, decorative water features shall incorporate recirculating water systems, and shall use recycled water, where available, excluding swimming pools and spas.

6.05.050: Landscape Maintenance

A. Landscape Maintenance Required. Where a Landscape and Irrigation Documentation Plan is required pursuant to Subsection 6.05.015.B (Landscape and Irrigation Documentation Plans) of this Division, all installed landscaping shall be permanently maintained as prescribed by this Section.

1. Once installed, no landscaping shall be removed unless replaced with landscaping of a similar design, character, and coverage, at maturity.

2. Trees shall be monitored, staking inspected, and branches pruned, if necessary, pursuant to Section 6.05.020 (Tree Preservation Policy and Protection Measures) of this Division, to direct new growth, and to avoid conflict with vehicles, pedestrians, lighting, or buildings. Stakes and ties shall be removed upon establishment, typically 2 years after planting.

3. Once installed, no landscaping shall be allowed to die-off. The replacement of dead or dying landscape materials shall occur in a timely manner, or immediately upon notification by the City, as prescribed by Division 6.10 (Property Appearance and Maintenance) of this Development Code.

4. Irrigation systems shall be maintained to prevent water waste. Broken or inefficient irrigation shall be repaired, replaced, or modified to prevent runoff from leaving the target landscape due to low head drainage, overspray, or other similar condition where water flows onto adjacent property, non-irrigated areas, walkways, roadways, parking lots or structures, unless the nonpermeable surfaces are designed and constructed to drain entirely to landscaping.

B. Landscape Maintenance Defined. On-going landscape maintenance shall consist of the following:

1. Regular watering;

2. Monitoring and treating for pests, disease, or injury;

3. Regular mowing, pruning, and the removal and replacement of dead or dying plants;

4. Regular fertilizing;

5. Clearing of debris and providing weed control;

6. Repair and/or timely replacement of irrigation systems, and components thereof;

7. Repair and/or timely replacement of integrated architectural features; and

8. Any other similar act(s) that promotes growth, health, beauty, and the life of plants, shrubs, trees, and/or groundcover/turf.

6.05.055: Landscape Design and Construction Guidelines

A. The City Council shall establish by resolution, Landscape Design and Construction Guidelines (Development Code Reference G), which are intended as a reference to assist design

professionals, landscape contractors and homeowners in their understanding of the City's goals and objectives for the preparation of landscape construction documentation plans, and the installation of landscape materials and elements.

B. The Landscape Design and Construction Guidelines (Development Code Reference G) shall compliment the mandatory landscaping regulations contained in this Division, by providing examples of potential design solutions, and by providing interpretations of the various mandatory landscaping regulations contained in this Division.

C. The Landscape Design and Construction Guidelines (Development Code Reference G) authorized by this Section, shall be enforceable in the same manner, and to the same extent, as any other applicable requirement of this Development Code.

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Division 6.06—Street Naming and Street Address Numbering

Sections:

6.06.000: Purpose
6.06.005: Applicability
6.06.010: Assignment of Street Names and Street Address Numbers
6.06.015: Street-Naming
6.06.020: Street Address Numbering

6.06.000: Purpose

The purpose of this division is to establish policies for the naming of public and private streets and alleyways, and the address numbering of lots, parcels, dwelling units, places of businesses, and public buildings located along public and/or private streets within the City.

6.06.005: Applicability

A. The naming of any new public or private street or alleyway within the City and any request to change the previously established name of a public or private street or alley within the City shall be accomplished pursuant to the Street Naming Policy established by this division.

B. A street address number shall be assigned to a lot, parcel, dwelling unit, place of business and/or public building located along a public and/or private street within the City pursuant to the Street Address Numbering Policy established by this division.

6.06.010: Assignment of Street Names and Street Address Numbers

A. **Assignment of Street Names.** The Planning Director shall be responsible for the assignment of street names, and shall, upon recommendation of the Building Official, City Engineer, Fire Chief, and Police Chief, assign street names as established by Section 6.06.015 (Street Naming) of this Division.

B. **Assignment of Street Addresses.** The Building Official shall be responsible for the assignment of street addresses and shall assign street addresses as established by Section 6.06.020 (Street Address Numbering) of this Division.

6.06.015: Street Naming

A. **Naming of Streets.** Street names should be assigned based upon one of the following criteria:

1. Presidents of the United States;

2. States of the United States;

3. Cities of the United States;

4. California counties;

5. Names of famous local, state, and national personalities who are deceased;

6. Names of culturally significant historic places and events;

7. Famous fictitious names;

8. Names of astrological constellations;

9. Colleges;

10. Colors;

11. Precious metals;

12. Rocks;

13. Trees, shrubs and flowers;

14. Fruits and nuts;

15. Armstrong registered roses; or

16. Others, as approved by the Planning Director.

B. **Street Name Prefix.** All street names shall be assigned a prefix based upon its direction and location in the City, as follows:

1. Each street that generally runs in a north-south direction, and is located north of Holt Boulevard, shall be assigned "North" as its street name prefix.

2. Each street that generally runs in a north-south direction, and is located south of Holt Boulevard, shall be assigned "South" as its street name prefix.

3. Each street that generally runs in an east-west direction, and is located east of Euclid Avenue, shall be assigned "East" as its street name prefix.

4. Each street that generally runs in an east-west direction, and is located west of Euclid Avenue, shall be assigned "West" as its street name prefix.

C. **Street Name Suffix.** All street names shall be assigned a suffix based upon its direction and design, as follows (excepting subregional thoroughfares, such as Holt and Mission Boulevards):

1. Each through street that generally runs in a north-south direction shall be assigned "Avenue" as its street name suffix.

2. Each through street that generally runs in an east-west direction shall be assigned "Street" as its street name suffix.

3. Each portion of a through street that changes direction, and generally runs in a north-south direction, shall be assigned "Way," "Parkway," or "Trail," as its street name suffix.

4. Each portion of a through street that changes direction, and generally runs in an east-west direction, shall be assigned "Road," "Drive," or "Lane," as its street name suffix.

5. Each cul-de-sac in which the centerline generally points in a north-south direction at its termination point shall be assigned "Place" as its street name suffix.

6. Each cul-de-sac in which the centerline generally points in an east-west direction at its termination point shall be assigned "Court" as its street name suffix.

7. Each circling street shall be assigned "Circle" as its street name suffix.

8. Each looping street shall be assigned "Loop" as its street name suffix.

D. **Naming of Private Streets and Drives.** The name of a private street or drive shall be determined pursuant to Subsection A (Naming of Streets) of this Section. In addition, each private street (or a private drive, if deemed necessary or desirable by the Planning Director) shall be assigned a "Privado" or "Paseo" street name suffix to identify that the street is privately owned and maintained.

E. **Naming of Alleys.** Alleys shall only be named if all the following criteria are met:

1. The alley leads to a landlocked parcel with frontage only onto an alley (no street frontage).

2. The structure(s) on the property are designated as a local historic landmark.

3. The naming will not adversely affect any other landlocked parcel.

6.06.020: Street Address Numbering

A. **Assignment of Street Addresses.** Street addresses shall be assigned based upon the following numbering system:

1. Euclid Avenue is hereby designated as the north-south street address-numbering axis and Holt Boulevard is hereby designated as the east-west street address-numbering axis. All streets that run in a general north-south direction shall be numbered from Holt Boulevard, consecutively, to the City limits. All streets that run in a general east-west direction shall be numbered from Euclid Avenue, consecutively, to corporate limits.

2. The numbering system shall begin at 100 and extend from each axis point. Wherever possible, succeeding blocks shall be assigned addresses in intervals of 100. Block length shall be determined by the next street succeeding street intersection, or at 660 FT intervals when no street intersection exists, with one whole street number assigned for each 20 lineal FT of street frontage.

3. On north-south running streets, north of Holt Boulevard, odd address numbers shall be assigned to the west side of the street and even address numbers to the east side of the street.

South of Holt Boulevard, odd address numbers shall be assigned to the east side of the street and even address numbers to the west side of the street.

4. On east-west running streets, east of Euclid Avenue, odd address numbers shall be assigned to the north side of the street and even address numbers to the south side of the street. West of Euclid Avenue, odd address numbers shall be assigned to the south side of the street and even address numbers to the north side of the street.

5. A new street having the design of a circle or loop shall bear one given name along its entire length and shall have a street address numbering system as follows:

a. Where the entrance to the circle or loop is from an adjacent east-west running street, the address numbering shall conform to that used on the north-south streets;

b. Where the entrance to the circle or loop is from an adjacent north-south running street, the address numbering shall conform to that use on the east-west streets.

B. Posting of Street Address Numbers. The owner, occupant or person in charge of any house or building to which a number has been assigned shall be responsible for posting assigned street address numbers pursuant to the following specifications:

1. Principal buildings shall display the address number on the side where the front entrance is located. A principal building occupied by more than one business or dwelling unit shall display the assigned number at the front entrance of each tenant or dwelling unit. In addition, commercial and industrial buildings shall display the assigned numbers at rear and side entrances facing a public alley or access drive.

2. A lot or development site having more than one building shall be assigned an address number in a manner determined by the Building Official. Commercial and industrial buildings shall display a directory at the main entrance to the site.

3. Street address numbers shall be posted so as to be conspicuously visible from the street or road fronting the property. The actual location and size of the numbers shall be approved by the Building Official, subject to the following guidelines:

a. Each individual digit stroke shall be a minimum of one inch wide;

b. Street address numerals located less than 50 FT from the street curb face shall be a minimum of 4 inches in height. Address numerals located from 50 to 100 FT from the street curb face shall be a minimum of 8 inches in height. Address numerals located more than 100 FT from the street curb face shall be a minimum of 12 inches in height; and

c. Street address numerals that are not visible from the street due to setback distance or would otherwise be obstructed may be posted on a freestanding structure having a maximum height of 3.5 FT and maximum area of 4 SF.

4. Street address numerals and the background to which they are affixed shall be of contrasting colors or shades and shall be of reflective material for nighttime visibility. Samples of the materials shall be submitted to and approved by the Building Official.

C. Street Address Number Required for Building Permit Issuance. No building permit shall be issued for any principal building until the owner or owner's agent has obtained the official street

address number of the premises from the Building Official. Final approval for a certificate of occupancy of any principal building erected, repaired or expanded shall be withheld until permanent and proper street address numbers have been displayed pursuant to this division.

D. Posting of Rooftop Address Numbers. Street addresses, suite/unit numbers and letters shall be displayed on rooftops as follows:

1. Street address numbers shall be displayed on rooftops of all multiple unit residential, commercial and industrial buildings. The numbers shall face the street corresponding to the address. Numerals shall be 3 FT long by one FT wide and shall be painted in reflective white paint on a flat black painted background.

2. Any other buildings may display secondary street address numbers on rooftops in coordination with the Police Department. Numerals shall be 3 FT long by 5 inches wide and shall be painted in reflective white paint on a flat black painted background.

3. Roof top street address numbers should not be visible from the street.

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Division 6.07—Reserved

**********Reserved for Future Use**********

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Division 6.08—Development Projects and Subdivisions

Sections:

6.08.000: Purpose
6.08.005: Applicability
6.08.010: Maps
6.08.015: Subdivision and Development Project Design
6.08.020: Monuments
6.08.025: Reports
6.08.030: Park Dedication and In-Lieu Fee Regulations
6.08.035: Dedications and Improvements
6.08.040: Improvement Plans and Security
6.08.045: Common Interest Subdivisions
6.08.050: Conversion to a Residential Common Interest Project
6.08.055: Conversion to a Nonresidential Common Interest Project
6.08.060: Urban Lot Splits

6.08.000: Purpose

The purpose of this Division is to set forth rules and regulations for the subdivision and/or development of real property pursuant to the provisions of the Subdivision Map Act of the State of California (commencing with GC Section 66410) and the Ontario Municipal Code. Furthermore, it is the purpose of this Division to regulate and control all divisions of land that may be lawfully regulated by the City pursuant to the Subdivision Map Act. The provisions of this Division shall be interpreted to carry out this intent and purpose. In the event of a conflict between any mandatory provision of the Subdivision Map Act and a provision of this Division, the Subdivision Map Act shall control.

6.08.005: Applicability

A. Pursuant to the provisions of the Subdivision Map Act, and in addition to any other applicable regulations provided by State law, the regulations contained in this Division shall apply to all subdivisions or parts of subdivisions of land proposed within the corporate limits of the City, and to the preparation of subdivision maps and any other maps provided for by the Subdivision Map Act. Prior to the subdivision and/or development of any land in the City, the subdivider and developer thereof shall conform to, and comply with, the requirements, rules, and regulations of this Division.

B. No land shall be subdivided and developed for any purpose that is not in conformity with the Vision, Policy Plan (General Plan), and City Council Priorities components of The Ontario Plan, and any applicable specific plan or planned unit development of the City. The type and intensity of land use shown in the Policy Plan, or applicable specific plan or planned unit development, shall determine the type of streets, roads, highways, utilities, and public services that shall be provided by the subdivider and/or the developer.

6.08.010: Maps

The requirement or necessity for a tentative, final, or parcel map shall be governed by the provisions of this Section.

A. **Tentative Tract Maps and Final Maps.** A tentative tract map and final map shall be required for all subdivisions creating 5 or more lots, 5 or more condominium units, a community apartment project containing 5 or more lots, or for the conversion of a dwelling to a stock cooperative containing 5 or more dwelling units, except as provided by Section GC 66418.2 and Section GC 66426.

B. **Parcel Maps.** A parcel map shall be required for all subdivisions creating 4 or fewer lots, or 4 or fewer condominium units, a community apartment project containing 4 or fewer lots, or for the conversion of a dwelling to a stock cooperative containing 4 or fewer dwelling units, or for those subdivisions described in Section GC 66426.

C. **Exceptions to the Preparation of a Tentative Tract Map, Final Map or Parcel Map.** Exceptions to the preparation of a tentative tract map or final map, or a parcel map shall be pursuant to GC Section 66426 and 66428.

D. **Exclusions from the Requirement for a Tentative Tract Map, Final Map or Parcel Map.** The requirement for the filing of a subdivision map pursuant to this Section shall not be applicable in those instances identified in GC Section 66412, 66412.1, 66412.2, 66412.3, 66412.5, and any other mandatory exclusions to the applicability of the Subdivision Map Act, as provided by the Act.

E. **Waiver of Parcel Maps.** The City Engineer is authorized to waive a parcel map pursuant to the provisions of Section 4.03.045 (Subdivisions—Parcel Map Waiver) of this Development Code.

6.08.015: Subdivision and Development Project Design

A. **Design and Improvement Requirements.** Pursuant to GC Section 66473.5, a subdivision for which a tentative map or parcel map is required pursuant to Section 6.08.010 (Maps) of this Division, shall be consistent with the Vision, Policy Plan (General Plan), and City Council Priorities components of The Ontario Plan, any applicable specific plan or planned unit development, and this Development Code. Unless otherwise specified, design requirements and improvement requirements may be modified or waived only by the City Council.

B. **Lot Requirements.** All residential, commercial, mixed use, and industrial lots shall have direct access to a public street, except where private street, common driveway or other access easement rights are specifically approved by the City. The access easement shall be reserved on a subdivision map or by separate instrument in perpetuity, for the benefit of the effected property(ies).

C. **Street Rights-Of-Way and Design Requirements.** The street layout of a proposed subdivision or development project shall be consistent with all street right-of-way designations contained in the Mobility Element of the Policy Plan (General Plan) component of The Ontario Plan, or an applicable specific plan, at the time of tentative map approval. For alignments not specifically shown in the Mobility element, the City Engineer shall approve alignments that are consistent with the Policy Plan component of The Ontario Plan, or any applicable specific plan, master plan, and City standard. All streets (public and private) shall be designed to meet public street requirements,

unless otherwise approved by the Executive Director Development or both the City Engineer and Planning Director.

D. **Utility Easements.** Whenever overhead utilities are allowed in a proposed subdivision or development project by this Development Code, utility easements of sufficient width shall be located along the rear or side lot lines. Whenever possible, such easements shall extend an equal distance into each of the 2 abutting lots. This requirement may be modified by the Approving Authority, if warranted by unusual circumstances in a particular proposed subdivision. Underground utility easements, whenever necessary and to the extent practicable, shall be adjoining and parallel to lot lines.

E. **Drainage Easements.** The design of a proposed subdivision or development project shall provide for the proper drainage of the proposed subdivision or development project, and all lots and improvements therein, based upon the runoff that can be anticipated from ultimate development of the watershed area where in the subdivision is located. Stormwater detention measures shall be provided when required by the City Engineer, to reduce any adverse effects of increased runoff from development on downstream properties.

F. **Lighting and Maintenance Districts and Community Facilities Districts.** The City may cause the annexation of an area within a subdivision or development project to be annexed into a Lighting and Maintenance District (LMD), Community Facilities District (CFD), or similar appropriate district, prior to the recordation of a final map or parcel map, or vesting map.

G. **Energy Conservation.** Pursuant to GC Section 66473.1, the design of a subdivision for which a tentative map is required pursuant to Section 6.08.010 (Maps) of this Division, or a development project, shall provide to the extent feasible, for future passive or natural heating or cooling opportunities in the subdivision.

H. **Cable Television Systems.** Pursuant to GC Section 66473.3, the Approving Authority may require the design of a subdivision for which a tentative map or parcel map is required pursuant to Section 6.08.010 (Maps) of this Division, to provide for appropriate cable television systems and for communication systems, including, but not limited to, telephone and Internet services, to each lot in the subdivision. This provision shall not apply to the conversion of existing dwelling units to a common interest project.

6.08.020: Monuments

A. Pursuant to GC Section 66495, at the time of survey of the final map or parcel map, the engineer or surveyor shall set sufficient durable monuments so that another engineer or surveyor may readily retrace the survey. The exterior boundary of the land being subdivided shall be adequately monumented or referenced prior to recordation of the final map or parcel map.

B. The subdivider shall submit to the City Engineer, in a form satisfactory to the City Engineer, a tie sheet showing proper ties to the location of the centerline monuments. A minimum of 3 ties shall be shown for each centerline monument. All monuments set, and tie monuments set, shall be permanently marked or tagged with the registration or license number of the responsible engineer or surveyor.

C. Interior monuments need not be set at the time the map is recorded, provided the engineer or surveyor certifies on the map that the monuments will be set prior to City Engineer acceptance of the improvements or within 2 years following the recordation of the final map,

whichever is later, and the subdivider furnishes to the City, security guaranteeing the full payment of the cost of setting the monuments.

D. Pursuant to GC Section 66497, the engineer or surveyor shall notify the subdivider and the City Engineer when monuments have been set. If the subdivider does not present evidence to the City that the engineer or surveyor has been paid for the setting of the final monuments, and the engineer or surveyor notifies the City that payment has not been received from the subdivider for the setting of the final monuments, within 3 months following the date of notification, the City shall pay the amount due to the engineer or surveyor from the monument deposit.

E. In the event of the death, disability or retirement from practice of the engineer or surveyor charged with the responsibility for setting monuments, or in the event of his refusal to set such monuments, the City Council may direct the City Engineer, or such engineer or surveyor as it may select, to set such monuments. If the original engineer or surveyor is replaced by another, the former may release his obligation to set the final monuments to the surveyor or engineer who replaced him, by letter to the City Engineer. When the monuments are so set, the substitute engineer or surveyor shall amend any map filed pursuant to this Section and the provisions of GC Section 66498, and GC Section 66499 through 66472, inclusive.

6.08.025: Reports

A. Soils Report.

1. Prior to the approval of a final tract or parcel map, vesting map, or development plan, the City may require that the subdivider and/or developer submit a preliminary soils report. If required, the report shall be prepared by a civil engineer who is registered by the State of California and shall be based upon adequate test borings or excavations in the subdivision.

2. A soils report shall be prepared by a qualified civil or geotechnical engineer, who is registered by the State of California. An investigation of each parcel in the subdivision shall be prepared if the preliminary soils report (if required) indicates the presence of any of the following problems:

a. Critically expansive soils or other soil problems that, if not corrected, would lead to structural defects;

b. Rocks or liquids containing deleterious chemicals that, if not corrected, could cause construction materials, such as concrete, steel, and ductile or cast iron, to corrode or deteriorate; or

c. The presence of methane gas and/or other toxic gases or substances, which, if not corrected, could cause life endangerment.

3. The soil investigation shall recommend corrective action that is likely to prevent structural damage to each building proposed to be constructed in the area where the soil problem exists.

4. The City shall approve a soils report (if required) upon determination that the recommended corrective action is likely to prevent structural damage to each building to be constructed in the area where a soil problem exists. The subdivider may appeal the determination to the City Council pursuant to the procedures set forth in Division 2.04 (Appeals) of this

Development Code. Subsequent building permits shall be conditioned upon the incorporation of the recommended corrective action in the construction of each building.

B. Geological Hazard Reports.

1. Prior to the approval of a final tract map or parcel map, vesting map or development plan, the City may require subdivider or developer submit a geological hazard report if the subdivision includes land within a geologic hazard area identified in the Policy Plan (General Plan) component of The Ontario Plan or by the California Department of Conservation, or if the Building Official determines that other geological conditions warrant the preparation of a report. The report shall be prepared by a civil engineer who is registered by the State of California and shall be based upon appropriate field observations.

2. If the geological hazard report indicates the presence of a potential geological hazard to life, health, or property, a qualified civil or geotechnical engineer, who is registered by the State of California, shall prepare a geological mitigation plan that identifies corrective action for the potential hazard, which shall be filed with the City.

3. The City shall approve the mitigation plan if it is determined that the recommended corrective action is likely to mitigate the potential hazard. The subdivider may appeal the determination to the City Council, pursuant to the procedures set forth in Division 2.04 (Appeals) of this Development Code. Subsequent building permits shall be conditioned upon the incorporation of the recommended corrective action in the construction of each building.

6.08.030: Park Dedication and In-Lieu Fee Regulations

A. Purpose. These park dedication and in-lieu fee regulations are enacted pursuant to the authority granted by GC Section 66477 and shall be interpreted consistent with the provisions thereof. The park and recreational facilities for which payment of impact fees and/or dedication of land are required by the terms of this Section shall be provided in accordance with the standards, specifications, and requirements of the Vision, Policy Plan (General Plan), and City Council Priorities components of The Ontario Plan, any applicable specific plan, and any other applicable resolution, policy, or standard of the City.

B. Applicability.

1. Effect on Other Laws. With respect to the requirement for the payment of impact fees or the dedication of land for park and recreational purposes by the subdivider or developer of a residential project, or the residential portion of a mixed-use project, pursuant to this Development Code, this Section shall supersede all other ordinances or regulations of the City inconsistent herewith. The enactment of this Section shall not supersede any other provisions or authority adopted by ordinance of the City Council, unless expressly stated in this Section.

2. Exemptions. The provisions of this Section shall not apply to subdivisions containing less than 5 parcels and not used for residential purposes; provided, however, that a condition may be placed on the approval of such parcel map that if a building permit is requested for construction of a residential structure or structures on one or more of the parcels within 4 years, an impact fee may be required to be paid by the owner of each parcel as a condition to the issuance of such permit. In addition, the provisions of this Section shall not apply to nonresidential subdivisions; or to condominium or stock cooperative projects that consist of the subdivision of

airspace in an existing apartment building that is more than 5 years old, when no new dwelling units are added.

C. Definitions. The following definitions shall govern the meaning of the words as used in this Section, unless from the context in which the word is used, a different meaning is clearly intended:

1. Fair Market Value. The value of land set forth in the City's general and specific plans, which are earmarked to be acquired by the City upon which the City intends to locate park and recreational facilities to service residents of the subdivision. Fair market value shall be based upon an appraisal by a qualified appraiser selected by the City, which appraisal shall be updated from time to time by the City. The fair market value shall be determined as of the time the final map or parcel map is filed. With regard to any park and recreation improvements, or equipment provided by the subdivider, the fair market value shall be the actual cost to acquire, construct, or install the improvement or equipment.

2. Park. A lot that is, or contiguous lots that are, owned, operated, and maintained by a public agency or private association, and which provides recreational land and facilities for the benefit and enjoyment of the residents of the subdivision and of persons residing, working, or visiting in the City. Parks may be classified as community parks, including community centers, athletic facilities, large multi-user swimming pools, picnic areas, cultural centers, or similar facilities; public neighborhood parks, including playground equipment, sports fields, and picnic areas; and private neighborhood parks, generally intended to serve only the immediate subdivision/development or specified planned community in which they are located. Parks may also include, or be limited to, open space areas suitable for active or passive uses.

3. Park and Recreational Facilities. Any public improvements deemed necessary by the City to develop, improve, or rehabilitate land and facilities for park and recreational purposes. Such improvements may include, but not be limited to, grading; landscaped areas for active and passive recreational use, open space and sports fields; irrigation and drainage systems; lawn, shrubs and trees; facilities for recreational community gardening; walkways; bicycle facilities and park lighting; playground or other recreational equipment; picnic facilities; community center or other buildings, swimming pools; volleyball, basketball, tennis, racquetball, and other courts; vehicle driveways and parking areas, and any other facilities which may hereafter be authorized by state law or approved by the City.

4. Private Open Space. Privately owned land and facilities for park and recreation purposes provided within a subdivision, and perpetually maintained and operated by the future residents or owner of the subdivision.

D. Payment of Impact Fees or Park Dedication Required. As a condition of approval of a tentative tract or parcel map, final tract or parcel map, or development project for a residential subdivision or the residential portion of a mixed-use project, or for a building permit within a subdivision, the subdivider shall be required to pay an impact fee, offer for dedication of park land in lieu thereof, or both, at the sole and exclusive option of the City, in the amount provided in this Section, for park and recreational purposes, unless the subdivider is exempted from this requirement by the express provisions of this Section. The payment of an impact fee and/or offering for dedication of land shall be at the time and according to the standards and formula contained in this Section.

E. Standards for Determining Dedication/Maximum Requirement.

1. General. If the park dedication is required under Subsection D (Payment of Impact Fees or Park Dedication Required), above, the park area required shall be determined pursuant to the standards provided in this Section.

2. Standard of Park Area to Population (Park Area Standard Ratio). it is found and determined that the public interest, convenience, health, safety, and welfare of the residents of the City require that 5.0 acres of property for every 1,000 persons residing within the City be devoted to local park and recreational purposes, and that such park area is necessary to provide for the needs of the current and future persons residing and working in the City. The ratio of 0.005 shall hereafter be referred to as the "Park Area Standard Ratio."

3. Computation of Maximum Area of Public Parkland to be Dedicated.

a. The maximum amount of public park land required to be dedicated by a subdivision or development project shall be equal to the Total Number Of Dwelling Unit Types multiplied by the dwelling unit occupancy factor established pursuant to Subparagraph b, below, multiplied by 0.005 (the Park Area Standard Ratio of 5.0 acres per 1,000 population). The computation is represented as follows:

Area of Public Parkland to be Dedicated = (Total Number of Dwelling Unit Types) x (Dwelling Unit Occupancy Factor) x (0.005)

b. The Dwelling Unit Occupancy Factor for each housing type shall be established by resolution of the City Council, based upon the latest available census data.

c. The City Council, by resolution, may require a dedication of parkland less than the maximum amount set forth above if the City Council finds, and clearly establishes that a smaller dedication will adequately serve the public interest, convenience, health, safety, and welfare of the residents of the City.

4. Qualification of Land Being Dedicated. In addition to meeting the requirements set forth in this section, any land offered for park dedication shall meet the applicable criteria specified in Section 6.08.035 (Dedications and Improvements) of this Division.

F. Standards for Determining Park Impact Fee/Maximum Fee.

1. When required by Subsection G (Determination of Dedication, Fees, or Combination) of this Section, the subdivider or developer shall pay to the City, a fee in lieu of making an offer of parkland dedication. For the purposes of impact fee calculation, 3.0 acres of property for every 1,000 persons residing within the City shall be determined to be devoted to local parkland and recreational purposes, thereby resulting in the ratio of 0.003 to be hereafter referred to as the "Park Area Fee Standard Ratio."

2. The Park Impact Fee shall be equal to the total number of dwelling units multiplied by the Dwelling Unit Occupancy Factor established pursuant to Subparagraph E.3.b (Dwelling Unit Occupancy Factor) of this Section, multiplied by the Park Area Fee Standard Ratio, multiplied by the area of parkland to be dedicated under Paragraph E.3 (Computation of Maximum Area of Parkland to be Dedicated) of this Section, multiplied by the fair market value of the land to be developed by the City for parkland and recreational facilities. The computation is represented as follows:

Park Impact Fee = (Total Number of Dwelling Units) x (Occupancy Factor) x (0.003) x (Fair Market Value of Land to be Developed)

G. Determination of Dedication, Fees, or Combination.

1. Impact Fee Generally Required. Where required by the City or where no park or recreational facility located in whole or in part within the proposed subdivision is designated in the general plan of the City or other adopted resolution policy or standard of the City, the subdivider or developer shall pay an impact fee computed in accordance with Subsection F (Standards for Determining Impact Fees/Maximum Fee), above, to be used for park and recreational purposes to serve the residents of the area being subdivided and other members of the public.

2. Dedication in Lieu of Impact Fee. Where a park or recreational facility has been designated in the Policy Plan (General Plan) component of The Ontario Plan of the City, or other adopted resolution policy or standard of the City, and is to be located in whole or in part within the proposed subdivision to serve the immediate and future needs of the residents of the subdivision and other members of the public, the City may require the subdivider to dedicate land for a park and provide recreational facilities thereon in lieu of payment of an impact fee as provided in this Section, if the City determines that dedication is desirable as provided in this Section. If the fair market value of the park and recreational facilities provided is less than that required hereunder, the difference shall be paid by the subdivider as an impact fee.

3. Combination of Land and Fees. The City may accept a combination of land, recreational facilities, and fees, with the respective amounts to be determined by the sole discretion of the City, so long as the aggregate fair market value of the land and recreational facilities, plus in-lieu fees, does not exceed the limits established in this Section.

4. Determination of Land or Fee. Whether the City requires payment of an impact fee, or requires land dedication in lieu thereof, or a combination of both, shall, in the City's sole discretion, be determined by consideration of the following, and such determination shall be final and conclusive:

a. The provisions of the City's general plan, any specific plan adopted thereto, and any other adopted resolution, policy or regulation of the City;

b. Topography, geology, access and location of land in the subdivision available for dedication;

c. Size and shape of the subdivision and land available for dedication;

d. The feasibility of dedication;

e. Access and location of other park sites to subdivision; and

f. Need of other accessible park sites for development, improvement, and rehabilitation.

5. Impact Fees for Subdivisions of 50 Parcels or Less. If the subdivision contains 50 lots or less, only the payment of impact fees may be required, except that condominium, stock cooperative or community apartment projects may be required to dedicate land if they have more than 50 dwelling units.

H. Subdivider Credits.

1. Public Parks. The subdivider shall receive a credit against the impact fee payment or park dedication requirement for the fair market value of any land dedicated and for the value of any park and recreation improvements provided by subdivider in conjunction with any public park. The value of such improvements shall be determined by City based upon Paragraph C.4 of this Section.

2. Private Park. In conjunction with any planned development, real estate development, stock cooperative, community apartment, or condominium, as defined by state law, if the subdivider provides private open space as defined in Subsection C (Definitions) of this Section, then the subdivider may receive a credit against the park dedication requirement of this Section, in an amount to be determined by the City Council or its designee, but such credit shall not exceed 33 percent of such impact fee payment or park dedication requirement. The actual amount of such credit shall be determined by the City Council or its designee, based upon the comparability of the private open space to public park area and the adequacy of such private open space to serve the needs of the subdivision for active recreational uses.

3. Application of Credits. The credits provided by Paragraphs H.1 and H.2, above, shall be applied to reduce the subdivider's obligation to dedicate and/or pay an impact fee as required under this Section, but only to the extent of such credit.

I. Disposition of Land or Fees.

1. The amount and location of land to be dedicated, or the impact fees to be paid, shall bear a reasonable relationship to the use of the park and recreational facilities by the future inhabitants of the subdivision. In accordance with GC Section 66477, it is expressly acknowledged that the land to be dedicated or impact fees to be paid may be for both neighborhood and community parks. In addition, such impact fees may be used to improve or rehabilitate existing parks.

2. Impact fees paid by a subdivider pursuant to this Section may be spent to develop, improve, and rehabilitate community and neighborhood parks even though such parks may be used by nonresidents of the subdivision, so long as the benefit of the park and recreational facilities to residents of the subdivision is reasonable in relation to the location of the parks and amount of the impact fees.

J. Time of Payment of Impact Fees or Land Dedication. All park impact fees shall be paid directly to the City Cashier at the time of issuance of a building permit for each lot within the subdivision. In the event of a dedication requirement, the subdivider shall make an irrevocable offer of dedication to the City at the time of recordation of the final map.

K. Schedule of Performance.

1. City's Schedule. The City shall prepare and maintain a schedule specifying how, when, and where land or impact fees, or both, which were dedicated to the City to develop park or recreational facilities will be used. Any impact fees collected pursuant to this Section shall be committed within 5 years after the payment of such fees or the issuance of building permits on 50 percent of the lots created by the subdivision, whichever occurs later. If any fees are not so committed, they shall be distributed to subdivision owners in accordance with law.

2. Subdivider's Schedule. In the event that a subdivider improves or develops parks for public or private ownership, they shall prepare a schedule specifying when, how, and where they will develop the park or recreational facilities to serve the residents of the subdivision. This schedule will be required as a condition of subdivision map approval.

L. Procedure. Unless otherwise expressly provided in this Section, any decision or action required by City in this Section shall be made after the duly noticed public hearing, at the time of approval of the tentative tract map or parcel map by the Approving Authority. Such decision or action shall be made a condition of approval of the subdivision map and shall be final and conclusive in the absence of a timely filed appeal pursuant to Division 2.04 (Appeals).

6.08.035: Dedications and Improvements

A. General Requirements.

1. The public need, safety, and general welfare require that dedications, offers of dedication, and irrevocable offers of dedication of real property for various public uses be made to the City, or other public agency or district, as conditions precedent to the approval or conditional approval of tentative tract or parcel maps, final tract and parcel maps, development plans, reversions to acreage, lot line adjustments, and consolidations and combinations of lots, or any other action or event requiring evidence of official City approval.

2. Dedications may be required for streets, highways, alleys, public service easements, courts, walkways, bicycle trails, equestrian trails, recreation trails, vehicular and pedestrian access rights, slopes, storm drains, watercourses, floodplains, sewers, water lines, water rights, public utilities, traffic signal facilities, transit facilities, environmental enhancement, landscaping, parks, recreation areas, and for all other public uses not specified, if found to be required to conform to, or implement the Policy Plan (General Plan) component of The Ontario Plan or any element thereof, or any applicable specific plan, planned unit development, master plan, and/or City standard. Dedications may also be required by the City on behalf of any other public agency or district.

B. Dedication Requirements.

1. Dedications for streets and highways shall be to the width as designated by the Mobility Element of the Policy Plan (General Plan) component of The Ontario Plan and City standards, or as designated by an approved specific plan. Deviations may be allowed for streets and highway widths not shown in the Mobility Element, or in any approved specific plan, based upon the land use, traffic volumes or other factors as determined by the City Engineer.

2. Dedications for other public easements shall be based upon the need for service, accessibility, topography, clearances available, and other circumstances and factors as determined by the City Engineer.

C. Method of Dedication. Dedications shall be made to the City by the following prescribed methods:

1. Final Map, Parcel Map, or Development Project. All streets, highways, alleys, easements, and lots offered for dedication or to be dedicated shall be clearly indicated on the map or development plan. They shall be clearly described in the appropriate statement on the

title sheet of the map or development plan. Vehicular access right dedications shall likewise be shown and described on the final map.

2. Separate Instrument. Where dedications are made a requirement of the final approval of a Lot Merger, Development Plan, Conditional Use Permit, building permit, or any other permit, and no final map or parcel map is required to be filed and recorded as a condition thereof, the required dedications shall be made by separate instrument in a form approved by the city attorney, which shall be signed, executed and acknowledged by all parties having record title interest in the property or rights being dedicated. Preparation, execution, and delivery of the fully executed instrument shall be made prior to the final approval by the City of the lot consolidation, lot combination, development plan, or permit being requested.

3. Fee Title. Fee title shall be granted by the subdivider when in the opinion of the City Engineer, in consultation with the City Attorney, it is necessary to carry out policies and requirements of the Policy Plan (General Plan) component of The Ontario Plan, and any City ordinance, resolution or standard.

D. Acceptance of Dedications. Acceptance of dedications shall be in conformance with the following:

1. At the time of final map or parcel map acceptance and approval, the Approving Authority may accept or accept subject to improvement, any or all dedications or offers of dedication. The City Clerk shall certify the action by the Approving Authority on the map.

2. Until any dedication is accepted by the City by execution of a Certificate of Acceptance recorded in the office of the County Recorder, the City shall not be responsible for, and shall not incur, any liability with respect to the offered property.

3. If any dedication is accepted, including but not limited to road or street, path, storm drain, sanitary sewer, water (potable or recycled), public utilities, and/or other public use easement, the acceptance shall be completed by the execution and recordation of a Certificate of Acceptance, recorded in the office of the County Recorder.

4. If any dedication is accepted subject to the completion and acceptance of public improvements, the City shall not be responsible for or incur any liability with respect to such dedication, unless and until the public improvements are completed by the subdivider and accepted by the City as evidenced by a notice of completion issued by the City Engineer pursuant to Section 6.08.040.J.4 of this Division. The ownership of and responsibility for the construction and maintenance of any public improvement is held by the subdivider and shall remain so until such time as the public improvements are completed and accepted.

5. Offers of Dedication may be terminated and abandoned in the same manner as prescribed for the abandonment or vacation of streets by the Streets and Highways Code (SHC), commencing with SHC Section 8300 or SHC Section 940, as applicable.

6. Acceptance of offers of dedication on a final map shall not be effective until the final map is filed in the office of the County Recorder, or a separate resolution of acceptance, approved by the City Council, is filed in such office.

E. Dedication of Land for Public Access. All vehicular and pedestrian access rights shall be dedicated to the City for those lots abutting any major, primary, secondary or collector street, flood control channel, park, or bike trail, except at designated locations.

F. Dedication of Land for Public Schools. Pursuant to GC Section 66478, the City may reserve an elementary school site within a proposed subdivision for later purchase by the appropriate school district. Whenever there is consideration of an area for a public school site within a subdivision, the city shall notify the school district and the State Department of Education, in writing, of the proposed site. The notification shall include the identification of any existing or proposed airport runways within the distance specified in State Education Code Section 17215.

1. Standards. As a condition of approval of a tentative or vesting tentative map, and as allowed by state law, a subdivider who develops or completes the development of one or more subdivisions within the school districts serving said subdivision, shall dedicate to the school district such lands as the Approving Authority deems necessary, for the purpose of constructing elementary schools necessary to assure the residents of the subdivision adequate public school service.

2. Consistency with Policy Plan (General Plan). School sites offered for dedication shall conform to the policies in the Policy Plan (General Plan) component of The Ontario Plan and relevant specific plans, and the requirements of the school district.

3. Timing. The requirement of dedication shall be imposed at the time of approval of the tentative or vesting tentative map. If, within 30 days following the requirement to dedicate is imposed by the City, the school districts do not offer to enter into a binding commitment with the subdivider to accept the dedication, the requirement shall be automatically terminated. The required dedication may be made any time before, concurrently with, or up to 60 days following the filing of the final map on any portion of the subdivision.

4. Repayment of Costs. Upon accepting the dedication, the school district shall repay to the subdivider, or their successors, the original cost to the subdivider of the dedicated land, plus a sum equal to the total of the following amounts:

a. The cost of any improvements to the dedicated lands since acquisition by the subdivider;

b. The taxes assessed against the dedicated land from the date of the school district's offer to enter into the binding commitment to accept the dedication; and

c. Any other costs incurred by the subdivider in maintenance of such dedicated land, including interest costs incurred on any loan covering such land.

5. Exception. These dedication requirements for public school lands shall not apply to a subdivider who has owned the land being subdivided for more than 10 years prior to the filing of the tentative map.

G. Dedication for Streets. In order to meet the City's transportation goals as described in the Mobility Element of the Policy Plan (General Plan) component of The Ontario Plan, any subdivider or developer of land shall dedicate, or make an irrevocable offer of dedication, of all land within the subdivision or the site that is needed for public streets and alley ways.

1. When Required. The dedication, or irrevocable offer of dedication, of land for streets and alley ways shall be a condition of approval of any tentative tract or parcel map, or vesting map submitted pursuant to Section 4.02.095 (Subdivisions—Tentative Tract and Parcel Maps, and Vesting Maps) of this Development Code, or the approval of any Development Plan

submitted pursuant to Section 4.02.025 (Development Plans) of this Development Code, for the construction, alteration, or enlargement of any building or dwelling, or the establishment of any agricultural, commercial, or industrial land use. Furthermore, an owner, lessee, or agent constructing, altering, or enlarging a building or dwelling, or establishing an agricultural, commercial, or industrial land use, shall provide appropriate street dedication, or make an irrevocable offer of dedication, as a condition of building permit issuance, except that such dedications shall not be required for the following:

a. Any accessory building that does not exceed 1,000 SF of GFA;

b. Any alteration, enlargement, or addition that does not exceed 50 percent of the area of an existing building, dwelling, or land use, not to exceed 2,000 SF of GFA;

c. The installation or construction of walls, fences, or signs;

d. Temporary land uses not exceeding 30 days duration; and

e. Unenclosed agricultural land uses legally established pursuant to Table 5.02-1 (Land Use Matrix) of this Development Code.

2. Rights-of-Way. Street dedications shall include the full right-of-way required for the functional classification of roadway as described in the Mobility Element of the Policy Plan (General Plan) component of The Ontario Plan, and applicable specific plans, and Section 6.08.015 (Subdivision Design) of this Division.

3. Street Design. Streets to be dedicated to the City, as well as any private streets, shall follow the design specifications in Subsection 6.08.015.C (Street Rights-of-Way) of this Division.

H. **Dedication for Pedestrian and Bicycle Paths**. Whenever a subdivider or developer is required to dedicate roadways to the public, a dedication of land may be required to provide bikeways and pedestrian paths for the use and safety of the residents of the subdivision, or to provide bikeways and pedestrian paths as shown in the Mobility Element of the Policy Plan (General Plan) component of The Ontario Plan, any bicycle or pedestrian master plan adopted by the City, or an applicable specific plan.

I. **Dedication for Local Transit Facilities.** In order to provide adequate local transit facilities, whenever a subdivider or developer is required to dedicate roadways to the public, a dedication of land shall be required for local transit facilities, such as bus turnouts, benches, shelters, landing pads, and similar items, that directly benefit the subdivision, or the community as a whole, as required by the Planning Director and/or the City Engineer, and as described in the Mobility Element of the Policy Plan (General Plan) component of The Ontario Plan, or an applicable specific plan. To facilitate a logical phasing of transit facility improvements, the City may require the payment of a fee in lieu of the construction and installation of required improvements.

J. **Improvement of Bridges, Signals, and Thoroughfares.** Pursuant to GC Section 66484 and Section 4.02.025 (Development Plans) of this Development Code, the subdivider or developer shall pay traffic impact fees for the purpose of defraying the actual or estimated cost of constructing major thoroughfares, other citywide transportation improvements or bridges. The City Council shall establish procedures and standards for determining the appropriate fees.

1. Construction, modification, or upgrading of traffic signals and appurtenances may be required as a condition of the approval of any subdivision, land division, development plan, or

use or building permit, if the additional traffic generated by the tract or development, the safety of the traveling public, the increased use of the streets, or other circumstances necessitate the construction.

2. Where the development of a subdivision or other project will be phased over a period time, and, in the opinion of the City Engineer, the full effect of increased burden on the streets will not be realized immediately, the subdivider or developer may be required to deposit a cash amount in the estimated value of the traffic signal improvements ultimately to be made, which sum shall be used at such time as the construction of the signal and appurtenances is warranted. In lieu of a cash deposit, the subdivider or developer may be permitted to post a bond or other surety to guarantee the installation of required traffic signals in a form satisfactory to the City Engineer and City Attorney. The exact amount, details and timing of the deposit and future construction shall be subject to an agreement between the city and the subdivider or developer.

K. **Groundwater Recharge Facilities.** Pursuant to GC Section 66484.5, the subdivider shall pay fees for the purpose of constructing recharge facilities for the replenishment of the underground water supply in that area of benefit. The City Council shall establish procedures and standards for determining the appropriate fees.

L. **Reservations for Other Public Uses.** In addition to the dedications for specific public uses that this Section requires, the subdivider or developer shall reserve land within the subdivision for wells, fire stations, libraries, or other public uses, consistent with the Policy Plan (General Plan) component of The Ontario Plan and applicable specific plans, provided that:

1. Develop in an Orderly and Efficient Manner. The reserved area is of a size and shape that permits the balance of the property within which the reservation is located to develop in an orderly and efficient manner;

2. Feasibility of Development. The amount of land reserved will not make development of the remaining land held by the subdivider economically infeasible; and

3. Consistency with Policy Plan (General Plan). The reserved area shall conform to the Policy Plan (General Plan) component of The Ontario Plan and applicable specific plans, and shall be in such multiples of streets and lots as to permit an efficient division of the reserved area in the event that it is not acquired within the prescribed period. In such an event, the subdivider shall make those changes that are necessary to permit the reserved area to be developed for the intended purpose, consistent with good subdividing practices.

M. **Drainage Facilities and Grading.** Drainage facilities shall be provided and installed as necessary to help protect the lots, parcels, buildings, and structures from flooding, and to minimize flooding of the public streets therein or abutting the property.

1. Facilities shall be designed to minimize the inundation of private properties from storm runoff emanating from a 100-year frequency storm.

2. Public streets shall be protected from flooding from runoffs of a 10-year frequency storm pursuant to City standards or approved equivalent. Protection to higher levels may be required by the City Engineer, dependent upon the degree of flood risk involved, the topography, location, local drainage patterns, and the requirements of the San Bernardino County Flood Control District.

3. Hydrologic and hydraulic calculations and studies for required facilities shall be subject to review and acceptance by the City Engineer and/or Building Official. All grading done in conjunction with the development of a tract or property shall be performed in conformance with the City's building code, the City grading standards, and good engineering practices.

4. On-site and off-site storm drain facilities, and site grading, shall be designed and constructed to prevent undue erosion of the site or off-site properties, and to prevent excessive deposits of mud, silt, or debris upon any public street or easement, or within any channel, storm drain facility, swale, or watercourse. The drainage facilities shall be designed in accordance with the City's drainage master plan, applicable elements of the Policy Plan (General Plan) component of The Ontario Plan, and any applicable specific plan.

N. Sewage Facilities Improvements. Sewer mains, manholes, and appurtenances shall be constructed to serve each subdivision, lot, parcel, building or structure, and individual laterals shall be provided to each lot therein. All such facilities shall be installed prior to the paving of the streets, alleys, or improvement of the easements within the development. Sanitary sewers shall be constructed to the sizes, lines, grades, and design pursuant to City standards, and applicable elements of the Policy Plan (General Plan) component of The Ontario Plan, or any applicable specific plan.

O. Water Supply System Improvements. Water mains, service meters, cross connection control devices, valves, fire protection facilities, and all other appurtenances of the water system shall be provided to the applicable City master plan(s), and water lines, grades, and design shall be pursuant to City standards, and as required by applicable elements of the Policy Plan (General Plan) component of The Ontario Plan, or any applicable specific plan.

P. Underground Utilities and Service Lines. Whenever any tentative tract or parcel map, development project, or map for the reversion of lots to acreage is filed, all electrical, telephone, cable television, and similar wires, cables, services, and appurtenances that provide direct service to the property being subdivided, divided, or developed, shall be installed underground, and all existing facilities providing direct service to the building, structure, or development being added to or rebuilt, shall be underground as a condition precedent to the approval of the tentative tract or parcel map, by the City Council or City Engineer, as applicable.

Q. Development Impact Fees.

1. Prior to the issuance of a building permit for construction on any lot within any subdivision or development project, the applicant for such permit shall pay all development impact fees established by resolution or ordinance of the City.

2. The City Council may authorize by resolution, the imposition of development impact fees that are less than the maximum fees, to encourage the development of undeveloped and underdeveloped properties within the "Old Model Colony" area of the City.

3. Where it is determined that the public interest would be served by such an agreement, the City Manager is hereby authorized to negotiate and execute agreements on behalf of the City, in order to provide credits to a project applicant against certain development impact fees, in exchange for the applicant's construction and dedication of public improvements on those reasonable terms and conditions as may be negotiated on a case-by-case basis, subject to approval by the City Council.

4. The City Manager is further authorized to negotiate and execute agreements to defer, waive, or reduce any development impact fees imposed upon an applicant for a particular development project, based upon evidence presented by the Applicant, that:

a. The development project will provide a general benefit to the health, safety, morals, and welfare of the citizens of the City, and will not only be of special benefit to the project applicant;

b. Other properties to be benefitted by any development impact fee will not be unfairly burdened by the delay, reduction, or waiver of said development impact fee; or

c. Deferral, waiver, or reduction in development impact fees will result in a more fair funding arrangement, and in the case of waiver or reduction, the owner will receive insufficient or no benefit from the development impact fee imposed, and would, therefore, be required, if the fee(s) were imposed in full, to pay more than their fair share for the benefit received.

5. The required findings (Subparagraphs 4.a through c, above) and any resulting agreement(s) to defer, waive, or reduce any development impact fee(s) shall be subject to approval by the City Council.

R. Condemnation Proceedings. When any dedication, improvement or design is required by the City Engineer, and the subdivider or developer does not have full control of the land required in connection with the dedication, improvement or design, and condemnation proceedings are necessary as determined by the City, the subdivider or developer shall pay all necessary and reasonable costs involved in the condemnation or acquisition including, but not limited to, appraisal and court costs.

6.08.040: Improvement Plans and Security

A. Design of Improvement Plans.

1. Following approval of a development project, tentative tract or parcel map, or vesting tentative map, and prior to the submission of any final map or parcel map, the subdivider or developer shall prepare and submit complete sets of improvement plans and cost estimates for any improvement(s) required.

2. The acceptance of all required improvement plans by the City Engineer shall be a prerequisite to the approval of the final map or parcel map, and in the case of a development project, shall be prerequisite to the issuance of any building permit.

3. All public or private improvement plans, profiles, descriptions, studies, calculations, notes, surveys and drawings required pursuant to this Division shall be provided at no expense to the City and shall be prepared pursuant to the requirements of this Section and as required by the City Engineer.

4. Construction plans for street, alley, drainage, sewer, and water improvements, traffic signals, and streetlights, and for any other required improvements, shall be drawn on standard City mylar film, in indelible ink, and shall be filed with the City Engineer for checking and review prior to their acceptance. All maps, sketches, descriptions, estimates, plans and other

drawings and items required to fulfill the requirements of this Division shall also be provided in the form, content, number, and details as specified by the City Engineer.

5. The plans and profiles of all required and proposed public and private improvements in a subdivision or development plan shall be furnished to the City Engineer and shall be ready for acceptance before a final map of the subdivision or the development plan is presented to the Approving Authority for approval.

6. No construction work shall commence on any of the improvements shown on any construction or improvement plans required herein until the plans have been reviewed, approved, and signed by the City Engineer. After acceptance and signature by the City Engineer, all original drawings shall become the property of the City.

B. Application Requirements. The improvement plans shall be prepared by or under the direction of a registered civil engineer licensed by the state of California, and shall show the complete plans, profiles and details for all streets and appurtenances, storm drainage, water systems and fire hydrants, sewers, utilities, grading and all other improvements proposed or necessary, on-site and off-site. They shall meet all the requirements deemed necessary by the City Engineer.

C. Application Review Process.

1. Upon receipt of a complete set of improvement plans, the City Engineer shall cause the plans to be reviewed and return one set to the applicant or their engineer, with the required revisions, if any, marked thereon.

2. When the plans are found to be complete and satisfactory to the City Engineer, the applicant shall submit copies in the number and term deemed necessary by the City Engineer. The copies shall be accompanied by any additional number of complete sets of copies the applicant, their engineer, and contractors may require, to be noted as approved by the City Engineer.

D. Acceptance by City Engineer.

1. Upon finding that all required revisions have been made, all required fees have been paid, and the plans conform to all applicable City ordinances, standards, and conditions of approval imposed upon the tentative map or development plan, the City Engineer shall accept the improvement plans.

2. Pursuant to GC Section 66456.2, the City Engineer shall act within 60 days of receiving the preliminary improvement plans and calculations, except that at least 15 days shall be provided for processing any resubmitted improvement plan. The period of 60 days shall not include any days during which the improvement plans have been returned to the subdivider for corrections or have been subject to review by any party other than the City or a private entity contracted by the City.

3. The City Engineer's acceptance of improvement plans shall not relieve the subdivider or developer of responsibility for the design of the improvements and for any deficiencies in the improvements.

E. Permit Required. The subdivider or developer shall not commence work on any portion of improvements prior to the issuance of an encroachment permit and payment of applicable

permit and inspection fees. The City Engineering Department shall be notified in advance of commencement of any portion of the work.

F. Construction of Improvements.

1. All construction methods and materials for improvements shall conform to the approved improvement plans, the requirements of the applicable construction permit, and any other applicable City standards and requirements.

2. All construction of improvements is subject to inspection by the City Engineer. The subdivider and/or developer shall notify the City Engineer before beginning the construction of any improvements. The City shall always have full access to the improvement work during its construction.

G. Completion of Improvements/Subdivision Improvement Agreement.

1. If any public improvement required with the approval of a subdivision will not be completed and accepted pursuant to Section 6.08.035 Dedications and Improvements) of this Division, prior to approval of the final map, the subdivider, at their expense, shall enter into a Subdivision Improvement Agreement as a condition precedent to approval of the final map, to complete the public improvements. Performance of the Subdivision Improvement Agreement shall be guaranteed by the security specified in Subsection I (Improvement Security) of this Section, and GC 66499 et seq.

2. A subdivision improvement agreement shall be prepared by the City Engineer in a form approved by the City Attorney, and shall provide for the following:

a. Construction of all improvements shall be as set forth in the approved plans and specifications;

b. The maximum period within which all improvements shall be completed to the satisfaction of the City Engineer;

c. Provisions for inspection of all improvements by the City Engineer and payment of fees by the subdivider for the cost of such inspection and all other incidental costs incurred by the City in enforcing the agreement;

d. If the subdivider fails to complete the work within the specified period of time, or any extended period of time that may have lawfully been granted to the subdivider, the City may, at its option, complete the required improvement work and the subdivider and their surety shall be firmly bound, under a continuing obligation, for payment of the full cost and expense incurred or expended by the City in completing such work, including interest from the date of notice of said cost and expense until paid;

e. In the event of litigation occasioned by a default of the owner or subdivider, his successors or assignees, the owner or subdivider, their successors or assignees will pay all costs involved, including reasonable attorney's fees, and that the same may be recovered as part of a lien against the real property; and

f. Additional terms or provisions, as may be necessary, pertaining to the forfeiture, collection, and disposition of improvement security upon the failure of the contracting

party to comply with the terms and provisions thereof or with the terms and provisions of this Development Code.

3. A subdivision improvement agreement shall be valid for a period specified in the agreement, but not to exceed 2 years from the effective date of the agreement.

a. The term of a subdivision improvement agreement may be extended at the discretion of the City Engineer.

b. A subdivision improvement agreement shall not only bind the present subdivider, but also all heirs, successors, executors, administrators, and assignees, so that the obligation runs with the real property. All agreements shall be executed by all those parties executing the final or parcel map.

H. Inspection of Improvements.

1. The construction of improvements required pursuant to this Division shall be subject to inspection and testing by the City Engineer to ensure compliance with the standards and specifications specified and required by this Division. All work and improvements shall be found to conform to the standards and specifications as a condition of the City's acceptance and release of any improvement securities held therefor.

2. No construction shall commence or continue without arrangements first having been made with the City Engineer for inspection. The City Engineer and his authorized representatives shall have the right to stop any work, refuse to inspect any work, or reject any or all work and construction if it is found that the work is unauthorized, is unsafe in any way to the workers or the public, is inferior in materials or workmanship, was performed without inspection, or does not meet or comply with city standards, specifications, or city-approved construction plans. Reasonable access to the construction and work shall be provided at all times so that full knowledge of the progress, workmanship, and character of the materials used in the work can be gained.

3. Upon completion of the required improvements, the subdivider or developer shall apply in writing to the City Engineer for preliminary final inspection. The City Engineer shall conduct a preliminary final inspection and prepare a deficiency list, noting all additional work to be performed and deficiencies in existing work to be corrected. The City Engineer shall provide a copy of the deficiency list to the subdivider or developer. If there are an excessive number of deficiencies or missing improvements, the City Engineer may choose to postpone the inspection.

4. After the subdivider or developer has corrected all of the items on the deficiency list, the subdivider or developer shall apply to the City Engineer for final inspection. The City Engineer shall conduct a final inspection and verify that the items on the deficiency list have been corrected. Upon verification, and after receiving record drawings (improvement plans), the City Engineer shall accept the improvements and issue a notice of completion to the subdivider or developer.

5. The City Engineer's acceptance of improvements shall not relieve the subdivider or developer of responsibility for correcting any deficiency that subsequently is discovered.

I. Improvement Security. Performance of a subdivision improvement agreement required pursuant to Subsection G (Completion of Improvements/Subdivision Improvement Agreement) of this Section shall be guaranteed by the security specified herein and GC Section 66499 et seq.

Any public improvement required with the approval of the Development Plan submitted pursuant to Section 4.02.025 (Development Plans) of this Development Code, at the discretion of the City Engineer, shall be guaranteed by the security specified herein.

1. Acceptable Forms of Required Improvement Security. Improvement securities shall be posted as a guarantee of the performance of any act, improvement, or obligation required as a condition of approval of any final map or parcel map, parcel map waiver, lot line adjustment, lot merger or development project. Unless otherwise provided herein, all such improvement securities shall be provided in one of the following forms, subject to approval and acceptance by the City Engineer and City Attorney:

a. *Bonds by Authorized Corporate Sureties.* One or more bonds by one or more duly authorized corporate sureties substantially in the form prescribed by the Subdivision Map Act, and subject to approval and acceptance by the City Attorney and City Council;

b. *Negotiable Bonds or a Letter of Credit.* A deposit with the City of immediately negotiable bonds or a letter of credit; or

c. *Cash and/or Negotiable Bonds of The Kind Approved for Securing Deposits of Public Moneys*. A deposit with the City or a responsible escrow agent or trust company, at the option of the City, of cash and/or negotiable bonds of the kind approved for securing deposits of public moneys; or

d. *Lien or Other Security Interests.* Any other form of security, including a lien or other security interests in real property, which the City Engineer and the City Attorney may, in their discretion, allow; provided, they determine that it is equivalent to the foregoing forms of security in terms of security and liquidity. Any written contract or document creating security interests shall be recorded in the Office of the County Recorder. From the time of recordation, a lien shall attach to the real property described therein, which shall have the priority of a judgment lien in the amounts specified.

2. Required Security Amounts.

a. *Performance and Guarantee*. The subdivider or developer shall provide an amount determined by the City Engineer, up to 100 percent of the total estimated cost of the improvement to be performed, including costs and fees incurred by the City. The estimated cost of improvement shall include a 10 percent contingency and a 10 percent increase for projected inflation computed to the estimated mid-point of construction; and

b. *Payment.* The subdivider or developer shall provide an amount determined by the City Engineer, up to 100 percent of the total estimated cost of the improvement to be performed, excluding grading and monumentation.

3. Release of Improvement Security. Improvement security may be released upon the final completion and acceptance of the act or work by the City Engineer; provided, however, such release shall not apply to the amount of security deemed necessary by the City Engineer for the guarantee and warranty period, nor to costs and reasonable expense fees, including reasonable attorney's fees incurred by the City in enforcing any improvement agreement. The subdivider or developer shall not be entitled to any reduction in security, except pursuant to Paragraph 4 (Partial Release of Improvement Security), below, until all improvements have been completed to the satisfaction of, and have been accepted by, the City Engineer.

4. Partial Release of Improvement Security. A partial release of performance security may be requested in writing from the Engineering Department. The portion of the performance security, in conjunction with the satisfactory completion of a part of the improvements as the work progresses, may be released upon the approval of the City Engineer, subject to the following:

a. No release shall be considered until at least 50 percent of the improvements are completed;

b. No release shall be considered for an amount less than 10 percent of the original total improvement security given for performance and guarantee;

c. An amount of up to 200 percent of the revised estimated construction cost for the remaining required improvements shall be required for the substitute security (or the remaining security);

d. The City Engineer is responsible for reviewing all applications and shall determine the amount of substitute security required in accordance with Subparagraph I.4.c, above; and

e. The original performance security may be released only upon receiving the proper substitute security, which has been determined acceptable by the City Attorney and the City Engineer.

J. Completion of Improvements.

1. Public improvements required as a condition of approval shall be completed pursuant to this Division unless they are deferred pursuant to Subsection K (Deferred Improvements) of this Section. The City Engineer shall review and approve any improvement agreement, conduct an inspection, and approve any constructed public improvement necessary to satisfy this provision, with the City Council delegating final approval to the City Engineer of any agreement or acceptance of any completed public improvement.

2. Once begun, public improvements for a final tract or parcel map, or development plan when required, shall be constructed to completion without interruption. The subdivider or developer shall exercise due diligence to ensure that this provision is met to the satisfaction of the City Engineer. Construction and inspection of public improvements shall be governed by City standards and the requirements of any applicable permit.

3. Notwithstanding any applicable agreement, the construction and maintenance of any public improvement is the responsibility of the subdivider or developer and shall remain so until such time that the City Council accepts the completed public improvements.

4. Upon acceptance of a public improvement, the City Engineer shall provide a notice of completion for that public improvement and shall release applicable securities for that public improvement. This action shall serve to transfer ownership and maintenance responsibility of the public improvement from the subdivider or developer to the City, and to provide full acceptance of the applicable dedication or easement, which acceptance had been contingent upon completion and acceptance of public improvements within said dedication or easement, subject to the terms of any applicable agreement.

K. Deferred Improvements. The Approving Authority for a tentative map or parcel map shall be responsible for approving any request for the deferred construction of on-site and off-site

improvements required by a tentative map or parcel map. The City Attorney shall approve the form and content of all deferred improvement agreements prior to the City accepting the document.

6.08.045: Common Interest Subdivisions

A. Purpose. The purpose of this Section is to establish criteria for the establishment of common interest subdivisions. For the purposes of this Section, the term "common interest subdivision" means a community apartment, condominium, planned development, or stock cooperative.

B. Applicability. The herein prescribed regulations shall be implemented in conjunction with the establishment of any common interest subdivision in the City.

C. Common Interest Subdivisions are Exempt from Minimum Lot Area and Building Setback Requirements. Common interest subdivisions shall be exempt from the minimum lot area and building setback regulations applicable to individually numbered and/or lettered lots identified on a tract or parcel map, excepting one-lot subdivisions. For the purposes of a common interest subdivision, any minimum lot area requirement shall be applied to the overall area of the common interest subdivision. Furthermore, any minimum building setback requirement shall only be applied to the exterior boundary of the common interest subdivision.

D. Recordation of a Tract or Parcel Map is Required. The establishment of a common interest subdivision shall require the approval and recordation of a tract or parcel map pursuant to the provisions of the Subdivision Map Act (commencing with GC Section 66410), Section 4.02.100 (Subdivisions—Tentative Tract and Parcel Maps, and Vesting Maps) and Section 4.03.030 (Final Maps and Parcel Maps) of this Development Code, and all applicable requirements of this Division.

E. Recordation of Covenants, Conditions, and Restrictions (CC&Rs). Covenants, conditions, and restrictions, if required, shall be recorded concurrently with the final map or parcel map, required pursuant to Subsection D (Recordation of a Tract or Parcel Map is Required), above, in the office of the San Bernardino County Recorder.

1. The purpose of the covenants, conditions, and restrictions is to guarantee compatibility and coordination of all lots or units within a common interest subdivision in terms of access, parking, landscaping, recreation facilities, open space, property and landscape maintenance, and architecture. Furthermore, the covenants, conditions, and restrictions shall establish a property owner (or homeowner) association for the purpose of maintaining common areas and facilities, enforcement of the covenants, conditions, and restrictions, regulation of operations and uses within the development, and ensuring continued architectural and landscaping compatibility within the development.

2. The covenants, conditions, and restrictions shall be subject to approval and acceptance by the Planning Director and City Engineer prior to recordation. Furthermore, the City may be required to be a non-voting member of the association and maintain the right of enforcement of the covenants, conditions, and restrictions.

3. The covenants, conditions, and restrictions shall include the establishment of a specific methodology or procedure for enforcement of its provisions by the City, if adequate maintenance of the development does not occur. Such procedures may include, but is not

limited to, granting the City the right of access to correct maintenance issues and assess the property owner (or homeowner) association for all costs incurred by the City.

F. Recordation of a Condominium Plan. The establishment of a condominium shall require the approval of a Condominium Plan by the City and the recordation of said Condominium Plan in the office of the San Bernardino County Recorder, prior to the sale of the first dwelling unit.

6.08.050: Conversion to a Residential Common Interest Project

This Section shall apply to the conversion of any existing residential real property to a common interest project, including condominium, community apartments, stock cooperative project, or any other similar form of common ownership, except conversion projects for which a final or parcel map has been approved prior to the effective date of this Development Code, or where the conversion involved a limited equity housing cooperative as defined in HSC Section 33007.5. All provisions, conditions, and further definitions of condominium development, as included in the California Civil Code, shall apply to the divisions of real property as permitted herein.

A. Purpose. The purpose of this Section regulating conversions to a residential common interest project is as follows:

1. Establish criteria for the conversion of existing single-family and multiple-family rental housing to community apartments, condominiums, planned developments, or stock cooperatives;

2. Ensure that converted housing achieves high quality appearance and safety, and is consistent with the goals and policies of The Ontario Plan;

3. Endeavor to maintain a reasonable balance of ownership and rental housing within the City, and a variety of housing choices of varying tenure, type, price, and location;

4. Ensure that the purchasers of community apartments, condominiums, planned developments, or stock cooperatives converted from existing rental housing stock have been properly informed as to the physical condition of dwellings offered for purchase; and

5. Ensure compliance with all requirements of applicable development, building, fire codes, plumbing, and electrical codes, and other applicable State and local laws and regulations, in effect at the time of filing of the tentative subdivision maps for conversion.

B. Applicability. Any conversion to a residential common interest project, including a community apartment, residential condominium, residential planned development, or residential stock cooperative, shall be subject to all applicable provisions of the Subdivision Map Act (commencing with GC Section 66410), the requirements of this Section, and all other applicable requirements of this Development Code and the Ontario Municipal Code.

C. Application Requirements. A residential common interest project conversion request shall consist of the following:

1. Subdivision Application. A subdivision application as required by Section 4.02.100 (Subdivisions—Tentative Tract and Parcel Maps, and Vesting Maps) of this Development Code.

2. Physical Elements Report. A report on the physical elements of all structures and facilities shall be submitted with the tentative or vesting tentative map. The report shall include, but not is limited to, the following:

a. Architect's or Engineer's Report. A report by a licensed architect or engineer detailing the structural condition of all elements of the property, including foundations, electrical, plumbing, utilities, walls, ceiling, windows, recreational equipment, parking facilities, appliances, and fixtures. The report shall state, to the best knowledge or estimate of the applicant, the following:

(1) When the element was constructed or installed;

(2) The condition of each element;

(3) When the element was replaced;

(4) The approximate condition of each element;

(5) Any variation or non-compliance of the element from this Development Code and the Building Code in effect on the date the last building permit was issued for the subject structure;

(6) The approximate date upon which the application for conversion was filed and accepted by the city; and

(7) The report shall identify any defective or unsafe elements and set forth the proposed corrective measures to be employed.

b. Pest Control Report. A report from a licensed structural pest control operator, approved by the city, on each structure and each unit within the structure.

c. Soils and Geological Hazard Reports. Soils and geological hazard reports prepared pursuant to Section 6.08.025 (Reports) of this Division, regarding soil deposits, rock formations, faults, groundwater, landslides, and liquefaction within the vicinity of the project, and a statement regarding any known evidence of soil problems relating to the structures. Reference shall be made to any previous soils reports for the site and a copy submitted with the report.

d. Repairs and Improvements Report. A statement of repairs and improvements to be made by the subdivider necessary to refurbish and restore the project to achieve a high degree of appearance and safety.

e. Notice to Tenants. The subdivider shall supply proof of all written notices as required by the Subdivision Map Act for conversion projects, as listed in Subsection E (Notice to Tenants) of this Section.

f. Plans and Information. The subdivider shall provide plans, maps, reports, special studies, exhibits, and any other information deemed necessary by the City to process the conversion, as identified on the applicable City application forms.

g. Proposed Declaration. The subdivider shall provide a proposed declaration, as required by CC Section 1353. The declaration shall include an agreement for the

creation of an association responsible for common area maintenance, a clear designation of parking and signage rights, and a method for resolving differences.

h. Development Plan Application Required. The developer shall submit a Development Plan application for approval of the conversion pursuant to Section 4.02.030 (Development Plans) of this Development Code.

D. Procedures.

1. Notification and Hearing Requirements. A final subdivision map creating a community apartment, condominium, planned development, or stock cooperative from the conversion of rental housing units, unless the subdivider shows that the following notification procedures have been fulfilled:

a. Each of the tenants or prospective tenants of the proposed community apartment, condominium, planned development, or stock cooperative project has received or will receive each of the notices included in the Subdivision Map Act (commencing with GC Section 66410), including the following:

(1) Written notification pursuant to GC Section 66452.8 and GC Section 66452.9, of intention to convert, provided at least 60 days prior to the filing of a tentative map;

(2) Written notification at least 10 days prior to the date of the public hearing at which the Approving Authority will review the Conditional Use Permit for the requested conversion in compliance with GC Section 65090 and GC Section 65091. Notice shall also be mailed to the owner of the subject property, as well as all property owners within 300 FT of the subject property, as shown on the last equalized tax assessor roll. In addition, a notice of public hearing shall be published at least once in a newspaper of general circulation at least 10 days prior to the hearing;

(3) Written notification pursuant to GC Section 66427.1(a) that each tenant shall receive a 10-day notice that a final public report will be, or has been, submitted to the Department of Real Estate, that the period for each tenant's right to purchase begins with the issuance of the report, and that the report will be available from the City, upon request;

(4) Written notification that the subdivider has received the public report from the Department of Real Estate. This notice shall be provided within 5 days after the date that the subdivider receives the public report from the Department of Real Estate;

(5) Written notification within 10 days following approval of a final map for the proposed conversion;

(6) Upon approval of a final map for the proposed conversion, written notification shall continually be delivered to all prospective tenants prior to execution of a rental agreement using the form in GC Section 66459(a). Failure to do so will not be grounds to deny the conversion, but will require the subdivider to pay each prospective tenant who was entitled to that notice, an amount as indicated in GC Section 66459(f);

(7) Written notification pursuant to GC Section 66452.11 shall be provided to all affected tenants at least 180 days prior to termination of tenancy due to the conversion or proposed conversion, but not before the City has approved a tentative map for the conversion. The notice given pursuant to this subparagraph shall not alter or abridge the rights or

obligations of the parties in performance of their covenants, including, but not limited to, the provision of services, payment of rent, or the obligations imposed by CC Section 1941, 1941.1, and 1941.2; and

(8) Notice of an exclusive right to contract for the purchase of a tenant's respective unit upon the same terms and conditions that the unit will be initially offered to the general public, or terms more favorable to the tenant. The exclusive right to purchase shall commence on the date the subdivision public report is issued, as provided in BPC Section 11018.2, and shall run for a period of not fewer than 90 days, unless the tenant gives prior written notice of their intention not to exercise the right. Notice shall be given using the form included in GC Section 66452.12(b).

b. If a rental agreement was negotiated in a language other than English, all required written notices regarding the conversion of residential real property into a community apartment, condominium, planned development, or stock cooperative project shall be issued in that language.

2. Division of Airspace Not Required. A map of a community apartment, condominium, planned development, or stock cooperative project need not show the buildings or the manner in which the buildings or the airspace above the property shown on the map are to be divided. The City does not have the right to refuse approval, of a conversion project (tentative or final map, or parcel map), based upon the manner in which the airspace is divided or any of the provisions listed in GC Section 66472.

3. Limitation on the Number of Rental Housing Units Converted Within a Current Calendar Year. The conversion of rental housing units to a community apartment, condominium, planned development, or stock cooperative, shall not result in the conversion of more than 5 percent of the potentially convertible rental units in the City during any current calendar year.

E. Notice to Tenants.

1. Tenant Notifications. The developer shall notify current and potential tenants according to Paragraph D.1 (Notification and Hearing Requirements) of this Section and the Subdivision Map Act.

2. Tenant Rights.

a. *Tenants Right to Purchase.* As provided in GC Section 66427.1(b), any present tenant or tenants of any housing unit shall be given a nontransferable right of first refusal to purchase the unit occupied at a price no greater than the price offered to the general public. The right of first refusal shall extend for at least 60 days from the date of issuance of the subdivision public report pursuant to BPC Section 11018.2, unless the tenant gives prior written notice of his intent not to exercise the right.

b. *Vacation of Units.* Each tenant that does not purchase a housing unit, and is not in default under the obligations of the rental agreement or lease under which they occupy the unit, shall have no fewer than 180 days from the date of receipt of notification from the owner of their intent to convert, or from the filing date of the final map, whichever date is later, to find substitute housing and to relocate. Tenants shall have the right to terminate leases at any time after receiving the notice.

c. *Increase in Rents.* From the date of submittal of the tentative or vesting tentative map, until the sale of the unit, no tenant's rent shall be increased more frequently than once every 12 months, at a rate no greater than the Consumer Price Index, as compiled by the Federal Bureau of Labor Statistics. This limitation shall not apply if rent increases are provided for in leases or contracts in existence prior to the filing date of the tentative map.

d. *Notice to New Tenants.* After submittal of the application to convert, any prospective tenant shall be notified in writing by the developer of the intent to convert prior to leasing or renting any unit and shall not be subject to the provisions of Subparagraph E.2.c (Increase in Rents) of this Section.

e. *Senior Citizens, the Handicapped, and the Disabled.* The developer shall be required to retain ownership of units occupied at the time of filing of the tentative map by senior citizens (persons 62 years of age or older) or the handicapped (as defined by HSC Section 50072) or the disabled (as defined by 42USC423), for a period of one year from the date of approval by the Approving Authority.

F. Standards for Conversion.

1. Building and Physical Standards.

a. The community apartment, condominium, planned development, or stock cooperative conversion project, and all individual units and common areas contained therein, shall comply with all applicable existing and current development, building (including energy conservation and sound transmission), fire, and subdivision requirements, unless legally nonconforming.

b. The community apartment, condominium, planned development, or stock cooperative conversion project shall comply with all applicable provisions of Ontario Municipal Code Chapter 11 (Security Standards for Building).

c. The consumption of gas, electricity and water within each unit shall be separately metered so that the unit owner can be separately billed for each unit. Each unit shall have its own panel, or access thereto, for all electrical circuits that serve the unit. The requirements of this subsection may be waived where the Approving Authority finds that full compliance with this provision would not be practicable and the developer submits an alternative plan approved by the Approving Authority.

d. The electrical, plumbing, mechanical, fire, and life safety systems of the structure shall be placed in a condition of good repair and maintenance.

e. The buildings and facilities shall be upgraded to meet the requirements of Ontario Municipal Code Title 5, Chapter 29 (Noise). The Approving Authority may require additional insulation or other upgrades to reduce noise to an acceptable level.

f. The developer shall dedicate land or easements for street widening, public access, or other public purposes in connection with the project, where determined necessary by the Approving Authority and in conformance with this Development Code.

g. All on-site and adjacent overhead utility service lines and poles shall be converted to an underground system consistent with the requirements of this Development Code.

h. All main buildings, structures, fences, patio enclosures, carports, irrigation systems, landscaped areas, accessory buildings, sidewalks, driveways and additional elements as required by the Approving Authority shall be refurbished and restored as necessary, to achieve a high quality appearance and safety.

i. If Development Impact Fees have not previously been paid for the affected residential units, the required fees shall be paid prior to the recordation of the final map, or as otherwise required by City ordinance.

j. The developer shall provide each purchaser with a copy of the below-listed items, prior to executing any purchase agreement or other contract to purchase a unit within the project and shall give the purchaser sufficient time to review the information. Copies of the information shall also be made available at all times at the sales office and a notice indicating that the reports and documentation are available shall be posted on the project site, at locations approved by the Planning Director. In addition, copies of the required reports and documentation shall be provided to the Homeowners Association upon its formation.

(1) Reports and documentation required by Paragraph C.2 (Physical Elements Report) of this Section, in their final form as accepted by the City; and

(2) A copy of the covenants, conditions, and restrictions, and a project maintenance plan.

k. Other conditions may be applied as deemed necessary by the Approving Authority to further the intent of this Section.

2. Securities and Penalties. All improvements and alterations required pursuant to this Section and all other applicable requirements of this Development Code, the Ontario Municipal Code, and the conditions of project approval, shall be made prior to the approval of the final map or parcel map, or upon approval of the Planning Director, City Engineer, and Building Official, and a deposit paid to the City pursuant to Division 2.06 (Performance Guarantees), to assure the completion of all required work prior to the closing of escrow on any unit within the project. The deposit shall be accompanied by an agreement by the developer, and owner of the project if different from the developer, in a form to be approved by the city attorney, guaranteeing completion of the work.

G. Findings. The Approving Authority, prior to approving a tentative tract or parcel map, or a Conditional Use Permit, for the conversion of rental housing units to a common interest project, including a community apartment, residential condominium, residential planned development, or residential stock cooperative, shall find and clearly establish the following findings:

1. Not Detrimental. All provisions of this Section have been met and the project will not be detrimental to the health, safety, or welfare of the community;

2. Consistency with The Ontario Plan. The proposed conversion is consistent with the Vision, City Council Priorities, and Policy Plan (General Plan) components of The Ontario Plan;

3. Conformity with Title. The proposed conversion conforms to all applicable requirements of this Development Code; and

4. Housing Diversity. The proposed conversion of rental housing units to a community apartment, condominium, planned development, or stock cooperative, will not have an adverse effect on the diversity of housing types available in the City.

6.08.055: Conversion to a Nonresidential Common Interest Project

This Section shall apply to the conversion of any existing nonresidential real property to a common interest project, such as condominiums or any other similar form of common ownership, except conversion projects for which a final or parcel map has been approved prior to the effective date of this Development Code. All provisions, conditions, and further definitions of condominium development, as included in the California Civil Code, shall apply to the divisions of real property as permitted herein.

A. Purpose. The purpose of this Section is to provide a legal process for the conversion of existing nonresidential buildings to a common interest ownership, such as a condominium, so as to protect both the community and the purchasers of units within a common interest project. This Section provides regulations to ensure adequate and safe building design and maintenance for all industrial and commercial common interest conversions, in order to achieve this goal.

B. Applicability. Any conversion to a nonresidential common interest project shall be subject to all applicable provisions of the Subdivision Map Act (commencing with GC Section 66410), the requirements of this Section, and all other applicable requirements of this Development Code and the Ontario Municipal Code.

C. Application Requirements. A request for the approval of a parcel map for a nonresidential common interest project conversion, shall be accompanied by the following items:

1. Subdivision Application. A subdivision application as required by Section 4.02.100 (Subdivisions—Tentative Tract and Parcel Maps, and Vesting Maps) of this Development Code.

2. Physical Elements Report. A physical elements report shall be submitted for each structure and/or facility, as described in Paragraph C.2 (Physical Elements Report) of Section 6.08.045 (Conversion to a Residential Common Interest Project) of this Division.

3. Notice to Tenants. Proof of all written notices required by the Subdivision Map Act for conversion projects, as listed in Subsection E (Notice to Tenants) of Section 6.08.045 (Conversion to a Residential Common Interest Project) of this Division.

4. Plans and Information. Provide plans, maps, reports, special studies, exhibits, and any other information deemed necessary by the City to process the conversion, as identified on the applicable City application forms.

5. Proposed Declaration. Provide a copy of the declaration required by CC Section 1353. The declaration shall include an agreement for the creation of an association responsible for common area maintenance, a clear designation of parking and signage rights, and a method for resolving differences.

6. Development Plan Application Required. The developer shall submit a Development Plan application for approval of the conversion pursuant to Section 4.02.030 (Development Plans) of this Development Code.

D. Procedures.

1. Acceptance of Reports. The final form of the reports and other documents required under Subsection C (Application Requirements) of this Section shall be as approved by the City. The reports, in their accepted form, shall remain on file with the City for review by the public. The subdivider shall provide each purchaser with a copy of the reports in their final, accepted form.

2. Inspection. In conjunction with the filing of a nonresidential common interest project conversion request, the subdivider shall request that an inspection of the premises be made by the Building Official and the City Engineer. The inspection shall include structures, common areas, site improvements, public improvements, and all other related facilities. A deficiency list shall be compiled during the inspection, which lists all necessary corrections required to conform to the requirements of this Section and all other applicable codes and ordinances.

3. Corrective Work. Upon completion of the inspection required pursuant to Paragraph D.2 (Inspection), above, a copy of the deficiency list shall be transmitted to the subdivider. All deficiencies shall be corrected to the satisfaction of the City prior to filing a final map or parcel map. When plans for corrective work are required, they shall be as approved by the appropriate city official, prior to the filing of the final map or parcel map.

4. Payment of Inspection Fees. The City shall charge the usual fees, if applicable, or an hourly fee for the inspection and processing according to an estimated actual hourly cost to the city. The owner shall post a cash deposit in an amount equal to the estimated cost of inspection. The deposit will be applied toward the inspection fee, with any refund or balance due to be resolved before the approval of the final map by the Approving Authority. Any unpaid balances shall be paid prior to recordation of the final map.

E. Standards for Conversion.

1. Building and Physical Standards.

a. Building Regulations. The project shall conform to the applicable standards of the City's Building Code that was in effect at the time the last building permit was issued for the affected structures.

b. Fire Prevention. Each unit shall be provided with a fire-warning system conforming to the City's Building Code. All fire hydrants, fire alarm systems, portable fire extinguishers and other fire protective appliances shall be retained in an operable condition at all times.

c. Sound Transmission.

(1) *Vibration Transmission.* All permanent mechanical equipment, such as motors, compressors, pumps, compactors, or any item determined by the Building Official to be a source of structural vibration or structural-borne noise shall be vibration-isolated with inertia blocks or bases, or vibration isolator springs, in a manner approved by the Building Official.

(2) *Noise Standards.* The structures shall conform to all interior and exterior sound transmission standards of CCR Title 24, the City's Building Code, and the requirements of Ontario Municipal Code Chapter 29 (Noise). The Approving Authority may require additional insulation or other upgrades to reduce noise to an acceptable level.

d. Utility Metering. Each unit shall be separately metered for gas, electricity and water, unless the covenants, conditions, and restrictions provide for the property owner association to take responsibility for these utilities.

e. Landscape Maintenance. All landscaping shall be restored, or new landscaping shall be installed, to achieve a high degree of appearance and quality pursuant to Division 6.05 (Landscaping) of this Development Code. Provisions shall be made within the declaration required pursuant to Paragraph C.5 (Proposed Declaration) of this Section, for continuing maintenance of all landscaped areas. Existing landscaping is subject to review and approval by the Approving Authority. If new landscaping is proposed, the design of all landscaping is subject to review and approval by the City.

f. Off-Street Parking and Loading. Off-street parking and loading shall be provided pursuant to the requirements of Division 6.03 (Off-Street Parking and Loading) this Development Code, for allowed commercial and industrial land uses, as applicable.

g. Refurbishing and Restoration of Improvements. Each main building, structure, fence, accessory building, sidewalk, driveway, landscaped area, utilities, and additional element as required by the department shall be refurbished and restored as necessary to achieve a high degree of appearance, quality and safety. The refurbishing and restoration is subject to review and approval by the department.

h. Building Security Standards. Each unit shall comply with all applicable provisions of Ontario Municipal Code Chapter 11 (Security Standards for Building).

i. Dedication of Land and Easements. The developer shall dedicate land or easements for street widening, public access, or other public purposes in connection with the project, where determined necessary by the Approving Authority, and in conformance with this Development Code.

j. Undergrounding of Overhead Utilities. All on-site and adjacent overhead utility service lines and poles shall be converted to an underground system consistent with the requirements of this Development Code.

k. Copies of Reports and Documentation to be Provided to New Property Owners. The developer shall provide each purchaser with a copy of the below-listed items, prior to executing any purchase agreement or other contract to purchase a unit within the project and shall give the purchaser sufficient time to review the information. In addition, copies of the required reports and documentation shall be provided to the Property Owner Association upon its formation.

(1) Reports and documentation required by Paragraph C.2 (Physical Elements Report) of this Section, in their final form as accepted by the City; and

(2) A copy of the covenants, conditions, and restrictions.

l. Additional Conditions. Additional conditions may be applied as deemed necessary by the Approving Authority to further the intent of this Section.

2. Securities and Penalties. All improvements and alterations required pursuant to this Section and all other applicable requirements of this Development Code, the Ontario Municipal Code, and the conditions of project approval, shall be made prior to the approval of the final

map or parcel map, or upon approval of the Planning Director, City Engineer, and Building Official, and a deposit paid to the City pursuant to Division 2.06 (Performance Guarantees), to assure the completion of all required work prior to the closing of escrow on any unit within the project. The deposit shall be accompanied by an agreement by the developer, and owner of the project if different from the developer, in a form to be approved by the city attorney, guaranteeing completion of the work.

F. **Findings.** The Approving Authority may not approve a request for a conversion to an industrial or commercial common interest project, unless it finds and clearly establishes that the proposed conversion conforms to the requirements of this Section, and is consistent with the Vision, Policy Plan (General Plan), and City Council Priorities components of The Ontario Plan, and all other applicable requirements of this Development Code and the Ontario Municipal Code.

6.08.060: Urban Lot Splits

A. **Purpose.** The purpose of this Section is to allow and appropriately regulate Urban Lot Splits pursuant to GC Section 66411.7.

B. **Definition**. For the purposes of this Section, the term "Urban Lot Split" shall mean the subdivision of an existing, legally subdivided lot into two lots pursuant to the requirements of this Section.

C. **Application**.

1. Only individual property owners may apply for an Urban Lot Split. "Individual property owner" means a natural person holding fee title individually or jointly in the person's own name or a beneficiary of a trust that holds fee title. "Individual property owner" does not include any corporation or corporate person of any kind (partnership, LP, LLC, C corporation, S corporation, etc.) except for a community land trust (as defined by Revenue and Taxation Code Section 402.1(a)(11)(C)(ii)) or a qualified nonprofit corporation (as defined by Section 214.15).

2. An application for an Urban Lot Split shall be submitted on a City application form. Only a complete application will be considered. The City will inform the applicant in writing of any incompleteness within 30 days following application submittal.

3. The City may establish a fee to recover its costs for adopting, implementing, and enforcing this Section of the Development Code, pursuant to applicable law. The City council may establish and change the fee by resolution. The fee shall be paid with the application.

D. **Approval**.

1. An application for a parcel map for an Urban Lot Split is approved or denied ministerially, by the City Engineer, without discretionary review.

2. A tentative parcel map for an Urban Lot Split shall be approved ministerially if it complies with all the requirements of this Section. The tentative parcel map may not be recorded. A final parcel map shall be approved ministerially as well, but not until the owner demonstrates that all required documents have been recorded, such as the deed restriction and easements. The tentative parcel map shall expire 3 months following approval.

3. The approval shall require the owner and applicant to hold the City of Ontario harmless from all claims and damages related to the approval and its subject matter.

4. The approval shall require the owner and applicant to reimburse the City for all costs of enforcement, including attorneys' fees and costs associated with enforcing the requirements of this Development Code.

E. **Requirements**. An Urban Lot Split shall satisfy each of the following requirements:

1. Subdivision Map Act Compliance.

a. The Urban Lot Split shall conform to all applicable objective requirements of the Subdivision Map Act (GC Section 66410 et seq., "SMA"), including implementing requirements in this Development Code, except as otherwise expressly provided in this Section.

b. If an Urban Lot Split violates any part of the SMA, the City's subdivision regulations, including this Section, or any other legal requirement:

(1) The buyer or grantee of a lot that is created by the Urban Lot Split has all the remedies available under the SMA, including but not limited to an action for damages or to void the deed, sale, or contract.

(2) The City has all the remedies available to it under the SMA, including but not limited to the following:

(a) An action to enjoin any attempt to sell, lease, or finance the property.

(b) An action for other legal, equitable, or summary remedy, such as declaratory and injunctive relief.

(c) Criminal prosecution, punishable by imprisonment in county jail or state prison for up to one year, by a fine of up to $10,000, or both, or a misdemeanor.

(d) Record a notice of violation.

(e) Withhold any or all future permits and approvals.

c. Notwithstanding Section 66411.1 of the SMA, no dedication of rights-of-way or construction of offsite improvements is required for an Urban Lot Split.

2. Zoning District. The lot to be split is in a single-family residential zoning district. For purposes of this Section, the term "single-family residential zoning district" shall mean the LDR-5 (Low Density Residential – 2.1 to 5.0 DU/Acre) zoning district.

3. Lot Location. Pursuant to the GC Section 65913.4(a)(6)(B) through (K), the lot to be split shall not be located on a site that is any of the following:

a. Prime farmland, farmland of statewide importance, or land that is zoned or designated for agricultural protection or preservation by the voters.

b. A wetland.

c. Within a very high fire hazard severity zone, unless the site complies with all fire-hazard mitigation measures required by existing building standards.

d. A hazardous waste site that has not been cleared for residential use.

e. Within a delineated earthquake fault zone, unless all development on the site complies with applicable seismic protection building code standards.

f. Within a 100-year flood hazard area, unless the site has either:

(1) Been subject to a Letter of Map Revision prepared by the Federal Emergency Management Agency and issued to the local jurisdiction; or

(2) Meets Federal Emergency Management Agency requirements necessary to meet minimum flood plain management criteria of the National Flood Insurance Program.

g. Within a regulatory floodway, unless all development on the site has received a no-rise certification.

h. Land identified for conservation in an adopted natural community conservation plan, habitat conservation plan, or other adopted natural resource protection plan.

i. Habitat for protected species.

j. Land under conservation easement.

4. Not Historic. The lot to be split shall not be a historic property or within a historic district that is included on the State Historic Resources Inventory. Nor may the lot be or be within a site that is designated by ordinance as a city or county landmark or as a historic property or district.

5. No Prior Urban Lot Split.

a. The lot to be split was not established through a prior Urban Lot Split.

b. The lot to be split is not adjacent to any lot that was established through a prior Urban Lot Split by the owner of the lot to be split or by any person acting in concert with the owner. For the purposes of this Section, the term "any person acting in concert with the owner" shall include any third-party that coordinates or assists the owners of two adjacent lots with their respective Urban Lot Splits.

6. No Impact on Protected Housing. The Urban Lot Split shall not require or include the demolition or alteration of any of the following types of housing:

a. Housing that is income-restricted for households of moderate, low, or very low income.

b. Housing that is subject to any form of rent or price control through a public entity's valid exercise of its policy power.

c. Housing, or a lot that used to have housing, that has been withdrawn from rental or lease under the Ellis Act (GC Sections 7060–7060.7) at any time in the 15 years prior to submission of the Urban Lot Split application.

d. Housing that has been occupied by a tenant in the last 3 years. The applicant and the owner of a property for which an Urban Lot Split is sought shall provide a sworn statement as to this fact with the application for the tentative parcel map. The City may conduct its own inquiries and investigation to ascertain the veracity of the sworn statement, including but not limited to, surveying owners of nearby properties; and the City may require additional evidence of the applicant and owner as necessary to determine compliance with this requirement.

7. Lot Size.

a. The lot to be split shall be at least 2,400 SF.

b. Each lot created by an Urban Lot Split shall be at least 1,200 SF.

c. Each lot created by an Urban Lot Split shall be between 60 percent and 40 percent of the original lot area.

8. Easements.

a. The owner shall enter into an easement agreement with each public-service provider to establish easements that are sufficient for the provision of public services and facilities to each of the resulting lots.

b. Each easement shall be shown on the parcel map.

c. Copies of the unrecorded easement agreements shall be submitted with the application. The easement agreements shall be recorded against the property before the final parcel map may be approved pursuant to subpart D.2 above.

9. Lot Access.

a. Each lot created by an Urban Lot Split shall adjoin a public street right-of-way.

b. Each lot created by an Urban Lot Split shall have frontage on the public street right-of-way of at least 20 FT.

10. Unit Standards.

a. *Quantity*. No more than two dwelling units of any kind may be built on a lot that results from an Urban Lot Split. For purposes of this paragraph, "unit" means any dwelling unit, including, but not limited to, a primary dwelling unit, a unit created pursuant to State law and Section 5.03.403 (Two-Unit Projects) of this Development Code, or an ADU or JADU created pursuant to Section 5.03.010 (Accessory Dwelling Unit) of this Development Code.

b. *Unit Size*.

(1) The total floor area of each primary dwelling that is developed on a lot resulting from an Urban Lot Split shall be a minimum of 500 SF in area and a maximum of 800 SF in area.

(2) A primary dwelling that was legally established prior to the Urban Lot Split and that is larger than 800 SF is limited to the lawful floor area at the time of the Urban Lot Split and shall not be expanded.

(3) A primary dwelling that was legally established prior to the Urban Lot Split and is smaller than 800 SF may be expanded to a maximum of 800 SF after the Urban Lot Split.

c. *Height Restrictions*.

(1) On a resulting lot that is 2,000 SF or larger, no new primary dwelling unit may exceed one-story or 16 FT in height, measured from grade to peak of the structure.

(2) On a resulting lot that is smaller than 2,000 SF, no new primary dwelling unit may exceed two-stories or 22 FT in height, measured from grade to peak of the structure. Any portion of a new primary dwelling that exceeds one story in height shall be stepped back by an additional 5 FT from the ground floor; no balcony deck or other portion of the second story may project into the stepback.

(3) No rooftop deck is permitted on any new or remodeled dwelling or structure on a lot resulting from an Urban Lot Split.

d. *Lot Coverage*. Maximum lot coverage shall conform to the requirement of the underlying zoning district. This lot coverage standard is only enforced to the extent that it does not prevent two primary dwelling units on the lot at 800 SF each.

e. *Setback Requirements*.

(1) **Generally**. All setbacks shall conform to the minimum requirements of the underlying zoning district.

(2) **Exceptions**. Notwithstanding subpart E.10.e above:

(a) Existing Structures. No setback is required for an existing legally established structure or for a new structure that is constructed in the same location and to the same dimensions as an existing legally established structure.

(b) Cannot Preclude Construction of Two 800-SF Units and 4-FT Side/Rear Setbacks. The setbacks imposed by the underlying zoning district shall yield to the degree necessary to avoid physically precluding the construction of up to two units on the lot or either of the two units from being at least 800 SF in floor area; but in no event may any structure be less than 4 FT from a side or rear property line.

(3) **Front Setback Area**. Notwithstanding any other part of this Development Code, dwellings that are constructed after an Urban Lot Split shall conform to the front setback requirement of the underlying zoning district. The front setback area shall:

(a) Be kept free from all structures greater than 3 FT high; and

(b) Allow for vehicular and fire-safety access to the front structure.

f. *Parking*. Each new primary dwelling unit shall have at least one off-street parking space per unit within a fully enclosed garage having a minimum interior clear area measuring 10 FT in width and 20 FT in length, unless one of the following applies:

(1) The lot is located within one-half mile walking distance of either:

(a) A corridor with fixed route bus service with service intervals no longer than 15 minutes during peak commute hours or

(b) A site that contains:

(i) An existing rail or bus rapid transit station,

(ii) A ferry terminal served by either a bus or rail transit service, or

(iii) The intersection of two or more major bus routes with a frequency of service interval of 15 minutes or less during the morning and afternoon peak commute periods.

(2) The site is located within one-block of a permanently established car-share vehicle pickup/drop-off location.

g. *Architecture*.

(1) If there is a legal primary dwelling on the lot that was established before the Urban Lot Split, any new primary dwelling unit shall match the existing primary dwelling unit with respect to exterior materials, finishes, color, and dominant roof pitch. The dominant roof pitch means the slope shared by the largest portion of the roof.

(2) If there is no legal primary dwelling on the lot before the Urban Lot Split, and if two primary dwellings are developed on the lot, the dwellings shall match each other with respect to exterior materials, finishes, color, and dominant roof pitch. The dominant roof pitch means the slope shared by the largest portion of the roof.

(3) All exterior lighting shall be limited to down-lights.

(4) No window or door of a dwelling that is constructed on the lot may have a direct line of sight to an adjoining residential property. Decorative masonry block walls, dense landscaping, or privacy glass may be used to provide screening and prevent a direct line of sight.

(5) If a dwelling is constructed on a lot after an Urban Lot Split and any portion of the dwelling is less than 30 FT from a property line that is not a public street right-of-way line, then all windows and doors in that portion shall either be (for windows) clerestory with the bottom of the glass at least 6 FT above the finished floor, or (for windows and for doors) utilize frosted or obscure glass.

h. *Walls, Fences, and Obstructions*.

(1) Lots created as a result of an Urban Lot Split shall be provided with 6-FT high decorative masonry block walls (reduced to 3 FT in height within front setback areas) at the following locations:

(a) Interior side and rear lot lines of each lot; and

(b) Street side property lines and along the rear property line of through lots, setback a minimum of 5 FT behind the sidewalk.

(2) The construction and maintenance of walls, fences, and other obstructions shall comply with the requirements of Division 6.02 (Walls, Fences, and Obstructions) of this Chapter.

i. *Landscaping*. Lots created as a result of an Urban Lot Split shall be fully landscaped and provided with a permanent automatic irrigation system pursuant to the requirements Division 6.05 (Landscaping) of this Chapter.

j. *Nonconforming Conditions*. An Urban Lot Split may be approved without requiring a legal nonconforming zoning condition to be corrected.

k. *Utilities*.

(1) Each primary dwelling unit on the resulting lots shall have its own direct utility connection to the utility service provider.

(2) Each primary dwelling unit on the resulting lots that is or that is proposed to be connected to an onsite wastewater treatment system shall first have a percolation test completed within the last 5 years or, if the percolation test has been recertified, within the last 10 years.

l. *Building and Safety*. An Urban Lot Split is a change of use. All structures built on a lot resulting from an Urban Lot Split shall comply with all current local building standards.

11. Fire-Hazard Mitigation Measures.

a. A lot in a very high fire hazard severity zone shall comply with each of the following fire-hazard mitigation measures:

(1) It shall have direct access to a public street right-of-way with a paved street with a width of at least 40 FT. The public street right-of-way shall have at least two independent points of access for fire and life safety to access and for residents to evacuate.

(2) All dwellings on the site shall comply with current Fire Code requirements for dwellings in a very high fire hazard severity zone.

(3) All enclosed structures on the site shall have fire sprinklers.

(4) All sides of all dwellings on the site shall be within a 150-FT hose-pull distance from either the public street right-of-way or of an onsite fire hydrant or standpipe.

(5) If the lot does not have a swimming pool, the lot shall have a water reservoir of at least 5,000 gallons per dwelling, with fire-authority approved hookups compatible with fire-authority standard pump and hose equipment.

b. Prior to submitting an application for an Urban Lot Split, the applicant shall obtain a certificate of compliance with all applicable fire-hazard mitigation measures pursuant to this subpart E.11. The City or its authorized agent shall inspect the site, including all structures on the site, and certify as to its compliance. The certificate shall be included with the application. The applicant shall pay the City's costs for inspection. Failure to pay is grounds for denying the application.

12. Separate Conveyance.

a. On a lot created by an Urban Lot Split:

(1) Primary dwelling units cannot be owned or conveyed separately from each other.

(2) Condominium airspace divisions and common interest developments are prohibited.

(3) All fee interest in a lot and all dwellings on the lot shall be held equally and undivided by all individual property owners.

(4) Separate conveyance of lots created by an Urban Lot Split is permitted. If dwellings or other structures (such as garages) on different lots are adjacent or attached to each other, the Urban Lot Split boundary may separate them for conveyance purposes if the structures meet Building Code safety standards and are sufficient to allow separate conveyance. If any attached structures span or will span the new lot line, the owner shall record appropriate CC&Rs, easements, or other documentation that is necessary to allocate rights and responsibility between the owners of the two lots.

13. Regulation of Uses.

a. *Residential-Only*. Nonresidential land uses shall be prohibited on any lot created by Urban Lot Split.

b. *No Short Term Rentals*. No dwelling unit on a lot that is created by an Urban Lot Split may be rented for a period of less than 30 days.

c. *Owner Occupancy*. The applicant for an Urban Lot Split shall sign an affidavit stating that the applicant intends to occupy one of the dwelling units on one of the resulting lots as the applicant's principal residence for a minimum of 3 years after the Urban Lot Split is approved.

14. Notice of Construction.

a. At least 30 business days prior to the starting any construction of a structure on a lot created by an Urban Lot Split, the property owner shall give written notice to all the owners of record of each of the adjacent residential parcels, which notice shall include the following information:

(1) Notice that construction has been authorized,

(2) The anticipated start and end dates for construction,

(3) The hours of construction,

(4) Contact information for the project manager (for construction-related complaints), and

(5) Contact information for the Building & Safety Department.

b. This notice requirement does not confer a right on the noticed persons or on anyone else to comment on the project before permits are issued. The approval of an Urban Lot Split is ministerial and under state law, the City has no discretion in approving or denying a particular project under this Section. This notice requirement is purely to promote neighborhood awareness and expectation.

15. Deed Restriction. The owner shall record a deed restriction, acceptable to the City, that does each of the following:

a. Expressly prohibits any rental of any dwelling on the property for a period of less than 30 days.

b. Expressly prohibits any nonresidential land use of Urban Lot Split.

c. Expressly prohibits any separate conveyance of a primary dwelling on the property, any separate fee interest, and any common interest development within the lot.

d. States that the property is formed by an Urban Lot Split and is, therefore, subject to the City's Urban Lot Split regulations, including all applicable limits on dwelling size and development.

F. Specific Adverse Impacts.

1. Notwithstanding anything else in this Section, the City may deny an application for an Urban Lot Split if the building official makes a written finding, based on a preponderance of the evidence, that the project would have a "specific, adverse impact" on either public health and safety or on the physical environment and for which there is no feasible method to satisfactorily mitigate or avoid the specific adverse impact.

2. The term "specific adverse impact" has the same meaning as in GC Section 65589.5(d)(2): "a significant, quantifiable, direct, and unavoidable impact, based on objective, identified written public health or safety standards, policies, or conditions as they existed on the date the application was deemed complete" and does not include (1) inconsistency with the zoning ordinance or general plan land use designation or (2) the eligibility to claim a welfare exemption under Revenue and Taxation Code Section 214(g).

3. The building official may consult with and be assisted by planning staff and others as necessary in making a finding of specific, adverse impact.

Division 6.09—Reserved

**********Reserved for Future Use**********

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Division 6.10—Reserved

**********Reserved for Future Use**********

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Division 6.11—Shopping Cart Retention and Storage

Sections:

6.11.000: Purpose
6.11.005: Applicability
6.11.010: Definitions
6.11.015: Exemption
6.11.020: Mandatory Shopping Cart Retention Plan
6.11.025: Shopping Cart Retention Plan Timeline and Approval Process
6.11.030: Penalties for Failing to Submit a Shopping Cart Retention Plan
6.11.035: Notification for Retrieval of Abandoned Carts
6.11.040: Administrative Costs and Fines
6.11.045: Disposition of Carts after 30 Days
6.11.050: Unmarked Shopping Carts: Public Nuisance
6.11.055: Unmarked Shopping Carts: Destruction
6.11.060: Shopping Cart Collection and Storage Facilities

6.11.000: Purpose

Abandoned shopping carts constitute a nuisance, create potential hazards to the health and safety of the public, and interfere with pedestrian and vehicular traffic within the City. The accumulation of wrecked, dismantled, and abandoned shopping carts on public or private property also tends to create conditions that reduce property values, promoting blight and deterioration in the City. The purpose of this Division is to provide regulations pertaining to abandoned shopping carts, unmarked shopping carts, provide a requirement for a mandatory plan to prevent cart removal, and provide adequate facilities for on-site cart storage.

6.11.005: Applicability

Any business establishment in the City that provides shopping carts for use by their patrons shall develop and implement a Shopping Cart Retention Plan, which is intended to prevent customers from removing carts from their business premises and provide appropriate cart storage areas pursuant to this Division. The Shopping Cart Retention Plan shall be reviewed and approved by the Planning Director pursuant to the procedures established for ministerial permits and decisions contained in Subsection 2.02.015.C (Ministerial Permits and Decisions) of this Development Code.

6.11.010: Definitions

As used in this Division, unless otherwise apparent from the context, the words, terms, and phrases listed below, shall have the following meaning:

A. **Abandoned Cart.** Any cart that has been removed without written permission of the owner, or on-duty manager from the premises of the business establishment, regardless of whether it has been left on either private or public property. This provision shall not apply to carts that are removed for the purpose of repair or maintenance.

B. **Cart.** A basket that is mounted on wheels or similar devise provided by a business establishment for use by a customer for the purpose of transporting goods of any kind, including, but not limited to, grocery store shopping carts.

C. **Owner.** Any person or entity, who in connection with the conduct of a business, owns, possesses, or makes any cart available to customers or the public. For the purposes of this Division, "owner" shall also include the owner's on-site or designated agent or retailer that provides the carts for use by its customers.

D. **Premises.** The entire area owned and utilized by the business establishment that provides carts for use by customers, including any parking lot or other property provided by the owner for customer parking.

E. **Unmarked Cart.** Any cart as defined by this Division that is not identified and marked pursuant to PC Section 22435.1.

6.11.015: Exemption

Any owner that agrees to enter into a contract with a City-designated retrieval service to provide for retrieval of abandoned carts, or, individually or as part of a consortium of businesses, enters into a retrieval contract with a retrieval service that is satisfactory to the City, shall be exempt from Section 6.11.025 (Prevention Plan Timeline and Approval Process), Section 6.11.030 (Penalties for Failing to Submit a Shopping Cart Retention Plan), and Section 6.11.035 (Notification for Retrieval of Abandoned Carts), below.

6.11.020: Mandatory Shopping Cart Retention Plan

Every business owner shall develop and implement a Shopping Cart Retention Plan for all businesses that utilize shopping carts for use by business patrons, to prevent customers from removing carts from the business premises. Every Shopping Cart Retention Plan shall include the following elements:

A. **Required Signs on Carts.** Every cart owned or provided by any business establishment in the City shall have a sign permanently affixed to it that contains all of the following information:

1. Identifies the owner of the cart or the name of the business establishment, or both;

2. Notifies the public of the procedure to be utilized for authorized removal of the cart from the business premises;

3. Notifies the public that the unauthorized removal of the cart from the premises or parking area of the retail establishment, or the unauthorized possession of the cart, is a violation of State law; and

4. Lists a valid telephone number to contact to report the location of the abandoned cart or lists an address for returning the cart to the owner or business establishment.

B. **Required Signs on Property.** Signs shall be placed in pertinent places near door exits and near parking lot exists that notify customers that cart removal is prohibited and constitutes a violation of State and local law.

C. Physical Measures.

1. New development, an increase of more than 10 percent in GFA, or the major alteration or remodel of any building occupied by, or proposed to be occupied by, retail commercial uses providing 10 or more shopping carts for use by business patrons, shall install and maintain in good working order, an electronic barrier system at the perimeter of the business site, which, when crossed by a shopping cart, will disable the cart, thereby preventing its removal from the site. Alternate cart retention methods that would achieve the same outcome may be considered by the Planning Director.

2. New and existing businesses providing less than 10 shopping carts for use by patrons, may be required to implement specific physical measures to prevent shopping cart removal from the business premises. These measures may include one or more of the following:

a. Installation of disabling devices on all carts;

b. Posting of a security guard to deter and stop customers who attempt to remove carts from the premises;

c. A decorative bollard and chain system or decorative fencing installed around the business premises to prevent cart removal;

d. Security deposits required for the use of all carts; and/or

e. The rental or sale of carts that can be temporarily or permanently used for the transport of purchases.

6.11.025: Shopping Cart Retention Plan Timeline and Approval Process

The Shopping Cart Retention Plan shall be submitted for approval by the City within 60 days after adoption of this Division, and each time the plan is proposed to be amended. If a new Plan is submitted, the proposed measures shall be implemented no later than 30 days after City approval is given. The prevention measures shall be continued until and unless the City indicates that measures need to be modified. Unless otherwise agreed, any modifications to the Plan imposed by the City shall be implemented within 30 days after the City notifies the retailer of the needed modifications.

6.11.030: Penalties for Failing to Submit a Shopping Cart Retention Plan

Any owner that fails to submit a Shopping Cart Retention Plan, implement the proposed Plan measures, or implement any required modifications to the Plan by the City within the periods specified in this Division, shall be subject to a $1,000 civil penalty, plus an additional penalty of $50 for each day of noncompliance.

6.11.035: Notification for Retrieval of Abandoned Carts

Pursuant to BPC Section 22435.7, the City shall notify the owner of any abandoned carts owned or used by the business establishment that have been located within the City within 24 hours of impoundment. The owner shall have 3 business days from the date that notification is given to retrieve carts from the City.

6.11.040: Administrative Costs and Fines

Pursuant to BPC Section 22435.7, any owner that fails to retrieve its abandoned cart(s) within 3 business days after receiving notice from the City, shall pay the City's administrative costs for retrieving the cart(s) and providing the notification to the owner. Any owner who fails to retrieve abandoned carts in accordance with this Division in excess of 3 times during a 6-month period shall be subject to a $50 fine for each occurrence. An occurrence includes all carts owned by the owner that are impounded by the City in a one-day period.

6.11.045: Disposition of Carts after 30 Days

Pursuant to State law, any cart not reclaimed from the City within 30 days after notification to the owner, shall be sold or otherwise disposed of by the City.

6.11.050: Unmarked Shopping Carts: Public Nuisance

Any unmarked shopping cart is hereby declared a public nuisance if:

A. It is left unattended on a public right-of-way or other public property;

B. It is left unattended on any private property at a location that will impede emergency services;

C. It is left unattended on the front or side setback of any private property without the owner's or occupant's permission; or

D. It is left on private property where it may be viewed from the public right-of-way or adjacent properties for more than 24 hours after the occupant, if any, and the owner of the property has received written notice which states that if the shopping cart is not removed from public view, it will be impounded by the City and may be sold or otherwise disposed of by the City.

6.11.055: Unmarked Shopping Carts: Destruction

Any carts found to be unmarked as defined by this Division, and has been impounded by the City, shall be destroyed without any further notice other than as specified in Subsection 6.11.050.D of this Division.

6.11.060: Shopping Cart Collection and Storage Facilities

Shopping cart storage facilities shall be provided for commercial-retail uses, including, but not limited to, automotive parts and supplies, food and beverage stores, health and personal care stores, general merchandise stores, and other miscellaneous retail stores, for 3 separate and distinct purposes: [1] the overnight or long-term storage of shopping carts; [2] the distribution of shopping carts to patrons as they enter the business; and [3] stations for the collection and storage of shopping carts within off-street parking facilities.

A. The Overnight or Long-Term Storage of Shopping Carts.

1. Facilities for the overnight or long-term storage of shopping carts shall be located within the building of the business they serve, or outside, within screened areas. Outside overnight shopping cart storage areas shall be screened and secured by a minimum 3-FT high decorative masonry wall, with a decorative cap, in combination with landscaping. The wall shall be designed to be architecturally consistent with the design of the adjacent building(s).

2. The minimum size, design, and location of overnight shopping cart storage areas shall be subject to Planning Director approval.

B. Stations for the Collection and Storage of Shopping Carts within Off-Street Parking Facilities (Shopping Cart Corrals). Shopping cart corrals shall be provided within off-street parking facilities and shall be distributed throughout parking lots for convenient access by business patrons.

1. At a minimum, shopping cart corrals shall be defined by a landscaped planter on at least two opposing perimeter sides, minimum 3 FT in width, bordered by a raised 6-inch concrete curb, which shall be planted and maintained with a hedgerow that will be allowed to grow to a minimum height of 3 FT for the purpose of screening shopping carts. The paving at the corral entrance shall be slightly raised to keep shopping carts confined within the corral. Within the required planter area, the construction of a 3-FT high decorative masonry wall with a decorative cap is encouraged, to provide further screening. The use of pipe corrals shall not be permitted.

2. Shopping cart corrals shall be distributed throughout the off-street parking area. The minimum number, dimensions, and locations of shopping cart corrals shall be determined by the Planning Director.

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CITY OF ONTARIO *Agenda Report* **November 4, 2025**	**SECTION:** **PUBLIC HEARINGS**
Department: Development Administration Prepared By: Pablo De Lara Staff Member Presenting: Rudy Zeledon, Executive Director Community Development Approved By:	Submitted To: Council/OHA Approved: _____ Continued To: _____ Denied: _____ Item No: 12

SUBJECT: **A PUBLIC HEARING TO CONSIDER THE ADOPTION OF AN ORDINANCE APPROVING A DEVELOPMENT AGREEMENT (FILE NO. PDA25-003) BETWEEN THE CITY OF ONTARIO AND GDC INVESTMENTS 13, L.P.**

RECOMMENDATION: That the City Council introduce and waive further reading of an Ordinance Approving a Development Agreement (File No. PDA25-003) between the City of Ontario and GDC Investments 13 L.P.

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

FISCAL IMPACT: There is not a direct fiscal impact associated with this action. The Development Agreement will provide funding from the formation of a Community Facilities District (CFD) for City services and facilities required to support the Esperanza Specific Plan (Specific Plan) development, thereby mitigating the increased costs associated with such services. In addition, the City will receive development impact, compliance processing, licensing, and permitting fees. No General Fund revenue will be used to support the Ontario Ranch development.

BACKGROUND & ANALYSIS: The Ontario Ranch Financial commitments required for construction of properties within a specific plan are substantial. Therefore, to adequately forecast these costs and gain assurance that the project may proceed under the existing policies, rules, and regulations. GDC Investments 13, L.P. (collectively the "Applicant" or "Owner"), has requested that the City enter into negotiations to create a Development Agreement (Agreement).

The Agreement proposes to include 10.02 acres of land within Planning Area 11 of the Esperanza Specific Plan; as shown on the attached Exhibit A. The Agreement grants the Applicant a vested right to develop Tentative Tract Map 20730, for condominium purposes (see attached Exhibits B

and C), provided that the Owner complies with the terms and conditions of the Specific Plan and related EIR. The Tentative Tract Map is located south of Chatham Street, west of Clifton Street, east of Amherst Avenue, and north of Eucalyptus Avenue and proposes to subdivide 10.02 acres into 28 numbered lots for a total of 161 condominium units and 15 lettered lots, for residential uses, private drives, landscape edges, and common open space purposes.

The term of the Agreement is for 10 years, with a 5-year option to renew. The main points of the Agreement address funding for all new City expenses created by the project, which includes Development Impact Fees (DIF) for construction of public improvements (i.e. streets and bridges, sewer, water, storm drain and fiber); and the creation of a Community Facilities District (CFD) for the maintenance of public facilities.

In considering the Agreement at their meeting on September 23, 2025, the Planning Commission found the Agreement to be consistent with State law, The Ontario Plan, and the City's Development Agreement policies. As a result, the Planning Commission adopted Resolution No. PC25-046 with a 5 to 1 vote, recommending City Council approval of the Agreement.

ENVIRONMENTAL REVIEW: The environmental impacts of the Project were reviewed in conjunction with The Ontario Plan 2050 Supplemental Environmental Impact Report (SCH No. 2021070364; certified by the City Council on August 16, 2022). An Addendum has been prepared in conjunction with the subject application for the proposed Development Agreement (File No. PDA25-003) and the associated Specific Plan Amendment (File No. PSPA24-004), the Tentative Tract Map (File No. PMTT24-008), and the Development Plan (File No. PDEV24-017) to determine possible environmental impacts. The Project will introduce no new significant environmental impacts beyond those previously analyzed in the Certified EIR, and all mitigation measures previously adopted by the Environmental Impact Report, are a condition of project approval and are incorporated in the Addendum.

EXHIBIT A:
ESPERANZA SPECIFIC PLAN

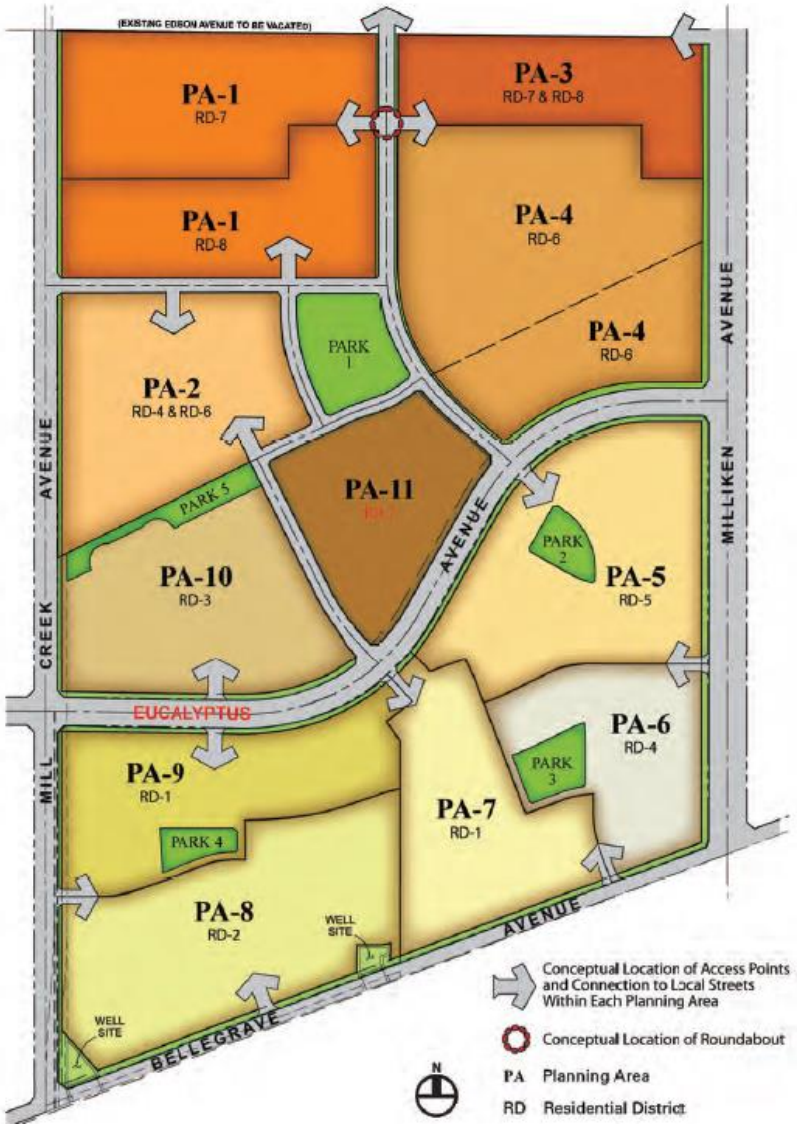


EXHIBIT B:
TENTATIVE TRACT MAP NO. 20730 FOR CONDOMINIUM PURPOSES

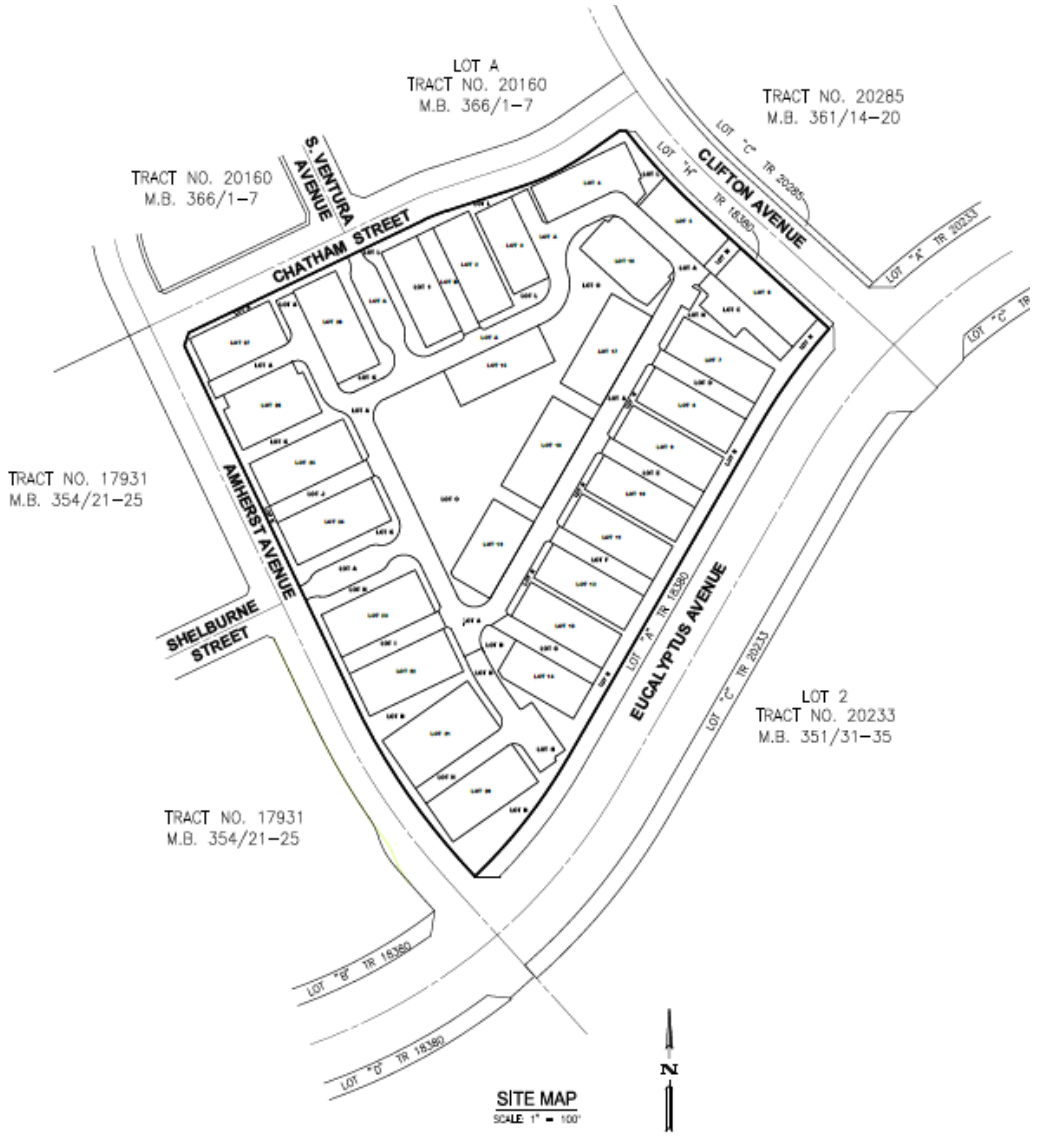


EXHIBIT C:
Conceptual Site Plan

ORDINANCE NO. _____

AN ORDINANCE OF THE CITY COUNCIL OF THE CITY OF ONTARIO, CALIFORNIA, RECOMMENDING CITY COUNCIL APPROVE FILE NO. PDA25-003, A DEVELOPMENT AGREEMENT BETWEEN THE CITY OF ONTARIO AND GDC INVESTMENTS 13, LP TO ESTABLISH THE TERMS AND CONDITIONS ASSOCIATED WITH TENTATIVE TRACT MAP 20730 (FILE NO. PMTT24-008) LOCATED SOUTH OF CHATHAM STREET, WEST OF CLIFTON STREET, EAST OF AMHERST AVENUE, AND NORTH OF EUCALYPTUS AVENUE, WITHIN PLANNING AREA 11 (RD-7/ROW TOWNHOMES) OF THE ESPERANZA SPECIFIC PLAN (APN: 1073-101-05).

WHEREAS, GDC Investments 13, LP ("Applicant") has filed an Application for the approval of a Development Agreement, File No. PDA25-003, as described in the title of this Ordinance (hereinafter referred to as "Application" or "Project"); and

WHEREAS, the Application applies to 10.02 acres of land located south of Chatham Street, west of Clifton Street, east of Amherst Avenue, and north of Eucalyptus Avenue, within Planning Area 11 (RD-7 / Row Townhomes) of the Esperanza Specific Plan; and

WHEREAS, the Applicant submitted Tentative Tract Map No. 20730 (File No. PMTT24-008), subdividing 10.02 acres of land acres into 28 numbered lots for a total of 161 condominium units and 15 lettered lots, for residential uses, private drives, landscape edges, and common open space purposes; and

WHEREAS, the environmental impacts of this Project were previously reviewed in conjunction with File No. PSPA24-004, a Specific Plan Amendment to the Esperanza Specific Plan along with the associated Tentative Tract Map (File No. PMTT24-008) and Development Plan (File No. PDEV24-017); and The Ontario Plan 2050 Supplemental Environmental Impact Report (SCH No. 2021070364; certified by the City Council on August 16, 2022). This Application introduces no new significant environmental impacts; and

WHEREAS, the City's "Local Guidelines for the Implementation of the California Environmental Quality Act (CEQA)" provide for the use of a single environmental assessment in situations where the impacts of subsequent projects are adequately analyzed; and

WHEREAS, Ontario Development Code Table 2.02-1 (Review Matrix) grants the City Council the responsibility and authority to review and make recommendations to the City Council on the subject Application; and

WHEREAS, the Project has been reviewed for consistency with the Housing Element of the Policy Plan component of The Ontario Plan, as State Housing Element law (as prescribed in Government Code Sections 65580 through 65589.8) requires that development projects must be consistent with the Housing Element, if upon consideration of all its aspects, it is found to further the purposes, principals, goals, and policies of the Housing Element; and

WHEREAS, the Project is located within the Airport Influence Area of Ontario International Airport, which encompasses lands within parts of San Bernardino, Riverside, and Los Angeles Counties, and is subject to, and must be consistent with, the policies and criteria set forth in the Ontario International Airport Land Use Compatibility Plan (hereinafter referred to as "ALUCP"), which applies only to jurisdictions within San Bernardino County, and addresses the noise, safety, airspace protection, and overflight impacts of current and future airport activity; and

WHEREAS, City of Ontario Development Code Division 2.03 (Public Hearings) prescribes the manner in which public notification shall be provided and hearing procedures to be followed, and all such notifications and procedures have been completed; and

WHEREAS, on September 23, 2025, the Planning Commission of the City of Ontario conducted a hearing to consider the Project, and concluded said hearing on that date; and

WHEREAS, on October 21, 2025, the City Council of the City of Ontario conducted a hearing to consider the Project, and concluded said hearing on that date; and

WHEREAS, all legal prerequisites to the adoption of this Resolution have occurred.

NOW, THEREFORE, IT IS HEREBY FOUND, DETERMINED, AND RESOLVED by the City Council of the City of Ontario, as follows:

SECTION 1: ***Environmental Determination and Findings.*** As the recommending authority for the Project, the City Council has reviewed and considered the information contained in the previous Certified EIR and supporting documentation. Based upon the facts and information contained in the previous Certified EIR and supporting documentation, the City Council finds as follows:

(1) The administrative record has been completed in compliance with CEQA, the State CEQA Guidelines, and the City of Ontario Local CEQA Guidelines; and

(2) The environmental impacts of the Project were reviewed in conjunction with an Addendum to The Ontario Plan 2050 Supplemental Environmental Impact Report (State Clearinghouse No. 2021070364), certified by the Ontario City Council on August 16, 2022, in conjunction with File No. PGPA20-002; and

(3) The EIR Addendum and administrative record have been completed in compliance with CEQA, the State CEQA Guidelines, and the City of Ontario Local CEQA Guidelines; and

(4) The City's "Guidelines for the Implementation of the California Environmental Quality Act (CEQA)" provide for the use of a single environmental assessment in situations where the impacts of subsequent projects are adequately analyzed. This Application introduces no new significant environmental impacts; and

(5) All previously adopted mitigation measures shall be a condition of project approval, as they are applicable to the Project, and are incorporated herein by this reference; and

(6) The EIR Addendum contains a complete and accurate reporting of the environmental impacts associated with the Project, and reflects the independent judgment of the City Council; and

(7) There is no substantial evidence in the administrative record supporting a fair argument that the Project may result in significant environmental impacts.

SECTION 2: ***Subsequent or Supplemental Environmental Review Not Required.*** Based on the information presented to the City Council, and the specific findings set forth in Section 1, above, the City Council finds that the preparation of a subsequent or supplemental Certified EIR is not required for the Project, as the Project:

(1) Does not constitute substantial changes to the Certified EIR that will require major revisions to the Certified EIR due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified significant effects; and

(2) Does not constitute substantial changes with respect to the circumstances under which the Certified EIR was prepared, that will require major revisions to the Certified EIR due to the involvement of new significant environmental effects or a substantial increase in the severity of the previously identified significant effects; and

(3) Does not contain new information of substantial importance that was not known and could not have been known with the exercise of reasonable diligence at the time the Certified EIR was certified/adopted, that shows any of the following:

(a) The project will have one or more significant effects not discussed in the Certified EIR; or

(b) Significant effects previously examined will be substantially more severe than shown in the Certified EIR; or

(c) Mitigation measures or alternatives previously found not to be feasible would in fact be feasible and would substantially reduce one or more significant effects of the Project, but the City declined to adopt such measures; or

(d) Mitigation measures or alternatives considerably different from those analyzed in the Certified EIR would substantially reduce one or more significant effects on the environment, but which the City declined to adopt.

SECTION 3: ***Housing Element Compliance.*** Pursuant to the requirements of California Government Code Chapter 3, Article 10.6, commencing with Section 65580, as the recommending authority for the Project, the City Council finds that based on the facts and information contained in the Application and supporting documentation, at the time of Project implementation, the project is consistent with the Housing Element of the Policy Plan (General Plan) component of The Ontario Plan. The project site is not one of the properties in the Housing Element Sites contained in Tables B-1 and B-2 (Housing Element Sites Inventory) of the Housing Element Technical Report.

SECTION 4: ***Airport Land Use Compatibility Plan ("ALUCP") Compliance.*** The California State Aeronautics Act (Public Utilities Code Section 21670 et seq.) requires that an Airport Land Use Compatibility Plan be prepared for all public use airports in the State; and requires that local land use plans and individual development proposals must be consistent with the policies set forth in the adopted Airport Land Use Compatibility Plan.

(1) On April 19, 2011, the City Council of the City of Ontario approved and adopted the Ontario International Airport Land use Compatibility Plan, establishing the Airport Influence Area for Ontario International Airport, which encompasses lands within parts of San Bernardino, Riverside, and Los Angeles Counties, and limits future land uses and development within the Airport Influence Area, as they relate to noise, safety, airspace protection, and overflight impacts of current and future airport activity. As the recommending authority for the Project, the City Council has reviewed and considered the facts and information contained in the Application and supporting documentation against the ONT ALUCP compatibility factors, including [1] Safety Criteria (ONT ALUCP Table 2-2) and Safety Zones (ONT ALUCP Map 2-2), [2] Noise Criteria (ONT ALUCP Table 2-3) and Noise Impact Zones (ONT ALUCP Map 2-3), [3] Airspace protection Zones (ONT ALUCP Map 2-4), and [4] Overflight Notification Zones (ONT ALUCP Map 2-5). As a result, the City Council, therefore, finds and determines that the Project, is will be consistent with the policies and criteria set forth within the ONT ALUCP; and

(2) On August 2, 2022, the City Council of the City of Ontario approved and adopted a Development Code Amendment to establish the Chino Airport ("CNO") Overlay Zoning District ("OZD") and Reference I, Chino Airport Land Use Compatibility Plan ("CNO ALUCP"). The CNO OZD and CNO ALUCP established the Airport Influence Area for Chino Airport, solely within the City of Ontario, and limits future land uses and development within the Airport Influence Area, as they relate to safety, airspace protection, and overflight impacts of current and future airport activity. The CNO ALUCP is consistent with policies and criteria set forth within the Caltrans 2011 California Airport Land Use Planning Handbook. The proposed Project is located within the Airport Influence Area of Chino Airport and was evaluated and found to be consistent with the California Airport Land Use Planning Handbook and the CNO ALUCP. As the recommending authority for the Project, the City Council has reviewed and considered the facts and information contained in the Application and supporting documentation against the CNO ALUCP compatibility factors, including Safety, Airspace Protection, Overflight. As a result, the City Council therefore, finds and determines that the Project is consistent with the policies and criteria set forth within the California Airport Land Use Planning Handbook and the Chino ALUCP.

SECTION 5: ***Concluding Facts and Reasons.*** Based upon the substantial evidence presented to the City Council during the above-referenced hearing, and upon the specific findings set forth in Section 1 through 4, above, the City Council hereby concludes as follows:

(1) The Development Agreement applies to approximately 10.02 acres of land located south of Chatham Street, west of Clifton Avenue, east of Amherst Avenue, and north of Eucalyptus Avenue, within Planning Area 11 of the Esperanza Specific Plan; and

(2) The Development Agreement establishes parameters for the development of land within the Esperanza Specific Plan. The Development Agreement also grants the Applicant, the right to develop, the ability to quantify the fees; and establish the terms and conditions that apply to those projects. These terms and conditions are consistent with The Ontario Plan Policy Plan (General Plan), design guidelines and development standards for the Esperanza Specific Plan; and

(3) The Development Agreement grants the Applicant a vested right to develop Tentative Tract Map 20730 (File No. PMTT24-008) as long as the Applicant complies with the terms and conditions of the Esperanza Specific Plan and EIR. Tentative Tract Map 20730 located south of Chatham Street, west of Clifton Avenue, east of Amherst Avenue, and north of Eucalyptus Avenue and proposes to subdivide 10.02 acres into 28 numbered lots for a total of 161 condominium units and 15 lettered lots, for residential uses, private drives, landscape edges, and common open space purposes; and

(4) The Development Agreement has been prepared in conformance with the goals and policies of The Ontario Plan Policy Plan (General Plan); and

(5) The Development Agreement does not conflict with the Land Use Policies of The Ontario Plan Policy Plan (General Plan) and will provide for development, within the district, in a manner consistent with the Policy Plan and with related development; and

(6) This Development Agreement will promote the goals and objectives of the Land Use Element of the Policy Plan; and

(7) This Development Agreement will not be materially injurious or detrimental to the adjacent properties and will not have a significant impact on the environment or the surrounding properties for which a Subsequent Environmental Impact Report (SCH# 2004011009) was adopted by the City Council on November 21, 2023; and

(8) This Application introduces no new significant environmental impacts. All previously adopted mitigation measures are a condition of project approval and are incorporated herein by this reference.

SECTION 6: ***City Council Action.*** Based upon the findings and conclusions set forth in Sections 1 through 5, above, the City Council hereby APPROVES the Development Agreement (File No. PDA24-004), attached hereto as "Attachment A," and incorporated herein by this reference.

SECTION 7: **City Manager Administrative Authority.** The City Council acknowledges that refinements and further development of the Ontario Ranch development area may demonstrate that changes are appropriate with respect to the details and performance of the parties under the Development Agreement. The City Council desires to retain a certain degree of flexibility with respect to the details of the Ontario Ranch developments, and with respect to those items covered in general terms under the Development Agreement. If and when the City Manager (or designee) and the Developer mutually find that changes, adjustments, or clarifications are appropriate to further the intended purposes of the Development Agreement, and such are not materially inconsistent with the Development Agreement, they may, unless otherwise required by law, effectuate such changes, adjustments, or clarifications by written amendment to this Agreement, or through one or more memoranda which are mutually approved by the City Manager on behalf of the City and by the Developer, and, after execution, shall be attached to the Development Agreement and become a part thereof. Unless otherwise required by law, no such changes, adjustments, or clarifications shall require prior notice or hearing before the City Council. The City Manager, with the approval of the City Attorney, shall have the authority but not the obligation to execute amendments, memoranda or other documents, and may take any action necessary to implement the Development Agreement.

SECTION 8 : ***Indemnification.*** The Applicant shall agree to defend, indemnify and hold harmless, the City of Ontario or its agents, officers, and employees from any claim, action or proceeding against the City of Ontario or its agents, officers or employees to attack, set aside, void, or annul this approval. The City of Ontario shall promptly notify the applicant of any such claim, action, or proceeding, and the City of Ontario shall cooperate fully in the defense.

SECTION 9: ***Custodian of Records.*** The documents and materials that constitute the record of proceedings on which these findings have been based are located at the City of Ontario City Hall, 303 East "B" Street, Ontario, California 91764. The custodian for these records is the City Clerk of the City of Ontario.

SECTION 10: ***Severability.*** If any section, sentence, clause or phrase of this Ordinance or the application thereof to any entity, person or circumstance is held for any reason to be invalid or unconstitutional, such invalidity or unconstitutionality shall not affect other provisions or applications of this Ordinance which can be given effect without the invalid provision or application, and to this end the provisions of this Ordinance are severable. The People of the City of Ontario hereby declare that they would have adopted this Ordinance and each section, sentence, clause or phrase thereof, irrespective of the fact that any one or more section, subsections, sentences, clauses or phrases be declared invalid or unconstitutional.

SECTION 11: ***Effective Date.*** This Ordinance shall become effective 30 days following its adoption.

SECTION 12: ***Publication and Posting.*** The Mayor shall sign this Ordinance and the City Clerk shall certify as to the adoption and shall cause a summary thereof to be published at least once, in a newspaper of general circulation in the City of Ontario, California within 15 days following the adoption. The City Clerk shall post a certified copy of this ordinance, including the vote for and against the same, in the Office of the City Clerk, in accordance with Government Code Section 36933.

PASSED, APPROVED, AND ADOPTED this _____ day of _____ 2025.

_____
PAUL S. LEON, MAYOR

ATTEST:

_____
SHEILA MAUTZ, CITY CLERK

APPROVED AS TO FORM:

_____
BEST BEST & KRIEGER LLP
CITY ATTORNEY

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

I, SHEILA MAUTZ, City Clerk of the City of Ontario, DO HEREBY CERTIFY that foregoing Ordinance No. _____ was duly introduced at a regular meeting of the City Council of the City of Ontario held _____ and adopted at the regular meeting held _____, 2025 by the following roll call vote, to wit:

AYES: COUNCIL MEMBERS:

NOES: COUNCIL MEMBERS:

ABSENT: COUNCIL MEMBERS:

_____
SHEILA MAUTZ, CITY CLERK

(SEAL)

I hereby certify that the foregoing is the original of Ordinance No. _____ duly passed and adopted by the Ontario City Council at their regular meeting held _____ and that Summaries of the Ordinance were published on _____ and _____, in the Inland Valley Daily Bulletin newspaper.

_____
SHEILA MAUTZ, CITY CLERK

(SEAL)

ATTACHMENT A:

FILE NO. PDA25-003

DEVELOPMENT AGREEMENT

By and Between

City of Ontario
a California municipal corporation

and

GDC Investments 13, LP

(Development Agreement to follow this page)

RECORDING REQUESTED BY AND
WHEN RECORDED MAIL TO:

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

Exempt from Fees Per Gov. Code § 6103

Space above this line for Recorder's Use Only

FILE NO. PDA25-003

DEVELOPMENT AGREEMENT

By and Between

City of Ontario
a California municipal corporation

and

GDC Investments 13, L.P.

_____, 2025

San Bernardino County, California

DEVELOPMENT AGREEMENT PDA25-003

This Development Agreement (hereinafter "Agreement") is entered into effective as of the ____ day of _____, 2025 by and among the City of Ontario, a California municipal corporation (hereinafter "CITY"), and GDC Investments 13, L.P., a Delaware limited partnership (hereinafter "OWNER"):

RECITALS

WHEREAS, CITY is authorized to enter into binding development agreements with persons having legal or equitable interests in real property for the development of such property, pursuant to Section 65864, et seq. of the Government Code; and

WHEREAS, OWNER has requested CITY to enter into a development agreement and proceedings have been taken in accordance with the rules and regulations of CITY; and

WHEREAS, by electing to enter into this Agreement, CITY shall bind future City Councils of CITY by the obligations specified herein and limit the future exercise of certain governmental and proprietary powers of CITY; and

WHEREAS, the terms and conditions of this Agreement have undergone extensive review by CITY and the City Council and have been found to be fair, just and reasonable; and

WHEREAS, the best interests of the citizens of the CITY and the public health, safety and welfare will be served by entering into this Agreement; and

WHEREAS, all of the procedures of the California Environmental Quality Act have been met with respect to the Project and the Agreement in that Esperanza Specific Plan (State Clearinghouse No. 2021070364 (the "FEIR"). The City Council found and determined that the FEIR was prepared in accordance with the requirements of the California Environmental Quality Act and adequately describes the impacts of the project described in the FEIR, which included consideration of this Agreement; and

WHEREAS, this Agreement and the Project are consistent with the CITY's Comprehensive General Plan and the Esperanza Specific Plan; and

WHEREAS, all actions taken and approvals given by CITY have been duly taken or approved in accordance with all applicable legal requirements for notice, public hearings, findings, votes, and other procedural matters; and

WHEREAS, development of the Property in accordance with this Agreement will provide substantial benefits to CITY and will further important policies and goals of CITY; and

WHEREAS, this Agreement will eliminate uncertainty in planning and provide for the orderly development of the Property, ensure progressive installation of necessary

improvements, provide for public services appropriate to the development of the Project, and generally serve the purposes for which development agreements under Sections 65864 et seq. of the Government Code are intended; and

WHEREAS, OWNER has incurred and will in the future incur substantial costs in excess of the generally applicable requirements in order to assure vesting of legal rights to develop the Property in accordance with this Agreement.

WHEREAS, the Property is located in an area of the City of Ontario that has been known as the "New Model Colony" area and the New Model Colony area has now been renamed as "Ontario Ranch."

WHEREAS, the property developer/owners are made aware of the South Archibald Trichloroethylene (TCE) Plume Disclosure Letter (Exhibit "G"). Property owner may wish to provide the attached Letter as part of the Real Estate Transfer Disclosure requirements under California Civil Code Section 1102 et seq. This may include notifications in the Covenants, Conditions and Restrictions (CC&Rs) or other documents related to property transfer and disclosures. Additional information on the plume is available from the Santa Ana Regional Water Quality Control Board at http://geotracker.waterboards.ca.gov/profile_report.asp?global_id=T10000004658

COVENANTS

NOW, THEREFORE, in consideration of the above recitals and of the mutual covenants hereinafter contained and for other good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, the parties agree as follows:

1. DEFINITIONS AND EXHIBITS.

1.1 Definitions. The following terms when used in this Agreement shall be defined as follows:

1.1.1 "Agreement" means this Development Agreement.

1.1.2 "CITY" means the City of Ontario, California, a California municipal corporation.

1.1.3 "Construction Agreement" means that certain Agreement for the Financing and Construction of Phases I and II Infrastructure Improvements to Serve an Easterly Portion of the New Model Colony, entered into between the CITY and NMC Builders as of the 4th day of October, 2005, and all amendments thereto and "Construction Agreement Amendment" means that First Amended and Restated Agreement for the Financing and Construction of Limited Infrastructure Improvements to Serve and Easterly Portion of the New Model Colony entered into between the CITY and NMC Builders as of the 21st day of August 2012.

1.1.4 "Development" means the improvement of the Property for the purposes of completing the structures, improvements and facilities comprising the Project

including, but not limited to: grading; the construction of public infrastructure and public facilities related to the Project whether located within or outside the Property; the construction of buildings and structures; and the installation of landscaping. "Development" does not include the maintenance, repair, reconstruction or redevelopment of any building, structure, improvement or facility after the construction and completion thereof.

1.1.5 "Development Approvals" means all permits and other entitlements for use subject to approval or issuance by CITY in connection with development of the Property including, but not limited to:

(a) specific plans and specific plan amendments;

(b) tentative and final subdivision and parcel maps;

(c) development plan review;

(d) conditional use permits (including model home use permits), public use permits and plot plans;

(e) zoning;

(f) grading and building permits.

1.1.6 "Development Exaction" means any requirement of CITY in connection with or pursuant to any Land Use Regulation or Development Approval for the dedication of land, the construction of improvements or public facilities, or the payment of fees in order to lessen, offset, mitigate or compensate for the impacts of development on the environment or other public interests.

1.1.7 "Development Impact Fee" means a monetary exaction, other than a tax or special assessment, whether characterized as a fee or a tax and whether established for a broad class of projects by legislation of general applicability or imposed on a specific project on an ad hoc basis, that is charged by a local agency to the applicant in connection with approval of a development project for the purpose of defraying all or a portion of the cost of public facilities related to the development project, and, for purposes of this Agreement only, includes fees collected under development agreements adopted pursuant to Article 2.5 of the Government Code (commencing with Section 65864) of Chapter 4, For purposes of this Agreement only, "Development Impact Fee" shall not include processing fees and charges imposed by CITY to cover the estimated actual costs to CITY of processing applications for Development Approvals or for monitoring compliance with any Development Approvals granted or issued, including, without limitation, fees for zoning variances; zoning changes; use permits; building inspections; building permits; filing and processing applications and petitions filed with the local agency formation commission or conducting preliminary proceedings or proceedings under the Cortese-Knox-Hertzberg Local Government Reorganization Act of 2000, Division 3 (commencing with Section 56000) of Title 5 of the Government Code; the processing of maps under the provisions of the Subdivision

Map Act, Division 2 (commencing with Section 66410) of Title 7 of the Government Code; or planning services under the authority of Chapter 3 (commencing with Section 65100) of Division 1 of Title 7 of the Government Code, fees and charges as described in Sections 51287, 56383, 57004, 65104, 65456, 65863.7, 65909.5, 66013, 66014, and 66451.2 of the Government Code, Sections 17951, 19132.3, and 19852 of the Health and Safety Code, Section 41901 of the Public Resources Code, and Section 21671.5 of the Public Utilities Code, as such codes may be amended or superceded, including by amendment or replacement.

1.1.8 "Development Plan" means the Existing Development Approvals and the Existing Land Use Regulations applicable to development of the Property.

1.1.9 "Effective Date" means the date that the ordinance approving this Agreement goes into effect.

1.1.10 "Existing Development Approvals" means all Development Approvals approved or issued prior to the Effective Date. Existing Development Approvals includes the Approvals incorporated herein as Exhibit "C" and all other Approvals which are a matter of public record on the Effective Date.

1.1.11 "Existing Land Use Regulations" means all Land Use Regulations in effect on the Effective Date. Existing Land Use Regulations includes the Regulations incorporated herein as Exhibit "D" and all other Land Use Regulations that are in effect and a matter of public record on the Effective Date.

1.1.12 "General Plan" means the General Plan adopted on August 16, 2022.

1.1.13 "Improvement" or "Improvements" means those public improvements required to support the development of the Project as described in the Tract Map conditions for Tract No. 20730 as further described in Exhibit "F" (the "Infrastructure Improvements Exhibit").

1.1.14 "Land Use Regulations" means all ordinances, resolutions, codes, rules, regulations and official policies of CITY governing the development and use of land, including, without limitation, the permitted use of land, the density or intensity of use, subdivision requirements, timing and phasing of development, the maximum height and size of buildings, the provisions for reservation or dedication of land for public purposes, and the design, improvement and construction standards and specifications applicable to the development of the Property. "Land Use Regulations" does not include any CITY ordinance, resolution, code, rule, regulation or official policy, governing:

(a) the conduct of businesses, professions, and occupations;

(b) taxes and assessments;

(c) the control and abatement of nuisances;

(d) the granting of encroachment permits and the conveyance of similar rights and interests that provide for the use of or the entry upon public property;

(e) the exercise of the power of eminent domain.

1.1.15 "Mortgagee" means a mortgagee of a mortgage, a beneficiary under a deed of trust or any other security-device lender, and their successors and assigns.

1.1.16 "Net MDD" means net maximum daily water demand.

1.1.17 "NMC Builders" means the consortium of investors and developers responsible for the construction of infrastructure within the New Model Colony incorporated as NMC Builders, LLC.

1.1.18 "Model Units" means a maximum of 2 buildings comprising a total of 12 model units, private common recreation facilities and sales facilities constructed by OWNER prior to the construction of any Production units and not offered for sale and occupancy for a period of time after the issuance of permits for Production Units.

1.1.19 "OWNER" means the persons and entities listed as owner on page 1 of this Agreement and their permitted successors in interest to all or any part of the Property.

1.1.20 "Production Unit(s)" means all units constructed for sale and occupancy by OWNER and excludes the specified number of Model Units constructed by OWNER for promotion of sales.

1.1.21 "Project" means the development of the Property contemplated by the Development Plan, as such Plan may be further defined, enhanced or modified pursuant to the provisions of this Agreement.

1.1.22 "Property" means the real property described on Exhibit "A" and shown on Exhibit "B" to this Agreement.

1.1.23 "Reservations of Authority" means the rights and authority excepted from the assurances and rights provided to OWNER under this Agreement and reserved to CITY under Section 3.6 of this Agreement.

1.1.24 "Specific Plan" means that certain specific plan adopted by the City Council, and entitled, "Esperanza Specific Plan."

1.1.25 "Storm Water Treatment Capacity Availability" means a designated portion of the total Storm Water Treatment Capacity Availability made available through the completion of construction of a Phase of regional storm water treatment facilities by the NMC Builders LLC as described in the Construction Agreement Amendment. The amount, in acres, of Storm Water Treatment Capacity Availability required for the issuance of a grading permit shall be based upon the factors and assumptions listed in the Construction Agreement Amendment.

1.1.26 "Subsequent Development Approvals" means all Development Approvals required subsequent to the Effective Date in connection with development of the Property.

1.1.27 "Subsequent Land Use Regulations" means any Land Use Regulations adopted and effective after the Effective Date of this Agreement.

1.1.28 "Water Availability Equivalent (WAE)" means a designated portion of the total Net MDD made available through the construction of each Phase described in the Water Phasing Plan of the Construction Agreement. The number of Water Availability Equivalents (of portions thereof) required for the issuance of each building permit shall be based upon water demand factors and assumptions listed in the Construction Agreement and Construction Agreement Amendment as "Water Availability Equivalents by Land Use" for each land use category.

1.2 Exhibits. The following documents are attached to, and by this reference made a part of, this Agreement:

Exhibit "A" — Legal Description of the Property.

Exhibit "B" — Map showing Property and its location.

Exhibit "C" — Existing Development Approvals.

Exhibit "D" — Existing Land Use Regulations.

Exhibit "E" — Description of Required Infrastructure Improvements

Exhibit "F" — Depiction of Required Infrastructure Improvements Exhibit

Exhibit "G" - Form of Plume Disclosure Letter

2. GENERAL PROVISIONS.

2.1 Binding Effect of Agreement. The Property is hereby made subject to this Agreement. Development of the Property is hereby authorized and shall be carried out only in accordance with the terms of this Agreement.

2.2 Ownership of Property. OWNER represents and covenants that it is the owner of the fee simple title to the Property or a portion thereof, or has the right to acquire fee simple title to the Property or a portion thereof from the current owner(s) thereof. To the extent OWNER does not own fee simple title to the Property, OWNER shall obtain written consent from the current fee owner of the Property agreeing to the terms of this Agreement and the recordation thereof.

2.3 Term. The term of this Agreement shall commence on the Effective Date and shall continue for an initial term of ten (10) years thereafter unless this term is modified or extended pursuant to the provisions of this Agreement. The term of this

Agreement may be extended for an additional five (5) years following expiration of the initial ten (10) year term, provided the following have occurred:

(a) OWNER provides at least 180 days written notice to CITY prior to expiration of the initial term; and

(b) In non-mixed use and residential use only projects, the OWNER shall have obtained, as applicable, building permits for at least seventy percent (70%) of the actual number of residential units permitted under this Agreement; and

(c) OWNER is not then in uncured default of this Agreement.

2.4 Assignment.

2.4.1 Right to Assign. OWNER shall have the right to sell, transfer or assign the Property in whole or in part (provided that no such partial transfer shall violate the Subdivision Map Act, Government Code Section 66410, et seq.), to any person, partnership, limited liability company, joint venture, firm or corporation at any time during the term of this Agreement; provided, however, that any such sale, transfer or assignment shall include the assignment and assumption of the rights, duties and obligations arising under or from this Agreement and be made in strict compliance with the following:

(a) No sale, transfer or assignment of any right or interest under this Agreement shall be made unless made together with the sale, transfer or assignment of all or a part of the Property. OWNER may be required to provide disclosure that the Property is within the South Archibald Trichloroethylene (TCE) Plume. OWNER may wish to provide the attached Disclosure Letter (Exhibit G) as part of the Real Estate Transfer Disclosure requirements under California Civil Code Section 1102 et seq.

(b) Concurrent with any such sale, transfer or assignment, or within fifteen (15) business days thereafter, OWNER shall notify CITY's City Manager, in writing, of such sale, transfer or assignment and shall provide CITY with: (1) an executed agreement, in a form reasonably acceptable to CITY, by the purchaser, transferee or assignee and providing therein that the purchaser, transferee or assignee expressly and unconditionally assumes all the duties and obligations of OWNER under this Agreement with respect to the portion of the Property so sold, transferred or assigned; and (2) the payment of the applicable processing charge to cover the CITY's review and consideration of such sale, transfer or assignment.

(c) Any sale, transfer or assignment not made in strict compliance with the foregoing conditions shall constitute a default by OWNER under this Agreement. Notwithstanding the failure of any purchaser, transferee or assignee to execute the agreement required by Paragraph (b) of this Subsection 2.4.1, the burdens of this Agreement shall be binding upon such purchaser, transferee or assignee, but the benefits of this Agreement shall not inure to such purchaser, transferee or assignee until and unless such agreement is executed. The City Manager shall have the authority to

review, consider and either approve, conditionally approve, or deny any proposed sale, transfer or assignment that is not made in compliance with this section 2.4.

2.4.2 Release of Transferring Owner. Notwithstanding any sale, transfer or assignment, a transferring OWNER shall continue to be obligated under this Agreement unless such transferring owner is given a release in writing by CITY, which release shall be provided by CITY upon the full satisfaction by such transferring owner of the following conditions:

(a) OWNER no longer has a legal or equitable interest in all or any part of the portion of the Property sold, transferred or assigned.

(b) OWNER is not then in default under this Agreement.

(c) OWNER has provided CITY with the notice and executed agreement required under Paragraph (b) of Subsection 2.4.1 above.

(d) The purchaser, transferee or assignee provides CITY with security equivalent to any security previously provided by OWNER to secure performance of its obligations hereunder.

2.4.3 Effect of Assignment and Release of Obligations. In the event of a sale, transfer or assignment pursuant to the provisions of Section 2.4.2 above:

(a) The assignee shall be liable for the performance of all obligations of OWNER with respect to transferred property, but shall have no obligations with respect to the portions of the Property, if any, not transferred (the "Retained Property").

(b) The owner of the Retained Property shall be liable for the performance of all obligations of OWNER with respect to Retained Property, but shall have no further obligations with respect to the transferred property.

(c) The assignee's exercise, use and enjoyment of the Property or portion thereof shall be subject to the terms of this Agreement to the same extent as if the assignee were the OWNER.

2.4.4 Subsequent Assignment. Any subsequent sale, transfer or assignment after an initial sale, transfer or assignment shall be made only in accordance with and subject to the terms and conditions of this Section 2.4.

2.4.5 Termination of Agreement with Respect to Individual Lots Upon Sale to Public and Completion of Construction. The provisions of Subsection 2.4.1 shall not apply to the sale or lease (for a period longer than one year) of any lot which has been finally subdivided and is individually (and not in "bulk") sold or leased to a member of the public or other ultimate user. Notwithstanding any other provisions of this Agreement, this Agreement shall terminate with respect to any lot and such lot shall be released and no longer be subject to this Agreement without the execution or recordation of any further document upon satisfaction of both of the following conditions:

(a) The lot has been finally subdivided and individually (and not in "bulk") sold or leased (for a period longer than one year) to a member of the public or other ultimate user; and,

(b) A certificate of occupancy has been issued for a building on the lot, and the fees set forth under Section 4 of this Agreement have been paid.

2.4.6 Partial Assignment and Assumption. CITY and OWNER agree OWNER may partially assign its obligations and rights under this Agreement, and all amendments hereto, to a purchaser, transferee or assignee of a lot, which has been subdivided subject to provisions of a partial assignment and assumption agreement in a form approved by CITY. Any such complete and executed partial assignment and assumption of this Agreement shall be submitted to CITY for approval pursuant to Section 2.4.1 of this Agreement. CITY shall review, and if the above conditions, including but not limited to, those conditions in Section 2.4.2, are satisfied, CITY may approve the partial assignment and release and notify the purchaser, transferee or assignee in writing thereof. No such release approved pursuant to this Subsection 2.4.6 shall cause, or otherwise affect, a release of OWNER from the duties and obligations under this Agreement that are retained by OWNER and excluded from the transfer or assignment.

2.5 Amendment or Cancellation of Agreement. This Agreement may be amended or cancelled in whole or in part only in the manner provided for in Government Code Section 65868.1. Any amendment of this Agreement, which amendment has been requested by OWNER, shall be considered by the CITY only upon the payment of the applicable processing charge. This provision shall not limit any remedy of CITY or OWNER as provided by this Agreement. Either Party or successor in interest, may propose an amendment to or cancellation, in whole or in part, of this Agreement. Any amendment or cancellation shall be by mutual consent of the parties or their successors in interest except as provided otherwise in this Agreement or in Government Code Section 65865.1. For purposes of this section, the term "successor in interest" shall mean any person having a legal or equitable interest in the whole of the Property, or any portion thereof as to which such person wishes to amend or cancel this Agreement. The procedure for proposing and adopting an amendment to, or cancellation of, in whole or in part, this Agreement shall be the same as the procedure for adopting and entering into this Agreement in the first instance. Notwithstanding the foregoing sentence, if the CITY initiates the proposed amendment to, or cancellation of, in whole or in part, this Agreement, CITY shall first give notice to the OWNER of its intention to initiate such proceedings at least sixty (60) days in advance of the giving the public notice of intention to consider the amendment or cancellation.

2.5.1 Amendment to Reflect Consistency With Future Amendments to the Construction Agreement. To the extent any future amendment to the Construction Agreement provides for modifications to rights or obligations that differ from or alter the same or similar rights or obligations contained in this Development Agreement, OWNER reserves the right to request an amendment to the Development Agreement to reflect any or all of such modifications.

2.5.2 Minor Modification. Upon the written application of OWNER, minor modifications and changes to the Development Plan including modifications to building design or footprint (not affecting minimum setbacks), parking layout and design, and landscape area design may be approved by the Director of the Planning Department without the need to amend this Development Agreement. Other changes in the Development Plan shall be processed pursuant to the City Zoning Ordinance. It is also contemplated by CITY and OWNER that OWNER may, from time to time, seek amendments to one or more of the Development Approvals. Any such amendments are contemplated by CITY and OWNER as being within the scope of this Agreement as long as they are consistent with the Land Use Regulations and shall, upon approval by CITY, continue to constitute the Development Approvals as referenced herein. The parties agree that any such modifications or amendments shall not constitute an amendment to this Agreement nor require an amendment to this Agreement.

2.6 Termination. This Agreement shall be deemed terminated and of no further effect upon the occurrence of any of the following events:

(a) Expiration of the stated term of this Agreement as set forth in Section 2.3.

(b) Entry of a final judgment setting aside, voiding or annulling the adoption of the ordinance approving this Agreement.

(c) The adoption of a referendum measure overriding or repealing the ordinance approving this Agreement.

(d) Completion of the Project in accordance with the terms of this Agreement including issuance of all required occupancy permits and acceptance by CITY or applicable public agency of all required dedications.

Termination of this Agreement shall not constitute termination of any other land use entitlements approved for the Property. Upon the termination of this Agreement, no party shall have any further right or obligation hereunder except with respect to any obligation to have been performed prior to such termination or with respect to any default in the performance of the provisions of this Agreement which has occurred prior to such termination or with respect to any obligations which are specifically set forth as surviving this Agreement. Upon such termination, any public facilities and services mitigation fees paid pursuant to Section 4.2 of this Agreement by OWNER to CITY for residential units on which construction has not yet begun shall be refunded to OWNER by CITY.

2.7 Notices.

(a) As used in this Agreement, “notice” includes, but is not limited to, the communication of notice, request, demand, approval, statement, report, acceptance, consent, waiver, appointment or other communication required or permitted hereunder.

(b) All notices shall be in writing and shall be considered given either: (i) when delivered in person, including, without limitation, by courier, to the recipient named below; or (ii) on the date of delivery shown on the return receipt, after deposit in the United States mail in a sealed envelope as either registered or certified mail with return receipt requested, and postage and postal charges prepaid, and addressed to the recipient named below. All notices shall be addressed as follows:

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

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

If to OWNER:
Dave Waters, Vice President
GDC Investments 13, L.P.
12770 El Camino Real, Suite 220
San Diego, CA 92130

with a copy to:
Dennis Moser, President
Moser Ventures Inc.
45478 Blackfoot Way
Indian Wells, CA 92210

(c) Either party may, by notice given at any time, require subsequent notices to be given to another person or entity, whether a party or an officer or representative of a party, or to a different address, or both. Notices given before actual receipt of notice of change shall not be invalidated by the change.

3. DEVELOPMENT OF THE PROPERTY.

3.1 Rights to Develop. Subject to the terms of this Agreement including the Reservations of Authority, OWNER shall have a vested right to develop the Property in accordance with, and to the extent of, the Development Plan. The Project shall remain subject to all Subsequent Development Approvals required to complete the Project as contemplated by the Development Plan. Except as otherwise provided in this Agreement, the permitted uses of the Property, the density and intensity of use, the maximum height and size of proposed buildings, and provisions for reservation and dedication of land for public purposes shall be those set forth in the Development Plan.

3.2 Effect of Agreement on Land Use Regulations. Except as otherwise provided under the terms of this Agreement including the Reservations of Authority, the rules, regulations and official policies governing permitted uses of the Property, the density and intensity of use of the Property, the maximum height and size of proposed buildings, and the design, improvement and construction standards and specifications applicable to development of the Property shall be the Existing Land Use Regulations. In connection with any Subsequent Development Approval, CITY shall exercise discretion in accordance with the same manner as it exercises its discretion under its police powers, including the Reservations of Authority set forth herein; provided

however, that such discretion shall not prevent development of the Property for the uses and to the density or intensity of development set forth in this Agreement.

3.3 Timing of Development. The parties acknowledge that OWNER cannot at this time predict when or the rate at which phases of the Property will be developed. Such decisions depend upon numerous factors which are not within the control of OWNER, such as market orientation and demand, interest rates, absorption, completion and other similar factors. Since the California Supreme Court held in Pardee Construction Co. v. City of Camarillo (1984) 37 Ca1. 3d 465, that the failure of the parties therein to provide for the timing of development resulted in a later adopted initiative restricting the timing of development to prevail over such parties' agreement, it is the parties' intent to cure that deficiency by acknowledging and providing that OWNER shall have the right to develop the Property in such order and at such rate and at such times as OWNER deems appropriate within the exercise of its subjective business judgment.

3.4 Requirement for Public Infrastructure Improvements. Development of the Property is contingent in part on the phasing of area-wide infrastructure improvements over which the OWNER has control. The issuance of building permits by CITY for Model Units and Production Units is, in general, contingent on OWNER's completion of needed infrastructure improvements and the availability of improvements and services to serve the Property.

3.4.1 Attached hereto as Exhibits "E" and "F" are a description and depiction, respectively, of the improvements needed for development of the Property. In the event of any discrepancy between Exhibit E and Exhibit F, Exhibit F shall control.

3.4.2 Subject to the prior submittal by OWNER and approval by CITY of a plan to provide sufficient public infrastructure for the construction of a maximum number of 2 buildings comprising a total of (12) Model Units, private common recreation facilities and sales facilities. CITY may issue a maximum of (5) building permits for Model Units, private common recreation facilities and sales facilities. The plan to be submitted by OWNER for CITY approval shall describe the utilities and other infrastructure necessary to provide sufficient fire protection and other public health and safety requirements for the Model Units and other facilities.

3.5 Changes and Amendments. The parties acknowledge that refinement and further development of the Project will require Subsequent Development Approvals and may demonstrate that changes are appropriate and mutually desirable in the Existing Development Approvals. In the event OWNER finds that a change in the Existing Development Approvals is necessary or appropriate, OWNER shall apply for a Subsequent Development Approval to effectuate such change and CITY shall process and act on such application in accordance with the Existing Land Use Regulations, except as otherwise provided by this Agreement including the Reservations of Authority. If approved, any such change in the Existing Development Approvals shall be

incorporated herein as an addendum to Exhibit "C", and may be further changed from time to time as provided in this Section. Unless otherwise required by law, as determined in CITY's reasonable discretion, a change to the Existing Development Approvals shall be deemed "minor" and not require an amendment to this Agreement provided such change does not:

(a) Alter the permitted uses of the Property as a whole; or,

(b) Increase the density or intensity of use of the Property as a whole; or,

(c) Increase the maximum height and size of permitted buildings; or,

(d) Delete a requirement for the reservation or dedication of land for public purposes within the Property as a whole; or,

(e) Constitute a project requiring a subsequent or supplemental environmental impact report pursuant to Section 21166 of the Public Resources Code.

3.6 Reservations of Authority.

3.6.1 Limitations, Reservations and Exceptions. Notwithstanding any other provision of this Agreement, the CITY shall not be prevented from applying new rules, regulations and policies upon the OWNER, nor shall a development agreement prevent the CITY from denying or conditionally approving any subsequent development project application on the basis of such new rules, regulations and policies where the new rules, regulations and policies consist of the following:

(a) Processing fees by CITY to cover costs of processing applications for development approvals or for monitoring compliance with any development approvals;

(b) Procedural regulations relating to hearing bodies, petitions, applications, notices, findings, records and any other matter of procedure;

(c) Regulations, policies and rules governing engineering and construction standards and specifications applicable to public and private improvements, including all uniform codes adopted by the CITY and any local amendments to those codes adopted by the CITY; provided however that, OWNER shall have a vested right to develop the Property in accordance with, and to the extent of, the standards and specifications that are expressly identified in the Specific Plan;

(d) Regulations that may conflict with this Agreement and the Development Plan but that are reasonably necessary to protect the residents of the project and/or of the immediate community from a condition perilous to their health or safety;

(e) Regulations that do not conflict with those rules, regulations and policies set forth in this Agreement or the Development Plan;

(f) Regulations that may conflict but to which the OWNER consents.

3.6.2 Subsequent Development Approvals. This Agreement shall not prevent CITY, in acting on Subsequent Development Approvals, from applying Subsequent Land Use Regulations that do not conflict with the Development Plan, nor shall this Agreement prevent CITY from denying or conditionally approving any Subsequent Development Approval on the basis of the Existing Land Use Regulations or any Subsequent Land Use Regulation not in conflict with the Development Plan.

3.6.3 Modification or Suspension by State or Federal Law. In the event that State or Federal laws or regulations, enacted after the Effective Date of this Agreement, prevent or preclude compliance with one or more of the provisions of this Agreement, such provisions of this Agreement shall be modified or suspended as may be necessary to comply with such State or Federal laws or regulations, provided, however, that this Agreement shall remain in full force and effect to the extent it is not inconsistent with such laws or regulations and to the extent such laws or regulations do not render such remaining provisions impractical to enforce. In the event OWNER alleges that such State or Federal laws or regulations preclude or prevent compliance with one or more provisions of this Agreement, and the CITY does not agree, the OWNER may, at its sole cost and expense, seek declaratory relief (or other similar non-monetary remedies); provided however, that nothing contained in this Section 3.6.3 shall impose on CITY any monetary liability for contesting such declaratory relief (or other similar non-monetary relief).

3.6.4 Intent. The parties acknowledge and agree that CITY is restricted in its authority to limit its police power by contract and that the foregoing limitations, reservations and exceptions are intended to reserve to CITY all of its police power which cannot be so limited. This Agreement shall be construed, contrary to its stated terms if necessary, to reserve to CITY all such power and authority which cannot be restricted by contract.

3.7 Public Works; Utilities. If OWNER is required by this Agreement to construct any public works facilities which will be dedicated to CITY or any other public agency upon completion, and if required by applicable laws to do so, OWNER shall perform such work in the same manner and subject to the same requirements as would be applicable to CITY or such other public agency should it have undertaken such construction. As a condition of development approval, OWNER shall connect the

Project to all utilities necessary to provide adequate water, recycled water, sewer, gas, electric, and other utility service to the Project. As a further condition of development approval, OWNER shall contract with the CITY for CITY-owned or operated utilities for this purpose, for such price and on such terms as may be available to similarly situated customers in the CITY.

(INSERT Specific Infrastructure Development Requirements)

3.7.1 OWNER agrees that development of the Property shall require the construction of water and recycled water improvements as described in Exhibit E and depicted in Exhibit F. OWNER agrees that no building permits shall be issued by CITY for Production Units prior to completion of the water and recycled water improvements as described in Exhibit E and depicted in Exhibit F. OWNER also agrees that recycled water shall be available and utilized by OWNER for all construction-related water uses including prior to, and during, any grading of the Property.

3.7.2 OWNER agrees that development of the Property shall require the construction of sewer improvements, as described in the attached Exhibit E and depicted in Exhibit F. OWNER agrees that no building permits shall be issued by CITY for Production Units prior to completion of the sewer improvements, as described in Exhibit E and depicted in Exhibit F.

3.7.3OWNER agrees that development of the Property shall require the extension of fiber optic communications improvements as described in the attached Exhibit E and depicted in Exhibit F. OWNER agrees that no building permits shall be issued by CITY for Production Units prior to completion of the fiber optic communication improvements, as described in Exhibit E and depicted in Exhibit F.

3.8 Acquisition of Offsite Provision of Real Property Interests. In any instance where OWNER is required by any Development Approval or Land Use Regulation and the Construction Agreement to construct any public improvement on land not owned by OWNER ("Offsite Improvements"), the CITY and OWNER shall cooperate in acquiring the necessary legal interest ("Offsite Property") in accordance with the procedures set forth in Section 2.4 of the Construction Agreement. This section 3.8 is not intended by the parties to impose upon the OWNER an enforceable duty to acquire land or construct any public improvements on land not owned by OWNER, except to the extent that the OWNER elects to proceed with the development of the Project, and then only in accordance with valid conditions imposed by the CITY upon the development of the Project under the Subdivision Map Act or other legal authority.

3.8.1 CITY Acquisition of Non-Construction Agreement Offsite Property. In the event OWNER is required to construct any public improvements on land not owned by OWNER, but such requirement is not based upon the Construction Agreement, Sections 3.8.1 and 3.8.2 shall control the acquisition of the necessary property interest(s) ("Non-Construction Agreement Offsite Property").

If the OWNER is unable to acquire such Non-Construction Agreement Offsite Property, and following the written request from the OWNER to CITY, CITY agrees to use reasonable and diligent good faith efforts to acquire the Non-Construction Agreement Offsite Property from the owner or owners of record by negotiation to the extent permitted by law and consistent with this Agreement. If CITY is unable to acquire the Non-Construction Agreement Offsite Property by negotiation within thirty (30) days after OWNER'S written request, CITY shall, initiate proceedings utilizing its power of eminent domain to acquire that Non-Construction Agreement Subject Property at a public hearing noticed and conducted in accordance with California Code of Civil Procedure Section 1245.235 for the purpose of considering the adoption of a resolution of necessity concerning the Non-Construction Agreement Offsite Property, subject to the conditions set forth in this Section 3.8. The CITY and OWNER acknowledge that the timelines set forth in this Section 3.8.1 represent the maximum time periods which CITY and OWNER reasonably believe will be necessary to complete the acquisition of any Non-Construction Agreement Offsite Property. CITY agrees to use reasonable good faith efforts to complete the actions described within lesser time periods, to the extent that it is reasonably able to do so, consistent with the legal constraints imposed upon CITY.

3.8.2 Owner's Option to Terminate Proceedings. CITY shall provide written notice to OWNER no later than fifteen (15) days prior to making an offer to the owner of the Non-Construction Agreement Offsite Property. At any time within that fifteen (15) day period, OWNER may, at its option, notify CITY that it wants CITY to cease all acquisition proceedings with respect to that Non-Construction Agreement Offsite Property, whereupon CITY shall cease such proceedings. CITY shall provide written notice to OWNER no later than fifteen (15) days prior to the date of the hearing on CITY'S intent to consider the adoption of a resolution of necessity as to any Non-Construction Agreement Offsite Property. At any time within that fifteen (15) day period, OWNER may, at its option, notify CITY that it wants CITY to cease condemnation proceedings, whereupon CITY shall cease such proceedings. If OWNER does not notify CITY to cease condemnation proceedings within said fifteen (15) day period, then the CITY may proceed to consider and act upon the Non-Construction Agreement Offsite Property resolution of necessity. If CITY adopts such resolution of necessity, then CITY shall diligently institute condemnation proceedings and file a complaint in condemnation and seek an order of immediate possession with respect to the Non-Construction Agreement Offsite Property.

3.9 Regulation by Other Public Agencies. It is acknowledged by the parties that other public agencies not within the control of CITY possess authority to regulate aspects of the development of the Property separately from or jointly with CITY and this Agreement does not limit the authority of such other public agencies. CITY agrees to cooperate fully, at no cost to CITY, with OWNER in obtaining any required permits or compliance with the regulations of other public agencies provided such cooperation is not in conflict with any laws, regulations or policies of the CITY.

3.10 Tentative Tract Maps; Extension. With respect to applications by OWNER for tentative subdivision maps for portions of the Property, CITY agrees that OWNER may file and process tentative maps in accordance with Chapter 4.5 (commencing with Section 66498.1) of Division 2 of Title 7 of the California Government Code and the applicable provisions of CITY's subdivision ordinance, as the same may be amended from time to time. In accordance with the provisions of Section 66452.6 of the Government Code, each tentative subdivision map or tentative parcel map, heretofore or hereafter approved in connection with development of the Property, shall be deemed to have been granted an extension of time to and until the date that is five (5) years following the Effective Date of this Agreement.; The CITY's City Council may, in its discretion, extend any such map for an additional period of up to five (5) years beyond its original term, so long as the subdivider files a written request for an extension with the City prior to the expiration of the initial five (5) year term.

4. PUBLIC BENEFITS.

4.1 Intent. The parties acknowledge and agree that development of the Property will result in substantial public needs that will not be fully met by the Development Plan and further acknowledge and agree that this Agreement confers substantial private benefits on OWNER that should be balanced by commensurate public benefits. Accordingly, the parties intend to provide consideration to the public to balance the private benefits conferred on OWNER by providing more fully for the satisfaction of the public needs resulting from the Project.

4.2 Development Impact Fees.

4.2.1 Amount of Development Impact Fee. Development Impact Fees (DIF) shall be paid by OWNER. The Development Impact Fee amounts to be paid by OWNER shall be the amounts that are in effect at the time such amounts are due. Nothing contained in this Agreement shall affect the ability of the CITY to impose new Development Impact Fees or amend the amounts of existing Development Impact Fees. Additionally, nothing contained in this Agreement shall affect the ability of other public agencies that are not controlled by CITY to impose and amend, from time to time, Development Impact Fees established or imposed by such other public agencies, even though such Development Impact Fees may be collected by CITY.

4.2.2 Time of Payment. The Development Impact Fees required pursuant to Subsection 4.2.1 shall be paid to CITY prior to the issuance of building permit for each applicable residential or other unit, except for the Open Space and Habitat Acquisition Development Impact fee, which shall be paid by OWNER to CITY prior to the issuance of a grading permit. Deferrals of the payment of Development Impact Fees may be granted pursuant to a separate agreement approved by City pursuant to City policy. Any existing Development Impact Fee (DIF) credits held by the Owner or any affiliated entity shall be applied toward the payment of DIFs as required under Subsection 4.2.1

4.2.3 Parkland and Quimby Act Fees. Pursuant to the General Plan (Ontario Plan) Goal PR1, Policy PR1-5 (achievement of a park standard of 5 acres of parkland per 1,000 residents) OWNER shall provide improved parks, developed in accordance with the City's park standards in an amount equal to two (2) acres per 1,000 of projected population without credit, reimbursement, offset or consideration from City. Such areas shall either be dedicated to the City or transferred to a homeowners' association. If approved by the City Manager, OWNER may satisfy this requirement through the development of non-public recreation facilities such as private recreational clubhouses or pool facilities. Credit for such private recreational facilities areas shall be limited to a maximum of 50% of the foregoing park development requirement. If OWNER's Project does not provide dedicated and developed park acreage equal to two (2) acres per 1,000 projected population, OWNER shall pay a fee in-lieu equal to the per acre estimated costs of acquisition and development of parkland in the City's Development Impact Fee for the calculated park acreage deficiency. Such in-lieu fee shall be due and payable prior to the issuance of the first building permit for Production Units issued to OWNER. Any park dedication and/or improvements in excess of such two (2) acres per thousand standard, provided such park has been developed in accordance with the City's park standards and is open to the public generally, shall entitle OWNER to a credit toward its obligations under the Quimby Act (Gov. Code, § 64477) and the City's implementing ordinance and/or resolution (collectively "**Quimby Act Obligations**"), and to the extent OWNER's Quimby Act Obligations are satisfied, OWNER shall be entitled to have the City acquire such developed and publicly available parks as Non-Program Interests in accordance with Section 4.3.3 below. **(Other provisions will be added that are Project-specific, if applicable).**

4.3 Responsibility for Construction of Public Improvements.

4.3.1 Timely Construction of Public Infrastructure. The phasing of the areawide infrastructure construction within Ontario Ranch will be as approved by the CITY. OWNER shall be responsible for the timely construction and completion of all public infrastructure required for the Project as shown on the attached Exhibit "F" and any and all tentative tract map conditions. Unless otherwise specified in the Subdivision Agreement/Tract Map conditions, all other required Improvements for each Tract Map, shall be completed and operational prior to, and as a condition precedent to, OWNER requesting and CITY's granting of the first building permit for Production Units for each such Tract Map. All Infrastructure and Improvements shall be completed as required by the Subdivision Agreement/Tract Map conditions for Tract No. 20730.

4.3.2 Construction of DIF Program Infrastructure (Construction Agreement). To the extent OWNER is required to construct and completes construction of public improvements that are included in CITY's Development Impact Fee Program and the Construction Agreement between CITY and NMC Builders LLC, CITY agrees that CITY shall issue DIF Credit in accordance with the provisions of the Construction Agreement and any amendments thereto. Use of DIF Credit issued

to OWNER as a member of NMC Builders LLC to offset OWNER's DIF payment obligations shall also be subject to the provisions of the Construction Agreement and any amendments thereto.

4.3.3 Construction of DIF Program Infrastructure (Non-Construction Agreement). To the extent OWNER is required to construct and completes construction of public improvements that are included in CITY's Development Impact Fee Program and such public improvements are not included the Construction Agreement between CITY and NMC Builders LLC, CITY agrees that CITY shall issue DIF Credit in accordance with the provisions of a separate Fee Credit Agreement between CITY and OWNER. Limitation on the use of DIF Credit issued to OWNER to offset OWNER's DIF payment obligations shall also be subject to the provisions of a separate Fee Credit Agreement. CITY and OWNER agree that the Fee Credit Agreement between CITY and OWNER shall comply with CITY's adopted policies applicable to such agreements.

4.4 Affordable Housing Requirement.

4.4.1 Affordable Housing- Number of Units. OWNER shall provide a minimum number of affordable housing units, equivalent to 10% of the OWNER's total approved residential units within the Project, that are affordable to very low, low- and moderate-income households. Such requirement for affordable housing shall be met through one, or a combination of one or more, of the options provided in the following Sections 4.4.2.1 through 4.4.2.5. For the purposes of this Section, any term not defined in this Agreement shall be as defined by California Community Redevelopment Law (California Health and Safety Code Section 33000 et seq.).

4.4.2 Affordability Spread. Of the total number of residential dwelling units specified in Section 4.4.1, to be constructed or rehabilitated pursuant to Sections 4.4.2.1 or 4.4.2.2 respectively, thirty percent (30%) shall be available to very low income, thirty percent (30%) shall be available to low income and forty percent (40%) shall be available to moderate income households. "**Households**" shall be as defined by California Health and Safety Code Section 50053.

4.4.2.1 New Construction. If OWNER elects to fully or partially satisfy the affordable housing requirement by the construction of new residential units, it shall construct and restrict the affordability of residential dwelling units within its Project or, at OWNER's option and with the approval of the City, within another project elsewhere within the City. The affordable units constructed shall be intermingled with other units as part of the Project, and shall be built to the same construction, design and aesthetic standards, as well as number of rooms, as other units constructed as part of that OWNER's Project. In addition, the percentage ratio of affordable units offered for sale versus those offered for rent shall equal the percentage ratio of other units offered for sale versus for rent within OWNER's Project.

Such construction shall be completed no later than the date that is five (5) years following the issuance of the first building permit for OWNER's Project; provided however that to the extent OWNER has not constructed the required percentage of units, based on the number of building permits for non-restricted units, OWNER shall, prior to the issuance of such building permits, provide security (in the form and substance approved by the City Manager and City Attorney) to City in order to ensure the faithful completion of such required percentage of construction of affordable units. If OWNER elects the option of constructing new affordable units, a detailed Affordable Housing Agreement specifying terms for the allowable monthly housing costs or rents (as applicable) and maintenance and occupancy standards shall be prepared, executed and recorded against such units as a condition to the issuance of a building permit. The Affordable Housing Agreement shall hold a recorded priority position senior to any other non-statutory lien or encumbrance affecting the unit.

4.4.2.2 Rehabilitation. If OWNER elects to fully or partially satisfy the affordable housing requirement by the substantial rehabilitation of existing residential units in the City, it shall substantially rehabilitate and restrict the affordability of, the number of residential units specified in Section 4.4.1, provided that such units shall be provided elsewhere within the City. The rehabilitation work shall be substantial and of high quality and shall also address any deferred property maintenance issues on the property. "**Substantial rehabilitation**" shall mean rehabilitated multi-family rented dwelling units with three or more units and the value of the rehabilitation constitutes 25 percent of the after rehabilitation value of the dwelling, inclusive of land value pursuant to Health and Safety Code Section 33413(b)(2)(A)(iii-iv) as such section exists as of the Effective Date of this Agreement. If OWNER chooses the option of rehabilitation of existing housing units within the City, a detailed Affordable Housing Agreement specifying the terms for the allowable month housing costs or rents (as applicable) and maintenance and occupancy standards shall be prepared, executed and recorded against such units as a condition to the issuance of a building permit. Such rehabilitation shall be completed no later than the date that is five (5) years following the issuance of the first building permit for OWNER's Project; provided however that to the extent OWNER has not rehabilitated the required percentage of units, based on the number of building permits, OWNER shall, prior to the issuance of such building permits, provide security (in the form and substance approved by the City Manager and City Attorney) to the City in order to ensure the faithful completion of such required percentage of rehabilitation.

4.4.2.3 In-Lieu Fee. If OWNER has not fully complied with the requirements of Section 4.4.1 by providing the minimum number of affordable units through the construction of new affordable units or by the substantial rehabilitation of existing units, shall pay an "**Affordability In-Lieu Fee**". If OWNER has not provided any affordable residential units by

construction or rehabilitation, the Affordability In-Lieu fee shall be equal to Three Dollars Forty-Six Cents ($3.46) per square foot of residential development within OWNER's Project or, if pre-paid as set forth below, Three Dollars and Four Cents ($3.04) per square foot of residential development within OWNER's Project. If OWNER has partially complied with the requirements of Section 4.4.1 by construction or rehabilitation of less than the minimum number of units, then the Affordability In-lieu Fee shall be recalculated and reduced in consideration of the number and type of affordable units provided. The Affordability In-Lieu Fee shall be paid by OWNER to City no later than prior to the issuance of each building permit within OWNER's Project based on the square footage of the residential unit for which such building permit is sought; provided however that OWNER may, at OWNER's election, pre-pay such Affordability In-Lieu Fee by paying such Affordability In-Lieu Fee within thirty (30) days following the earliest discretionary approval by the City for OWNER's Project, including, but not limited to, any general plan amendment, specific plan adoption, development agreement, tentative map approval, variance, conditional use permit, or resolution of intention to form any public financing mechanism. The Three Dollars Forty-Six Cents ($3.46) and Three Dollars and Four Cents ($3.04) per square foot amounts shall automatically be increased annually, commencing on July 1, 2025, and automatically each July 1 thereafter. Such adjustment shall be based on the percentage increase (but no decrease) in the Consumer Price Index (Riverside - San Bernardino - Ontario, CA), (December 2017=100) over the preceding year. The pre-paid Affordability In-Lieu Fee shall be calculated based on the maximum floor area ratio (FAR) permitted within the General Plan and any applicable FAR contained within the applicable specific plan, whichever is greater, and the Maximum Development Density. For purposes of this Agreement, "**Maximum Development Density**" shall be determined by multiplying the OWNER's Project's density for residential development potential as set forth in the General Plan or the applicable Specific Plan, whichever is less, by the net acreage of land within OWNER's Project. All "Affordability In-Lieu Fees" collected by the City shall be used to promote the construction of affordable housing within the City.

4.4.2.4 Affordability Covenants. Prior to the issuance of the first building permit for any affordable unit, the CITY and OWNER shall enter into an Affordable Housing Agreement Affordability shall be assured for a period of forty-five (45) years for for-sale units and fifty-five (55) years for rentals. For rental units, base rents shall be established by the CITY and rental adjustments required by the CITY shall be performed on an annual basis. In addition, the Affordable Housing Agreement shall impose maximum occupancy limits of two (2) occupants per bedroom plus one (1) additional occupant per dwelling unit, and a requirement for the owner or tenant to properly maintain each dwelling unit.

4.4.2.5 Transfer of Affordable Project. No transfer of title to any affordable

housing project shall occur without the prior written consent of the CITY. In the event OWNER transfers title to any affordable housing project required to be constructed pursuant to this Agreement to a non-profit entity, or other entity, that receives an exemption from ad valorem real property taxes, the CITY shall be required to assure payment of an annual in lieu fee to the CITY on July 1 of each year equal to one-tenth of one percent (0.1%) of the assessed value of such project. The CITY may permit OWNER to satisfy this obligation by recorded covenants against the property and enforceable against said entity by the CITY. Any such covenants shall be approved by the Planning Director and the City Attorney.

4.5 Schools Obligations.

4.5.1 Written Evidence of Compliance with Schools Obligations.
OWNER shall, either through joint or individual agreements between OWNER and the applicable school district(s), shall satisfy its new school obligations. The new school obligations for the Mountain View School District in the Ontario Ranch area have been projected to include the acquisition or dedication of school sites for, and construction of, up to eight (8) schools. Of these eight (8) schools, six (6) are to be elementary (K-5) grade schools and two (2) are to be middle grade schools. The new school obligations for the Chaffey Joint Union High School District in the Ontario Ranch area have been projected to include the dedication of a school site for, and construction of, an additional high school. The new school obligations for the applicable school district shall be met by a combination of the following: (1) designating and dedicating school site(s) within the Property as set forth in the General Plan, and/or (2) paying school impact fees, (3) entering into a joint mitigation agreement or individual mitigation agreements, or (4) any combination of the foregoing. Written evidence of approval by the applicable school district that OWNER has met their school obligations may be required by the City as the condition to the issuance by the City of any entitlements for OWNER's Project. In the event OWNER is unable to provide such written evidence from the applicable school district(s), the City shall have the right to decline to honor any DIF Credit, Certificates of MDD Availability, Certificates of Storm Water Treatment Capacity Availability, or any combination thereof, presented by such OWNER, without liability to the City. To the extent that a joint mitigation agreement is approved by the applicable school district(s), and OWNER is a participant in good standing in such mitigation agreement, OWNER shall be deemed to have mitigated its new school obligations under this Section 4.4.1.

4.6 Net MDD/Water Availability Equivalents.

4.6.1 Assigned Net MDD/Water Availability Equivalents. The City has agreed with NMC Builders LLC to reserve exclusively for Members of NMC Builders, including OWNER, Net MDD made available through the construction of water system improvements funded by NMC Builders LLC. NMC Builders has assigned to OWNER its allocable share of the Net MDD issued by City. The

provisions of the Construction Agreement Amendment requires that the City shall not approval a final tract map or issue building permits or certificates of occupancy for the area of development within the New Model Colony served by the water system improvements funded by NMC Builders LLC, except to the bearer of an Assignment of Net MDD Water Availability.

4.6.2 Use of Assigned Net MDD Water Availability. OWNER shall provide evidence of sufficient Net MDD Water Availability Equivalents (or portions thereof) prior to and as a condition precedent to, the City's approval of any and all tract maps for the Property. The amount of Net MDD Water Availability Equivalents required for City's approval of a tract map shall be based upon water demand factors and assumptions listed in Exhibit C-2R of the Construction Agreement Amendment as "Water Demand Equivalents by Land Use" for each land use category.

4.6.3 Requirement for other Water System Improvements. A Certificate of Net MDD Availability is evidence only of available water capacity and does not satisfy any other conditions applicable to an OWNER's Project, including those relating to design and construction of master-planned potable water and recycled water transmission and distribution system for the respective pressure zone and other public infrastructure requirements.

4.6.4 Effectiveness of Agreement. Notwithstanding anything set forth in this Agreement, CITY and OWNER each acknowledge, confirm, and agree that (i) the CITY approval of this Agreement and (ii) the effectiveness of this Agreement, in each case, are conditioned upon OWNER's admission to NMC Builders as a "Member" (if not already a Member) thereof pursuant to the terms and conditions of the operating agreement of NMC Builders within thirty (30) days following the Effective Date of this Agreement. OWNER'S failure to maintain membership in NMC Builders LLC is and shall be a Default under this Agreement

4.7 Storm Water Capacity Availability.

4.7.1 Requirement for Storm Water Treatment Capacity Availability. OWNER shall provide evidence of sufficient Storm Water Treatment Capacity Availability as reserved in a Certificate of Storm Water Treatment Capacity Availability the same manner and subject to the same limitations as provided for the assignment of Certificates of Net MDD Availability in Section 4.7 of this Agreement.

4.7.2 Use of Storm Water Treatment Capacity Availability. The amount of Storm Water Treatment Capacity Availability required for the issuance of a grading permit to OWNER shall be based upon the Net Residential Acreage of the area to be graded regardless of the corresponding use.

4.7.3 Requirement for other Storm Water Improvements. The Certificate of Storm Water Treatment Capacity Availability is evidence only of available storm water treatment capacity and does not satisfy any other conditions applicable to

a particular development project, including those relating to on-site water treatment, water quality, connection to the storm water collection system, or other public infrastructure requirements.

4.8 Maintenance of Open Space. OWNER shall provide for the ongoing maintenance of all park, common areas and open space areas within the Project as more particularly set forth in the Specific Plan, through a homeowners' association as approved by the CITY. Covenants, conditions and restrictions establishing any homeowners' association shall be approved by the Planning Director and City Attorney.

4.9 Compliance with Public Benefits Requirements.

4.10.1 Failure to Provide Public Benefits. In the event OWNER fails or refuses to comply with any condition referenced in Section 4.1 through 4.10, or challenges (whether administratively or through legal proceedings) the imposition of such conditions, OWNER shall be deemed in default of this Agreement pursuant to Section 8.4 hereof, thereby entitling the City to any and all remedies available to it, including, without limitation, the right of the City to withhold OWNER's Project-related building permits, certificates of occupancy, or discretionary approvals, without liability.

5. FINANCING OF PUBLIC IMPROVEMENTS.

5.1 Financing Mechanism(s). In accordance with the Memorandum of Agreement between the CITY and NMC Builders, CITY will cooperate with OWNER in the formation of a CFD, or CFDs, to include all of the Project, to provide a financing mechanism to reimburse the OWNER for funds paid to NMC Builders LLC for OWNER's share of the costs of public infrastructure pursuant to the Construction Agreement and to acquire other public facilities constructed by OWNER subject to the provisions of the Memorandum of Agreement between CITY and NMC Builders LLC. Notwithstanding such reimbursements and acquisitions, OWNER shall remain entitled to DIF Credits as provided for in Article 3 of the Construction Agreement and/or as provided for in a separate Fee Credit Agreement between CITY and OWNER. OWNER agrees that, prior to the recordation of any Tract Map for the Property, the Property shall be included in a CFD to finance City services through annual special taxes that will initially be $1,426.38 per Single Family Detached Dwelling Unit, $1,236.46 per Multiple-Family Dwelling Unit, $1,036.38 per Gated Apartment Community Dwelling Unit, and $.26 per square foot for Non-Residential buildings. These amounts shall be subject to an automatic increase at a rate not to exceed four (4%) percent per year, unless otherwise modified by the CITY. CITY shall be the sole and exclusive lead agency in the formation of any CFD, assessment district or other public financing mechanism within the Property; provided however, that the proceeds of any such CFD, assessment district, or financing mechanism may be used, subject to restrictions that may be imposed by applicable law, for the purposes of acquiring, constructing or maintaining public facilities to be owned or operated by other public agencies, including, without

limitation those facilities owned or operated by a school district. In addition to the rights of the CITY pursuant to section 5.2 hereof, CITY shall have the right, but not the obligation, to condition the formation of any CFD, assessment district or other public financing mechanism within the Property on the OWNER mitigating all Project-related impacts to the applicable school district(s) as required by such school district(s). Written evidence by such school district(s) may be required by the CITY as the condition to the formation of any CFD, assessment district or other public financing mechanism within the Property, or any steps preliminary thereto, including, without limitation, the adoption of any resolution of intention to form such CFD, assessment district or other public financing mechanism within the Property. It is not the intent of the parties hereto, by this provision, to prohibit or otherwise limit the City's ability to take any and all necessary steps requisite to the formation of the CFD to finance City services through annual special taxes as set forth in this Section 5.1. Formation of any CFD, assessment district or other public financing mechanism within the Property, shall be subject to CITY's ability to make all findings required by applicable law and complying with all applicable legal procedures and requirements including, without limitation, CITY's public financing district policies as such policies may be amended from time to time. Notwithstanding the foregoing, it is acknowledged and agreed by the parties that nothing contained in this Agreement shall be construed as requiring CITY or the City Council to form any such district or to issue and sell bonds.

6. REVIEW FOR COMPLIANCE.

6.1 Periodic and Special Reviews.

6.1.1 Time for and Initiation of Periodic Review. The CITY shall review this Agreement every twelve (12) months from the Effective Date in order to ascertain the good faith compliance by the OWNER with the terms of this Agreement. The OWNER shall submit an Annual Monitoring Report to CITY, in a form acceptable to the City Manager, along with any applicable processing charge within ten (10) days after each anniversary date of the Effective Date of this Agreement. Within fifteen (15) days after the receipt of the Annual Monitoring Report, CITY shall review the Annual Monitoring Report. Prior to the expiration of the fifteen (15) day review period, CITY shall either issue a notice of continuing compliance or a notice of non-compliance and a notice of CITY's intent to conduct a Special Review pursuant to Sections 6.1.2 through 6.1.6. Issuance of a notice of continuing compliance may be issued by the City Manager or his designee.

6.1.2 Initiation of Special Review. A special review may be called either by agreement between the parties or by initiation in one or more of the following ways:

(1) Recommendation of the Planning staff;

(2) Affirmative vote of at least four (4) members of the Planning Commission; or

(3) Affirmative vote of at least three (3) members of the City Council.

6.1.3 Notice of Special Review. The City Manager shall begin the special review proceeding by giving notice that the CITY intends to undertake a special review of this Agreement to the OWNER. Such notice shall be given at least ten (10) days in advance of the time at which the matter will be considered by the Planning Commission.

6.1.4 Public Hearing. The Planning Commission shall conduct a hearing at which the OWNER must demonstrate good faith compliance with the terms of this Agreement. The burden of proof on this issue is upon the OWNER.

6.1.5 Findings Upon Public Hearing. The Planning Commission shall determine upon the basis of substantial evidence whether or not the OWNER has, for the period under review, complied in good faith with the terms and conditions of this Agreement.

6.1.6 Procedure Upon Findings.

(a) If the Planning Commission finds and determines on the basis of substantial evidence that the OWNER has complied in good faith with the terms and conditions of this Agreement during the period under review, the review for that period is concluded.

(b) If the Planning Commission finds and determines on the basis of substantial evidence that the OWNER has not complied in good faith with the terms and conditions of this Agreement during the period under review, the Planning Commission may recommend to the City Council to modify or terminate this Agreement.

(c) The OWNER may appeal a determination pursuant to paragraph (b) to the City Council in accordance with the CITY's rule for consideration of appeals in zoning matters generally.

6.2 Proceedings Upon Modification or Termination. If, upon a finding under Section 6.1.6(b), the CITY determines to proceed with modification or termination of this Agreement, the CITY shall give notice to the property OWNER of its intention so to do. The notice shall contain:

(a) The time and place of the hearing;

(b) A statement as to whether or not the CITY proposes to terminate or to modify this Agreement; and

(c) Other information that the CITY considers necessary to inform the OWNER of the nature of the proceeding.

6.3 Hearing on Modification or Termination. At the time and place set for the hearing on modification or termination, the OWNER shall be given an opportunity to be heard. The OWNER shall be required to demonstrate good faith compliance with the terms and conditions of this Agreement. The burden of proof on this issue shall be on the OWNER. If the City Council finds, based upon substantial evidence in the administrative record, that the OWNER has not complied in good faith with the terms and conditions of the agreement, the City Council may terminate or modify this Agreement and impose those conditions to the action it takes as it considers necessary to protect the interests of the CITY. The decision of the City Council shall be final, subject only to judicial review pursuant to Section 1094.5 of the Code of Civil Procedure.

6.4 Certificate of Agreement Compliance. If, at the conclusion of a Periodic or Special Review, OWNER is found to be in compliance with this Agreement, CITY shall, upon written request by OWNER, issue a Certificate of Agreement Compliance ("Certificate") to OWNER stating that after the most recent Periodic or Special Review and based upon the information known or made known to the Planning Director and City Council that (1) this Agreement remains in effect and (2) OWNER is not in default. The Certificate shall be in recordable form, shall contain information necessary to communicate constructive record notice of the finding of compliance, shall state whether the Certificate is issued after a Periodic or Special Review and shall state the anticipated date of commencement of the next Periodic Review. OWNER may record the Certificate with the County Recorder. Whether or not the Certificate is relied upon by assignees or other transferees or OWNER, CITY shall not be bound by a Certificate if a default existed at the time of the Periodic or Special Review, but was concealed from or otherwise not known to the Planning Director or City Council.

7. [RESERVED]

8. DEFAULT AND REMEDIES.

8.1 Remedies in General. It is acknowledged by the parties that CITY would not have entered into this Agreement if it were to be liable in damages under this Agreement, or with respect to this Agreement or the application thereof.

In general, each of the parties hereto may pursue any remedy at law or equity available for the breach of any provision of this Agreement, except that CITY shall not be liable in damages to OWNER, or to any successor in interest of OWNER, or to any other person, and OWNER covenants not to sue for damages or claim any damages:

(a) For any breach of this Agreement or for any cause of action which arises out of this Agreement; or

(b) For the taking, impairment or restriction of any right or interest conveyed or provided under or pursuant to this Agreement; or

(c) Arising out of or connected with any dispute, controversy or issue regarding the application or interpretation or effect of the provisions of this Agreement.

8.2 Specific Performance. The parties acknowledge that money damages and remedies at law generally are inadequate and specific performance and other non-monetary relief are particularly appropriate remedies for the enforcement of this Agreement and should be available to all parties for the following reasons:

(a) Money damages are unavailable against CITY as provided in Section 8.1 above.

(b) Due to the size, nature and scope of the project, it may not be practical or possible to restore the Property to its natural condition once implementation of this Agreement has begun. After such implementation, OWNER may be foreclosed from other choices it may have had to utilize the Property or portions thereof. OWNER has invested significant time and resources and performed extensive planning and processing of the Project in agreeing to the terms of this Agreement and will be investing even more significant time and resources in implementing the Project in reliance upon the terms of this Agreement, and it is not possible to determine the sum of money which would adequately compensate OWNER for such efforts.

8.3 Release. Except for nondamaged remedies, including the remedy of specific performance and judicial review as provided for in Section 6.5, OWNER, for itself, its successors and assignees, hereby releases the CITY, its officers, agents and employees from any and all claims, demands, actions, or suits of any kind or nature arising out of any liability, known or unknown, present or future, including, but not limited to, any claim or liability, based or asserted, pursuant to Article I, Section 19 of the California Constitution, the Fifth Amendment of the United States Constitution, or any other law or ordinance which seeks to impose any other liability or damage, whatsoever, upon the CITY because it entered into this Agreement or because of the terms of this Agreement.

8.4 Termination or Modification of Agreement for Default of OWNER. Subject to the provisions contained in Subsection 6.3 herein, CITY may terminate or modify this Agreement for any failure of OWNER to perform any material duty or obligation of OWNER under this Agreement, or to comply in good faith with the terms of this Agreement (hereinafter referred to as "default"); provided, however, CITY may terminate or modify this Agreement pursuant to this Section only after providing written notice to OWNER of default setting forth the nature of the default and the actions, if any, required by OWNER to cure such default and, where the default can be cured, OWNER has failed to take such actions and cure such default within 60 days after the effective date of such notice or, in the event that such default cannot be cured within such 60 day period but can be cured within a longer time, has failed to commence the actions

necessary to cure such default within such 60 day period and to diligently proceed to complete such actions and cure such default.

8.5 Termination of Agreement for Default of CITY. OWNER may terminate this Agreement only in the event of a default by CITY in the performance of a material term of this Agreement and only after providing written notice to CITY of default setting forth the nature of the default and the actions, if any, required by CITY to cure such default and, where the default can be cured, CITY has failed to take such actions and cure such default within 60 days after the effective date of such notice or, in the event that such default cannot be cured within such 60 day period but can be cured within a longer time, has failed to commence the actions necessary to cure such default within such 60 day period and to diligently proceed to complete such actions and cure such default.

9. THIRD PARTY LITIGATION.

9.1 General Plan Litigation. CITY has determined that this Agreement is consistent with its Comprehensive General Plan, as such General Plan exists as of the Effective Date ("General Plan"), and that the General Plan meets all requirements of law. OWNER has reviewed the General Plan and concurs with CITY's determination. CITY shall have no liability in damages under this Agreement for any failure of CITY to perform under this Agreement or the inability of OWNER to develop the Property as contemplated by the Development Plan of this Agreement as the result of a judicial determination that on the Effective Date, or at any time thereafter, the General Plan, or portions thereof, are invalid or inadequate or not in compliance with law.

9.2 Third Party Litigation Concerning Agreement. OWNER shall defend, at its expense, including attorneys' fees, indemnify, and hold harmless CITY, its agents, officers and employees from any claim, action or proceeding against CITY, its agents, officers, or employees to attack, set aside, void, or annul the approval of this Agreement or the approval of any permit granted pursuant to this Agreement. CITY shall promptly notify OWNER of any such claim, action or proceeding, and CITY shall cooperate in the defense. If CITY fails to promptly notify OWNER of any such claim, action or proceeding, or if CITY fails to cooperate in the defense, OWNER shall not thereafter be responsible to defend, indemnify, or hold harmless CITY. CITY may in its discretion participate in the defense of any such claim, action or proceeding.

9.3 Indemnity. In addition to the provisions of 9.2 above, OWNER shall indemnify and hold CITY, its officers, agents, employees and independent contractors free and harmless from any liability whatsoever, based or asserted upon any act or omission of OWNER, its officers, agents, employees, subcontractors and independent contractors, for property damage, bodily injury, or death (OWNER's employees included) or any other element of damage of any kind or nature, relating to or in any way connected with or arising from the activities contemplated hereunder, including, but not limited to, the study, design, engineering, construction, completion, failure and conveyance of the public improvements, save and except claims for damages arising through the sole active negligence or sole willful misconduct of CITY. OWNER shall defend, at its expense, including attorneys' fees, CITY, its officers, agents, employees

and independent contractors in any legal action based upon such alleged acts or omissions. CITY may in its discretion participate in the defense of any such legal action.

9.4 Environment Assurances. OWNER shall indemnify and hold CITY, its officers, agents, and employees free and harmless from any liability, based or asserted, upon any act or omission of OWNER, its officers, agents, employees, subcontractors, predecessors in interest, successors, assigns and independent contractors for any violation of any federal, state or local law, ordinance or regulation relating to industrial hygiene or to environmental conditions on, under or about the Property, including, but not limited to, soil and groundwater conditions, and OWNER shall defend, at its expense, including attorneys' fees, CITY, its officers, agents and employees in any action based or asserted upon any such alleged act or omission. CITY may in its discretion participate in the defense of any such action.

9.5 Reservation of Rights. With respect to Sections 9.2, 9.3 and 9.4 herein, CITY reserves the right to either (1) approve the attorney(s) which OWNER selects, hires or otherwise engages to defend CITY hereunder, which approval shall not be unreasonably withheld, or (2) conduct its own defense, provided, however, that OWNER shall reimburse CITY forthwith for any and all reasonable expenses incurred for such defense, including attorneys' fees, upon billing and accounting therefor.

9.6 Survival. The provisions of this Sections 9.1 through 9.6, inclusive, shall survive the termination of this Agreement.

10. MORTGAGEE PROTECTION.

The parties hereto agree that this Agreement shall not prevent or limit OWNER, in any manner, at OWNER's sole discretion, from encumbering the Property or any portion thereof or any improvement thereon by any mortgage, deed of trust or other security device securing financing with respect to the Property. CITY acknowledges that the lenders providing such financing may require certain Agreement interpretations and modifications and agrees upon request, from time to time, to meet with OWNER and representatives of such lenders to negotiate in good faith any such request for interpretation or modification. CITY will not unreasonably withhold its consent to any such requested interpretation or modification provided such interpretation or modification is consistent with the intent and purposes of this Agreement. Any Mortgagee of the Property shall be entitled to the following rights and privileges:

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

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

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

(d) Any Mortgagee who comes into possession of the Property, or any part thereof, pursuant to foreclosure of the mortgage or deed of trust, or deed in lieu of such foreclosure, shall take the Property, or part thereof, subject to the terms of this Agreement. Notwithstanding any other provision of this Agreement to the contrary, no Mortgagee shall have an obligation or duty under this Agreement to perform any of OWNER's obligations or other affirmative covenants of OWNER hereunder, or to guarantee such performance; provided, however, that to the extent that any covenant to be performed by OWNER is a condition precedent to the performance of a covenant by CITY, the performance thereof shall continue to be a condition precedent to CITY's performance hereunder, and further provided that any sale, transfer or assignment by any Mortgagee in possession shall be subject to the provisions of Section 2.4 of this Agreement.

11. MISCELLANEOUS PROVISIONS.

11.1 Recordation of Agreement. This Agreement and any amendment or cancellation thereof shall be recorded with the San Bernardino County Recorder by the City Clerk within the ten (10) days after the CITY executes this Agreement, as required by Section 65868.5 of the Government Code. If the parties to this Agreement or their successors in interest amend or cancel this Agreement as provided for herein and in Government Code Section 65868, or if the CITY terminates or modifies the agreement as provided for herein and in Government Code Section 65865.1 for failure of the applicant to comply in good faith with the terms or conditions of this Agreement, the City Clerk shall have notice of such action recorded with the San Bernardino County Recorder.

11.2 Entire Agreement. This Agreement sets forth and contains the entire understanding and agreement of the parties, and there are no oral or written representations, understandings or ancillary covenants, undertakings or agreements which are not contained or expressly referred to herein. No testimony or evidence of any such representations, understandings or covenants shall be admissible in any proceeding of any kind or nature to interpret or determine the terms or conditions of this Agreement.

11.3 Severability. If any term, provision, covenant or condition of this Agreement shall be determined invalid, void or unenforceable, the remainder of this Agreement shall not be affected thereby to the extent such remaining provisions are not rendered impractical to perform taking into consideration the purposes of this Agreement. Notwithstanding the foregoing, the provision of the Public Benefits set forth in Section 4 of this Agreement, including the payment of the fees set forth therein, are essential elements of this Agreement and CITY would not have entered into this

Agreement but for such provisions, and therefore in the event such provisions are determined to be invalid, void or unenforceable, this entire Agreement shall be null and void and of no force and effect whatsoever.

11.4 Interpretation and Governing Law. This Agreement and any dispute arising hereunder shall be governed and interpreted in accordance with the laws of the State of California. This Agreement shall be construed as a whole according to its fair language and common meaning to achieve the objectives and purposes of the parties hereto, and the rule of construction to the effect that ambiguities are to be resolved against the drafting party shall not be employed in interpreting this Agreement, all parties having been represented by counsel in the negotiation and preparation hereof.

11.5 Section Headings. All section headings and subheadings are inserted for convenience only and shall not affect any construction or interpretation of this Agreement.

11.6 Singular and Plural. As used herein, the singular of any word includes the plural.

11.7 Joint and Several Obligations. Subject to section 2.4, if at any time during the term of this Agreement the Property is owned, in whole or in part, by more than one owner, all obligations of such owners under this Agreement shall be joint and several, and the default of any such owner shall be the default of all such owners. Notwithstanding the foregoing, no owner of a single lot which has been finally subdivided and sold to such owner as a member of the general public or otherwise as an ultimate user shall have any obligation under this Agreement except as provided under Section 4 hereof.

11.8 Time of Essence. Time is of the essence in the performance of the provisions of this Agreement as to which time is an element.

11.9 Waiver. Failure by a party to insist upon the strict performance of any of the provisions of this Agreement by the other party, or the failure by a party to exercise its rights upon the default of the other party, shall not constitute a waiver of such party's right to insist and demand strict compliance by the other party with the terms of this Agreement thereafter.

11.10 No Third Party Beneficiaries. This Agreement is made and entered into for the sole protection and benefit of the parties and their successors and assigns. No other person shall have any right of action based upon any provision of this Agreement.

11.11 Force Majeure. Neither party shall be deemed to be in default where failure or delay in performance of any of its obligations under this Agreement is caused by floods, earthquakes, other Acts of God, fires, wars, riots or similar hostilities, strikes and other labor difficulties beyond the party's control, (including the party's employment force), government regulations, court actions (such as restraining orders or injunctions), or other causes beyond the party's control. If any such events shall occur, the term of this Agreement and the time for performance by either party of any of its obligations

hereunder may be extended by the written agreement of the parties for the period of time that such events prevented such performance, provided that the term of this Agreement shall not be extended under any circumstances for more than five (5) years.

11.12 Mutual Covenants. The covenants contained herein are mutual covenants and also constitute conditions to the concurrent or subsequent performance by the party benefited thereby of the covenants to be performed hereunder by such benefited party.

11.13 Successors in Interest. The burdens of this Agreement shall be binding upon, and the benefits of this Agreement shall inure to, all successors in interest to the parties to this Agreement. All provisions of this Agreement shall be enforceable as equitable servitudes and constitute covenants running with the land. Each covenant to do or refrain from doing some act hereunder with regard to development of the Property: (a) is for the benefit of and is a burden upon every portion of the Property; (b) runs with the Property and each portion thereof; and, (c) is binding upon each party and each successor in interest during ownership of the Property or any portion thereof.

11.14 Counterparts. This Agreement may be executed by the parties in counterparts, which counterparts shall be construed together and have the same effect as if all of the parties had executed the same instrument.

11.15 Jurisdiction and Venue. Any action at law or in equity arising under this Agreement or brought by a party hereto for the purpose of enforcing, construing or determining the validity of any provision of this Agreement shall be filed and tried in the Superior Court of the County of San Bernardino, State of California, and the parties hereto waive all provisions of law providing for the filing, removal or change of venue to any other court.

11.16 Project as a Private Undertaking. It is specifically understood and agreed by and between the parties hereto that the development of the Project is a private development, that neither party is acting as the agent of the other in any respect hereunder, and that each party is an independent contracting entity with respect to the terms, covenants and conditions contained in this Agreement. No partnership, joint venture or other association of any kind is formed by this Agreement. The only relationship between CITY and OWNER is that of a government entity regulating the development of private property and the owner of such property.

11.17 Further Actions and Instruments. Each of the parties shall cooperate with and provide reasonable assistance to the other to the extent contemplated hereunder in the performance of all obligations under this Agreement and the satisfaction of the conditions of this Agreement. Upon the request of either party at any time, the other party shall promptly execute, with acknowledgment or affidavit if reasonably required, and file or record such required instruments and writings and take any actions as may be reasonably necessary under the terms of this Agreement to carry out the intent and to fulfill the provisions of this Agreement or to evidence or consummate the transactions contemplated by this Agreement. The City Manager may delegate his powers and

duties under this Agreement to an Assistant City Manager or other management level employee of the CITY.

11.18 Eminent Domain. No provision of this Agreement shall be construed to limit or restrict the exercise by CITY of its power of eminent domain.

11.19 Agent for Service of Process. In the event OWNER is not a resident of the State of California or it is an association, partnership or joint venture without a member, partner or joint venturer resident of the State of California, or it is a foreign corporation, then in any such event, OWNER shall file with the Planning Director, upon its execution of this Agreement, a designation of a natural person residing in the State of California, giving his or her name, residence and business addresses, as its agent for the purpose of service of process in any court action arising out of or based upon this Agreement, and the delivery to such agent of a copy of any process in any such action shall constitute valid service upon OWNER. If for any reason service of such process upon such agent is not feasible, then in such event OWNER may be personally served with such process out of this County and such service shall constitute valid service upon OWNER. OWNER is amenable to the process so served, submits to the jurisdiction of the Court so obtained and waives any and all objections and protests thereto. OWNER for itself, assigns and successors hereby waives the provisions of the Hague Convention (Convention on the Service Abroad of Judicial and Extra Judicial Documents in Civil or Commercial Matters, 20 U.S.T. 361, T.I.A.S. No. 6638).

11.20 Estoppel Certificate. Within thirty (30) business days following a written request by any of the parties, the other party shall execute and deliver to the requesting party a statement certifying that (i) either this Agreement is unmodified and in full force and effect or there have been specified (date and nature) modifications to the Agreement, but it remains in full force and effect as modified; and (ii) either there are no known current uncured defaults under this Agreement or that the responding party alleges that specified (date and nature) defaults exist. The statement shall also provide any other reasonable information requested. The failure to timely deliver this statement shall constitute a conclusive presumption that this Agreement is in full force and effect without modification except as may be represented by the requesting party and that there are no uncured defaults in the performance of the requesting party, except as may be represented by the requesting party. OWNER shall pay to CITY all costs incurred by CITY in connection with the issuance of estoppel certificates under this Section 11.20 prior to CITY's issuance of such certificates.

11.21 Authority to Execute. The person or persons executing this Agreement on behalf of OWNER warrants and represents that he or she/they have the authority to execute this Agreement on behalf of his or her/their corporation, partnership or business entity and warrants and represents that he or she/they has/have the authority to bind OWNER to the performance of its obligations hereunder.

11.22 Prevailing Wage. OWNER, for itself, its successors, and assigns, agrees, covenants, and warrants that the development of the Property, if any, shall comply with all applicable federal and state labor laws (including, without limitation, the requirement

under California law to pay prevailing wages and hire apprentices), and all obligations as set forth herein.

11.22.1 CITY makes no representations concerning prevailing wages in compliance with California Labor Code Section 1770 et seq.

11.22.2 OWNER acknowledges and agrees that it shall be independently responsible for reviewing the applicable laws and regulations with respect to the payment of prevailing wages and complying therewith. OWNER shall bear all risks of payment or non-payment of prevailing wages under California law and/or the implementation of Labor Code Section 1781, as the same may be amended from time to time, and/or any other similar law.

11.22.3 The foregoing indemnity shall survive termination of this Agreement and shall continue after completion of the construction and development of the Property by OWNER, its successors or assigns. OWNER shall be solely responsible for determining and effectuating compliance with such laws.

11.22.4 OWNER, ON BEHALF OF ITSELF, ITS SUCCESSORS, AND ASSIGNS, WAIVES AND RELEASES CITY FROM ANY RIGHT OF ACTION THAT MAY BE AVAILABLE TO OWNER PURSUANT TO LABOR CODE SECTION 1781 OR THE DAVIS BACON ACT. RELATIVE TO THE WAIVER AND RELEASE CONTAINED IN THIS SECTION 11.22, OWNER ACKNOWLEDGES THE PROTECTIONS OF CIVIL CODE SECTION 1542, WHICH READS AS FOLLOWS: A GENERAL RELEASE DOES NOT EXTEND TO CLAIMS THAT THE CREDITOR OR RELEASING PARTY DOES NOT KNOW OR SUSPECT TO EXIST IN HIS OR HER FAVOR AT THE TIME OF EXECUTING THE RELEASE, WHICH IF KNOWN BY HIM OR HER MUST HAVE MATERIALLY AFFECTED HIS OR HER SETTLEMENT WITH THE DEBTOR OR RELEASED PARTY.

INITIALS. BY INITIALING BELOW, OWNER KNOWINGLY AND VOLUNTARILY WAIVES THE PROVISIONS OF SECTION 1542 SOLELY WITH THE MATTERS WHICH ARE THE SUBJECT OF THE FOREGOING WAIVERS AND RELEASES:

_____
(Owner's Initials)

IN WITNESS WHEREOF, the parties hereto have executed this Agreement on the day and year set forth below.

[SIGNATURES CONTAINED ON FOLLOWING PAGE]

SIGNATURE PAGE
TO DEVELOPMENT AGREEMENT PDA25-003

"OWNER"

GDC Investments 13,
a Limited Partnership_____

By: _____
Name: Dave Waters
Its:VicePresident_____
Date: _____

"CITY"

CITY OF ONTARIO

By:_____
Scott Ochoa
City Manager

Date: _____

ATTEST:

_____
City Clerk, Ontario

APPROVED AS TO FORM:
BEST BEST KRIEGER, LLP

_____
City Attorney

ACKNOWLEDGEMENT

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

STATE OF CALIFORNIA)
COUNTY OF_____)

On _____, 20_____, before me,_____,
Date *Insert Name and Title of the Officer*

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

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

WITNESS my hand and official seal.

Signature_____
Signature of Notary Public

Place Notary Seal Above

ACKNOWLEDGEMENT

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

STATE OF CALIFORNIA)
COUNTY OF_____)

On _____, 20_____, before me_____,
Date *Insert Name and Title of the Officer*

personally appeared _____
Name(s) of Signer(s)

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

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

WITNESS my hand and official seal.

Signature_____
Signature of Notary Public

Place Notary Seal Above

EXHIBIT "A"
TO DEVELOPMENT AGREEMENT

Legal Description of Property

THE LAND REFERRED TO HEREIN BELOW IS SITUATED IN THE CITY OF ONTARIO, COUNTY OF SAN BERNARDINO, STATE OF CALIFORNIA, AND IS DESCRIBED AS FOLLOWS:

LOT 1 OF TRACT NO. 18380, IN THE CITY OF ONTARIO, COUNTY OF SAN BERNARDINO, AS PER MAP RECORDED IN BOOK 350, PAGES 64 THROUGH 69, INCLUSIVE OF MAPS, IN THE OFFICE OF THE COUNTY RECORDER OF SAID COUNTY.

APN: 1073-101-05-0-000

EXHIBIT "B"
TO DEVELOPMENT AGREEMENT

Map showing Property and its location

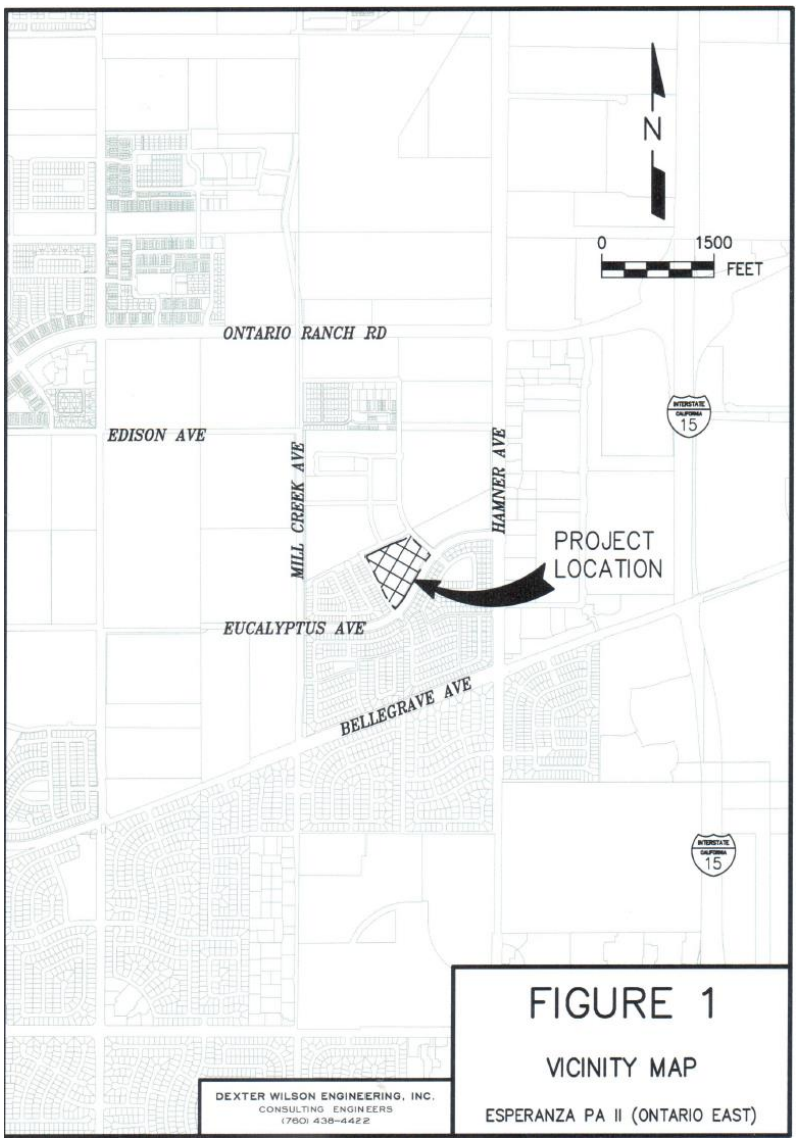


EXHIBIT "C"
TO DEVELOPMENT AGREEMENT

Existing Development Approvals

On December 18, 2006, the Planning Commission:

a) Issued Resolution No. PC06-170 recommending City Council adopt and certify the Esperanza Environmental Impact Report (SCH#2002061047).

b) Issued Resolution No. PC06-171 recommending City Council approval of the Esperanza Specific Plan (File No. PSP05-002).

On January 16, 2007, the City Council:

a) Adopted and certified the Esperanza Environmental Impact Report (SCH#2002061047) and issued Resolution No. 2007-008.

On February 6, 2007, the City Council:

a) Approved the Esperanza Specific Plan (File No. PSP05-002) and adopted Ordinance No. 2852.

On August 27, 2019, the Planning Commission:

a) Issued Resolution No. PC19-064 for the approval of Tentative Tract Map 20157 (File No. PMTT18-002).

b) Issued Resolution No. PC19-068 recommending City Council approval of the Development Agreement (File No. PDA19-002).

EXHIBIT "D"
TO DEVELOPMENT AGREEMENT

Existing Land Use Regulations

These documents are listed for reference only:

1. Esperanza Specific Plan EIR (SCH#2002061047), Resolution No. 2007-008

2. Esperanza Specific Plan (File No. PSP0S-002), Ordinance No. 2852

3. City of Ontario Municipal Code
    a. Six - Sanitation & Health
    b. Seven - Public Works
    c. Eight- Building Regulations
    d. Nine - Development Code
    e. Ten - Parks & Recreation

EXHIBIT "E"
TO DEVELOPMENT AGREEMENT

Description of Required Infrastructure Improvements

OWNER shall design, construct, and complete all improvements including but not limited to Sewer (SW), Potable Water (PW), Recycled Water (RW), Storm Drain (SD), Fiber Optic (FO), and Street (ST) improvements necessary to serve the Property, prior to the request of any Production Units.

FIBER OPTICS (FO)

a) FO improvements on Chatham Street from South Amherst Avenue to Clifton Avenue.

POTABLE WATER (PW)

a) PW improvements on Clifton Avenue from Eucalyptus Avenue to Chatham Street.
b) PW improvements on Chatham Street from Clifton Avenue to Amherst Avenue.
c) PW improvements on Amherst Avenue from Chatham Street to Eucalyptus Avenue.

RECYCLED WATER (RW)

a) RW improvements on Clifton Avenue from Eucalyptus Avenue to Chatham Street.
b) Abandonment of RW improvements on Amherst Avenue from Eucalyptus Avenue to Shelburne Street.

SEWER (SW)

a) SW improvements on Amherst Avenue from the Project's point of connection to Eucalyptus Avenue.

EXHBIT “F”
TO DEVELOPMENT AGREEMENT

Required Infrastructure Improvements

(SEE ATTACHED EXHIBITS)

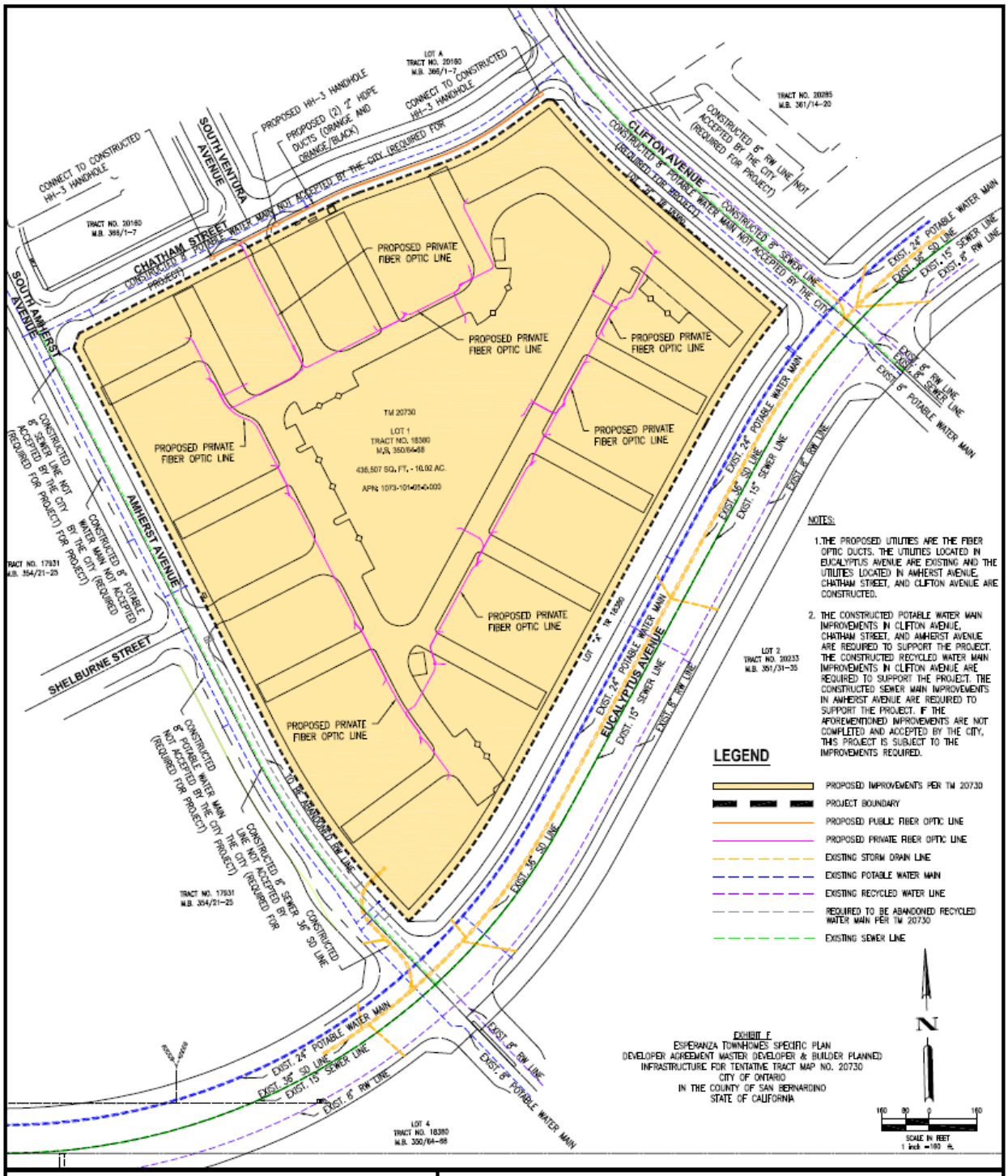


EXHIBIT F
ESPERANZA TOWNHOMES SPECIFIC PLAN
DEVELOPER AGREEMENT MASTER DEVELOPER & BUILDER PLANNED INFRASTRUCTURE FOR TENTATIVE TRACT MAP NO. 20730
CITY OF ONTARIO
IN THE COUNTY OF SAN BERNARDINO
STATE OF CALIFORNIA

WALDEN & ASSOCIATES
CIVIL ENGINEERS – LAND SURVEYORS – PLANNERS
2552 WHITE ROAD, SUITE B • IRVINE, CA 92614-6236
(949) 660-0110 FAX: 660-0418

ESPERANZA PA-11 TOWNHOMES
TM 20730
DEVELOPER AGREEMENT EXHIBIT

W.O. No. 2175-996-001 Date 08/2025
Engr. AC Chk'd MP Sheet 1 Of 1

EXHIBIT "G"
TO DEVELOPMENT AGREEMENT

Form of Plume Disclosure Letter

CITY OF ONTARIO

ONTARIO MUNICIPAL UTILITIES COMPANY

PAUL S. LEON
MAYOR

DEBRA DORST-PORADA
MAYOR PRO TEM

ALAN D. WAPNER
JIM W. BOWMAN
RUBEN VALENCIA
COUNCIL MEMBERS

AL C. BOLING
CITY MANAGER

SHEILA MAUTZ
CITY CLERK

JAMES R. MILHISER
TREASURER

SCOTT BURTON
UTILITIES GENERAL MANAGER

March 2017

DISCLOSURE NOTICE
SOUTH ARCHIBALD TRICHLOROETHYLENE PLUME

Dear Property Owner/Developer/Applicant:

The City of Ontario ("City") has approved or will be approving development in the Ontario Ranch area in the next few years, subject to the appropriate and required statutory process. This letter is intended to serve as notice to all potential property owners of the existence of a groundwater plume, known as the South Archibald Trichloroethylene (TCE) Plume which may exist in, under or near owner's property.

The groundwater plume is in an area in the central Chino Basin south of the Pomona Freeway, west of Turner Avenue, east of Grove Avenue, and north of Kimball Avenue. The plume primarily consists of TCE, a discontinued industrial solvent, and is subject to a clean-up under the oversight and direction of the Santa Ana Regional Water Quality Control Board ("Regional Board").

The Regional Board's approved clean-up procedure involves the removal and treatment of groundwater containing TCE via groundwater wells to reduce the plume concentrations and control its migration. In addition, the City is providing potable water supplies for domestic purposes to residences with private domestic wells affected by the plume. Finally, the Regional Board will continue to monitor all impacted areas and private domestic wells to ensure that residents' health and the environment are properly safeguarded. These remedial actions are documented in a Remedial Action Plan approved by the Regional Board in September 2016.

Further and current information may be found on the Regional Board's Geotracker website at https://geotracker.waterboards.ca.gov/profile_report?global_id=T10000004658.

Property owners may wish to include this letter as a part of a Real Estate Transfer Disclosure under California Civil Code Section 1102 et seq.

1425 SOUTH BON VIEW - ONTARIO, CALIFORNIA 91761-4406 - (909) 395-2605 - FAX (909) 395-2601

CITY OF ONTARIO *Agenda Report* **November 4, 2025**	**SECTION:** **PUBLIC HEARINGS**
Department: Planning Prepared By: Robert Morales Staff Member Presenting: Rudy Zeledon, Executive Director Community Development Approved By:	Submitted To: Council/OHA Approved: _____ Continued To: _____ Denied: _____ Item No: 13

SUBJECT: **A PUBLIC HEARING TO CONSIDER AN ADDENDUM TO THE ONTARIO PLAN 2050 SUPPLEMENTAL ENVIRONMENTAL IMPACT REPORT FOR A GENERAL PLAN AMENDMENT (FILE NO. PGPA24-003) AND SPECIFIC PLAN AMENDMENT (FILE NO. PSPA24-004) TO THE ESPERANZA SPECIFIC PLAN**

RECOMMENDATION:

That the City Council consider and adopt the following:

1. A Resolution approving an Addendum to The Ontario Plan 2050 Supplemental Environmental Impact Report (State Clearinghouse No. 2021070364, certified by the City Council on August 16, 2022); and
2. Resolutions approving General Plan Amendment (File No. PGPA24-003) and Specific Plan Amendment (File No. PSPA24-004)

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

FISCAL IMPACT: There is not a direct fiscal impact associated with this action. The proposed General Plan Amendment and Specific Plan Amendment to the Esperanza Specific Plan would update land use designations and development standards to facilitate future residential development. Implementation of the amendments would generate increased property tax revenues from future housing and result in one-time payments to the City for plan check, permit, and development impact fees.

BACKGROUND & ANALYSIS: On January 27, 2010, the Ontario City Council certified The Ontario Plan Environmental Impact Report in conjunction with File No. PGPA06-001 (City Council Resolution No. 2010-006), and on August 16, 2022, the Ontario City Council certified The Ontario Plan 2050

Update Supplemental Environmental Impact Report (SEIR) in conjunction with The Ontario Plan 2050 Update (TOP 2050; File No. PGPA20-002). TOP 2050 and the associated SEIR analyzed the Project site and established guidelines for development, including, but not limited to, Public School (K-12) and university use. Within the SEIR, adjacent areas are designated for Low-Density Residential and Medium-Density Residential uses.

On May 25, 2023, the Mountain View School District officially informed GDC Communities, the property owner, that it would not exercise its option to purchase the Project site for an elementary school facility. Although the site had previously been identified as suitable for a Public School (K-12) use, the District determined that it no longer intends to pursue acquisition or development of the site (See Attachment A – Mountain View School District Letter).

On August 13, 2024, the applicant submitted applications for the following: (1) a General Plan Amendment (File No. PGPA24-003) to change the land use designation of approximately 10.02 acres from Public School to Medium Density Residential; (2) a Specific Plan Amendment (File No. PSPA24-004) to revise the Esperanza Specific Plan to allow RD-7 (Row Townhomes) within Planning Area 11 and to update the plan's land use map, standards, and exhibits accordingly; (3) a Tentative Tract Map (File No. PMTT24-008 / TTM 20730) to subdivide the 10.02 acres into 28 numbered lots and 15 lettered lots for condominium purposes; and (4) a Development Plan (File No. PDEV24-017) to construct 161 multiple-family dwellings within Planning Area 11 of the Esperanza Specific Plan.

On September 15, 2025, the Development Advisory Board conducted a public hearing regarding the Tentative Tract Map and Development Plan and recommended that the Planning Commission approve File Nos. PMTT24-008 and PDEV24-017.

On September 23, 2025, the Planning Commission conducted a public hearing regarding the General Plan Amendment (File No. PGPA24-003) and Specific Plan Amendment (File No. PSPA24-004) and recommended that the City Council approve the applications by a 5-1 vote. The Commission also approved Tentative Tract Map (File No. PMTT24-008) and Development Plan (File No. PDEV24-017) by a 5-1 vote.

GENERAL PLAN AMENDMENT (File No. PGPA24-003): The Project proposes to amend the Ontario Plan Policy Plan Land Use Map and associated buildout tables to change the designation of 10.02 acres from Public School to Medium Density Residential. The Project site is currently designated Public School in the TOP 2050 Land Use Map. The proposed amendment would establish a Medium Density Residential designation with a buildout capacity of 224 dwelling units. This capacity offsets the 128-unit reduction from PGPA23-003 and ensures compliance with SB 330 by maintaining the City's overall housing capacity.

SPECIFIC PLAN AMENDMENT (File No. PSPA24-004): The Specific Plan Amendment proposes the following changes:

Planning Area 11

- Increase the number of units allowed from 0 to 161 dwelling units.
- Revise the permitted land use from School to RD-7/Row Townhomes.

Other Revisions

- Update the Specific Plan land use map (Planning Areas), development standards, exhibits, and text to reflect the proposed land use changes.

All changes to the Specific Plan, including exhibits, tables, development standards, and design guidelines, are included in the revised Specific Plan document accompanying this report. Additions are shown in red text, and deletions are indicated with strikethrough.

Approval of the related Tentative Tract Map and Development Plan files is contingent upon approval of the proposed General Plan Amendment, Specific Plan Amendment, and the related Addendum to The Ontario Plan 2050 Supplemental Environmental Impact Report (SCH No. 2021070364).

CORRESPONDENCE: The City received eleven letters opposing the proposed land use change. The main concerns raised were:

1. Loss of planned school site – Residents noted the site had been identified for a future school, and they felt the change to residential use conflicts with community expectations. *Staff Response: The Mountain View School District formally declined to pursue the site for a school in May 2023. While the City acknowledges community concerns, school facility planning is outside the City's purview. The proposed medium-density residential use is compatible with the surrounding residential neighborhoods.*
2. School capacity impacts – Residents expressed concern that new housing would worsen pressure on local schools, which are already strained by growth in Ontario Ranch. *Staff Response: School capacity and facility planning fall under the responsibility of the School District, which manages needs through its own planning and enrollment forecasting. In March 2015, builders and property owners within the New Model Colony (NMC) entered into a Mitigation Agreement with the Mountain View School District (MVSD). This agreement provided funding for schools and identified several potential school sites that could be utilized as needed to serve the east Ontario Ranch area. The actual need for these sites is determined by student enrollment levels. According to MVSD, current and projected enrollment figures are significantly below capacity, approximately 50% below. As a result, in May 2023, MVSD determined that the designated elementary school site within the Esperanza Specific Plan would not be required.*
   Even under the most conservative districtwide student generation projections, only three additional elementary school sites will be needed to meet demand at full buildout. Parkview Elementary School, located within the Parkplace community, is now open. New Haven Elementary School, located within the Avenue Specific Plan, is currently under construction and is scheduled to open in September 2027. Based on actual student generation rates to date, only two more elementary school sites will be required after New Haven Elementary is completed. Currently there are three more elementary school sites that are still reserved within the following Specific Plans: the Avenue, West Haven, and Great Park.

AIRPORT LAND USE COMPATIBILITY PLAN COMPLIANCE: The California State Aeronautics Act (Public Utilities Code Section 21670 et seq.) requires that an Airport Land Use Compatibility Plan be

prepared for all public use airports in the State and requires that local land use plans and individual development proposals must be consistent with the policies set forth in the adopted Airport Land Use Compatibility Plan.

On April 19, 2011, the City Council of the City of Ontario approved and adopted the ONT ALUCP, establishing the Airport Influence Area for Ontario International Airport, which encompasses lands within parts of San Bernardino, Riverside, and Los Angeles Counties, and limits future land uses and development within the Airport Influence Area, as they relate to noise, safety, airspace protection, and overflight impacts of current and future airport activity. As the decision-making body for PGPA24-003 and PSPA24-004, the City Council has reviewed and considered the facts and information contained in the Application and supporting documentation against the ONT ALUCP compatibility factors, including [1] Safety Criteria (ONT ALUCP Table 2-2) and Safety Zones (ONT ALUCP Map 2-2), [2] Noise Criteria (ONT ALUCP Table 2-3) and Noise Impact Zones (ONT ALUCP Map 2-3), [3] Airspace protection Zones (ONT ALUCP Map 2-4), and [4] Overflight Notification Zones (ONT ALUCP Map 2-5). As a result, the Planning Commission finds and determines that the Project, when implemented in conjunction with the conditions of approval, will be consistent with the policies and criteria set forth within the ONT ALUCP.

HOUSING ELEMENT COMPLIANCE: The Project is consistent with the Housing Element of the Policy Plan (general plan) component of The Ontario Plan 2050, as the Project site is not one of the properties in the Housing Element Sites contained in Tables B-1 and B-2 (Housing Element Sites Inventory) of the Housing Element Technical Report.

ENVIRONMENTAL REVIEW: The environmental impacts of the Project were reviewed in conjunction with The Ontario Plan 2050 Supplemental Environmental Impact Report (SCH No. 2021070364; certified by the City Council on August 16, 2022).

The Application is a project pursuant to the California Environmental Quality Act (Public Resources Code Section 21000, et seq.) (CEQA) and an Addendum has been prepared to determine possible environmental impacts. Although the proposed Project could have a significant effect on the environment, because all potentially significant effects have been analyzed adequately in an earlier Certified EIR and have been avoided or mitigated pursuant to that earlier Certified EIR, including revisions or mitigation measures that are imposed on the proposed Project, nothing further is required. The Project will introduce no new significant environmental impacts beyond those previously analyzed in the Certified EIR, and all mitigation measures previously adopted by the Environmental Impact Report, are a condition of project approval and are incorporated in the Addendum.

CONCLUSION: Staff recommends that the City Council adopt Resolutions approving General Plan Amendment (File No. PGPA24-003) and Specific Plan Amendment (File No. PSPA24-004).

CITY OF ONTARIO PLANNING DEPARTMENT

PLANNING COMMISSION AGENDA REPORT

September 23, 2025

303 East B Street, Ontario, California 91764 Phone: 909.395.2036 / Email: PlanningDirector@OntarioCA.gov

FILE NOS: PGPA24-003, PSPA24-004, PMTT24-008, & PDEV24-017

SUBJECT: A public hearing to consider the following: [1] An Amendment (File No. PGPA24-003) to The Ontario Plan 2050 Policy Plan (General Plan) Land Use Map to change the land use designation on approximately 10.02 acres of land, located south of Chatham Street, west of Clifton Avenue, east of Amherst Avenue, and north of Eucalyptus Avenue, from Public School to Medium Density Residential; [2] An Amendment (File No. PSPA24-004) to the Esperanza Specific Plan to revise the specific plan for consistency with The Ontario Plan Policy Plan (General Plan) Land Use Map. The amendment includes [i] revising the allowed uses within Planning Area 11 from School to RD-7/Row Townhomes; and [ii] modifying the Specific Plan land use map, development standards, exhibits, and text to reflect the proposed land use changes; [3] A Tentative Tract Map (TTM 20730) (File No. PMTT24-008) for condominium purposes to subdivide approximately 10.02 acres into 28 numbered lots and 15 lettered lots, located within Planning Area 11 (RD-7/Row Townhomes) of the Esperanza Specific Plan; and [4] A Development Plan (File No. PDEV24-017) to construct 161 multiple-family dwellings on approximately 10.02 acres, located within Planning Area 11 (RD-7/Row Townhomes) of the Esperanza Specific Plan. **Submitted by GDC Investments 13, LP. City Council action is required for File Nos. PGPA24-003 and PSPA24-004.**

PROPERTY OWNER: GDC Investments 13, LP

RECOMMENDED ACTION: That the Planning Commission consider and adopt the following:

1. A Resolution recommending the City Council approve the Addendum to The Ontario Plan 2050 Supplemental Environmental Impact Report (State Clearinghouse No. 2021070364, certified by the City Council on August 16, 2022); and

2. Resolutions recommending the City Council approve General Plan Amendment and Specific Plan Amendments (File Nos. PGPA24-003 and PSPA24-004) pursuant to the facts and reasons contained in the staff report and attached Resolutions; and

3. Resolutions approving Tentative Tract Map and Development Plan (File Nos. PMTT24-008 and PDEV24-017), pursuant to the facts and reasons contained in the staff report and subject to the conditions of approval appended to the Resolutions as Attachment A.

BACKGROUND: On January 27, 2010, the Ontario City Council certified The Ontario Plan Environmental Impact Report in conjunction with File No. PGPA06-001 (City Council Resolution No. 2010-006), and on August 16, 2022, the Ontario City Council certified The Ontario Plan 2050 Update Supplemental Environmental Impact Report (SEIR) in conjunction with The Ontario Plan 2050 Update (TOP 2050; File No. PGPA20-002). TOP 2050 and the associated SEIR analyzed the Project site and established guidelines for development, including, but not limited to, Public School (K-12) and university uses. Within the SEIR, adjacent areas are designated for Low-Density Residential and Medium-Density Residential uses.

On May 25, 2023, the Mountain View School District officially informed GDC Communities, the property owner, that it would not exercise its option to purchase the Project site for an elementary school facility. Although the site had previously been identified as suitable for a Public School (K-12) use, the District determined that it no longer intends to pursue acquisition or development of the site (See Attachment A – Mountain View School District Letter).

On August 13, 2024, the applicant submitted applications for the following: (1) a General Plan Amendment (File No. PGPA24-003) to change the land use designation of approximately 10.02 acres from Public School to Medium Density Residential; (2) a Specific Plan Amendment (File No. PSPA24-004) to revise the Esperanza Specific Plan to allow RD-7 (Row Townhomes) within Planning Area 11 and to update the plan's land use map, standards, and exhibits accordingly; (3) a Tentative Tract Map (File No. PMTT24-008 / TTM 20730) to subdivide the 10.02 acres into 28 numbered lots and 15 lettered lots for condominium purposes; and (4) a Development Plan (File No. PDEV24-017) to construct 161 multiple-family dwellings within Planning Area 11 of the Esperanza Specific Plan.

On September 15, 2025, the Development Advisory Board conducted a public hearing regarding the Tentative Tract Map and Development Plan and recommended that the Planning Commission approve File Nos. PMTT24-008 and PDEV24-017.

PROJECT SETTING: The Project site consists of approximately 10.02 acres located south of Chatham Street, west of Clifton Avenue, east of Amherst Avenue, and north of Eucalyptus Avenue, within Planning Area 11 of the Esperanza Specific Plan (see Exhibit A: Project Location Map). The site is currently vacant and is surrounded by established residential neighborhoods, developed with low- and medium-density housing, consistent with the Esperanza Specific Plan. Surrounding land uses, zoning, and the applicable Policy Plan (General Plan) and Specific Plan designations are summarized in Table 1: Surrounding Zoning & Land Uses.

PROJECT ANALYSIS:

(1) General Plan Amendment (File No. PGPA24-003)

The Project would amend the Ontario Plan Policy Plan – Land Use Map and associated buildout tables to reflect the change in land use from School to Medium Density Residential (see Exhibit B). The proposed Project will establish the following:

- Convert 10.02 acres of land from Public School to Medium Density Residential.

The Project site is currently designated Public School in the TOP 2050 Land Use Map. The proposed General Plan Amendment would change the designation to Medium Density Residential, establishing a buildout capacity of 224 dwelling units. This capacity accommodates the 130-unit loss resulting from PGPA23-003 and ensures compliance with SB 330 by maintaining the City's overall housing capacity.

(2) Specific Plan Amendment (File No. PSPA24-004)

The SPA proposes the following changes:

- Revise Planning Area 11 to include:
  - Increase the number of units allowed from 0 dwelling units to 161 dwelling units.
  - Revise the allowed uses from School to RD-7/Row Townhomes

- Various changes to the Specific Plan land use map (Planning Areas), development standards, exhibits, and text modification, to reflect the proposed land use changes.

All changes and additions to the Specific Plan (including exhibits, tables, development standards, and design guidelines) are shown in the revised Specific Plan document accompanying this report. Additions are highlighted in red text, while deletions are indicated with strikethroughs.

Approval of the related Tentative Tract Map and Development Plan, discussed below, is contingent upon the approval of the proposed General Plan Amendment, Specific Plan Amendment and related Addendum to The Ontario Plan 2050 Supplemental Environmental Impact Report (SCH No. 2021070364).

(3) Tentative Tract Map (File No. PMTT24-008)

Tentative Tract Map No. 20730 (File No. PMTT24-008) for Condominium Purposes proposes to subdivide 10.02 acres within Planning Area 11 of the Esperanza Specific Plan into 28 numbered lots for a total of 161 dwelling units and 15 lettered lots. The lettered lots are designated for public and private streets, landscape edges, and common open space. The numbered lots range from 6,098 to 10,454 square feet, with an average lot size of 7,639 square feet. While the RD-7 (Row Townhome) designation under the Specific Plan does not require a minimum lot size, width, or depth, the configuration of the lots is determined by building setbacks and required separations. The proposed tract yields a net density of 16.07 dwelling units per acre, consistent with the Esperanza Specific Plan.

(4) Development Plan (File No. PDEV24-017)

(a) Site Design/Building Layout — The Project consists of 161 attached row townhome units in 28 buildings, with 2- and 3-story configurations. Buildings are organized along a private street network with rear-loaded garages accessed from drive aisles that also serve as fire lanes. Buildings along Clifton Avenue, Amherst Avenue, and Eucalyptus Avenue include pedestrian entries, landscape improvements, and project monumentation. A multipurpose trail and six-foot community wall are proposed along Eucalyptus Avenue.

The site includes a recreation area with a pool and common open space, as well as distributed private courtyards. Each unit includes private open space in the form of porches, patios, or balconies. A total of approximately 96,000 square feet of open space is provided, exceeding Specific Plan requirements. Parking is provided through private two-car garages, driveway spaces, uncovered surface spaces, and parallel off-site spaces, meeting the required parking ratio.

(b) Site Access/Circulation — The Project site will have two primary vehicular access points, one from Amherst Avenue and one from Chatham Street. Both access points connect to a private street network designed with 24-foot-wide drive aisles that also function as fire lanes and provide access to individual garages, guest parking spaces, and parallel on-street parking. The circulation system is designed to accommodate emergency vehicle access and maintain connectivity throughout the site. Pedestrian access is provided through individual entries along the project's street frontages, including Amherst Avenue, Clifton Avenue, and Eucalyptus Avenue. A multipurpose trail is planned along Eucalyptus Avenue, and internal pedestrian pathways provide connections between buildings, open space areas, and parking facilities.

(c) Parking — The Project requires 414 vehicle parking spaces, as specified in the Esperanza Specific Plan. The project proposes a total of 433 spaces, which exceeds the minimum requirement. Parking is provided through 322 enclosed garage spaces, 45 uncovered surface spaces, 17 driveway spaces, and 49 parallel on-street spaces. The parking calculations for the project are summarized in Table 3: Parking Summary.

(d) Architecture — The Applicant proposes two architectural styles: Transitional Farmhouse and Transitional Spanish. Both styles are applied to 2- and 3-story row townhome buildings.

- **Transitional Farmhouse** — The row townhomes in a Transitional Farmhouse style include the following treatments:
  - Simple gabled rooflines with composition shingles;
  - Vertical board-and-batten siding combined with horizontal lap siding;
  - Light stucco walls with contrasting trim;
  - Covered entries with porch elements; and
  - Balconies and vertically proportioned windows for articulation.

- **Transitional Spanish** — The row townhomes in a Transitional Spanish style include the following treatments:
  - Gabled and hipped roof forms with S-profile concrete roof tiles;
  - Smooth stucco finishes in light neutral tones;
  - Arched entryways at selected units;
  - Simple eave detailing with occasional shed roof projections;
  - Recessed windows with trim; and
  - Metal balcony railings and light fixtures for articulation.

(e) Landscaping — The Project incorporates California native and drought-tolerant tree species, including Desert Museum Palo Verde, Western Redbud, Golden Rain Tree, Crape Myrtle, Chinese Pistache, California Sycamore, Coast Live Oak, Brisbane Box, and Olive. Palms are included in limited quantities for vertical emphasis along key frontages. A mix of evergreen and deciduous trees is distributed throughout private streets, courtyards, and open space areas to provide shade and buffering.

(f) Open Space/Amenities — Private open space is provided through porches, patios, and balconies for each unit, totaling approximately 37,150 square feet, which exceeds the 24,150 square feet required. Common open space is provided in the form of a central recreation area with a pool, private courtyards, and landscaped paseos, totaling approximately 58,878 square feet, which exceeds the 40,250 square feet required. In total, 96,028 square feet of open space is provided, surpassing the minimum requirement of 64,400 square feet.

(g) Traffic — The Trip Generation Assessment compared traffic from the approved elementary school in the Esperanza Specific Plan with the proposed 161-unit residential project. The school was estimated to generate 949 daily trips, including 309 in the AM peak and 206 in the PM peak. The proposed residences are expected to generate 944 daily trips, with 108 AM and 125 PM peak trips. This represents a net reduction of 5 daily trips, 201 fewer AM peak trips, and 81 fewer PM peak trips compared to the school use. Because the Project results in fewer trips than previously approved, no additional traffic operations analysis is required.

Traffic Comparison: School vs. Residential

Use	*Daily Trips*	*AM Peak Trips*	*PM Peak Trips*
Approved Elementary School	949	309	206
Proposed 161 Homes	944	108	125
Difference (School – Homes)	-5	-201	-81

(h) Signage — All Project signage is required to comply with sign regulations provided in Ontario Development Code Division 8.1 and the Esperanza Specific Plan. Prior to the issuance of a Building Permit for the installation of any new on-site signage, the Applicant is required to submit Sign Plans for Planning Department review and approval.

(i) Utilities (drainage, sewer) — Public utilities (water and sewer) are available to serve the Project. Furthermore, the Applicant has submitted a Preliminary Water Quality Management Plan (PWQMP), which establishes the Project's compliance with storm water discharge/water quality requirements. The PWQMP includes site design measures that capture runoff and pollutant transport by minimizing impervious surfaces and maximizes low impact development (LID) best management practices (BMPs), such as retention and infiltration, biotreatment, and evapotranspiration. The PWQMP proposes the use of private storm drain. Any overflow drainage will be conveyed to the public street by way of parkway drains and culverts.

PUBLIC NOTIFICATION: The subject application was advertised as a public hearing in at least one newspaper of general circulation in the City of Ontario (the Inland Valley Daily Bulletin newspaper). In addition, the Project site was posted with one or more large public notification signs and notices were mailed to all owners of real property located within a minimum of 300 feet of the exterior boundaries of the property that is the subject of the hearing, as shown on the records of the County Assessor.

CORRESPONDENCE: As of the preparation of this report, the City has received 8 written letters of opposition to the proposed land use change. The letters raise the following common concerns (See Attachment B – Opposition Letters):

1. The project site was previously identified for a future school use. Residents expressed concern that changing the land use would not align with the community's expectations for a school facility.

   Staff Response: *The Mountain View School District (School District) formally notified the property owner on May 25, 2023 (see Attachment A), that it no longer intends to acquire or develop the site for a school facility. The City acknowledges the residents concern of the change of land use from a school facility to medium density residential. Unfortunately, the City does not have control of the School District facilities planning. The proposed land use amendment from a school facility to medium density residential is complementary because the project site is surrounded by single-family and multi-family residential uses and the proposed medium density residential land use would be consistent with these existing residential neighborhoods.*

2. Recent residential growth in Ontario Ranch has already increased the need for additional school facilities and converting the project site to housing may add further strain to existing schools.

   ***Staff Response**: School facility planning is the responsibility of the School District, which addresses demand through their own separate facilities planning and enrollment forecast analysis processes.*

AGENCY/DEPARTMENT REVIEWS: Each City agency/department has been provided the opportunity to review and comment on the subject application and recommend conditions of approval to be imposed upon the application. At the time of the Resolution

preparation, recommended conditions of approval were provided and are appended to the attached Resolutions as Attachment A.

AIRPORT LAND USE COMPATIBILITY PLAN (ALUCP) COMPLIANCE: The California State Aeronautics Act (Public Utilities Code Section 21670 et seq.) requires that an Airport Land Use Compatibility Plan be prepared for all public use airports in the State; and requires that local land use plans and individual development proposals must be consistent with the policies set forth in the adopted Airport Land Use Compatibility Plan.

On April 19, 2011, the City Council of the City of Ontario approved and adopted the ONT ALUCP, establishing the Airport Influence Area for Ontario International Airport, which encompasses lands within parts of San Bernardino, Riverside, and Los Angeles Counties, and limits future land uses and development within the Airport Influence Area, as they relate to noise, safety, airspace protection, and overflight impacts of current and future airport activity. As the decision-making body for PMTT24-008 and PDEV24-017, and the recommending body for PGPA24-003 and PSPA24-004, the Planning Commission has reviewed and considered the facts and information contained in the Application and supporting documentation against the ONT ALUCP compatibility factors, including [1] Safety Criteria (ONT ALUCP Table 2-2) and Safety Zones (ONT ALUCP Map 2-2), [2] Noise Criteria (ONT ALUCP Table 2-3) and Noise Impact Zones (ONT ALUCP Map 2-3), [3] Airspace protection Zones (ONT ALUCP Map 2-4), and [4] Overflight Notification Zones (ONT ALUCP Map 2-5). As a result, the Planning Commission finds and determines that the Project, when implemented in conjunction with the conditions of approval, will be consistent with the policies and criteria set forth within the ONT ALUCP.

COMPLIANCE WITH THE ONTARIO PLAN 2050: The proposed Project is consistent with the principles, goals and policies contained within the Vision, Governance, Policy Plan (general plan), and City Council Priorities components of The Ontario Plan 2050 (TOP). More specifically, the goals and policies of TOP that are furthered by the proposed Project are as follows:

(1) City Council Goals.

- Operate in a Businesslike Manner
- Focus Resources in Ontario's Commercial and Residential Neighborhoods
- Invest in the City's Infrastructure (Water, Streets, Sewers, Parks, Storm Drains and Public Facilities)
- Ensure the Development of a Well Planned, Balanced, and Self-Sustaining Community in Ontario Ranch

(2) Vision.

Distinctive Development that integrates our varied and diverse focal points, districts, centers, corridors, and neighborhoods to provide a feeling of coherence without sacrificing uniqueness.

Commercial and Residential Development

- Development quality that is broadly recognized as distinctive and not exclusively tied to the general suburban character typical of much of Southern California.

- A demonstrated ability to attract housing in pursuit of our acknowledged responsibility to balance housing with the job growth that drives our quality of life.

- Distinctive and well-maintained neighborhoods that offer exceptional variety in lifestyles, with convenient access to schools, recreation and cultural facilities, places of worship, places of employment and shopping.

Development Quality

- Unique and authentic districts, centers, and corridors of varied scales that establish Ontario as one of the most vital and diverse locales in Southern California.

- Superior quality and design of the built environment and open spaces through careful attention to detail at every scale, including public and private spaces and structures.

(3) Governance.

Decision Making

Goal G1: Sustained decision-making that consistently moves Ontario towards its Vision by using The Ontario Plan as a framework for assessing choices.

- G1-1 Consistency with Policies. We require that staff recommendations to the City Council be consistent with adopted City Council Priorities (Goals and Objectives) and The Policy Pan.

- G1-2 Long-term Benefit. We require decisions to demonstrate and document how they add value to the community and support the Ontario Vision.

(4) Policy Plan (General Plan).

Land Use Element

Goal LU-1 Balance: A community that has a spectrum of housing types and price ranges that match the jobs in the City and that make it possible for people to live and work in Ontario and maintain a quality of life.

- LU-1.1 Strategic Growth. We concentrate growth in strategic locations that help create place and identity, maximize available and planned infrastructure, foster the development of transit, and support the expansion of the active and multimodal transportation networks throughout the City.

- LU-1.6 Complete Community. We incorporate a variety of land uses and building types in our land use planning efforts that result in a complete community where residents at all stages of life, employers, workers, and visitors have a wide spectrum of choices of where they can live, work, shop and recreate within Ontario.

Housing Element

Goal H-1 Neighborhoods & Housing: Stable neighborhoods of quality housing, ample community services, and public facilities, well-maintained infrastructure, and public safety that foster a positive sense of identity.

- H-1.2 Neighborhood Conditions. We direct efforts to improve the long-term sustainability of neighborhoods through comprehensive planning, provision of neighborhood amenities, rehabilitation and maintenance of housing, and community building efforts.

- H-1.5 Neighborhood Identity. We strengthen neighborhood identity through creating parks and recreational outlets, sponsoring neighborhood events, and encouraging resident participation in the planning and improvement of their neighborhoods.

Goal H-2 Housing Supply & Diversity: Diversity of types of quality housing that are affordable to a range of household income levels, accommodate changing demographics, and support and reinforce the economic sustainability of Ontario.

- H-2.4 Ontario Ranch. We support a premier lifestyle community in the Ontario Ranch, distinguished by diverse housing, highest design quality, and cohesive and highly amenitized neighborhoods.

- H-2.5 Housing Design. We require architectural excellence through adherence to City design guidelines, thoughtful site planning, environmentally sustainable practices, and other best practices.

Community Economics Element

Goal CE-1 Complete Community: A complete community that provides for all incomes and stages of life.

- CE-1.1 Jobs-Housing Balance. We pursue improvement to the Inland Empire's balance between jobs and housing by promoting job growth that reduces the regional economy's reliance on out-commuting.

- CE-1.6 Diversity of Housing. We collaborate with residents, housing providers, and the development community to provide housing opportunities for every stage of life; we plan for a variety of housing types and price points to encourage the development of housing supportive of our efforts to attract business in growing sectors of the community while being respectful of existing viable uses.

Goal CE-2 Placemaking: A City of distinctive neighborhoods, districts, corridors, and centers where people choose to be.

- CE-2.1 *Development Projects*. We require new development and redevelopment to create unique, high-quality places that add value to the community.

- CE-2.2 *Development Review*. We require those proposing new development and redevelopment to demonstrate how their projects will create appropriately unique, functional, and sustainable places that will compete well with their competition within the region.

- CE-2.4 Protection of Investment. We require that new development and redevelopment protect existing investment by providing architecture and urban design of equal or greater quality.

- CE-2.5 Private Maintenance. We require adequate maintenance, upkeep, and investment in private property because proper maintenance on private property protects property values.

Mobility Element

Goal M-1 Roadway System: A system of roadways that meets the mobility needs of a dynamic and prosperous Ontario.

- M-1.4 Complete Streets. We work to provide a complete, balanced, context-aware, multimodal transportation network that meets the needs of all users of streets, roads, and highways, including motorists, pedestrians, bicyclists, children, persons with disabilities, seniors, movers of commercial goods, and users of public transportation. We prioritize implementation of complete streets improvements in environmental justice areas to facilitate opportunities for residents to use active transportation systems.

Goal M-2 Active Transportation: A system of trails and corridors that facilitate and encourage active modes of transportation.

- M-2.3 Pedestrian Walkways. We require streets to include sidewalks and visible crosswalks at major intersections where necessary to promote safe and comfortable mobility between residential areas, businesses, schools, parks, recreation areas, and other key destination points.

Community Design Element

Goal CD-1 Image & Identity: A dynamic, progressive city containing distinct and complete places that foster a positive sense of identity and belonging among residents, visitors, and businesses.

Goal CD-2 Design Quality: A high level of design quality resulting in neighborhoods, public spaces, parks, and streetscapes that are attractive, safe, functional, human-scale, and distinct.

- CD-2.1 Quality Building Design and Architecture. We encourage all development projects to convey visual interest and character through:

    1. Building volume, massing, and height to provide context-appropriate scale and proportion;

    2. A true architectural style which is carried out in plan, section, and elevation through all aspects of the building and site design and appropriate for its setting; and

    3. Exterior building materials that are articulated, high quality, durable, and appropriate for the architectural style.

- CD-2.2 Neighborhood Design. We create distinct residential neighborhoods that promote a sense of community and identity by emphasizing access, connectivity, livability, and social interaction through such elements as:

    1. A pattern of smaller, walkable blocks that promote activity, safety, and access to nearby amenities and services;

    2. Varied parcel sizes and lot configurations to accommodate a diversity of housing types;

    3. Traffic calming measures to slow traffic and promote walkability while maintaining acceptable traffic flows and emergency evacuation access;

    4. Floor plans that encourage views onto the street and de-emphasize the visual and physical dominance of garages (introducing the front porch as the "outdoor living room"), as appropriate; and

5. Landscaped parkways, with sidewalks separated from the curb and designed to maximize safety, comfort, and aesthetics for all users.

- CD-2.9 Landscape Design. We encourage durable, sustainable, and drought-tolerant landscaping materials and designs that enhance the aesthetics of structures, create and define public and private spaces, and provide shade and environmental benefits.

- CD-2.10 Parking Areas. We require all development, including single-family residential, to minimize the visual impact of surface, structured, and garage parking areas visible from the public realm in an aesthetically pleasing, safe and environmentally sensitive manner. Examples include:

  1. Garage parking: providing access to single-family residential garages through alley access, recessing garages from the frontage to emphasize front doors or active living spaces.

- CD-2.13 Entitlement Process. We work collaboratively with all stakeholders to ensure a high degree of certainty in the efficient review and timely processing of all development plans and permits.

HOUSING ELEMENT COMPLIANCE: The Project is consistent with the Housing Element of the Policy Plan (general plan) component of The Ontario Plan 2050, as the Project site is not one of the properties in the Housing Element Sites contained in Tables B-1 and B-2 (Housing Element Sites Inventory) of the Housing Element Technical Report.

ENVIRONMENTAL REVIEW: The environmental impacts of the Project were reviewed in conjunction with The Ontario Plan 2050 Supplemental Environmental Impact Report (SCH No. 2021070364; certified by the City Council on August 16, 2022).

The Application is a project pursuant to the California Environmental Quality Act (Public Resources Code Section 21000, et seq.) (CEQA) and an Addendum has been prepared to determine possible environmental impacts. Although the proposed Project could have a significant effect on the environment, because all potentially significant effects have been analyzed adequately in an earlier Certified EIR and have been avoided or mitigated pursuant to that earlier Certified EIR, including revisions or mitigation measures that are imposed on the proposed Project, nothing further is required. The Project will introduce no new significant environmental impacts beyond those previously analyzed in the Certified EIR, and all mitigation measures previously adopted by the Environmental Impact Report, are a condition of project approval and are incorporated in the Addendum.

The Addendum prepared for the Project included studies and assessments (see Appendices C through M, Attachment A – TOP SEIR Addendum). A summary of each study is as follows:

(a) Air Quality — The Air Quality Assessment evaluated construction and operational emissions for the Project. Modeling showed that emissions would not exceed the South Coast Air Quality Management District thresholds. The study concluded that air quality impacts would be less than significant, and no additional mitigation is required beyond compliance with existing State and regional regulations.

(b) Cultural Resources Report — The Cultural Resources Report evaluated archaeological and historic resources within the project site. A records search, Sacred Lands File review, and field survey found no cultural resources on-site. Due to prior grading and lack of findings, no impacts are anticipated and no further study or mitigation is recommended.

(c) Geotechnical Investigation — The Geotechnical Evaluation reviewed soil and subsurface conditions for the Project site. Testing confirmed that the site consists of engineered fill over dense alluvial soils, with groundwater more than 120 feet below ground. The site is not within an active fault zone, and the potential for liquefaction or lateral spreading is very low. With standard grading and foundation practices, the study concluded that the site is suitable for development and no significant geotechnical constraints are expected.

(d) Paleontological Resources Assessment — The Paleontological Resources Assessment reviewed the potential for fossil resources on the Project site. No fossils were observed during the field survey, but deeper soils in the area are known to contain fossils. To address this, the study recommends monitoring during grading with procedures for fossil recovery if needed. With these measures, potential impacts would be reduced to less than significant.

(e) Greenhouses Gasses (GHG) Assessment — The GHG Assessment evaluated whether the Project would create new or greater emissions compared to the previously approved Specific Plan. Modeling showed the Project would generate approximately 2,238 metric tons of CO_2e per year, which is below the City's threshold of significance. With compliance measures from the City's Climate Action Plan, impacts would be less than significant.

(f) Phase 1 Environmental Site Assessment (ESA) Report — The Phase I ESA evaluated the site for potential environmental concerns. The property was historically used for agriculture and has been graded in recent years. No hazardous materials, contamination, or other concerns were identified on the site or nearby properties. The study concluded that the site is not affected by environmental conditions and no further investigation is required.

(g) Drainage Report — The Drainage Report evaluated stormwater conditions for the Project site. Development would increase runoff, but City standards limit discharge to 15.64 cubic feet per second. To meet this requirement, the Project will include an oversized private storm drain system with onsite storage and a flow restriction device.

With these improvements, the site will manage runoff from a 100-year storm without creating downstream impacts.

(h) Noise Impact Analysis — The Noise Study evaluated potential construction and operational noise for the Project. Measurements and modeling showed that traffic, building equipment, and construction activities would remain within City and CEQA thresholds. Interior standards can be met with typical building construction. The study concluded that noise and vibration impacts are less than significant and no additional mitigation is required.

(i) Trip Generation/Vehicle Miles Traveled (VMT) Analysis — The Trip Generation Assessment compared traffic from the approved elementary school in the Esperanza Specific Plan with the proposed 161-unit residential project. The school was estimated to generate 949 daily trips, including 309 in the AM peak and 206 in the PM peak. The proposed residences are expected to generate 944 daily trips, with 108 AM and 125 PM peak trips. This represents a net reduction of 5 daily trips, 201 fewer AM peak trips, and 81 fewer PM peak trips compared to the school use. Because the Project results in fewer trips than previously approved, no additional traffic operations analysis is required.

The VMT Analysis evaluated the Project's consistency with the City of Ontario's adopted VMT thresholds. Modeling with the San Bernardino Traffic Analysis Model (SBTAM) showed that the Project would generate 22.3 daily VMT per service population under baseline conditions and 23.7 under buildout, both below the City's threshold of 27.6. The Project also does not increase VMT per service population citywide under cumulative conditions. The analysis concluded that impacts are less than significant, and the Project is consistent with City policies for circulation, active transportation, and transit.

(j) Water Study — The Water Study evaluated whether the City's existing water system can serve the 161-unit Project. The Project is estimated to use about 52,000 gallons of water per day. The onsite system will connect to the existing 8-inch lines in Amherst Avenue and Chatham Street. Modeling confirmed the City's 925 Zone has sufficient capacity to provide both domestic service and required fire flows. The study concluded that the City's water system can serve the Project and no offsite improvements are required.

(k) Sewer Study — The Sewer Study evaluated whether the City's existing sewer system can accommodate the 161-unit Project. The Project is expected to generate about 28,000 gallons of wastewater per day. The onsite system will connect to the existing 8-inch line in Amherst Avenue and convey flows to larger downstream lines. Modeling confirmed that all downstream facilities have sufficient capacity to handle the added demand. The study concluded that the City's sewer system can serve the Project and no offsite improvements are required.

TECHNICAL APPENDIX:

Table 1: Surrounding Zoning and Land Uses

	Existing Land Use	***Policy Plan Designation***	***Zoning Designation***	***Specific Plan Land Use***
Site	Vacant	Medium Density (Proposed)	SP (Esperanza Specific Plan)	PA-11 (RD-7) (Proposed)
North	Residential	Low Density	SP (Esperanza Specific Plan)	Park
South	Residential	Low Density	SP (Esperanza Specific Plan)	PA-7 (RD-1)
East	Residential	Medium Density	SP (Esperanza Specific Plan)	PA-4 (RD-6)
West	Residential	Low Density	SP (Esperanza Specific Plan)	PA-10 (RD-3)

Table 2: General Site & Building Statistics

Item	***Required Min./Max.***	***Provided (Ranges)***	***Meets Y/N***
Project area (in acres):	N/A	10.2 acres	Y
Maximum project density (dwelling units/ac):	16.07 DU/AC	16.07 DU/AC	Y
Front yard setback (in FT):	10 FT	10.5 - 21.3 FT	Y
Side yard setback (in FT):	10 FT	10 FT	Y
Rear yard setback (in FT):	3-5 FT	29 – 44.5 FT	Y
Maximum height (in FT):	45 FT	39.25 FT	Y
Open space – private:	24,150	37,150	Y
Open space – common:	40,250	86,995	Y
Total no. of dwelling units:	112-255 Min/Max	161 Units	Y

Table 3: Parking Summary

Type of Use	*Units*	*Parking Ratio*	*Spaces Required*	*Spaces Provided*
2-Bedroom Units	32	2.0 Spaces Per Dwelling Unit, Including 1 in a Garage	64	322 Garage 17 Driveway 45 Uncovered 49 parallel
3-bedroom units	129	2.5 Spaces Per Dwelling Unit, Including 2 in a Garage	323	
Guest	161	1 Space Per 6 Units	27	30
TOTAL			**414**	**433**

Table 4: Dwelling Unit Statistics:

Unit Type	*Unit Size (in SF)*	*No. Bedrooms*	*No. Bathrooms*	*No. Stories*	*Private Open Space (in FT)*
1	2,017	2	2.5	2	249
2	1859	3	2.5	2	234
3	1995	2	2.5	2	191
4	2004	3	2.5	2	289
4X	2,052	3	2.5	2	291
4CC	2112	3	2.5	2	300
5	2204	3	2.5	2	221
5 ACC	2,088	3	2.5	3	221
6	2288	3	3.5	3	152

Exhibit A: PROJECT LOCATION MAP

Source(s): ESRI, NearMap Imagery (May 2024)

Figure 2

0 75 150 300 Feet

Aerial Photograph

Exhibit B: FUTURE BUILDOUT TABLE

City of Ontario Policy Plan
Land Use Element

2·0·5·0 THE ONTARIO PLAN

LU-03 Future Buildout Table

Land Use	Acres[2]	Assumed Density/Intensity[3]	Units	Pop[4]	Non-Residential Square Feet	Jobs[5]
Residential						
Rural	529	2.0 du/ac	1,057	3,863	-	-
Low Density[6,7]	6,274	5.9 du/ac (north of Riverside Dr) 4.5 du/ac (south of Riverside Dr)[7]	34,842	127,304	-	-
Low-Medium Density[6]	889	8.5 du/ac	7,197	26,363	-	-
Medium Density[7]	2,301 ~~2,291~~	18.0 du/ac (north of Riverside Dr) 22.0 du/ac (south of Riverside Dr)[8]	~~46,926~~ 47,150	~~152,030~~ 152,757	-	-
High Density	198	25.0 du/ac (north of Riverside Dr) 35.0 du/ac (south of Riverside Dr)	5,089	13,038	-	-
Subtotal	~~101,180~~ **101,190**		~~95,433~~ **95,657**	~~322,710~~ **323,437**	**-**	**-**
Mixed Use						
• Downtown	132	• 60% of the area at 35 du/ac • 40% of the area at 0.80 FAR for office and retail	2,758	7,068	1,830,863	4,092
• East Holt Boulevard[8]	75	• 75% of the area at 30 du/ac • 25% of area at 0.80 FAR retail	1,693	4,336	655,222	546
• West Holt Boulevard[8]	1	• 75% of the area at 30 du/ac • 25% of area at 0.80 FAR retail	33	84	12,678	11
• Meredith	91	• 50% of the area at 40 du/ac • 50% at 0.35 FAR for retail uses	1,815	4,651	691,939	577
• Multimodal Transit Center	73	• 15% of the area at 60 du/ac • 60% of the area at 1.0 FAR office and retail • 25% of the area at 0.70 FAR Lodging	653	1,673	2,449,557	5,993
• Inland Empire Corridor	37	• 82% of the area at 10 du/ac • 18% of area t 0.35 FAR retail	300	769	100,455	84
• Guasti	86	• 30% of the area at 30 du/ac • 15% of area at 1.0 FAR retail • 30% of area at 0.70 FAR office • 25% of area at 0.70 FAR Lodging	777	1,991	2,012,077	3,848
• Ontario Center[8] *(South of Concours, East of Haven Avenue, West of Milliken, North of Interstate 10 Fwy)*	186	• 50% of area at 40 du/ac • 20% of area at 1.0 FAR office • 30% of area at 0.70 FAR retail	3,729	9,553	3,329,507	7,327

LU-03 Future Buildout Table

Land Use	Acres[2]	Assumed Density/Intensity[3]	Units	Pop[4]	Non-Residential Square Feet	Jobs[5]
• Ontario Center Arena[8] *((North of Concours, West of Milliken, East of Center Avenue, South of 4th Street*	169	• 75% of area at 40 du/ac • 10% of area at 1.00 FAR office • 15% of area at 0.80 FAR retail	5,076	13,006	1,621,435	3,417
• Ontario Mills	249	• 40% of area at 40 du/ac • 5% of area at 0.75 FAR office • 55% of area at 0.50 FAR retail	3,990	10,223	3,394,666	3,971
• Rich-Haven[2]	154	• 86% of area at 18 du/ac • 2% of area at 0.35 FAR office • 12% of area at 0.30 FAR retail	2,389	6,122	289,088	373
• Parkside	3	• 50% of the area at 35 du/ac • 50% of area at 0.80 FAR retail	52	132	51,440	129
• Eucalyptus/ Chino Airport[2]	105	• 40% of the area at 35 du/ac • 10% of area at 0.80 FAR retail • 20% of area at 1.00 FAR office • 30% of area at 0.60 FAR business park (industrial)	1,471	3,769	2,059,760	4,008
• Grove[2]	36	• 65% of the area at 35 du/ac • 25% of area at 0.80 FAR retail • 10% of area at 0.70 FAR Office	821	2,104	385,285	630
• Great Park[2]	~~305~~ 300	• 70% of area at 35 du/ac • 10% of area at 0.70 FAR for office • 20% of area at 0.30 FAR for retail uses	~~7,470~~ 7,340	~~19,141~~ 18,808	~~2,789,181~~ 2,740,699	~~4,930~~ 4,845
• Neighborhood Activity Hub[8] *(Mountain Village)*	8	• 50% of the area at 35 du/ac • 50% of area at 0.80 FAR retail	137	350	136,070	340
• Neighborhood Activity Hub[8] *(Mountain & Fourth)*	7	• 70% of the area at 50 du/ac • 30% of area at 0.80 FAR retail	251	643	75,008	188
• Neighborhood Activity Hub[8] *(Euclid & Francis)*	13	• 50% of the area at 30 du/ac • 50% of area at 0.80 FAR retail	190	487	220,912	552
• Neighborhood Activity Hub[8] *(Euclid & Walnut)*	16	• 75% of the area at 30 du/ac • 25% of area at 0.80 FAR retail	369	945	142,840	357
• Neighborhood Activity Hub[2,8] *(Euclid & Riverside)*	15	• 75% of the area at 35 du/ac • 25% of area at 0.80 FAR retail	394	1,009	130,662	327
Subtotal	~~1,762~~ 1,756	-	~~34,367~~ 34,238	~~88,058~~ 87,725	~~22,478,644~~ 22,330,162	~~41,698~~ 41,612

LU-03 Future Buildout Table

Land Use	Acres[2]	Assumed Density/Intensity[3]	Units	Pop[4]	Non-Residential Square Feet	Jobs[5]
Retail/Service						
Neighborhood Commercial[6]	248	0.30 FAR	-	-	3,238,367	8,832
General Commercial	385	0.30 FAR	-	-	5,033,395	5,605
Office/ Commercial	310	0.75 FAR	-	-	10,101,733	28,239
Hospitality	194	1.00 FAR	-	-	8,458,978	11,412
Subtotal	**1,136**		**-**	**-**	**26,832,472**	**54,088**
Employment						
Business Park	~~1,139~~ 1,145	0.50 FAR	-	-	~~24,816,271~~ 24,931,704	~~42,835~~ 42,987
Industrial	7,664	0.55 FAR	-	-	183,596,786	148,483
Subtotal	**~~8,802~~ 8,808**		-	-	**~~208,413,056~~ 208,528,490**	**~~191,318~~ 191,470**
Other						
Open Space–Non-Recreation	1,200	Not applicable	-	-	-	-
Open Space–Parkland[6]	1,047	Not applicable	-	-	-	-
Open Space-Water	17	Not applicable	-	-	-	-
Public Facility	90	Not applicable	-	-	-	-
Public School	~~614~~ 604	Not applicable	-	-	-	-
Ontario International Airport	1,423	Not applicable	-	-	-	-
Landfill	137	Not applicable	-	-	-	-
Railroad	250	Not applicable	-	-	-	-
Roadways	5,364	Not applicable	-	-	-	-
Subtotal	***~~10,142~~ 10,131***	-	-	-	-	-
Total	***32,022***	-	***~~129,800~~ 129,895***	***~~410,768~~ 411,162***	***~~264,057,928~~ 261,709,056***	***~~299, 324~~ 296,028***

Exhibit C: PROPOSED ESPERANZA SPECIFIC PLAN LAND USE PLAN

Exhibit D: PROPOSED ESPERANZA SPECIFIC PLAN LAND USE SUMMARY

LAND USE	UNITS	GROSS ACRES	UNITS/ GROSS ACRES	NET ACRES	UNITS/ NET ACRES
Residential Uses					
PA-1 (RD-7/ Row Townhomes, RD-8/ Motorcourt Townhomes)	319 DU	29.35 AC	10.87 DU/AC	28.97 AC	11.01 DU/AC
PA-2 (RD-4/ SFD Cottages, RD-6/ 6-Pack Courtyard)	113 DU	22.84 AC	4.95 DU/AC	17.36 AC	6.51 DU/AC
PA-3 (RD-7 & RD-8/ Row Townhomes)	156 DU	11.40 AC	13.68 DU/AC	11.10 AC	14.05 DU/AC
PA-4 (RD-6/ 6-Pack Courtyard, 8-Pack Courtyard, Row Townhomes)	303 DU	27.41 AC	11.05 DU/AC	19.30 AC	15.70 DU/AC
PA-5 (RD-5/ 4-Pack Courtyard)	157 DU	23.78 AC	6.60 DU/AC	17.64 AC	8.90 DU/AC
PA-6 (RD-4/ SFD Cottages)	78 DU	13.64 AC	5.72 DU/AC	10.00 AC	7.80 DU/AC
PA-7 (RD-1/ SFD 50' wide lots)	76 DU	14.36 AC	5.29 DU/AC	12.56 AC	6.05 DU/AC
PA-8 (RD-2/ SFD 55' wide lots)	107 DU	23.72 AC	4.51 DU/AC	19.26 AC	5.56 DU/AC
PA-9 (RD-1/ SFD 50' x 80')	82 DU	17.75 AC	4.62 DU/AC	13.27 AC	6.18 DU/AC
PA-10 (RD-3/ SFD 2-Pack)	100 DU	19.92 AC	5.02 DU/AC	14.62 AC	6.84 DU/AC
PA-11 (RD-7/ Row Townhomes)	161 DU	13.10 AC	12.29 DU/AC	10.02 AC	16.07 DU/AC
Park 1		5.75*AC			
Residential land Use Total	**1,652 DU**	**223.00 AC**	**7.41 DU/AC**	**174.10 AC**	**9.49 DU/AC**
Parks				9.89 AC	
Neighborhood Edge Buffers				6.62 AC	
Roadways				28.25 AC	
SCE Easements and Well Sites				4.14 AC	
PROJECT TOTAL	**1,652 DU**	**223.00 AC**		**223.00 AC**	

NOTES:

1. *Gross residential acres do not include the 13.10 gross acres for a school site.*
2. *Net residential acres are gross acres less parks, neighborhood edge buffers, roadways, and easements and net area for school site.*

** PA-2 includes 3.45 AC of Park 1*

Exhibit E: TENTATIVE TRACT MAP 20730

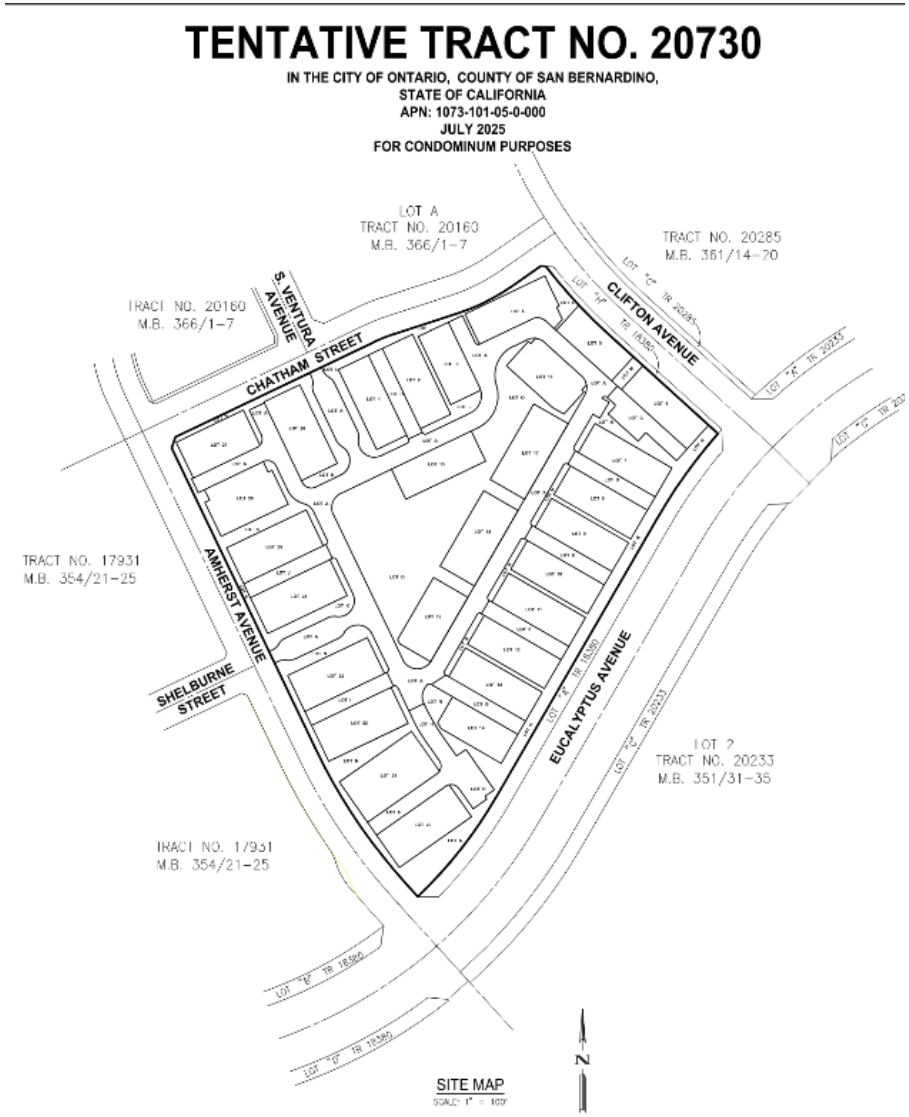


Exhibit F: SITE PLAN

Bassenian | Lagoni
ARCHITECTURE • PLANNING • INTERIORS

Copyright 2025 Bassenian | Lagoni Architects

2101 Orchard Drive, Suite 100
Newport Beach, CA USA 92660
tel. +1 949 553 9100
fax +1 949 553 0548

CONCEPTUAL SITE PLAN

ESPERANZA : PA-11

Ontario, California

0 30 60 120

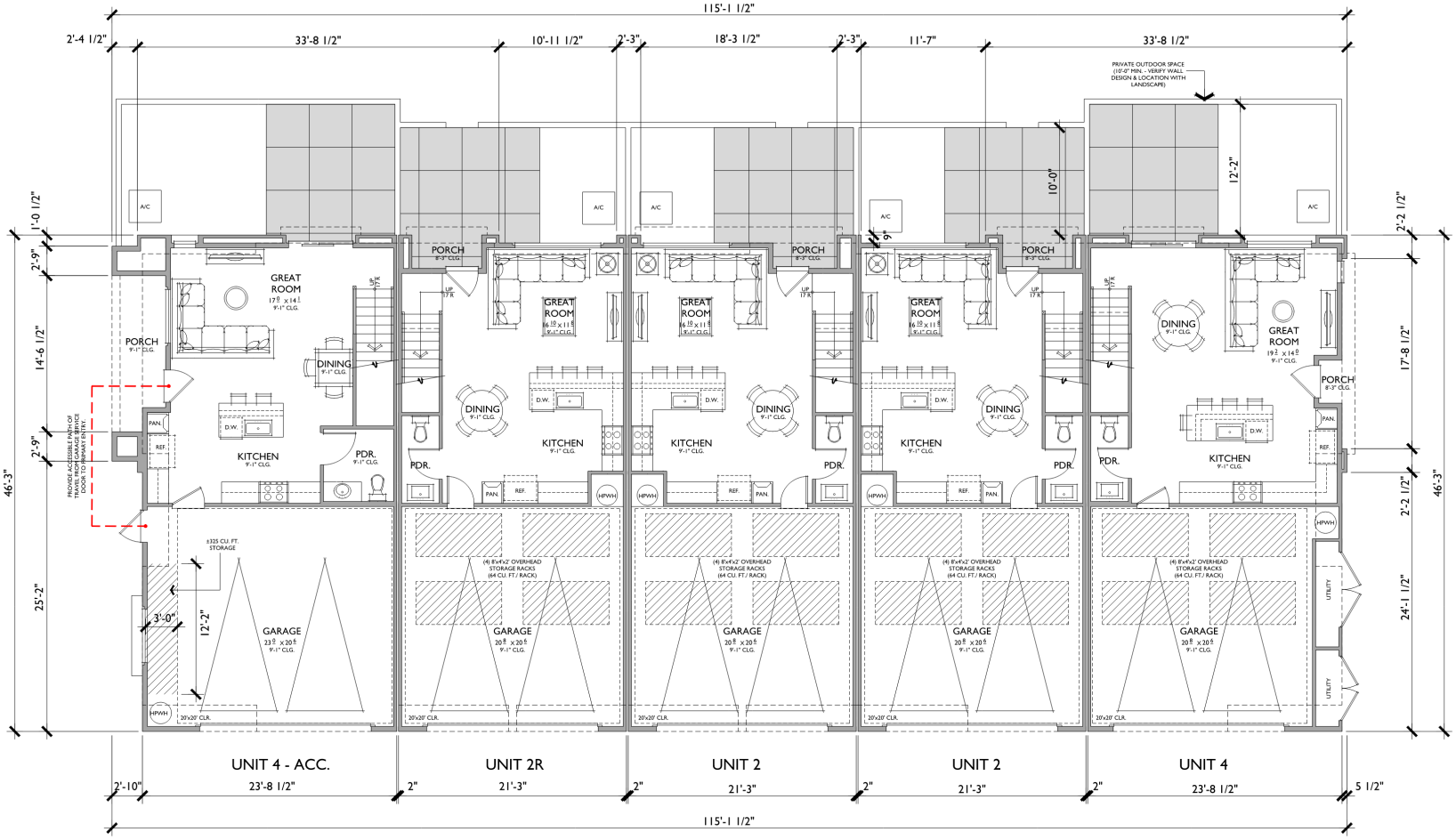
SCALE: 1" = 60'-0"

A47.23312

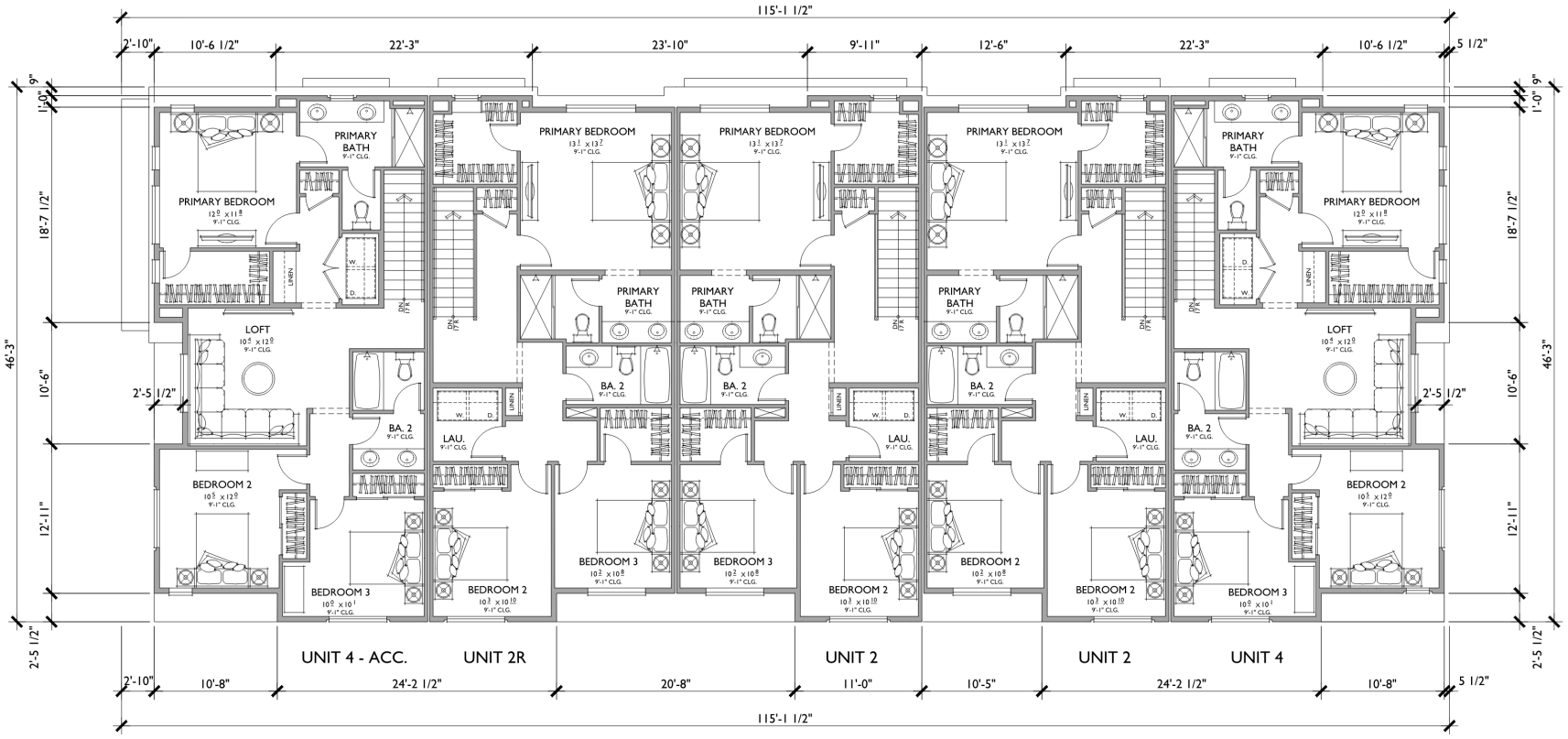
09.02.25

Exhibit G: FLOOR PLAN

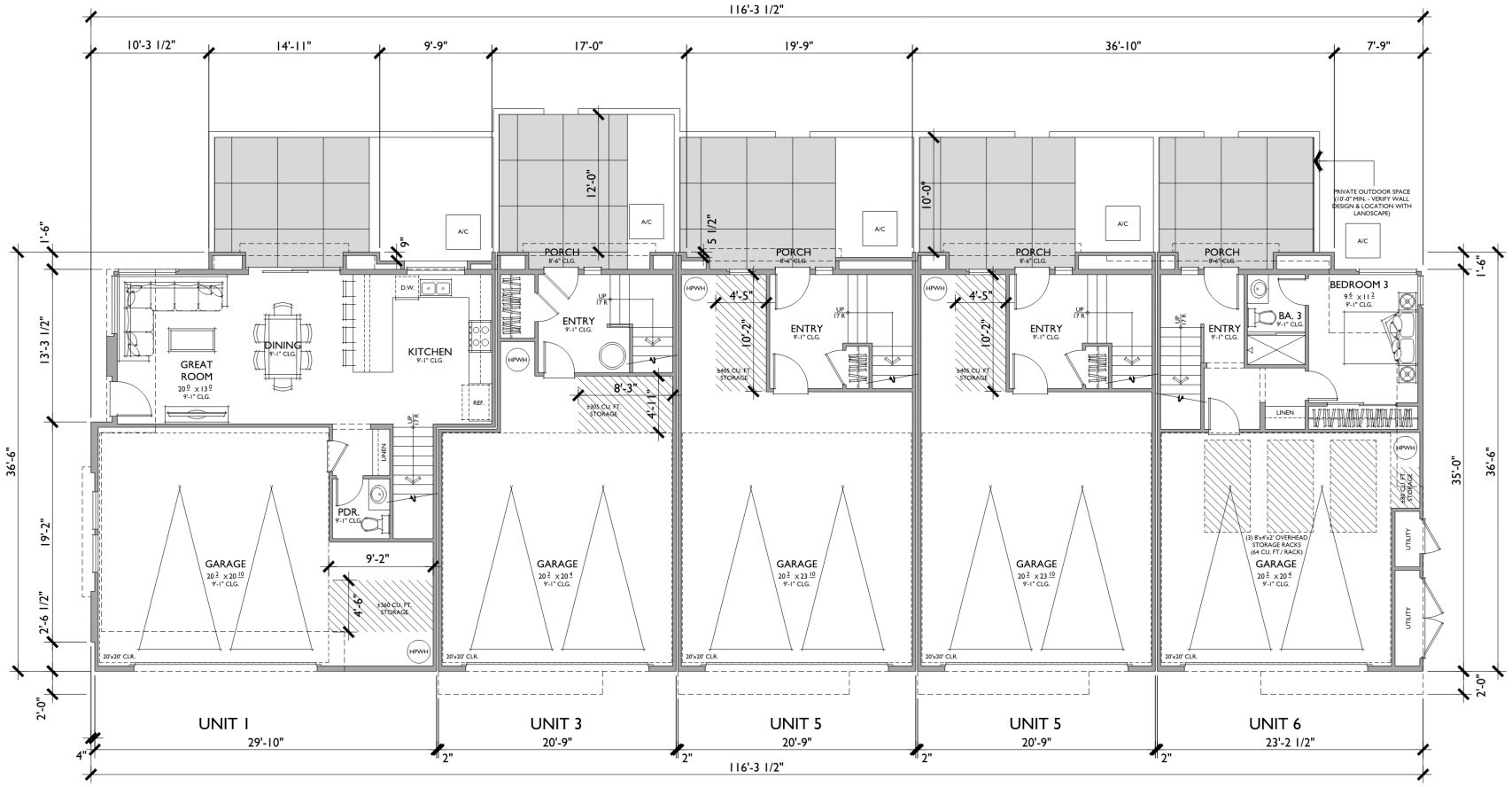
Typical 2 Story – First Floor



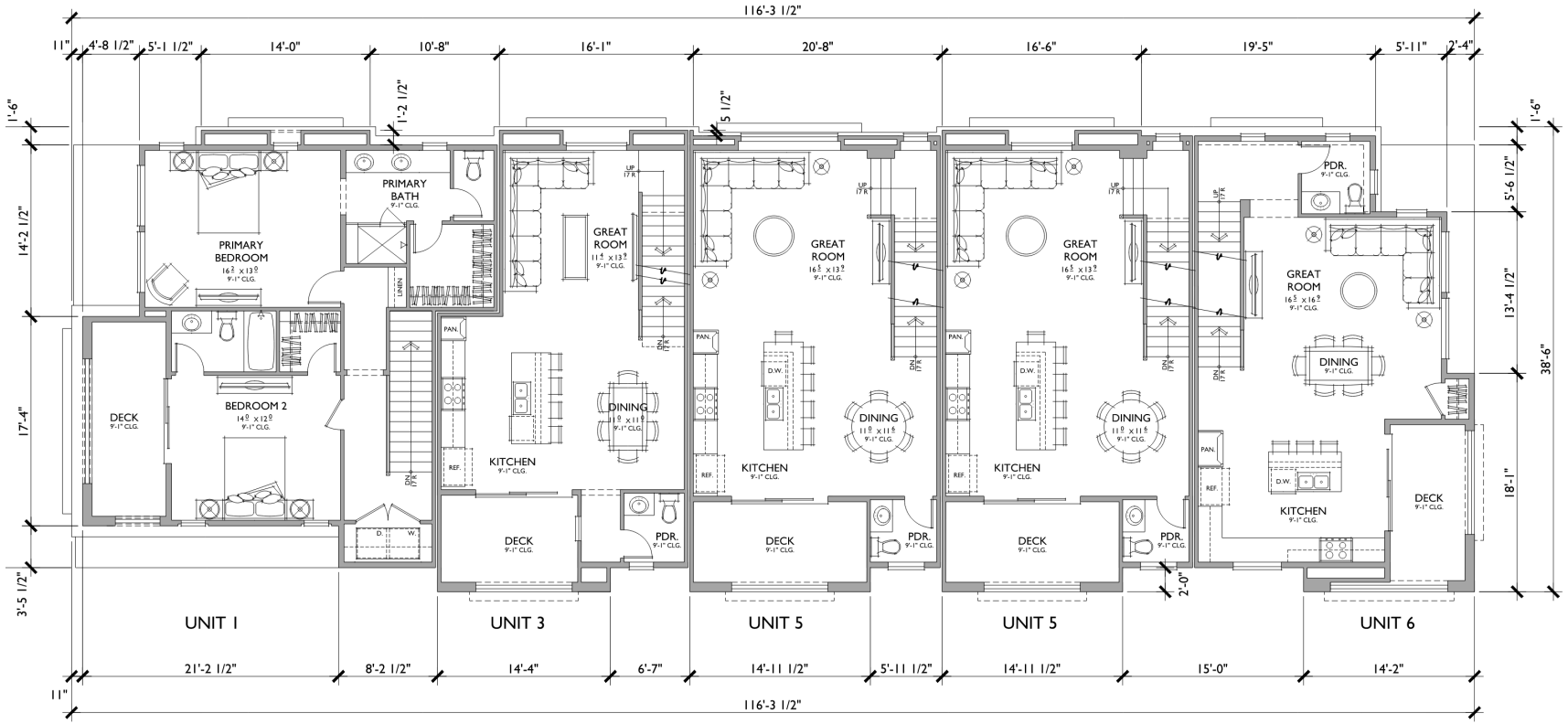
Typical 2 Story – Second Floor



Typical 3 Story – First Floor



Typical 3 Story – Second Floor



Typical 3 Story – Third Floor

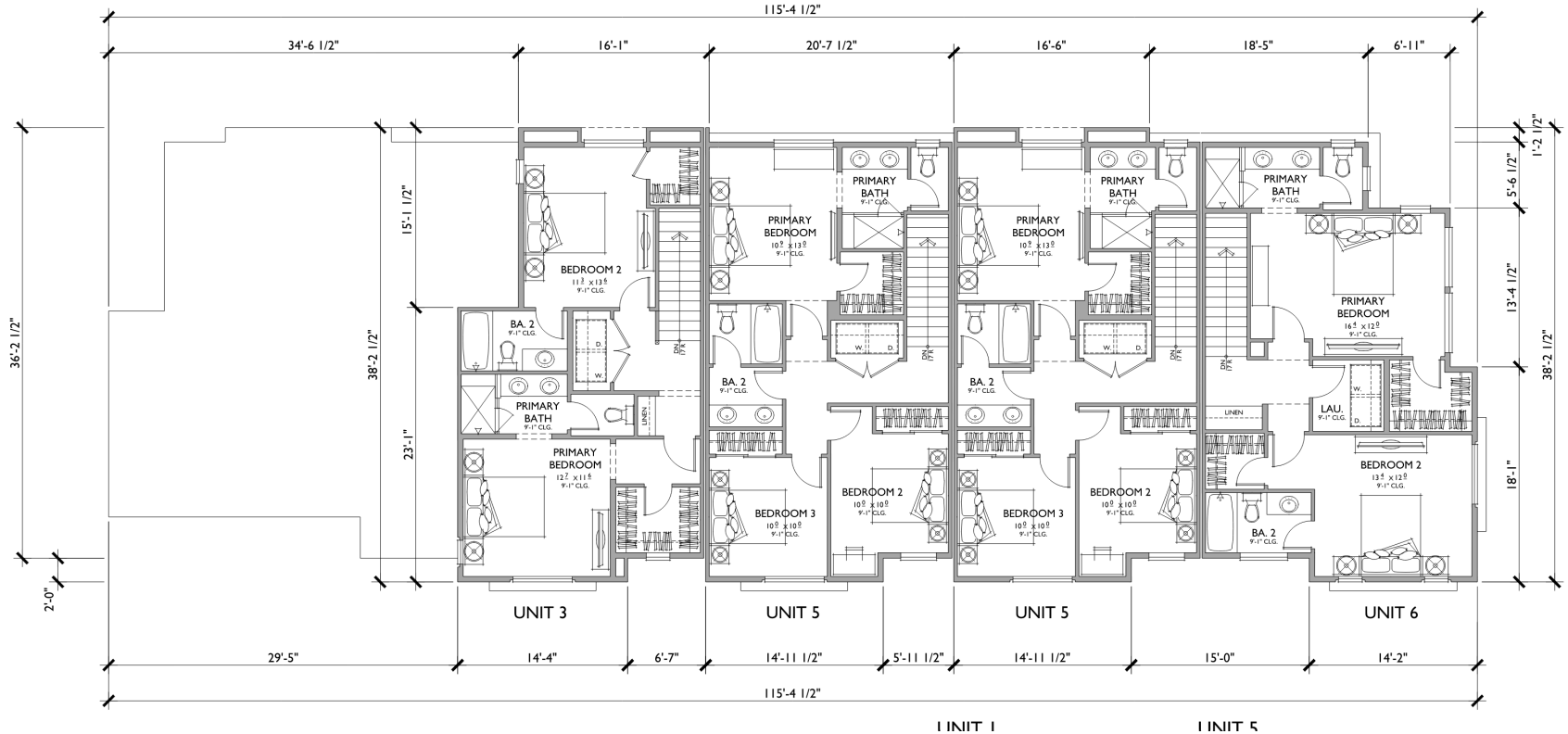
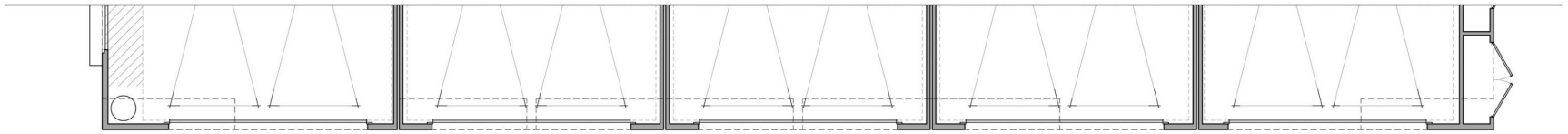


Exhibit H: ELEVATIONS

2 Story Transitional Farmhouse

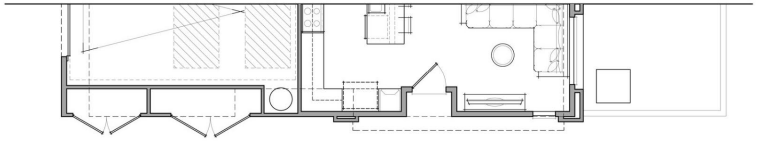
REAR (TYPICAL ALLEY ELEV.)



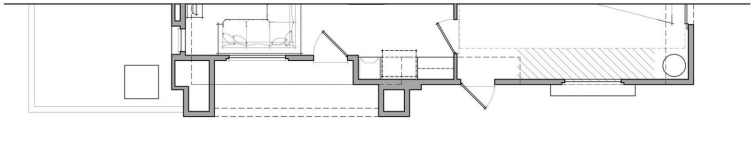
UNIT 4 - ACC. UNIT 2R UNIT 2 UNIT 2 UNIT 4

LEFT (TYPICAL INTERNAL LOOP RD. ELEV.)

RIGHT (TYPICAL AMHERST ELEVATION)



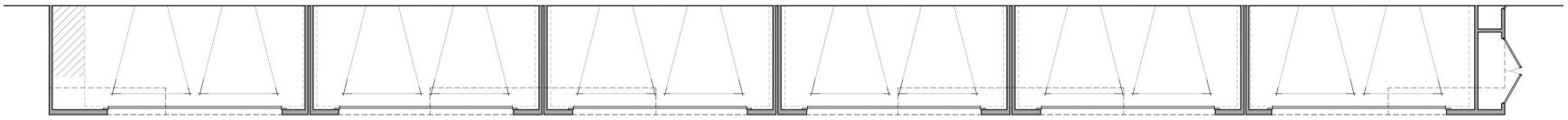
UNIT 4



UNIT 4 - ACC.

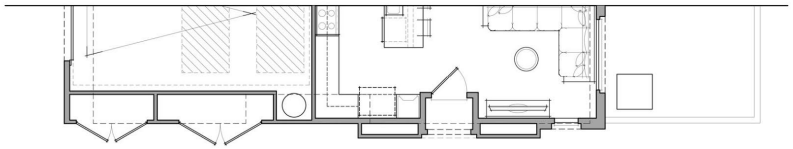
2 Story Transitional Spanish

REAR (TYPICAL INTERNAL LOOP RD. ELEV.)



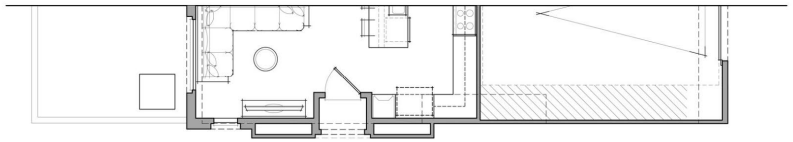
UNIT 4X UNIT 2R UNIT 2 UNIT 2R UNIT 2 UNIT 4

LEFT (TYPICAL INTERNAL END ELEV.)



UNIT 4

RIGHT (TYPICAL INTERNAL END ELEV.)



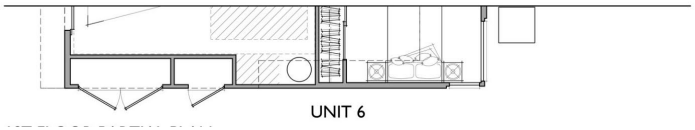
UNIT 4X

3 Story Transitional Farmhouse

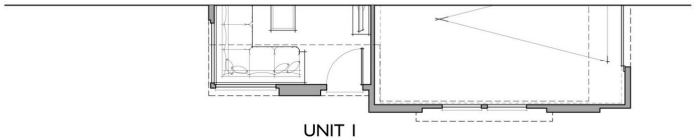
REAR (TYPICAL ALLEY ELEV.)
UNIT 1
UNIT 3
UNIT 5
UNIT 5
UNIT 6

LEFT (TYPICAL INTERNAL LOOP RD. ELEV.)

RIGHT (TYPICAL SITE BOUNDARY ELEVATION)



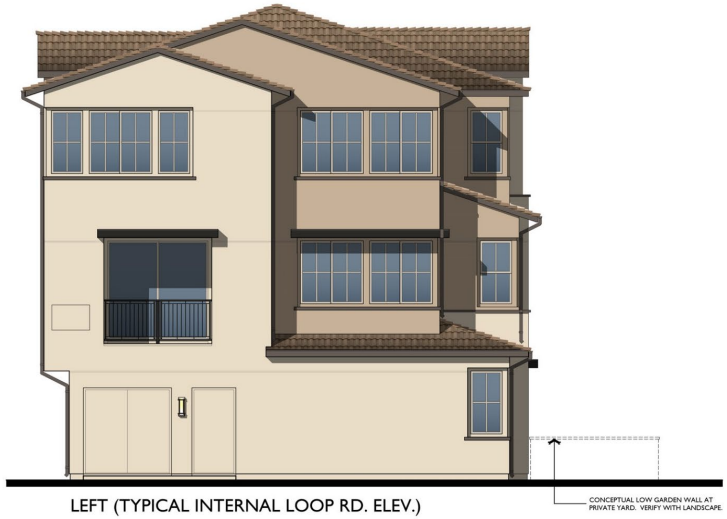
UNIT 6



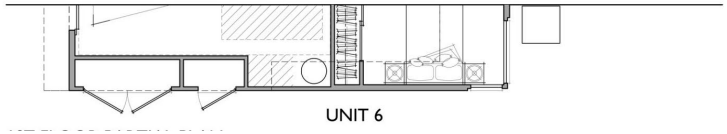
UNIT 1

3 Story Transitional Spanish

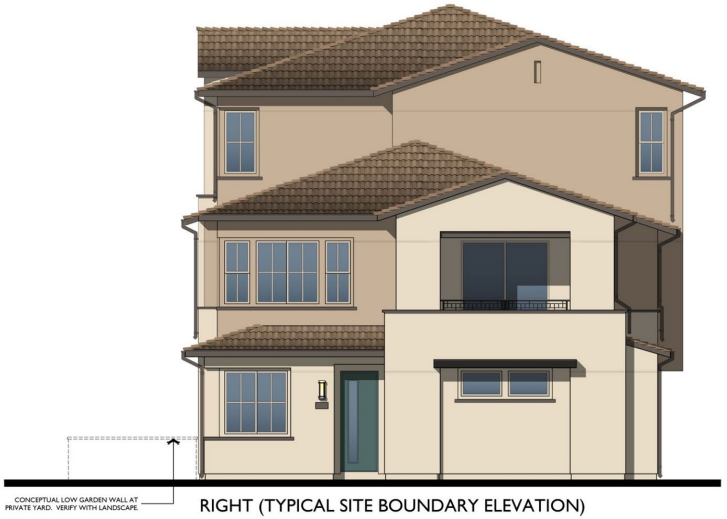
REAR (TYPICAL ALLEY ELEV.)



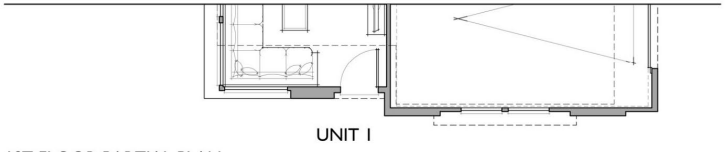
LEFT (TYPICAL INTERNAL LOOP RD. ELEV.)



UNIT 6



RIGHT (TYPICAL SITE BOUNDARY ELEVATION)



UNIT 1

Exhibit I: LANDSCAPE PLAN

PLANT SCHEDULE OVERALL TREES

SYMBOL	BOTANICAL / COMMON NAME	SIZE	WUCOLS	QTY
TREES				
	CALLISTEMON CITRINUS BOTTLE BRUSH STANDARD	24" BOX	L	4
	CERCIDIUM X 'DESERT MUSEUM' DESERT MUSEUM PALO VERDE MULTI-TRUNK	36" BOX	L	32
	CERCIS OCCIDENTALIS WESTERN REDBUD STANDARD	15 GAL	M	7
	KOELREUTERIA PANICULATA GOLDEN RAIN TREE STANDARD	36" BOX	M	11
	LAGERSTROEMIA INDICA X FAURIEI 'MUSKOGEE' MUSKOGEE CRAPE MYRTLE STANDARD	24" BOX	M	6
	LAURUS NOBILIS 'SARATOGA' SWEET BAY STANDARD	24" BOX	L	60
	OLEA EUROPAEA 'WILSONII' WILSON FRUITLESS OLIVE STANDARD	16'X16' FIELD GROWN	L	26
	PISTACIA CHINENSIS CHINESE PISTACHE	36" BOX	M	42
	PLATANUS RACEMOSA CALIFORNIA SYCAMORE STANDARD	36" BOX	M	37
	PODOCARPUS GRACILIOR FERN PINE STANDARD	24" BOX	M	16
	PODOCARPUS GRACILIOR FERN PINE STANDARD	48"BOX	M	8
	QUERCUS AGRIFOLIA COAST LIVE OAK STANDARD	36" BOX	L	37
	QUERCUS ILEX HOLLY OAK STANDARD	15 GAL	L	24
	RHAPHIOLEPIS X 'MONTIC' MAJESTIC BEAUTY® INDIAN HAWTHORN STANDARD	24" BOX	M	97
	TRISTANIA CONFERTA BRISBANE BOX STANDARD	36" BOX	M	28
	WASHINGTONIA FILIFERA CALIFORNIA FAN PALM	18' BTH	L	7

Source(s): BMLA, Inc. (01-22-2025)

Figure 6

Not to Scale

Landscape Plan

Exhibit J: SITE PHOTOS

Esperanza Specific Plan – Planning Area 11

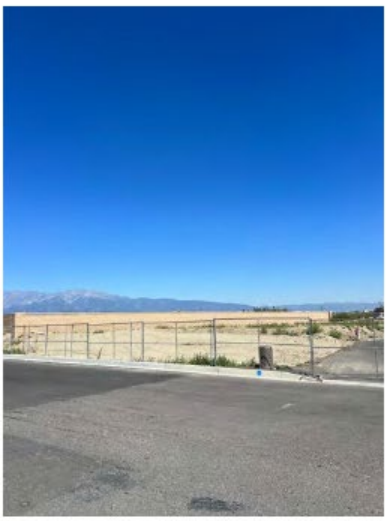


Photo 1 – Clifton Ave Looking North

Photo 2 – Clifton Ave Looking South @ Eastern Portion of Site

Photo 3 – Clifton Ave Looking East

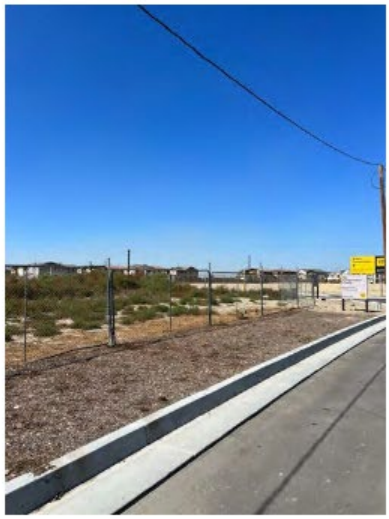


Photo 4 – Clifton Ave Looking West @ Northeast Corner of Site

Esperanza Specific Plan – Planning Area 11

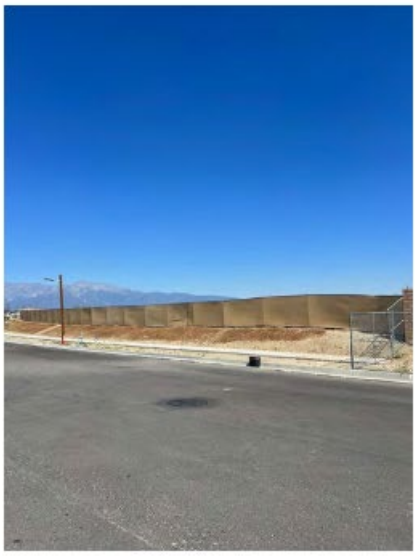


Photo 5 – Chatham/Clifton Corner Looking North Toward Future Park

Photo 6 – Chatham/Clifton Corner Looking South To Site

Photo 7 – Chatham/Clifton Corner Looking East

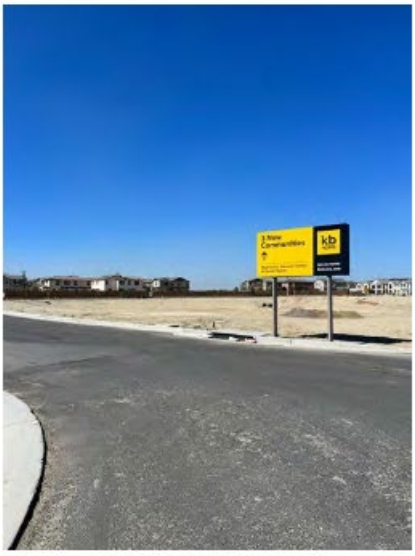


Photo 8 – Chatham/Clifton Corner Looking West

Esperanza Specific Plan – Planning Area 11

Photo 9 – Chatham St Looking North to Future Park Site

Photo 10 – Chatham St Looking South to Site

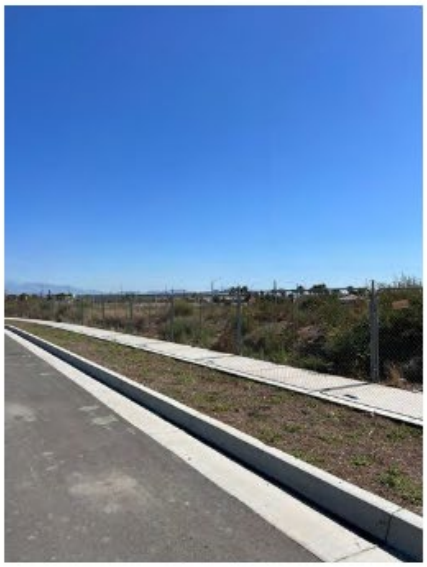


Photo 11 – Chatham St looking East

Photo 12 – Chatham St looking West

Attachment A:

Mountain View School District Letter

(Document to follow this page)

Attachment B:

Opposition Letters

(Document to follow this page)

Resolutions for:
Addendum
File Nos. PGPA24-003, PSPA24-004, PMTT24-008, & PDEV24-017

(Documents to follow this page)

MOUNTAIN VIEW SCHOOL DISTRICT

2585 S. Archibald Ave. • Ontario, CA 91761 • (909) 947-2205 • Fax: (909) 947-2291 • http://mvsdk8.org

Board of Trustees

Chris Taylor	Randall Ceniceros	Dr. James Willingham	Ronald Newton	Michelle Imperial
President	Clerk	Member	Member	Member

Douglass Moss, Ph.D., Superintendent

May 25, 2023

GDC Communities
12770 El Camino Real, Suite 220
San Diego, CA 92130
Attention: Dave Waters

RE: Esperanza Elementary School Site, City of Ontario, New Model Colony

Dear Mr. Waters,

Please let this letter serve as formal notification of the District's intent to pass on its option to purchase the property set aside by GDC Communities for an elementary school site in the Esperanza neighborhood of the New Model Colony.

The Mountain View School District officially informed you via email, on February 10, 2023, of our intent to forego our option to purchase the above-mentioned property. MVSD is sincerely grateful for GDC's patience in allowing the District time to make this determination.

We wish GDC Communities the best in their future endeavors and look forward to working together in the future should the opportunity present itself.

Sincerely,

Jeremy Currier
Assistant Superintendent
Personnel and Administrative Services

From:	Cinthia Hernandez
To:	Robert Morales
Cc:	Planning Director; Records Management; Public Comments
Subject:	Opposition to Re-Zoning School Site for Housing (Project File Nos. PGPA24-003, PDEV24-033)
Date:	Friday, September 12, 2025 1:32:54 PM

To the City of Ontario Planning Commission,

As a resident of Ontario, I am writing to express my opposition to the proposed change of the designated school site at the corner of Eucalyptus Avenue and Campus Avenue into a housing development.

This land was originally designated for a school, and with the rapid pace of housing growth in our community, the need for additional educational facilities is more urgent than ever. In just the past five years, hundreds of new homes have been added in the Ontario Ranch community, yet school growth has not kept up with the number of children entering and preparing to enter the public school system. Converting this land into 129 new homes will only add more students to an already strained system.

Ontario families were led to believe that this parcel would serve the community as a school. Changing that designation now would break faith with the residents who relied on that plan when choosing to live here.

I respectfully urge the Planning Commission and City Council to uphold the original vision for this site as a school and reject the proposed zoning change. Our children's education, safety, and quality of life should come before additional housing density.

Thank you for your consideration.

Sincerely,

Cinthia Hernandez

4516 S. Amherst Ave, Ontario, CA 91761

From:	Diana Herrera
To:	Robert Morales
Cc:	Public Comments; Records Management; Planning Director
Subject:	Opposition to Re-Zoning School Site for Housing (Project File Nos. PGPA24-003, PDEV24-033)
Date:	Friday, September 12, 2025 3:17:01 PM

To the City of Ontario Planning Commission,

As a resident of Ontario, I am writing to express my opposition to the proposed change of the designated school site at the corner of Eucalyptus Avenue and Campus Avenue into a housing development.

This land was originally designated for a school, and with the rapid pace of housing growth in our community, the need for additional educational facilities is more urgent than ever. In just the past five years, hundreds of new homes have been added in the Ontario Ranch community, yet school growth has not kept up with the number of children entering and preparing to enter the public school system. Converting this land into 129 new homes will only add more students to an already strained system.

Ontario families were led to believe that this parcel would serve the community as a school.
Changing that designation now would break faith with the residents who relied on that plan
when choosing to live here.

I respectfully urge the Planning Commission and City Council to uphold the original vision for this site as a school and reject the proposed zoning change. Our children's education, safety, and quality of life should come before additional housing density.

Thank you for your consideration.

Sincerely,

Diana Herrera
dee.herrera914@gmail.com
4517 S. Mendocino Ave
Ontario, CA 91761

From:	James
To:	Robert Morales
Cc:	Planning Director; Records Management; Public Comments
Subject:	Opposition to Re-Zoning School Site for Housing (Project File Nos. PGPA24-003, PDEV24-033)
Date:	Saturday, September 13, 2025 9:35:27 AM

To the City of Ontario Planning Commission,

As a resident of Ontario, I am writing to express my opposition to the proposed change of the designated school site at the corner of Eucalyptus Avenue and Campus Avenue into a housing development.

This land was originally designated for a school, and with the rapid pace of housing growth in our community, the need for additional educational facilities is more urgent than ever. In just the past five years, hundreds of new homes have been added in the Ontario Ranch community, yet school growth has not kept up with the number of children entering and preparing to enter the public school system. Converting this land into 129 new homes will only add more students to an already strained system.

Ontario families were led to believe that this parcel would serve the community as a school.

Changing that designation now would break faith with the residents who relied on that plan when choosing to live here.

I respectfully urge the Planning Commission and City Council to uphold the original vision for this site as a school and reject the proposed zoning change. Our children's education, safety, and quality of life should come before additional housing density.

Thank you for your consideration.

Sincerely,

James Dortch

4485 S Mendocino Ave [google.com]
Ontario, CA 91761 [google.com]

From:	Kayci Dortch
To:	Robert Morales
Cc:	Planning Director; Records Management; Public Comments
Subject:	Opposition to Re-Zoning School Site for Housing (Project File Nos. PGPA24-003, PDEV24-033)
Date:	Friday, September 12, 2025 5:13:29 PM

To the City of Ontario Planning Commission,

As a resident of Ontario, I am writing to express my opposition to the proposed change of the designated school site at the corner of Eucalyptus Avenue and Campus Avenue into a housing development.

This land was originally designated for a school, and with the rapid pace of housing growth in our community, the need for additional educational facilities is more urgent than ever. In just the past five years, hundreds of new homes have been added in the Ontario Ranch community, yet school growth has not kept up with the number of children entering and preparing to enter the public school system. Converting this land into 129 new homes will only add more students to an already strained system.

Ontario families were led to believe that this parcel would serve the community as a school.

Changing that designation now would break faith with the residents who relied on that plan when choosing to live here.

I respectfully urge the Planning Commission and City Council to uphold the original vision for this site as a school and reject the proposed zoning change. Our children's education, safety, and quality of life should come before additional housing density.

Thank you for your consideration.

Sincerely,

Kayci Dortch

4485 S Mendocino Ave
Ontario, CA 91761

From:	Kirstie Gracia
To:	Robert Morales
Cc:	Records Management; Planning Director; Public Comments
Subject:	Opposition to Re-Zoning School Site for Housing (Project File Nos. PGPA24-003, PDEV24-033)
Date:	Friday, September 12, 2025 6:28:34 PM

To the City of Ontario Planning Commission,

As a resident of Ontario, I am writing to express my **opposition** to the proposed change of the designated school site at the corner of Eucalyptus Avenue and Campus Avenue into a housing development.

This land was originally designated for a school, and with the rapid pace of housing growth in our community, the need for additional educational facilities is more urgent than ever. In just the past five years, hundreds of new homes have been added in the Ontario Ranch community, yet school growth has not kept up with the number of children entering and preparing to enter the public school system. Converting this land into 129 new homes will only add more students to an already strained system.
Ontario families were led to believe that this parcel would serve the community as a school. Changing that designation now would break faith with the residents who relied on that plan when choosing to live here.

I respectfully **urge** the Planning Commission and City Council to uphold the original vision for this site as a school and reject the proposed zoning change. Our children's education, safety, and quality of life should come before additional housing density.

Thank you for your consideration.
Sincerely,

--
Kirstie M. Garcia

From:	Miao Gao
To:	Robert Morales
Cc:	Public Comments; Planning Director; Records Management
Subject:	Opposition to Re-Zoning School Site for Housing (Project File Nos. PGPA24-003, PDEV24-033)
Date:	Sunday, September 14, 2025 4:48:43 PM

To the City of Ontario Planning Commission,

As a resident of Ontario, I am writing to express my opposition to the proposed change of the
designated school site at the corner of Eucalyptus Avenue and Campus Avenue into a housing
development.
This land was originally designated for a school, and with the rapid pace of housing growth in
our community, the need for additional educational facilities is more urgent than ever. In just the
past five years, hundreds of new homes have been added in the Ontario Ranch community, yet
school growth has not kept up with the number of children entering and preparing to enter the
public school system. Converting this land into 129 new homes will only add more students to
an already strained system.
Ontario families were led to believe that this parcel would serve the community as a school.
Changing that designation now would break faith with the residents who relied on that plan
when choosing to live here.
I respectfully urge the Planning Commission and City Council to uphold the original vision for
this site as a school and reject the proposed zoning change. Our children's education, safety,
and quality of life should come before additional housing density.
Thank you for your consideration.

Miao Gao
3925 E Fincastle St
Ontario, CA

From:	Nikko Erick Reyes
To:	Robert Morales
Cc:	Planning Director; Records Management; Public Comments
Subject:	Opposition to Re-Zoning School Site for Housing (Project File Nos. PGPA24-003, PDEV24-033)
Date:	Friday, September 12, 2025 5:49:33 PM

To the City of Ontario Planning Commission,

As a resident of Ontario, I am writing to express my opposition to the proposed change of the designated school site at the corner of Eucalyptus Avenue and Campus Avenue into a housing development.

This land was originally designated for a school, and with the rapid pace of housing growth in our community, the need for additional educational facilities is more urgent than ever. In just the past five years, hundreds of new homes have been added in the Ontario Ranch community, yet school growth has not kept up with the number of children entering and preparing to enter the public school system. Converting this land into 129 new homes will only add more students to an already strained system.

Ontario families were led to believe that this parcel would serve the community as a school.

Changing that designation now would break faith with the residents who relied on that plan when choosing to live here.

I respectfully urge the Planning Commission and City Council to uphold the original vision for this site as a school and reject the proposed zoning change. Our children's education, safety, and quality of life should come before additional housing density.

Thank you for your consideration.

Sincerely,

Nikko Reyes

S. Mendocino Ave. Ontario, CA 91761

Nikko Erick Reyes
nikko.erick@gmail.com

http://www.niknokseyer.com [niknokseyer.com]

[twitter.com] [facebook.com] [plus.google.com] [linkedin.com] [instagram.com] [youtube.com] [github.com]

[youracclaim.com]

From:	Vivi Yuan
To:	Robert Morales
Cc:	Planning Director; Records Management; Public Comments
Subject:	Opposition to Re-Zoning School Site for Housing (Project File Nos. PGPA24-003, PDEV24-033)
Date:	Monday, September 15, 2025 8:32:39 PM

Dear Planning Commission and City Council Members,

As a resident of Ontario and mother of 3 little kids, I am writing to express my strong opposition to the proposed change of the designated school site at the corner of Eucalyptus Avenue and Campus Avenue into a housing development.

This parcel was originally set aside for a school. With the rapid pace of housing growth in our community, the need for additional educational facilities is more urgent than ever. In the past five years alone, hundreds of new homes have been built in the Ontario Ranch community, yet school construction has not kept pace with the number of children entering and preparing to enter the public school system. Converting this land into 129 new homes will only increase student enrollment pressures on an already strained system.

Ontario families were assured that this property would serve the community as a school site. Changing its designation now would not only undermine careful community planning but also break the trust of residents who relied on that commitment when deciding to move here.

I respectfully urge the Planning Commission and City Council to uphold the original vision for this site as a school and reject the proposed zoning change. Our children's education, safety, and overall quality of life must take precedence over additional housing density.

Thank you for your time and consideration.

Sincerely,

Vivian Chang

3915E Fincastle st Ontario

RESOLUTION NO. PC25-047

A RESOLUTION OF THE PLANNING COMMISSION OF THE CITY OF ONTARIO, CALIFORNIA, APPROVING THE USE OF AN ADDENDUM TO THE ONTARIO PLAN 2050 SUPPLEMENTAL ENVIRONMENTAL IMPACT REPORT, IN ACCORDANCE WITH THE CALIFORNIA ENVIRONMENTAL QUALITY ACT, AS AMENDED, FOR FILE NOS. PMTT24-008 AND PDEV24-017, AND RECOMMENDING THE CITY COUNCIL APPROVE THE USE OF THE ADDENDUM FOR FILE NOS. PGPA24-003 AND PSPA24-004.

WHEREAS, GDC Investments 13, LP (Applicant) filed an Applications for the following: [1] An General Plan Amendment (File No. PGPA24-003) to The Ontario Plan (TOP) 2050 Policy Plan (General Plan) Land Use Map to change the land use designation on approximately 10.02 acres of land, located south of Chatham Street, west of Clifton Avenue, east of Amherst Avenue, and north of Eucalyptus Avenue, from Public School to Medium Density Residential; [2] A Specific Plan Amendment (File No. PSPA24-004) to the Esperanza Specific Plan to revise the specific plan for consistency with TOP Policy Plan (General Plan) Land Use Map. The amendment includes [i] revising the allowed uses within Planning Area 11 from School to RD-7/Row Townhomes; and [ii] modifying the Specific Plan land use map, development standards, exhibits, and text to reflect the proposed land use changes; [3] A Tentative Tract Map (TTM 20730) (File No. PMTT24-008) for condominium purposes to subdivide approximately 10.02 acres into 28 numbered lots and 15 lettered lots, located within Planning Area 11 (RD-7/Row Townhomes) of the Esperanza Specific Plan; and [4] A Development Plan (File No. PDEV24-017) to construct 161 multiple-family dwellings on approximately 10.02 acres, located within Planning Area 11 (RD-7/Row Townhomes) of the Esperanza Specific Plan. (hereinafter referred to as Application or Project); and

WHEREAS, the City of Ontario certified the Environmental Impact Report prepared for TOP and associated Statement of Overriding Considerations, and issued Resolution No. 2010-003; and

WHEREAS, the City of Ontario adopted the Policy Plan (General Plan) as part of the component framework for TOP on January 27, 2010, and issued Resolution No. 2010-004; and

WHEREAS, the City of Ontario certified the Supplemental Environmental Impact Report (SEIR), for the General Plan Amendment for TOP 2050 Technical Update on August 16, 2022; and

WHEREAS, TOP 2050 Supplemental Environmental Impact Report (SEIR)(State Clearinghouse No. 2021070364) was certified on August 16, 2022 (hereinafter referred to as Certified EIR), in which development and use of the Project site was discussed; and

WHEREAS, the Planning Director of the City of Ontario has prepared and approved for attachment to the certified Supplemental Environmental Impact Report (SEIR), an Addendum to the Certified SEIR (hereinafter referred to as SEIR Addendum) in accordance with the requirements of the California Environmental Quality Act of 1970, together with State and local guidelines implementing said Act, all as amended to date (collectively referred to as CEQA); and

WHEREAS, the SEIR Addendum concluded that implementation of the Project could result in a number of significant effects on the environment that were previously analyzed in the Certified SEIR, and that the Certified SEIR identified mitigation measures that would reduce each of those significant effects to a less-than-significant level; and

WHEREAS, pursuant to State CEQA Guidelines Section 15164(a), a lead agency shall prepare an addendum to a previously certified EIR if some changes or additions are necessary to a project, but the preparation of a subsequent or supplemental EIR is not required; and

WHEREAS, the City determined that none of the conditions requiring preparation of a subsequent or supplemental EIR would occur from the Project, and that preparation of an Addendum to the Certified SEIR was appropriate; and

WHEREAS, the City of Ontario is the lead agency on the Project, and the Planning Commission is the recommending body for the General Plan Amendment (File No. PGPA24-003) and Specific Plan Amendment (File No. PSPA24-004), as well as the decision-making body for the Tentative Tract Map (File No. PMTT24-008) and Development Plan (File No. PDEV24-017); and

WHEREAS, the Planning Commission has reviewed and considered the SEIR Addendum for the Project, has concluded that none of the conditions requiring preparation of a subsequent of supplemental EIR have occurred, and intends to take actions on the Project in compliance with CEQA and state and local guidelines implementing CEQA; and

WHEREAS, the SEIR Addendum for the Project is on file in the Planning Department, located at 303 East B Street, Ontario, CA 91764, is available for inspection by any interested person at that location and is, by this reference, incorporated into this Resolution as if fully set forth herein; and

WHEREAS, all legal prerequisites to the adoption of this Resolution have occurred.

NOW, THEREFORE, IT IS HEREBY FOUND, DETERMINED, AND RESOLVED by the Planning Commission of the City of Ontario, as follows:

SECTION 1: ***Environmental Determination and Findings.*** As the recommending body for the General Plan Amendment (File No. PGPA24-003) and Specific Plan Amendment (File No. PSPA24-004), and the decision-making body for the Tentative Tract Map (PMTT24-008) and Development Plan (File No. PDEV24-017). The Planning Commission has reviewed and considered the information contained in the administrative record for the Project. Based upon the facts and information contained in the administrative record, including all written and oral evidence presented to the Planning Commission, the Planning Commission finds as follows:

(1) The environmental impacts of this Project were reviewed in conjunction with an Addendum to TOP 2050 Supplemental Environmental Impact Report (SEIR)(State Clearinghouse No. 2021070364), certified by the Ontario City Council on August16, 2022, in conjunction with File No. PGPA20-002; and

(2) The SEIR Addendum and administrative record have been completed in compliance with CEQA, the State CEQA Guidelines, and the City of Ontario Local CEQA Guidelines; and

(3) The City's "Local Guidelines for Implementing the California Environmental Quality Act (CEQA)" provide for the use of a single environmental assessment in situations where the impacts of subsequent projects are adequately analyzed. This Application introduces no new significant environmental impacts; and

(4) All previously adopted mitigation measures shall be a condition of project approval, as they are applicable to the Project, and are incorporated herein by this reference; and

(5) The SEIR Addendum contains a complete and accurate reporting of the environmental impacts associated with the Project, and reflects the independent judgment of the Planning Commission; and

(6) There is no substantial evidence in the administrative record supporting a fair argument that the Project may result in significant environmental impacts.

SECTION 2: ***Additional Environmental Review Not Required.*** Based on the Addendum, all related information presented to the Planning Commission, and the specific findings set forth in Section 1, above, the Planning Commission finds that the preparation of a subsequent or supplemental Environmental Impact Report is not required for the Project, as the Project:

(1) Does not constitute substantial changes to the Certified SEIR that will require major revisions to the Certified SEIR due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified significant effects; and

(2) Does not constitute substantial changes with respect to the circumstances under which the Certified SEIR was prepared, that will require major revisions to the Certified SEIR due to the involvement of new significant environmental effects or a substantial increase in the severity of the previously identified significant effects; and

(3) Does not contain new information of substantial importance that was not known and could not have been known with the exercise of reasonable diligence at the time the Certified SEIR was certified/adopted, that shows any of the following:

(a) The Project will have one or more significant effects not discussed in the Certified SEIR; or

(b) Significant effects previously examined will be substantially more severe than shown in the Certified SEIR; or

(c) Mitigation measures or alternatives previously found not to be feasible would in fact be feasible and would substantially reduce one or more significant effects of the Project, but the City declined to adopt such measures; or

(d) Mitigation measures or alternatives considerably different from those analyzed in the Certified SEIR would substantially reduce one or more significant effects on the environment, but which the City declined to adopt.

SECTION 3: ***Planning Commission Action.*** Based upon the findings and conclusions set forth in Sections 1 and 2, above, the Planning Commission hereby recommends the City Council finds that based upon the entire record of proceedings before it, and all information received, that there is no substantial evidence that the Project will constitute substantial changes to the Certified SEIR, and does hereby approve the SEIR Addendum, attached hereto as "Attachment A," and incorporated herein by this reference.

SECTION 4: ***Indemnification.*** The Applicant shall agree to defend, indemnify and hold harmless, the City of Ontario or its agents, officers, and employees from any claim, action or proceeding against the City of Ontario or its agents, officers or employees to attack, set aside, void, or annul this approval. The City of Ontario shall promptly notify the Applicant of any such claim, action, or proceeding, and the City of Ontario shall cooperate fully in the defense.

SECTION 5: ***Custodian of Records.*** The documents and materials that constitute the record of proceedings on which these findings have been based are located at the City of Ontario City Hall, 303 East B Street, Ontario, California 91764. The custodian for these records is the City Clerk of the City of Ontario.

SECTION 6: ***Certification to Adoption.*** The Secretary shall certify to the adoption of the Resolution.

- - - - - - - - - - - - - -

The Secretary Pro Tempore for the Planning Commission of the City of Ontario shall certify as to the adoption of this Resolution.

I hereby certify that the foregoing Resolution was duly and regularly introduced, passed and adopted by the Planning Commission of the City of Ontario at a regular meeting thereof held on the 23rd day of September 2025, and the foregoing is a full, true and correct copy of said Resolution, and has not been amended or repealed.

Nicola Ricci
Planning Commission Chairman

ATTEST:

Henry K. Noh
Planning Director and
Secretary to the Planning Commission

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

I, Gwen Berendsen, Secretary Pro Tempore of the Planning Commission of the City of Ontario, DO HEREBY CERTIFY that foregoing Resolution No. PC25-047, was duly passed and adopted by the Planning Commission of the City of Ontario at their regular meeting held on September 23, 2025, by the following roll call vote, to wit:

AYES: Anderson, DeDiemar, Lampkin, Marks, Ricci

NOES: Gage

ABSENT: None

ABSTAIN: None

Gwen Berendsen
Secretary Pro Tempore

ATTACHMENT A:

Addendum to The Ontario Plan 2050 Supplemental Environmental Impact Report (State Clearinghouse No. 2021070364)

(Addendum to follow this page)

Addendum to
The Ontario Plan 2050 Supplemental Environmental Impact Report

(State Clearinghouse No. 2021070364)

for the
Esperanza PA-11 SPA

(File No(s).: PPA24-0139, PGPA24-004, PSPA24-004, PDEV24-017, PMTT24-008, PDA25-003)

Prepared for:

City of Ontario
303 East B Street
Ontario, CA 91764

Prepared by:

T&B Planning, Inc.
3200 El Camino Real, Suite 100
Irvine, CA 92602

May 2025

1. Project Title/File Nos.: Esperanza PA-11 SPA/File Nos.: PPA24-0139, PGPA24-004, PSPA24-004, PDEV24-017, PMTT24-008, PDA25-003

2. Lead Agency: City of Ontario-Planning Department, 303 East B Street, Ontario, CA 91764

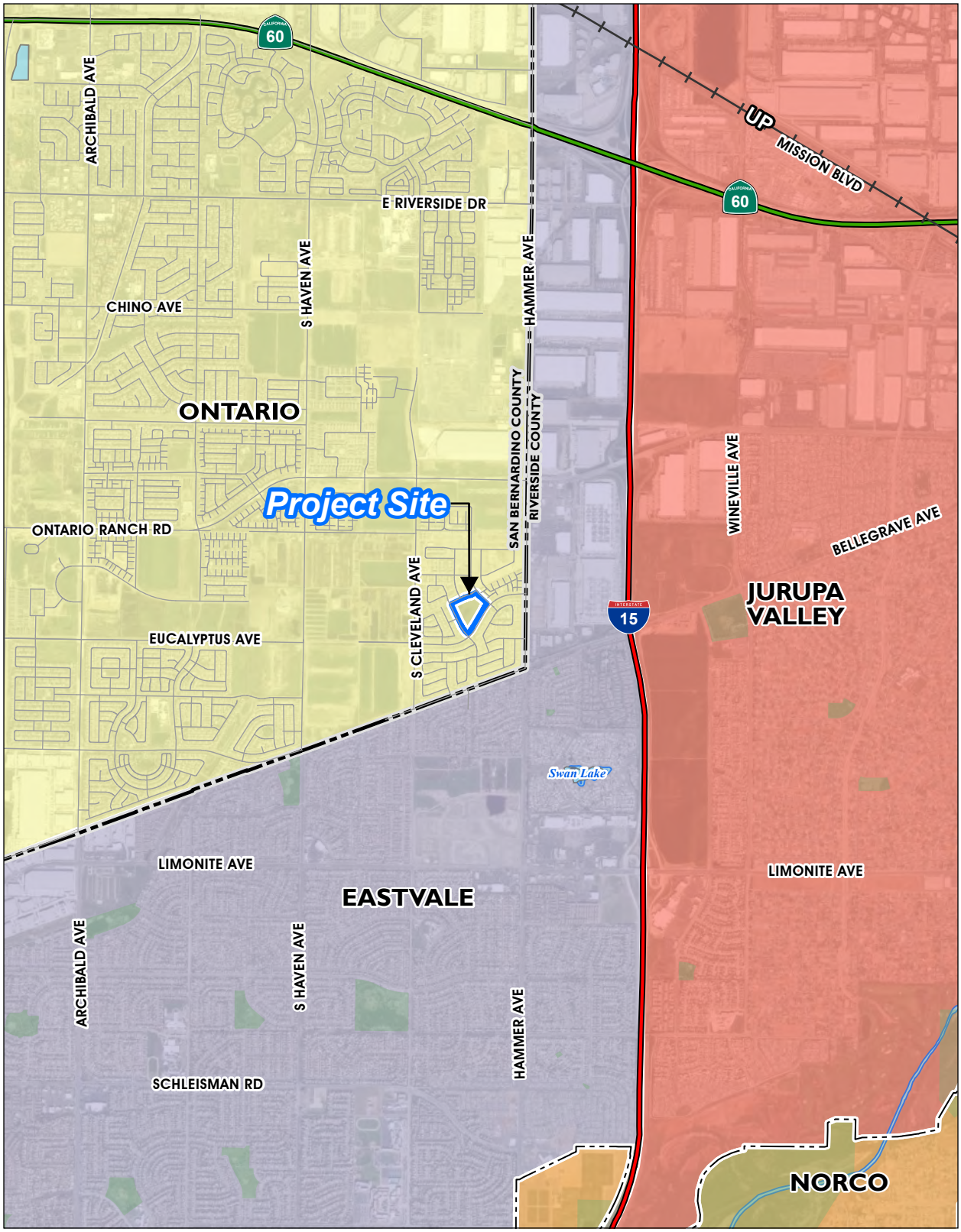
3. Contact Person: Robert Morales, Phone: (909) 395-2432, Email: rmorales@ontarioca.gov

4. Project Sponsor: GDC Investments 14, LP; 12770 El Camino Real, Suite 220, San Diego, CA 92130

5. Project Location: The Project site is located in southwestern San Bernardino County, within the City of Ontario. Ontario is located approximately 40 miles from downtown Los Angeles, 20 miles from downtown San Bernardino, and 30 miles from Orange County. Please refer to Figure 1, *Regional Location Map.* As shown in Figure 2, *Aerial Site Photograph*, the Project site is bound by Eucalyptus Avenue to the south, South Amherst Avenue to the west, Chatham Street to the north, and Clifton Avenue to the east. Regional access is provided via Interstate 15 (I-15) and State Route 60 (SR-60).

6. Policy Plan (General Plan) Designation: Existing - Public School (PS); Proposed – Medium Density Residential (MRD).

7. Zoning Designation: Existing – School under the Ontario Esperanza Specific Plan; Proposed – Planning Area 11 (RD-7 / Row Townhomes of the Esperanza Specific Plan

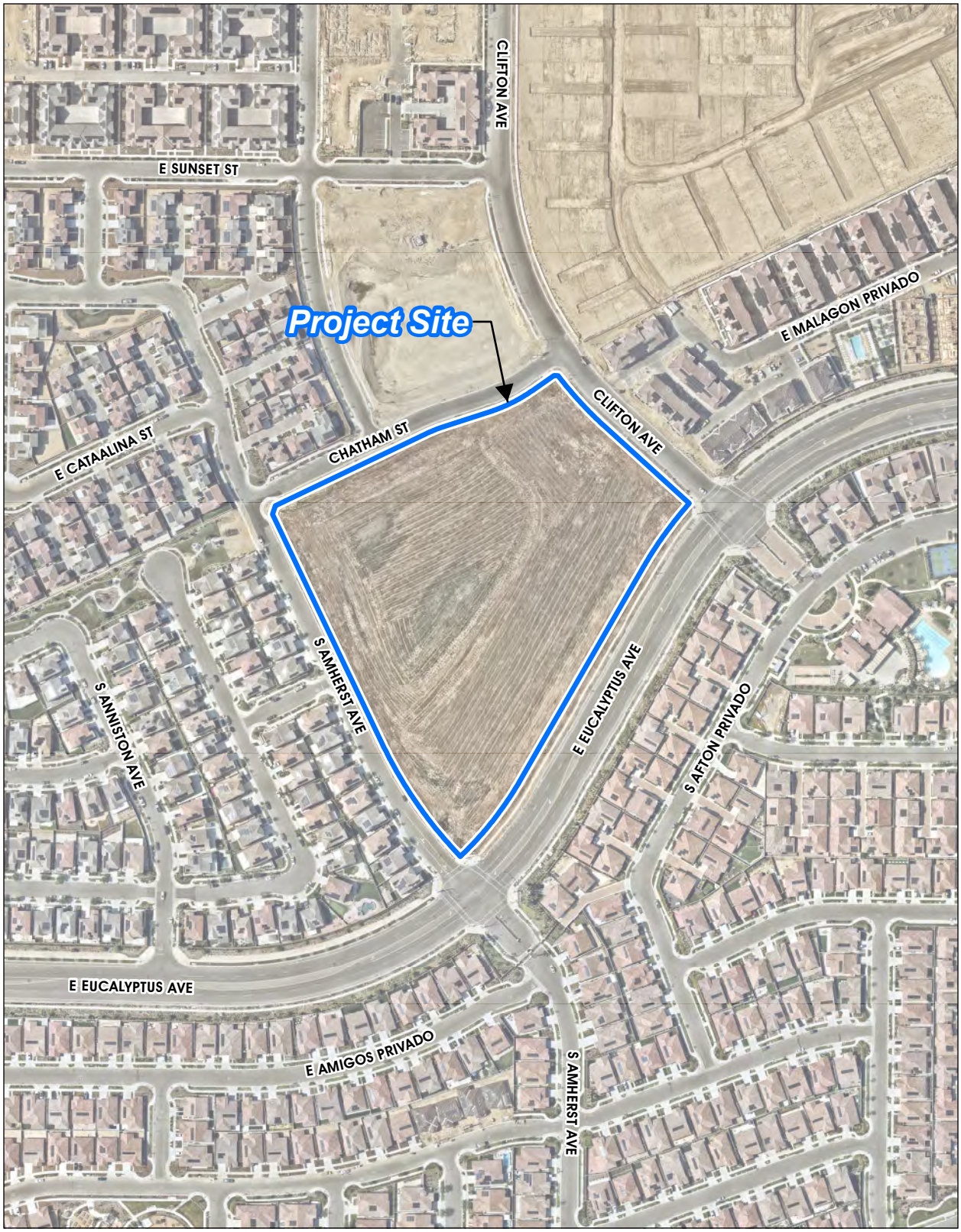


Source(s): ESRI, NearMap Imagery (May 2024), SB County (2024), RCIT (2024)

Figure 1

0 875 1,750 3,500 Feet

Regional Location Map



Source(s): ESRI, NearMap Imagery (May 2024)

Figure 2

0 75 150 300 Feet

Aerial Site Photograph

8. Description of Project: The Project proposed the following entitlements:

    1. A General Plan Amendment (File No. PGPA24-004) to change the land use designation of the Project site from Public School (PS) to Medium Density Residential (MDR).

    2. A Specific Plan Amendment (File No. PSPA24-004) to the Ontario Ezperanza Specific Plan (adopted on February 6, 2007) to change the land use designation of approximately 10.02 net acres of land from School to MDR 25. The amended Specific Plan is presented as Appendix A to this Addendum.

    3. A Development Plan (File No. PDEV24-017) to construct 161 multi-family residential units on approximately 10.02 net acres (APN: 1073-101-05). The Project would also include amenities including a pool/spa, playground, shaded barbecue/picnic area, fitness stations, and open turf areas. Refer to Figure 3, *Site Plan*.

    4. Tentative Parcel Map (File No. PMTT24-008).

    5. Development Agreement (PDA25-003) between the City of Ontario and the Project Applicant pursuant to California Government Code Sections 65864 et seq.

Building Characteristics and Operations

The Project proposes a mix of 2-story (69) and 3-story (92) units. Units would range in size from 1,350 to 1,717 square feet. Representative elevations of each building type are presented in Figures 4 and 5. Although color schemes would vary on each of the buildings, the color palette of the Project features neutral building tones, accented with siding, stucco, and wall tile accents. Buildings would range from approximately 28’ to 39’ high.

Circulation and Parking

Vehicular access will be provided via a driveway off of Chatham Street and another off Amherst Avenue. The Project also includes a total of 433 parking spaces, comprised of 322 garage spaces, 45 uncovered spaces, 17 driveway spaces, and 49 off-site parallel spaces.

Site Summary:

2- & 3-Story Row Townhomes

Total Homes

2-Story Townhome	: 69
3-Story Townhome	: 92
Total	: 161

Gross Site Area	: ± 10.02 Acres
Gross Density	: ± 16.1 Homes per Acre

Parking Required:

2.5 Spaces / 3BR x 161	: 403
1.0 Guest Space / 6 Units x 161	: 27
Total Required	: 430 (2.67:1)

Parking Provided:

Garage Spaces	: 322
Uncovered Spaces	: 45
Driveway Spaces	: 17
Parallel Spaces (Off-site)	: 49
Total Provided	: 433 (2.69:1)

Open Space:

Private Open Space Required:

150 SF / Unit x 161	: 24,150 SF
Total Required	: 24,150 SF
Provided	: 37,149 SF

Common Open Space Required:

250 SF / Unit x 161	: 40,250 SF
Total Required	: 40,250 SF
Provided	: 58,878 SF

Total Open Space Required	: 64,400 SF
Total Open Space Provided	: 96,027 SF

Private Courtyard Areas

• Unit 1	: 249 SF min.
• Unit 2	: 234 SF min.
• Unit 3	: 191 SF min.
• Unit 4	: 289 SF min.
• Unit 4 ACC	: 300 SF min.
• Unit 5	: 221 SF min.
• Unit 6	: 152 SF min.

Source(s): Bassenian Lagoni Architects (01-24-2025)

Figure 3

Not to Scale

Site Plan

Not to Scale

FRONT (TYPICAL PASEO ELEV.)

REAR (TYPICAL INTERNAL LOOP RD. ELEV.)

Source(s): Bassenian Lagoni Architects (01-24-2025)

Figure 4

Not to Scale

Building Elevations – Two Story

FRONT (TYPICAL PASEO ELEV.)

REAR (TYPICAL ALLEY ELEV.)

Source(s): Bassenian Lagoni Architects (01-24-2025)

Figure 5

Not to Scale

Building Elevations – Three Story

Landscaping, Walls, and Lighting

The landscape concept proposes California-friendly plant materials consistent with the Esperanza Specific Plan. As depicted in Figure 6, *Landscape Plan*, a variety of trees, shrubs, accent plants, and ground cover are proposed along the perimeter of the Project site, and throughout the community. A total of 494 trees are proposed on-site. Accent specimen 36" box and 48" box trees would be provided at corners and entries. Consistent with City standards, 25 percent of tree species planted on-site would be California natives.

The Project would construct a 6-foot community theme wall along Eucalyptus Avenue. Corner entry monuments would be implemented at the corners of Eucalyptus Avenue/Amherst Avenue and Eucalyptus Avenue/Clifton Avenue. The Project's primary entry off Chatham Street would be flanked by entry monuments on either side.

Exterior lighting would be installed on-site, as necessary, for safety, security, and wayfinding. Decorative architectural lighting as well as landscape lighting would also be installed to accent building entries as focal points throughout the site. Ornamental landscaping, lighting, walls, and utility infrastructure improvements/connections would be installed per compliance with the City's Municipal Code.

Infrastructure Improvements

Currently, the Project site is fully graded. Adjacent streets have been previously constructed, and no off-site roadways are anticipated as part of the Project. Peripheral improvements such as sidewalk and curb upgrades will be completed as part of the Project. Utility stubs currently exist adjacent to the site.

Water service to the Project site would be provided by the Ontario Municipal Utilities Company (OMUC). The Project on-site water system would connect to existing 8-inch water lines in Amherst Avenue and Chatham Street adjacent to the site. See Figure 7, *Water Plan*.

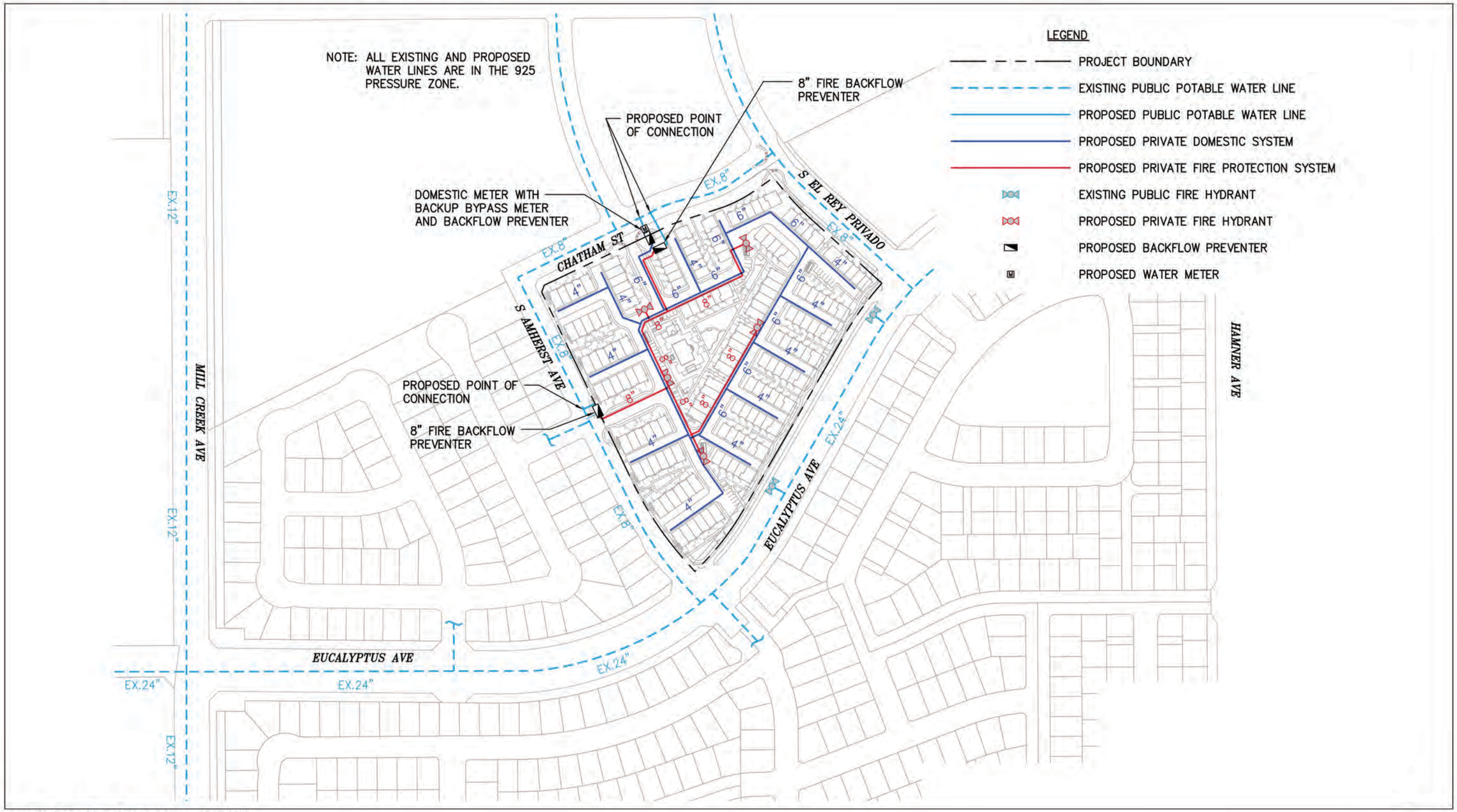
PLANT SCHEDULE OVERALL TREES				
SYMBOL	BOTANICAL / COMMON NAME	SIZE	WUCOLS	QTY
TREES				
	CALLISTEMON CITRINUS BOTTLE BRUSH STANDARD	24" BOX	L	4
	CERCIDIUM X 'DESERT MUSEUM' DESERT MUSEUM PALO VERDE MULTI-TRUNK	36" BOX	L	32
	CERCIS OCCIDENTALIS WESTERN REDBUD STANDARD	15 GAL	M	7
	KOELREUTERIA PANICULATA GOLDEN RAIN TREE STANDARD	36" BOX	M	11
	LAGERSTROEMIA INDICA X FAURIEI 'MUSKOGEE' MUSKOGEE CRAPE MYRTLE STANDARD	24" BOX	M	6
	LAURUS NOBILIS 'SARATOGA' SWEET BAY STANDARD	24" BOX	L	60
	OLEA EUROPAEA 'WILSONII' WILSON FRUITLESS OLIVE STANDARD	16`X16` FIELD GROWN	L	26
	PISTACIA CHINENSIS CHINESE PISTACHE	36" BOX	M	42
	PLATANUS RACEMOSA CALIFORNIA SYCAMORE STANDARD	36" BOX	M	37
	PODOCARPUS GRACILIOR FERN PINE STANDARD	24" BOX	M	16
	PODOCARPUS GRACILIOR FERN PINE STANDARD	48"BOX	M	8
	QUERCUS AGRIFOLIA COAST LIVE OAK STANDARD	36" BOX	L	37
	QUERCUS ILEX HOLLY OAK STANDARD	15 GAL	L	24
	RHAPHIOLEPIS X 'MONTIC' MAJESTIC BEAUTY® INDIAN HAWTHORN STANDARD	24" BOX	M	97
	TRISTANIA CONFERTA BRISBANE BOX STANDARD	36" BOX	M	28
	WASHINGTONIA FILIFERA CALIFORNIA FAN PALM	18` BTH	L	7

Source(s): BMLA, Inc. (01-22-2025)

Figure 6

Not to Scale

Landscape Plan



Source(s): Dexter Wilson Engineering, Inc. (04-17-2025)

Figure 7

Not to Scale

Water Plan

Sanitary sewer service to the Project site would be provided by Inland Empire Utilities Agency (IEUA). Proposed on-site sewer lines would connect to an existing 8-inch line in South Amherst Avenue, adjacent to the site. See Figure 8, *Sewer Plan*.

The Project site currently drains in a southwesterly direction towards the intersection of Eucalyptus Avenue and Amherst Avenue where an on-site detention basin is located. The basin has a 36-inch inlet that joins a public storm drain in Amherst Avenue. The Project would implement an on-site storm drain system that generally maintains the existing drainage pattern and connects to the existing storm drain in Amherst Avenue. The Projects on-site storm drainage system would function as a flow restriction by oversizing the on-site capacity and providing on-site storage to ensure outflow would be consistent with the capacity of the surrounding storm drainage system.

Dry utilities serving the Project area include Southern California Edison, Southern California Gas Company, and various telecommunication providers. The Project would include installation of on-site dry utility infrastructure that is anticipated to connect with the existing infrastructure available in the vicinity. It is noted that the Project would not require natural gas infrastructure or service.

GHG-Reduction Features

The Project includes the following design features aimed at reducing the Project's GHG emissions.

- Building Electrification
  - Electric Space Heater
  - Electric Water Heater
  - Electric Stove
  - Electric Dryer
  - Electric Pool Heater
  - Electric Spa Heater
  - Lack of Natural Gas Infrastructure

Source(s): Dexter Wilson Engineering, Inc. (04-17-2025)

Figure 8

Not to Scale

Sewer Plan

- Vehicle Electrification
  - Installation of Level 2 EV or higher charging stations at a rate of 30% or more of required vehicle spaces.

- Waste Diversion
  - Storage and collection of green waste, organic waste, and recyclables.

- Water Conservation
  - Water efficient showerheads and faucets
  - Outdoor landscaping consists of drought tolerant, low maintenance plants with a drip irrigation or weather-based controller sprinkler system.

Please also refer to Checklist item 8, *Greenhouse Gas Emissions*.

Project Construction Characteristics:

Phased construction is expected to commence in early 2025 and would last through the remainder of the year. Construction activities are as follows:

- Demolition
- Site Preparation & Grading
- Building Construction
- Paving
- Architectural Coating & Landscaping

The site would not require any import/export of soils to accommodate the Project.

9. Project Setting: As shown in previous Figure 2, the Project site is currently vacant, undeveloped property. The site is surrounded by existing and/or approved residential uses, as well as an approved park use. Although sidewalks, curbs, gutters, and streetlights are in place along the site's perimeter, upgrades will occur to better accommodate the Project.

10. Background: On January 27, 2010, the Ontario City Council adopted The Ontario Plan ("TOP"). An Environmental Impact Report ("EIR") was prepared for TOP (State Clearinghouse No. 2008101140) and certified by the City Council on January 27, 2010 (hereinafter referred to as "Certified EIR"), which included Mitigation, Findings and a Statement of Overriding Considerations pursuant to the requirements of the California Environmental Quality Act, commencing with Public Resources Code Section 21000 ("CEQA"). Subsequently, on August 16, 2022, the Ontario City Council adopted The Ontario Plan 2050 ("TOP 2050"), an update to TOP. TOP 2050 serves as the framework for the City's business plan and provides a foundation for the City to operate as a municipal corporation that consists of six (6) distinct components: 1) Vision; 2) Governance Manual; 3) Policy Plan; 4) Council Priorities; 5) Implementation; and 6) Tracking and Feedback. The Policy Plan component of TOP 2050 meets the functional and legal mandate of a General Plan and contains nine elements: Land Use, Housing, Parks and Recreation, Environmental Resources, Community Economics, Safety, Mobility, Community Design and Social Resources.

    A Supplemental Environmental Impact Report ("SEIR") was prepared for TOP 2050 (State Clearinghouse No. 2021070364) and was certified by the City Council on August 16, 2022 (hereinafter referred to as "Certified SEIR"). The Certified SEIR analyzed the direct and physical changes in the environment that would be caused by TOP 2050; focusing on changes to land use associated with the buildout of the proposed land use plan compared to the TOP, and in the Policy Plan and impacts resultant of population and employment growth in the City.

    The Project site was analyzed in the Certified SEIR as a school use.

It is also noted that the Project site is located within the Ezperanza Specific Plan area. As originally envisioned, the 223-acre Specific Plan area included 916 single-family residential dwelling units, 494 cluster/town home dwelling units, a 10-acre elementary school site, and a total of nine acres of park land. The Specific Plan included a caveat that if the Mountain View School District chose not to utilize the school site, up to 46 residential units could be developed in place of the school. An EIR was prepared for the Specific Plan in 2006.

Since the time of the Specific Plan EIR, the School District has decided not to acquire the 10-acre site. As such, the Specific Plan Amendment (SPA) analyzed within this Addendum reflects the use of the previous school site for the development of the residential uses proposed by the Project.

Because of the age of the Specific Plan EIR (2006), this document tiers off the SEIR prepared for TOP 2050 (2022) in an effort to reflect more current environmental conditions and study methodologies. Notwithstanding, the Esperanza Specific Plan EIR included various mitigation measures for the entire Specific Plan area. Some of these mitigation measures remain applicable to the Project considered herein. Appendix B to this Addendum contains a complete listing of all mitigation required within the Esperanza Specific Plan EIR and provides an applicability determination for the Esperanza PA-11 SPA Project. The City would require the implementation of the applicable measures as Conditions of Approval for the Project.

11. CEQA Requirements for an Addendum: If changes to a project or its circumstances occur or new information becomes available after adoption of a previous EIR or negative declaration, the lead agency may: (1) prepare a subsequent EIR if the criteria of State CEQA Guidelines Section 15162(a) are met, (2) prepare a subsequent negative declaration, (3) prepare an addendum, or (4) prepare no further documentation. (State CEQA Guidelines Section 15162(b)). When only minor technical changes or additions to the previous EIR or negative declaration are necessary and none of the conditions described in section 15162 calling for the preparation of a subsequent EIR or negative declaration have occurred, CEQA allows the lead agency to prepare and adopt an addendum. (State CEQA Guidelines Section 15164(b).)

Under Section 15162, a subsequent EIR or negative declaration is required only when:

1) Substantial changes are proposed in the project which will require major revisions of the previous EIR or negative declaration due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified significant effects;

2) Substantial changes occur with respect to the circumstances under which the project is undertaken which will require major revisions of the previous EIR or negative declaration due to the involvement of any new significant environmental effects or a substantial increase in the severity of previously identified significant effects; or

3) New information of substantial importance, which was not known and could not have been known with the exercise of reasonable diligence at the time the previous EIR or negative declaration was adopted, shows any of the following:

    a) The project will have one or more significant effects not discussed in the previous EIR;

    b) Significant effects previously examined will be substantially more severe than shown in the previous EIR;

    c) Mitigation measures or alternatives previously found not to be feasible would in fact be feasible and would substantially reduce one or more significant effects of the project, but the project proponents decline to adopt the mitigation measure or alternative; or

    d) Mitigation measures or alternatives which are considerably different from those analyzed in the previous EIR would substantially reduce one or more significant effects on the environment, but the project proponents decline to adopt the mitigation measure or alternative.

Thus, if the Project does not result in any of the circumstances listed in Section 15162 (i.e., no new or substantially greater significant impacts), the City may properly adopt an addendum to the Certified SEIR.

12. Analysis: According to CEQA Guidelines Section 15164, an Addendum to a previously certified EIR may be used if some changes or additions are necessary, but none of the conditions described in Section 15162 requiring the preparation of a subsequent Negative Declaration or EIR have occurred. The CEQA Guidelines require that a brief explanation be provided to support the findings that no subsequent EIR or Negative Declaration are needed for further discretionary approval. These findings are described below:

    1) *Required Finding: Substantial changes are not proposed for the project that will require major revisions of the previous EIR due to the involvement of new, significant environmental effects or a substantial increase in the severity of previously identified significant effects*.

    Substantial changes are not proposed by the Project and Project implementation will not require revisions to the Certified SEIR due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified significant effects. The Certified SEIR analyzed the direct and physical changes in the environment that would be caused by TOP 2050, focusing on changes to land use associated with the buildout of the proposed land use plan. In addition, all applicable adopted mitigation measures are a condition of Project approval and are incorporated herein by reference. This Addendum provides an analysis of the Project and verification that the Project will not cause environmental impacts such that any of the circumstances identified in State CEQA Guidelines Section 15162 are present.

    2) *Required Finding: Substantial changes have not occurred with respect to the circumstances under which the project is undertaken, that would require major revisions of the previous Environmental Impact Report due to the involvement of new significant*

environmental effects or a substantial increase in the severity of previously identified significant effects.

Substantial changes have not occurred with respect to the circumstances under which the project was undertaken, that would require major revisions to the Certified SEIR due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified significant effects. In addition, all applicable adopted mitigation measures are a condition of Project approval and are incorporated herein by reference. This Addendum provides an analysis of the Project and verification that the Project will not cause environmental impacts such that any of the circumstances identified in State CEQA Guidelines Section 15162 are present.

3) *Required Finding. No new information has been provided that would indicate that the proposed project would result in one or more significant effects not discussed in the previous EIR.*

No new information that was not known and could not have been known with the exercise of reasonable diligence at the time SEIR was certified shows that the proposed Project would result in any new significant effects not previously discussed in the Certified SEIR, that significant effects previously examined will be substantially more severe than shown in the previous EIR, that mitigation measures or alternatives previously found not to be feasible would in fact be feasible and would substantially reduce one or more significant effects on the environment, or that mitigation measures or alternatives that are considerably different from those analyzed in the previous EIR would substantially reduce one or more significant effects on the environment. The Certified SEIR assumed buildout of the site. No proposed changes or revisions to the Certified SEIR are required. In addition, all applicable previously adopted mitigation measures are a condition of Project approval and are incorporated herein by reference. This Addendum provides an analysis of the

Project and verification that the Project will not cause environmental impacts such that any of the circumstances identified in State CEQA Guidelines Section 15162 are present.

13. Conclusion: The Certified SEIR, as certified by City Council on August 16, 2022, was prepared as a Program EIR in accordance with CEQA, the State CEQA Guidelines, and the City's Rules for the Implementation of CEQA and in accordance with Section 15121(a) of the State CEQA Guidelines (California Code of Regulations, Title 14, Division 6, Chapter 3). The Certified SEIR considered the direct physical changes and reasonably foreseeable indirect physical changes in the environment that would be caused by TOP 2050. Consequently, the Certified SEIR focused on impacts from changes to land use associated with buildout of the City's land use plan, and impacts from the resulting population and employment growth in the City. The proposed Project coordinates with the existing uses of the properties and uses within the surrounding areas.

    Accordingly, and based on the findings and information contained in the Certified SEIR, the analysis in this document, and CEQA statute and State CEQA Guidelines, including Sections 15164 and 15162, the Project will not result in any new, increased or substantially different impacts, other than those previously considered and addressed in the Certified SEIR.

14. Surrounding Land Uses:

	Existing Land Use	General Plan Designation	Zoning Designation	Specific Plan Land Use
Site:	Vacant, graded land	Public School (PS)	SP, Specific Plan	School
North:	Vacant, graded land	Low Density Residential (LDR)	SP, Specific Plan	Single Family Detached/Park
South:	Single Family Residential	Low Density Residential (LDR)	SP, Specific Plan	Single Family Detached
East:	Vacant, graded land/ Attached Residential	Medium Density/Low Density Residential (MDR/LDR)	SP, Specific Plan	Single Family Detached
West:	Vacant, graded land/Single Family Residential	Low Density Residential (LDR)	SP, Specific Plan	Single Family Detached

15. Other public agencies whose approval is anticipated include (e.g., permits, financing approval or participation agreement):

- Santa Ana Regional Water Quality Control Board (Issuance of a National Pollutant Discharge Elimination System Permit; Issuance of a Construction General Permit);
- State Water Resources Control Board (Stormwater Pollution Prevention Plan);
- South Coast Air Quality Management District (Issuance of Air Quality permits to construct and operation, if necessary)

16. Have California Native American tribes traditionally and culturally affiliated with the project area requested consultation pursuant to Public Resources Code section 21080.3.1?

☒Yes ☐ No

If “yes”, has consultation begun? ☐ Yes ☐ No ☒ Completed

ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED

The environmental factors checked below would be potentially affected by this project, involving at least one impact that is a "Potentially Significant Impact" as indicated by the checklist on the following pages.

☐ Aesthetics	☐ Agriculture/Forestry Resources	☐ Air Quality
☐ Biological Resources	☐ Cultural Resources	☐ Geology / Soils
☐ Greenhouse Gas Emissions	☐ Hazards & Hazardous Materials	☐ Hydrology/Water Quality
☐ Land Use / Planning	☐ Mineral Resources	☐ Noise
☐ Population / Housing	☐ Public Services	☐ Recreation
☐ Transportation	☐ Utilities / Service Systems	☐ Mandatory Findings of Significance
☐ Tribal Cultural Resources	☐ Wildfire	☐ Energy

DETERMINATION (To be completed by the Lead Agency)

On the basis of this initial evaluation, I find that the proposed project will not require any major revisions of the previously certified SEIR due to the involvement of any new significant environmental effects or a substantial increase in the severity of previously identified significant effects, that the proposed Project does not trigger any of the conditions set forth in State CEQA Guidelines section 15162, and that an addendum to the previously certified SEIR is appropriate pursuant to State CEQA Guidelines section 15164.

Signature:	Date: Click to enter date
Printed Name: Robert Morales	For: City of Ontario

EVALUATION OF ENVIRONMENTAL IMPACTS

Issues	*New Significant Impact or Substantial Increase in Severity of Previously Identified Significant impact*	*Substantial Increase in Severity of Previously Identified Significant impact*	*Changed Circumstan-ces or New Info requiring a subsequent EIR*	*No New Significant Impact or Substantial Increase in Severity of Impacts Previously Analyzed in TOP 2050 SEIR*
1. **AESTHETICS.** Except as provided in Public Resources Code section 21099, would the project:				
a) Have a substantial adverse effect on a scenic vista?	☐	☐	☐	☒
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	☐	☐	☐	☒
c) In non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from publicly accessible vantage point). If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?)	☐	☐	☐	☒
d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	☐	☐	☐	☒
2. **AGRICULTURE AND FOREST RESOURCES.** In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Dept. of Conservation as an optional model to use in assessing impacts on agriculture and farmland. In determining whether impacts to forest resources, including timberland, are significant environmental effects, lead agencies may refer to information compiled by the California Department of Forestry and Fire Protection regarding the state's inventory of forest land,				

Issues	*New Significant Impact or Substantial Increase in Severity of Previously Identified Significant impact*	*Substantial Increase in Severity of Previously Identified Significant impact*	*Changed Circumstan-ces or New Info requiring a subsequent EIR*	*No New Significant Impact or Substantial Increase in Severity of Impacts Previously Analyzed in TOP 2050 SEIR*
including the Forest and Range Assessment Project and the Forest Legacy Assessment project; and forest carbon measurement methodology provided in Forest protocols adopted by the California Air Resources Board. Would the project:				
a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?	☐	☐	☐	☒
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?	☐	☐	☐	☒
c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?	☐	☐	☐	☒
d) Result in the loss of forest land or conversion of forest land to non-forest use?	☐	☐	☐	☒
e) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?	☐	☐	☐	☒
3. **AIR QUALITY.** Where available, the significance criteria established by the applicable air quality management district or air pollution control district may be relied upon to make the following determinations. Would the project:				
a) Conflict with or obstruct implementation of the applicable air quality plan?	☐	☐	☐	☒

Issues	*New Significant Impact or Substantial Increase in Severity of Previously Identified Significant impact*	*Substantial Increase in Severity of Previously Identified Significant impact*	*Changed Circumstan-ces or New Info requiring a subsequent EIR*	*No New Significant Impact or Substantial Increase in Severity of Impacts Previously Analyzed in TOP 2050 SEIR*
b) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard?	☐	☐	☐	☒
c) Expose sensitive receptors to substantial pollutant concentrations?	☐	☐	☐	☒
d) Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?	☐	☐	☐	☒
4. **BIOLOGICAL RESOURCES.** Would the project:				
a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	☐	☐	☐	☒
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	☐	☐	☐	☒
c) Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	☐	☐	☐	☒
d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?	☐	☐	☐	☒
e) Conflict with any local policies or ordinances protecting biological	☐	☐	☐	☒

Issues	*New Significant Impact or Substantial Increase in Severity of Previously Identified Significant impact*	*Substantial Increase in Severity of Previously Identified Significant impact*	*Changed Circumstan-ces or New Info requiring a subsequent EIR*	*No New Significant Impact or Substantial Increase in Severity of Impacts Previously Analyzed in TOP 2050 SEIR*
resources, such as a tree preservation policy or ordinance?				
f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?	☐	☐	☐	☒
5. **CULTURAL RESOURCES.** Would the project:				
a) Cause a substantial adverse change in the significance of a historical resource pursuant to § 15064.5?	☐	☐	☐	☒
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to § 15064.5?	☐	☐	☐	☒
c) Disturb any human remains, including those interred outside of dedicated cemeteries?	☐	☐	☐	☒
6. **ENERGY.** Would the project:				
a) Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?	☐	☐	☐	☒
b) Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?	☐	☐	☐	☒
7. **GEOLOGY AND SOILS.** Would the project:				
a) Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury or death involving:				
i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to	☐	☐	☐	☒

Issues	*New Significant Impact or Substantial Increase in Severity of Previously Identified Significant impact*	*Substantial Increase in Severity of Previously Identified Significant impact*	*Changed Circumstan-ces or New Info requiring a subsequent EIR*	*No New Significant Impact or Substantial Increase in Severity of Impacts Previously Analyzed in TOP 2050 SEIR*
Division of Mines and Geology Special Publication 42.				
ii) Strong seismic ground shaking?	☐	☐	☐	☒
iii) Seismic-related ground failure, including liquefaction?	☐	☐	☐	☒
iv) Landslides?	☐	☐	☐	☒
b) Result in substantial soil erosion or the loss of topsoil?	☐	☐	☐	☒
c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?	☐	☐	☐	☒
d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code, creating substantial direct or indirect risks to life or property?	☐	☐	☐	☒
e) Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?	☐	☐	☐	☒
f) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	☐	☐	☐	☒
8. **GREENHOUSE GAS EMISSIONS.** Would the project:				
a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	☐	☐	☐	☒
b) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emission of greenhouse gases?	☐	☐	☐	☒

Issues	*New Significant Impact or Substantial Increase in Severity of Previously Identified Significant impact*	*Substantial Increase in Severity of Previously Identified Significant impact*	*Changed Circumstan-ces or New Info requiring a subsequent EIR*	*No New Significant Impact or Substantial Increase in Severity of Impacts Previously Analyzed in TOP 2050 SEIR*
9. **HAZARDS AND HAZARDOUS MATERIALS.** Would the project:				
a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	☐	☐	☐	☒
b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?	☐	☐	☐	☒
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	☐	☐	☐	☒
d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?	☐	☐	☐	☒
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area?	☐	☐	☐	☒
f) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	☐	☐	☐	☒
g) Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?	☐	☐	☐	☒
10. **HYDROLOGY AND WATER QUALITY.** Would the project:				

Issues	*New Significant Impact or Substantial Increase in Severity of Previously Identified Significant impact*	*Substantial Increase in Severity of Previously Identified Significant impact*	*Changed Circumstan-ces or New Info requiring a subsequent EIR*	*No New Significant Impact or Substantial Increase in Severity of Impacts Previously Analyzed in TOP 2050 SEIR*
a) Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?	☐	☐	☐	☒
b) Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?	☐	☐	☐	☒
c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:				
i) Result in substantial erosion or siltation on- or off-site;	☐	☐	☐	☒
ii) Substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site;	☐	☐	☐	☒
iii) Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or	☐	☐	☐	☒
d) Impede or redirect flood flows?	☐	☐	☐	☒
e) In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?	☐	☐	☐	☒
f) Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?	☐	☐	☐	☒
11. **LAND USE AND PLANNING.** Would the project:				
a) Physically divide an established community?	☐	☐	☐	☒

Issues	*New Significant Impact or Substantial Increase in Severity of Previously Identified Significant impact*	*Substantial Increase in Severity of Previously Identified Significant impact*	*Changed Circumstan-ces or New Info requiring a subsequent EIR*	*No New Significant Impact or Substantial Increase in Severity of Impacts Previously Analyzed in TOP 2050 SEIR*
b) Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?	☐	☐	☐	☒
12. **MINERAL RESOURCES.** Would the project:				
a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?	☐	☐	☐	☒
b) Result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?	☐	☐	☐	☒
13. **NOISE.** Would the project result in:				
a) Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	☐	☐	☐	☒
b) Generation of excessive groundborne vibration or groundborne noise levels?	☐	☐	☐	☒
c) For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?	☐	☐	☐	☒
14. **POPULATION AND HOUSING.** Would the project:				
a) Induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of road or other	☐	☐	☐	☒

Issues	*New Significant Impact or Substantial Increase in Severity of Previously Identified Significant impact*	*Substantial Increase in Severity of Previously Identified Significant impact*	*Changed Circumstan-ces or New Info requiring a subsequent EIR*	*No New Significant Impact or Substantial Increase in Severity of Impacts Previously Analyzed in TOP 2050 SEIR*
infrastructure)?				
b) Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?	☐	☐	☐	☒
15. **PUBLIC SERVICES.** Would the project:				
a) Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:				
i) Fire protection?	☐	☐	☐	☒
ii) Police protection?	☐	☐	☐	☒
iii) Schools?	☐	☐	☐	☒
iv) Parks?	☐	☐	☐	☒
v) Other public facilities?	☐	☐	☐	☒
16. RECREATION.				
a) Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?	☐	☐	☐	☒
b) Does the project include recreational facilities or require the construction or expansion of recreational facilities which have an adverse physical effect on the environment?	☐	☐	☐	☒
17. **TRANSPORTATION.** Would the project:				
a) Conflict with a program plan, ordinance or	☐	☐	☐	☒

Issues	*New Significant Impact or Substantial Increase in Severity of Previously Identified Significant impact*	*Substantial Increase in Severity of Previously Identified Significant impact*	*Changed Circumstan-ces or New Info requiring a subsequent EIR*	*No New Significant Impact or Substantial Increase in Severity of Impacts Previously Analyzed in TOP 2050 SEIR*
policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?				
b) Conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)?	☐	☐	☐	☒
c) Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	☐	☐	☐	☒
d) Result in inadequate emergency access?	☐	☐	☐	☒
18. **TRIBAL CULTURAL RESOURCES.** Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:				
a) Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k), or	☐	☐	☐	☒
b) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resources Code section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.	☐	☐	☐	☒
19. **UTILITIES AND SERVICE SYSTEMS.** Would the project:				
a) Require or result in the relocation or	☐	☐	☐	☒

Issues	*New Significant Impact or Substantial Increase in Severity of Previously Identified Significant impact*	*Substantial Increase in Severity of Previously Identified Significant impact*	*Changed Circumstan-ces or New Info requiring a subsequent EIR*	*No New Significant Impact or Substantial Increase in Severity of Impacts Previously Analyzed in TOP 2050 SEIR*
construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?				
b) Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?	☐	☐	☐	☒
c) Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?	☐	☐	☐	☒
d) Generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?	☐	☐	☐	☒
e) Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?	☐	☐	☐	☒
20. **WILDFIRE.** If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project:				
a) Substantially impair an adopted emergency response plan or emergency evacuation plan?	☐	☐	☐	☒
b) Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to, pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?	☐	☐	☐	☒
c) Require the installation or maintenance of	☐	☐	☐	☒

Issues	*New Significant Impact or Substantial Increase in Severity of Previously Identified Significant impact*	*Substantial Increase in Severity of Previously Identified Significant impact*	*Changed Circumstan-ces or New Info requiring a subsequent EIR*	*No New Significant Impact or Substantial Increase in Severity of Impacts Previously Analyzed in TOP 2050 SEIR*
associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?				
d) Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?	☐	☐	☐	☒
21. **MANDATORY FINDINGS OF SIGNIFICANCE.** (State CEQA Guidelines section 15065(a).)				
a) Does the project have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?	☐	☐	☐	☒
b) Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current project, and the effects of probable future projects.)	☐	☐	☐	☒
c) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?	☐	☐	☐	☒
Note: Authority cited: Public Resources Code sections 21083, 21083.05, 21083.09. Reference: Gov. Code section 65088.4; Public Resources Code sections 21073, 21074, 21080(c), 21080.1, 21080.3,				

Issues	*New Significant Impact or Substantial Increase in Severity of Previously Identified Significant impact*	*Substantial Increase in Severity of Previously Identified Significant impact*	*Changed Circumstan-ces or New Info requiring a subsequent EIR*	*No New Significant Impact or Substantial Increase in Severity of Impacts Previously Analyzed in TOP 2050 SEIR*
21080.3.1, 21080.3.2, 21082.3, 21083, 21083.3, 21083.5, 21084.2, 21084.3, 21093, 21094, 21095 and 21151; *Sundstrom v. County of Mendocino* (1988) 202 Cal.App.3d 296; *Leonoff v. Monterey County Board of Supervisors* (1990) 222 Cal.App.3d 1337; *Eureka Citizens for Responsible Govt. v. City of Eureka* (2007) 147 Cal.App.4th 357; *Protect the Historic Amador Waterways v. Amador Water Agency* (2004) 116 Cal.App.4th 1099, 1109; *San Franciscans Upholding the Downtown Plan v. City and County of San Francisco* (2002) 102 Cal.App.4th 656.				

EXPLANATION OF ISSUES

1. **AESTHETICS. Would the project:**

a. **Have a substantial adverse effect on a scenic vista?**

Summary of Certified SEIR Finding: The Certified SEIR concluded that increased development under TOP 2050 would occur within the City limits and already urbanized areas of the City. The scale and design of the City under TOP 2050 would not deter views of the San Gabriel Mountains. Therefore, impacts to scenic vistas would be less than significant and would not result in new or a substantial increase in magnitude of impacts compared to the Certified SEIR (Certified SEIR, pp. 5.1-4 – 5.1-10).

Project Impacts: TOP 2050 does not identify scenic vistas within the City. However, the Policy Plan (Policy CD-1.5) requires all major north-south streets be designed and developed to feature views of the San Gabriel Mountains. The Project site is not located along any major north-south streets, as identified in Figure M-01, *Roadway Classifications*, of the City's Mobility Element. The Project would not result in any new, increased or substantially different impacts, other than those previously considered and addressed in the Certified SEIR.

Mitigation:

Certified SEIR Measure(s)	Project Applicability
None.	-

b. **Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings and historic buildings within a state scenic highway?**

Summary of Certified SEIR Finding: The Certified SEIR concluded that there are no State Scenic highways through or in the vicinity of the City. The closest designated State scenic highway is a portion of State Route 142 in Chino Hills, approximately five miles west of the Ontario city limit. Therefore, no impacts to scenic highways would occur and TOP 2050 would not result in new or a substantial increase in

magnitude of impacts compared to the Certified SEIR (Certified SEIR, pp. 5.1-4 – 5.1-10).

Project Impacts: The Project is not located near a scenic highway, nor does the site contain any scenic resources. The Project would not substantially damage scenic resources, including, but not limited to, trees, rock outcroppings and historic buildings within a state scenic highway. The Project would not result in any new, increased or substantially different impacts, other than those previously considered and addressed in the Certified SEIR.

Mitigation:

Certified SEIR Measure(s)	Project Applicability
None.	-

c. **In non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from publicly accessible vantage point). If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?**

Summary of Certified SEIR Finding: The Certified SEIR recognizes that buildout of the City would alter the visual character of the City. The Certified SEIR concludes that compliance with the City Municipal Code and applicable TOP 2050 Policies would ensure that potential aesthetics impacts of development anticipated under TOP 2050 would be less than significant (Certified SEIR, pp. 5.1-4 – 5.1-10).

Project Impacts: Final designs of the Project facilities including, but not limited to, the proposed buildings, landscape/hardscape features, and lighting configurations would be required to conform to the Esperanza Specific Plan Development Regulations and Design Guidelines, and applicable provisions of the City Municipal Code. Final designs of all uses would be subject to City review and approval. As such, the Project would not conflict with applicable zoning or other regulations governing scenic quality. Impacts of the Project in these regards would be less than significant. On this basis, when compared to the Certified SEIR

findings, no new or substantially increased aesthetic impacts would result from the Project.

Mitigation:

Certified SEIR Measure(s)	Project Applicability
None.	-

d. **Create a new source of substantial light or glare that would adversely affect day or nighttime views in the area?**

Summary of Certified SEIR Finding: The Certified SEIR concluded that TOP 2050 would result in additional sources of light and glare; however, adherence to the design standards of the City of Ontario Development Code would ensure that light and glare from new developments would be minimized and that significant impacts would not occur. Therefore, impacts to light and glare would be less than significant, and TOP 2050 would not result in new or a substantial increase in magnitude of impacts compared to the Certified SEIR (Certified SEIR, pp. 5.1-4 – 5.1-10).

Project Impacts: The Project site is surrounded by existing and/or proposed urban uses. Street lighting is currently located along the entire periphery of the site. New lighting will be introduced to the site as part of the Project. Pursuant to the requirements of the City's Municipal Code, Project on-site lighting would be shielded, diffused or indirect, to avoid glare to pedestrians or motorists. In addition, lighting fixtures will be selected and located to confine the area of illumination to within the Project site and minimize light spillage.

Furthermore, consistent with the findings of the Certified SEIR, site lighting plans will be subject to review by the Planning Department and Police Department prior to issuance of building permits (pursuant to the City's Building Security Ordinance). Therefore, implementation of the Project would not result in a significant source of light or glare that would adversely affect daytime or nighttime views. The Project would not result in any new, increased or substantially different impacts, beyond those previously considered and addressed in the Certified SEIR.

Mitigation:

Certified SEIR Measure(s)	Project Applicability
None.	-

2. **AGRICULTURE AND FOREST RESOURCES.** In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model prepared by the California Department of Conservation as an optional model to use in assessing impacts on agriculture and farmland. In determining whether impacts to forest resources, including timberland, are significant environmental effects, lead agencies may refer to information compiled by the California Department of Forestry and Fire Protection regarding the state's inventory of forest land, including the Forest and Range Assessment Project and the Forest Legacy Assessment project; and forest carbon measurement methodology provided in Forest Protocols adopted by the California Air Resources Board. Would the project:

a. **Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?**

Summary of Certified SEIR Finding: Under TOP 2050, the City of Ontario no longer has land designated for agricultural uses. Because TOP 2050 is the baseline for the Certified SEIR, TOP 2050 would not result in the conversion of Prime Farmland, Unique Farmland, and Farmland of Statewide Importance to nonagricultural uses. TOP 2050 would therefore have no impact on land zoned for agricultural purposes (Certified SEIR, p. 5.2-12).

Project Impacts: The Project site is not designated as Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland). According to the California Department of Conservation, the Project site is designated as "Other Land." This designation is used for properties that are not included in any other mapping category. Vacant and non-agricultural land surrounded on all sides by

urban development is commonly mapped as Other Land (DOC, 2022). As such, the Project would not result in any new, increased or substantially different impacts, other than those previously considered and addressed in the Certified SEIR.

Mitigation:

Certified SEIR Measure(s)	Project Applicability
None.	-

b. **Conflict with existing zoning for agricultural use, or a Williamson Act contract?**

Summary of Certified SEIR Finding: The Certified SEIR concluded that implementation of the Land Use Plan would not adversely affect agriculturally zoned properties (Certified SEIR, p. 5.2-12).

Implementation of TOP 2050 would affect all active Williamson Act contracts within the City. The Certified SEIR concluded, however, that impacts to Williamson Act contract properties under TOP 2050 would not be greater than, or different than, would result from TOP 2009. On this basis, the Certified SEIR concluded that TOP 2050 impacts to Williamson Act Contract properties would be less than significant (Certified SEIR, p. 5.2-13).

Project Impacts: The Project site is not zoned for agricultural use. The Project site is zoned Specific Plan and would involve a Specific Plan Amendment to change the land use designation from School to MDR 25. The Project's proposed Specific Plan Amendment would not result in a loss of land zoned for agricultural use. Furthermore, there is no Williamson Act contract in effect on the Project site. Therefore, no impacts to agricultural uses are anticipated, nor will there be any conflict with existing Williamson Act contracts. The Project would not result in any new, increased or substantially different impacts, other than those previously considered and addressed in the Certified SEIR.

Mitigation:

Certified SEIR Measure(s)	Project Applicability
None.	-

c. **Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g)?**

Summary of Certified SEIR Finding: There are no City land uses zoned for forest land, timberland, or timberland zoned Timberland Production. There are no properties in the City considered to be forestland. As such, implementation of TOP 2050 would have no impact on land uses zoned for forest land, timberland, or timberland zoned Timberland Production; nor would TOP 2050 result in the loss or conversion of timberland or forest land to non-forest uses (Certified SEIR, p. 5.2-13).

Project Impacts: The Project site is not zoned for forest land or timberland. As concluded in the Certified SEIR, the City's Zoning Map does not designate any parcels of land in the Project area for forest land, timberland, or timberland zoned Timberland Production. Therefore, implementation of the Project would not conflict with, or cause the rezoning of, forest land or timberland. The Project would not result in any new, increased or substantially different impacts, other than those previously considered and addressed in the Certified SEIR.

Mitigation:

Certified SEIR Measure(s)	Project Applicability
None.	-

d. **Result in the loss of forest land or conversion of forest land to non-forest use?**

Summary of Certified SEIR Finding: There are no City land uses zoned for forest land. There are no properties in the City considered to be forest land. As such,

implementation of TOP 2050 would have no impact on land uses zoned for forest land; nor would TOP 2050 result in the loss or conversion of forest land to non-forest uses (Certified SEIR, p. 5.2-13).

Project Impacts: There is currently no land in the City of Ontario that qualifies as forest land as defined in Public Resources Code section 12220(g). Neither the Policy Plan nor the City's Zoning Code provide designations for forest land. Consequently, the Project would not result in the loss or conversion of forest land. The Project would not result in any new, increased or substantially different impacts, other than those previously considered and addressed in the Certified SEIR.

Mitigation:

Certified SEIR Measure(s)	Project Applicability
None.	-

e. **Involve other changes in the existing environment, which, due to their location or nature, could individually or cumulatively result in loss of Farmland to non-agricultural use or conversion of forest land to non-forest use?**

Summary of Certified SEIR Finding: Under TOP 2050, the City Ontario no longer has land designated for agricultural uses. Because TOP 2050 is the baseline for the Certified SEIR, TOP 2050 would not result in the conversion of Prime Farmland, Unique Farmland, and Farmland of Statewide Importance to nonagricultural uses. TOP 2050 would therefore have no impact on land zoned for agricultural purposes (Certified SEIR, p. 5.2-12).

Project Impacts: As previously mentioned, the Project site does not include Farmland (defined as Prime Farmland, Unique Farmland, or Farmland of Statewide Importance) or forest land and, therefore, the Project would not result in the conversion of Farmland to non-agricultural use or forest land to non-forest use. The Project would not result in any impacts to agricultural and/or forestry resources. The Project would not result in any new, increased or substantially

different impacts, other than those previously considered and addressed in the Certified SEIR.

Mitigation Required:

Certified SEIR Measure(s)	Project Applicability
None.	-

3. **AIR QUALITY.** The analysis in this section is based on the following technical analysis:

- *Esperanza Specific Plan Amendment Air Quality Assessment* (Urban Crossroads, Inc.) March 28, 2025.

This report (Urban Crossroads, 2025a) is provided in its entirety as Appendix C of this Addendum.

a. **Conflict with or obstruct implementation of the applicable air quality plan?**

Summary of Certified SEIR Finding: The Certified EIR evaluated conformance with the South Coast Air Quality Management District (SCAQMD) Air Quality Management Plan (AQMP) based on the following criteria: 1. Whether the project would exceed the assumptions in the AQMP, and 2. Whether the project would result in an increase in the frequency or severity of existing air quality violations, cause, or contribute to new violations, or delay timeline attainment of air quality standards. The Certified SEIR concluded that buildout of TOP 2050 would be consistent with the AQMP under the first criteria. However, air pollutant emissions associated with buildout of TOP 2050 would cumulatively contribute to the nonattainment designations in the South Coast Air Basin (SCAB). Incorporation of Mitigation Measures 3-2 and AQ-1 (see discussion under checklist item b, below) into future development projects for the operation phase would reduce criteria air pollutant emissions associated with buildout of TOP 2050. Additionally, goals and policies in TOP 2050 would promote increased capacity for alternative transportation modes. However, no additional mitigation measures that would reduce impacts below SCAQMD thresholds were identified. Therefore, impacts would remain significant and unavoidable (Certified SEIR, p. 5.3-40).

Project Impacts: The Project site is located within the SCAB. Currently, State, and federal air quality standards are exceeded in most parts of the SCAB. In response, the SCAQMD has adopted a series of Air Quality Management Plans (AQMPs) to meet the State and federal ambient air quality standards. AQMPs are regularly updated to more effectively reduce emissions, accommodate growth, and to minimize any negative fiscal impacts of air pollution control on the economy. In December 2022, the SCAQMD released the Final 2022 AQMP. The 2022 AQMP continues to evaluate current integrated strategies and control measures to meet the California Ambient Air Quality Standards, as well as explore new and innovative methods to reach its goals. Current AQMP consistency criteria include:

Consistency Criterion No. 1: The Project will not result in an increase in the frequency or severity of existing air quality violations or cause or contribute to new violations or delay the timely attainment of air quality standards or the interim emissions reductions specified in the AQMP.

Consistency Criterion No. 2: The Project will not exceed the assumptions in the AQMP based on the years of Project build-out phase.

The 2022 AQMP assumed buildout of the Project site consistent with existing General Plan designations. Although a General Plan Amendment would be required to accommodate the Project, operational-source emissions would not exceed the applicable SCAQMD regional thresholds for emissions of any criteria pollutant (see Table 3-2, presented subsequently). Additionally, the Project would be subject to all applicable mitigation and would be developed consistent with TOP 2050 goals and policies.

The City adopted a Statement of Overriding Considerations in regard to pollutant emissions associated with buildout of TOP 2050. The Project would not result in any new, increased or substantially different impacts, other than those previously considered and addressed in the Certified SEIR.

Mitigation:

Certified SEIR Measure(s)	Project Applicability
None. The Certified SEIR did not propose specific measures under this item, but stated that mitigation measures applied to a development project's construction and operational phases (presented subsequently) would reduce impacts associated with consistency with the SCAQMD.	See measures 3-1, 3-2, and AQ-1, presented subsequently.

b. **Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard?**

Summary of Certified SEIR Finding: The Certified SEIR concluded that buildout of TOP 2050 would generate short-term and long-term air pollutant emissions exceeding SCAQMD regional significance thresholds for VOC, CO, NOx, PM_{10}, and $PM_{2.5}$. These exceedances would cumulatively contribute to the SCAB nonattainment designations for O3, PM_{10} and $PM_{2.5}$. Even with the implementation of mitigation measures, nonattainment air quality impacts resulting from buildout of TOP 2050 would be significant and unavoidable (Certified SEIR, pp. 5.3-54 – 5.3-57).

Project Impacts:

Construction

To analyze the emissions associated with construction, regional Project-generated emissions were developed and compared to applicable SCAQMD thresholds. Table 3-1 presents the regional emissions that can be expected from Project construction.

Table 3-1
Regional Construction Impacts

Source	Emissions (lbs/day)					
	VOC	NO_X	CO	SO_X	PM_{10}	$PM_{2.5}$
Summer						
2026	3.91	34.72	32.28	0.06	23.78	12.01
2027	1.60	11.05	22.06	0.03	2.01	0.73
2028	1.54	10.51	21.48	0.03	1.98	0.69
Winter						
2026	3.47	30.11	29.79	0.06	11.93	5.11
2027	1.57	11.12	20.15	0.03	2.01	0.73
2028	1.51	10.54	19.70	0.03	1.98	0.69
2029	29.05	17.78	32.37	0.05	2.70	1.02
Maximum Daily Emissions	**29.05**	**34.72**	**32.37**	**0.06**	**23.78**	**12.01**
SCAQMD Regional Threshold	75	100	550	150	150	55
Threshold Exceeded?	NO	NO	NO	NO	NO	NO

Source: Urban Crossroads, 2025a

As shown above, regional emissions associated with Project construction would not exceed applicable SCAQMD thresholds, and therefore, would not result in a cumulatively considerable net increase of any criteria pollutant beyond that anticipated and evaluated in the Certified SEIR during construction.

Operations

Operational activities associated with the Project would result in emissions of CO, VOCs, NO_X, SO_X, PM_{10}, and $PM_{2.5}$. Operational-related emissions are expected from the following primary sources: area source emissions, energy source emissions, and mobile source emissions. The Project-related operational air quality impacts derive primarily from vehicle trips generated by buildout associated with the net increase in residential units.

The SCAQMD has developed regional operational significance thresholds for criteria pollutants, as summarized in Table 3-2. The SCAQMD's CEQA Air Quality Significance Thresholds (March 2023) indicate that any projects in the SCAB with

daily emissions that exceed any of the indicated thresholds should be considered as having an individually and cumulatively significant air quality impact.

Table 3-2
SCAQMD Regional Threshold of Significance

Pollutant	Operational Regional Thresholds
NO_X	55 lbs/day
VOC	55 lbs/day
PM_{10}	150 lbs/day
$PM_{2.5}$	55 lbs/day
SO_X	150 lbs/day
CO	550 lbs/day

Source: Urban Crossroads, 2025a

Table 3-3 compares the emissions associated with the proposed Project and the approved school use against the SCAQMD thresholds presented above.

Table 3-3
Operational Emissions Comparison

	Emissions (lbs/day)					
	VOC	NO_X	CO	SO_X	PM_{10}	$PM_{2.5}$
Summer						
Proposed Project	8.44	7.52	53.35	0.14	11.69	3.22
Approved School Use	6.21	5.76	55.04	0.13	11.43	2.99
Net Emissions	**2.24**	**1.76**	**-1.68**	**0.01**	**0.26**	**0.23**
Threshold	55	55	550	150	150	55
Threshold Exceeded?	No	No	No	No	No	No
Winter						
Proposed Project	7.45	7.74	36.28	0.14	11.68	3.22
Approved School Use	5.48	6.15	42.64	0.13	11.42	2.98
Net Emissions	**1.97**	**1.59**	**-6.37**	**0.01**	**0.26**	**0.23**
Threshold	55	55	550	150	150	55
Threshold Exceeded?	No	No	No	No	No	No

Source: Urban Crossroads, 2025a

As shown above, operational-source emissions would not exceed the applicable SCAQMD regional thresholds for emissions of any criteria pollutant. The Project would not result in any new, increased or substantially different impacts, other than those previously considered and addressed in the Certified SEIR.

Mitigation:

Certified SEIR Measure(s)	Project Applicability
MM 3-1 Prior to discretionary approval by the City of Ontario for development projects subject to CEQA (California Environmental Quality Act) review (i.e., nonexempt projects), project applicants shall prepare and submit a technical assessment evaluating potential project construction-related air quality impacts to the City of Ontario Planning Department for review and approval. The evaluation shall be prepared in conformance with South Coast Air Quality Management District (South Coast AQMD) methodology for assessing air quality impacts. If construction-related criteria air pollutants are determined to have the potential to exceed the South Coast AQMD–adopted thresholds of significance, City of Ontario Building Department shall require feasible mitigation measures to reduce air quality emissions. Potential measures shall be incorporated as conditions of approval for a project and may include: • Require fugitive dust control measures that exceed South Coast Air Quality Management District's Rule 403, such as: o Requiring use of nontoxic soil stabilizers to reduce wind erosion. o Applying water every four hours to active soil disturbing activities. o Tarping and/or maintaining a minimum of 24 inches of	**Implemented.** The Project-specific Air Quality Impact Analysis is summarized within this Addendum and provided in its entirety as Appendix C. Project construction would not exceed SCAQMD thresholds; further mitigation is not required.

freeboard on trucks hauling dirt, sand, soil, or other loose materials. • Using construction equipment rated by the United States Environmental Protection Agency as having Tier 4 interim or higher exhaust emission limits. • Ensuring construction equipment is properly serviced and maintained to the manufacturer's standards. • Limiting nonessential idling of construction equipment to no more than five consecutive minutes. • Using Super-Compliant VOC paints for coating of architectural surfaces whenever possible. A list of Super-Compliant architectural coating manufactures can be found on the South Coast Air Quality Management District's website at: http://www.aqmd.gov/prdas/brochures/Super-Compliant_AIM.pdf. These identified measures shall be incorporated into all appropriate construction documents (e.g., construction management plans) submitted to the City and shall be verified by the City's Planning Department.	
MM 3-2 The City of Ontario shall evaluate new development proposals within the City and require all developments to include access or linkages to alternative modes of transportation, such as transit stops, bike paths, and/or pedestrian paths	**Applicable.** Omnitrans Route 87 currently provides transit service to the Project area, with a stop located at the corner of Eucalyptus Avenue and Hamner Avenue, less than 1,000 feet from the Project site. The Project would provide internal driveways and pedestrian paths that connect to the

(e.g. sidewalks).	existing street and sidewalk network surrounding the Project site.
AQ-1 Prior to discretionary approval by the City of Ontario for development projects subject to CEQA (California Environmental Quality Act) review (i.e., nonexempt projects), project applicants shall prepare and submit a technical assessment evaluating potential project operation-phase-related air quality impacts to the City of Ontario Planning Department for review and approval. The evaluation shall be prepared in conformance with South Coast Air Quality Management District (South Coast AQMD) methodology in assessing air quality impacts. If operation-related air pollutants are determined to have the potential to exceed the South Coast AQMD–adopted thresholds of significance, the City of Ontario Planning Department shall require that applicants for new development projects incorporate mitigation measures to reduce air pollutant emissions during operational activities. The identified measures shall be included as part of the conditions of approval. Possible mitigation measures to reduce long-term emissions could include, but are not limited to the following: • For site-specific development that requires refrigerated vehicles, the construction documents shall demonstrate an adequate number of electrical service connections at loading docks for plug-in of the anticipated number of refrigerated trailers to reduce idling time and	**Implemented.** The Project-specific Air Quality Impact Analysis is summarized within this Addendum and provided in its entirety as Appendix C. Project operations would not exceed SCAQMD thresholds; further mitigation is not required.

emissions. • Applicants for manufacturing and light industrial uses shall consider energy storage and combined heat and power in appropriate applications to optimize renewable energy generation systems and avoid peak energy use. • Site-specific developments with truck delivery and loading areas and truck parking spaces shall include signage as a reminder to limit idling of vehicles while parked for loading/unloading in accordance with California Air Resources Board Rule 2845 (13 CCR Chapter 10 sec. 2485). • Provide changing/shower facilities as specified in Section A5.106.4.3 of CALGreen (Nonresidential Voluntary Measures). • Provide bicycle parking facilities per Section A4.106.9 of CALGreen (Residential Voluntary Measures). • Provide preferential parking spaces for low-emitting, fuel-efficient, and carpool/van vehicles per Section A5.106.5.1 of CALGreen (Nonresidential Voluntary Measures). • Provide facilities to support electric charging stations per Section A5.106.5.3 and Section A5.106.8.2 of CALGreen (Nonresidential Voluntary Measures; Residential Voluntary Measures). • Applicant-provided appliances shall be Energy Star–certified	

appliances or appliances of equivalent energy efficiency (e.g., dishwashers, refrigerators, clothes washers, and dryers). Installation of Energy Star–certified or equivalent appliances shall be verified by the City during plan check.	

c. **Expose sensitive receptors to substantial pollutant concentrations?**

Summary of Certified SEIR Finding: The Certified SEIR notes that individual development projects within the City would be required to achieve the incremental risk thresholds established by SCAQMD, and on this basis, potential Toxic Air Contaminant (TAC) impacts from individual developments would be less than significant. TOP 2050 Policy ER4-9, New Localized Air Pollution Sources Near Existing Sensitive Receptors, ensures that mobile sources of TACs not covered under South Coast AQMD permits are considered during subsequent project-level environmental review by the City of Ontario. Other air quality mitigation measures implemented under TOP 2050 would further reduce air pollutant emissions, thereby minimizing effects of pollutants at sensitive receptors.

The Certified SEIR nonetheless concludes that buildout of TOP 2050 would generate TACs that could contribute to elevated levels of TAC pollutants in the air basin. On this basis, the Certified SEIR concluded that TOP 2050 TAC emission impacts at sensitive receptors would be cumulatively significant (Certified SEIR, p. 5.3-57).

Project Impacts:

Construction

To analyze Project impacts to vicinity sensitive receptors, the localized emissions associated with Project construction were developed and compared to applicable SCAQMD thresholds. Peak site preparation and grading activities were used for analysis, since this phase represents the maximum localized emissions that would occur. Table 3-4 presents the localized construction emissions of the Project, along with the applicable thresholds.

Table 3-4
Localized Construction Impacts

	Emissions (lbs/day)			
	NO_X	CO	PM_{10}	$PM_{2.5}$
Site Preparation				
Maximum Daily Emissions	34.61	31.01	7.43	4.31
SCAQMD Threshold	220	1,713	11	7
Threshold Exceeded?	No	No	No	No
Grading				
Maximum Daily Emissions	29.95	28.67	4.05	2.25
SCAQMD Threshold	237	1,873	13	8
Threshold Exceeded?	No	No	No	No

Source: Urban Crossroads, 2025a

As shown above, localized emissions associated with Project construction would not exceed applicable SCAQMD thresholds.

Toxic Air Contaminants

Residential uses proposed by the Project would not result in toxic air contaminants (TACs) during operation. The Certified SEIR, which evaluated regional emissions from mobile sources resulting from implementation of TOP 2050, concluded that the implementation of 2050 would not produce the volume of traffic required to generate a CO hotspot, and CO hotspots impacts would be less than significant. As identified in Checklist item 17, *Traffic*, the proposed Project would generate fewer vehicular trips than anticipated and evaluated in the Certified SEIR. Therefore, the proposed Project would not expose sensitive receptors to substantial localized CO concentrations, consistent with the conclusion of the TOP Final SEIR. Therefore, sensitive receptors would not be exposed to substantial pollutant concentrations as the result of Project operations.

Based on the foregoing, the Project would not expose sensitive receptors near the Project site to significant pollutant concentrations during construction and operation. Therefore, the Project would not result in any new, increased or substantially different impacts, other than those previously considered and addressed in the Certified SEIR.

Mitigation:

Certified SEIR Measure(s)	Project Applicability
None.	-

d. **Result in other emissions (such as those leading to odors adversely affecting a substantial number of people)?**

Summary of Certified SEIR Finding: The Certified SEIR notes that development pursuant to TOP 2050 would be required to comply with SCAQMD Rule 402. SCAQMD Rule 402 acts to generally control and regulate odors and odor sources, thereby minimizing potential effects of construction-source and operational-source odors from other than industrial land uses (Certified SEIR, p. 5.3-46).

The Certified SEIR also acknowledges that certain types of industrial land uses (e.g., compost facilities, landfills, solid-waste transfer stations, fiberglass manufacturing facilities, paint/coating operations, asphalt batch manufacturing plants, chemical manufacturing, and food manufacturing facilities) warrant focused odor impact analyses. The City would require site- and development-specific analyses to ensure that any odors generated by these types of land uses would not adversely affect a substantial number of people (Certified SEIR, p. 5.3-46).

Based on the preceding, the Certified SEIR concluded that the potential for TOP 2050 to create or result in odors that would adversely affect a substantial number of people would be less than significant.

Project Impacts: Land uses generally associated with odor complaints include uses such as agricultural uses, wastewater treatment plants, chemical plants, composting operations, refineries, landfills, and dairies. The Project does not propose land uses typically associated with emitting objectionable odors. Potential odor sources associated with the Project may result from construction equipment exhaust and the application of concrete and architectural coatings during construction activities and the temporary storage of typical solid waste (refuse) associated with the Project's (long-term operational) uses. Standard

construction requirements would minimize odor impacts from construction. The construction odor emissions would be temporary, short-term, and intermittent in nature and would cease upon completion of the respective phase of construction and is thus considered less than significant.

Project-generated refuse would be stored in covered containers and removed at regular intervals in compliance with the City's solid waste regulations. The Project would also be required to comply with SCAQMD Rule 402 to prevent occurrences of public nuisances. Therefore, odors associated with the Project construction and operations would be less than significant. The Project would not result in any new, increased or substantially different impacts, other than those previously considered and addressed in the Certified SEIR.

Mitigation:

Certified SEIR Measure(s)	Project Applicability
None.	-

4. **BIOLOGICAL RESOURCES.** Would the project:

a. **Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?**

Summary of Certified SEIR Finding: The Certified SEIR recognizes that development in accordance with TOP 2050 could impact sensitive species. Projects considered for approval under TOP 2050 would be subject to independent CEQA review to determine whether there is potential habitat on-site for sensitive species. The Certified SEIR did not identify any significant impacts in this regard (Certified SEIR, pp. 5.4-28 – 5.4-34).

Project Impacts: A General Biological Resources Assessment was conducted for the entire Esperanza Specific Plan area, inclusive of the Project site, as part of the Esperanza DEIR. The Assessment concluded that no natural or native plant communities were present within the Specific Plan area, and only a few scattered remnants of native vegetation remained due to long-standing agricultural uses. No special-status plant species were identified within the Specific Plan area, nor were any expected to occur due to the overall absence of suitable habitat.

Several special-status wildlife species were either recorded during the Assessment or had the potential to occur within the Specific Plan area. These species included the loggerhead shrike (*Lanius ludovicianus*), burrowing owl (*Athene cunicularia*), white-tailed kite (*Elanus leucurus*), Northern harrier (*Circus cyaneus*), Ferruginous hawk (*Buteo regalis*), Golden eagle (*Aquila chrysaetos*), California horned lark (*Eremophila alpestfis actia*), and the San Diego black-tailed jackrabbit (*Lepus californicus benettii*). Impacts to these species, and potential foraging/nesting habitat within the Specific Plan area, were reduced to less than significant through the application of mitigation.

All mitigation measures protecting biological resources required of the Esperanza Specific Plan (see Appendix B) would be implemented by the Project, precluding the Project's potential to have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species. The Project would not result in any new, increased or substantially different impacts, other than those previously considered and addressed in the Certified SEIR.

Mitigation:

Certified SEIR Measure(s)	Project Applicability
None.	-

b. **Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?**

c. **Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?**

Summary of Certified SEIR Finding: The Certified SEIR concluded that individual projects subject to CEQA environmental review would be required to determine whether there is potential habitat on-site for sensitive species. The Certified SEIR did not identify any significant impacts in this regard (Certified SEIR, p. 5.4-28).

Project Impacts: The Esperanza Specific Plan DEIR concluded that no riparian or wetlands were located within the Specific Plan area, inclusive of the Project site. The site is surrounded by roadways, including gutters. No drainage courses or streams exist within the Project site. Therefore, the Project would not result in significant impacts to riparian habitat, wetlands, or other sensitive natural communities. The Project would not result in any new, increased or substantially different impacts, other than those previously considered and addressed in the Certified SEIR.

Mitigation:

Certified SEIR Measure(s)	Project Applicability
None.	-

d. **Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?**

Summary of Certified SEIR Finding: The Certified SEIR states that no regional wildlife movement corridors have been identified in the City, and most of the City is ill-suited for the purposes of wildlife movement. Additionally, compliance with existing policies and regulations ensures impacts in this regard would be maintained at levels that would be less than significant (Certified SEIR, p. 5.4-30).

Project Impacts: No wildlife corridors or linkages are located on-site. Further, the site is bounded on all sides by roads and/or urban development, diminishing its potential to function as a wildlife movement corridor. Consistent with the conclusion of the Certified SEIR, the Project would not interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors or impede the use of native wildlife nursery sites. The Project would not result in any new, increased or substantially different impacts, other than those previously considered and addressed in the Certified SEIR.

Mitigation:

Certified SEIR Measure(s)	Project Applicability
None.	-

e. **Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?**

f. **Conflict with the provisions of an adopted Habitat Conservation Plan (HCP), Natural Community Conservation Plan (NCCP), or other approved local, regional, or state habitat conservation plan?**

Summary of Certified SEIR Finding: The Certified SEIR did not identify any conflicts with any local policies or ordinances protecting biological resources, adopted Habitat Conservation Plan, Natural Community Plan, or other approved local, regional, or state habitat conservation plan (Certified SEIR, pp. 5.4-30 – 5.4-31).

Project Impacts: Section 10-2 of the Ontario Municipal Code addresses tree protection, maintenance, and replacement policies for trees within the City's parkways and rights-of-way. Additionally, the City has published landscape guidelines that must be followed when developing new or existing sites. The Project would be implemented consistent with all applicable guidelines in this regard.

The Project site is not part of an adopted HCP, NCCP or other approved habitat conservation plan (CDFW, 2019). As a result, no adverse environmental impacts are anticipated. The Project would not result in any new, increased or substantially different impacts, other than those previously considered and addressed in the Certified SEIR.

Mitigation:

Certified SEIR Measure(s)	Project Applicability
None.	-

5. **CULTURAL RESOURCES.** The analysis in this section is based on the following technical analysis:

    - *Cultural Resources Study for the Eucalyptus and Amherst Avenues Project, City of Ontario, San Bernardino County, California* (BFSA Environmental Services) April 1, 2025.

The report (BFSA, 2025a) is provided in its entirety as Appendix D of this Addendum.

a. **Cause a substantial adverse change in the significance of a historical resource as defined in Section 15064.5?**

Summary of Certified SEIR Finding: Historic resources in the City include historic districts, historic landmarks or points of historical interest, and other buildings, structures, objects, and sites that appear eligible for listing on the National, California, or Local Registers of Historic Places. The Certified SEIR concluded that adoption of TOP 2050 would not itself directly affect any historical structures; however, identified and potential historic structures and sites may be vulnerable as development occurs. Mitigation Measure 5-1 would require historic or potentially historic resources to be evaluated for historic significance through the City's Development Code tier system. Impacts to historical resources would remain significant and unavoidable (Certified SEIR, pp. 5.5-18 – 5.5-23).

Project Impacts: No on-site historical resources were identified as part of the Project-specific Cultural Resources Study. The Cultural Resources Study concluded that no further study or mitigation would be required (BFSAa, 2025). Therefore, the Project would not cause a substantial adverse change in the significance of a historical resource as defined in Section 15064.5, and no impacts would occur. The Project would not result in any new, increased or substantially different impacts, other than those previously considered and addressed in the Certified SEIR.

Mitigation:

Certified SEIR Measure(s)	**Project Applicability**
5-1 Historic or potentially historic resources in the City shall be evaluated for historic significance through the City's tier system prior to the issuance of plan or development approvals. Pursuant to City's Development Code (Chapter 4, Permits, Actions, and Decisions, and Chapter 7, Historic Preservation) mitigation measures for all Tier III Historic Resources shall include the following: a) Each historic resource shall be fully documented and cataloged pursuant to Historic American Building Survey/Historic American Engineering Record (HABS/HAER) standards, to provide a record of the resource, including, but not limited to: [i] the preparation of site plans, floor plans, exterior and interior elevations, and detail drawings of character defining features (such as moldings, stairs, etc.); and [ii]	**Not Applicable.** No historical resources are located on-site, nor would any historic resources be affected by the Project.

photographs of the resource, including the exterior, interior, and interior and exterior character defining features (such as moldings, light fixtures, trim patterns, etc.). b) A mitigation fee established pursuant to Section 7.01.030 (Historic Preservation Mitigation Fee) shall be paid to the City prior to the issuance of a demolition permit for Tier III historic resources. Fees for Tier I and II historic resources shall be determined during the Environmental Impact Report process. The fees established for Tier III will be used as a reference point for establishing fees for Tier I and II historic resources. c) A Certificate of Appropriateness shall not be issued for the demolition of an historic resource, either in whole or in part, until such time that a demolition permit application and a replacement structure has been approved by the City, and appropriate permits have been issued for its construction, unless: [i] a waiver is granted pursuant to Subsection H (Replacement Structure Waiver for Historic Resources Located within Industrial Zoning Districts) of Section 4.02.050; [ii] a deferral of the replacement structure requirement is granted pursuant to Subsection G (Replacement Structure Deferral) of Section 4.02.050; or [iii] demolition is required pursuant to Section	

7.01.050 (Unsafe or Dangerous Conditions) of this Development Code. In an effort to preserve features and artifacts from historic resources, a determination whether items within or on the resource should be salvaged must be made by the Planning Department and may include the local historical society prior to the issuance of the demolition permit. The applicant shall be responsible for the removal, relocation, storage, and donation of such items selected for salvaging. The applicant shall provide an inventory of salvaged items to the Planning Department, and shall include a list of each item name, description, and dimension (as necessary), and the location of each item on a floor plan.	

b. **Cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5?**

Summary of Certified SEIR Finding: Adoption of TOP 2050 would not of itself directly affect archaeological resources. However, buildout of TOP 2050 land use plan would allow development activities and ground disturbance affecting known and potential areas of archaeological sensitivity. These activities could potentially cause the disturbance of archeological resources. Therefore, future development that would be accommodated by TOP 2050 could potentially unearth previously unrecorded resources; see Mitigation Measure 5-2, below. (Certified SEIR, p. 5.5-19).

Project Impacts: No cultural resources were identified within the Project site during the Cultural Resources Study. Further, no natural resources associated with archaeological sites, such as natural water sources or bedrock outcroppings are present within the Project site. Due to the prior ground disturbance and the

absence of identified cultural resources within the Project site vicinity, the potential for any significant resources to be present or impacted by the Project was determined to be minimal. Given that no archaeological sites, features, or artifacts have been identified within or directly adjacent to the Project site, the Cultural Resources Study determined that no potential impacts to cultural resources are anticipated. The Cultural Resources Study concluded that no further archaeological study or mitigation would be required (BFSA, 2025a).

The Project would not result in any new, increased or substantially different impacts, other than those previously considered and addressed in the Certified SEIR.

Mitigation:

Certified SEIR Measure(s)	**Project Applicability**
MM 5-2 In areas of documented or inferred from evident archaeological and/or paleontological resource presence, City staff shall require applicants for development permits to provide studies to document the presence/absence of such resources. On properties where resources are identified, such studies shall provide a detailed mitigation plan, including a monitoring program and recovery and/or in situ preservation plan, based on the recommendations of a qualified cultural preservation expert. The mitigation plan shall include the following requirements: a) Archaeologists and/or paleontologist shall be retained for the project and will be on call during grading and other significant ground-disturbing activities. b) Should any cultural resources be discovered, no further grading shall	**Not Applicable.** No archaeological resources would be affected by the Project. Please refer to Checklist item 7, *Geology and Soils*, for a discussion of Project paleontological resource impacts and mitigation.

occur in the area of the discovery until the Planning Director or designee is satisfied that adequate provisions are in place to protect these resources. c) Unanticipated discoveries shall be evaluated for significance by a San Bernardino County Certified Professional Archaeologist/ Paleontologist. If significance criteria are met, then the project shall be required to perform data recovery, professional identification, radiocarbon dates, and other special studies; submit materials to a museum for permanent curation; and provide a comprehensive final report including a catalog with museum numbers.	

c. **Disturb any human remains, including those interred outside of dedicated cemeteries?**

Summary of Certified SEIR Finding: The Certified SEIR concluded that compliance with existing regulations would ensure that the potential for TOP 2050 to disturb any human remains, including those interred outside of formal cemeteries was less than significant (Certified SEIR, p. 5.5-21).

Project Impacts: The Project would be required to comply with all existing regulations, including the California Public Resources Code Section 5097.98, which would provide protection for any human remains discovered during development activities. On this basis, the potential for the Project to result in disturbance of any human remains, including those interred outside of formal cemeteries would be less than significant. When compared to the Certified SEIR findings, no new or substantially increased impacts related to potential disturbance of human remains would result from the Project.

Mitigation:

Certified SEIR Measure(s)	Project Applicability
None.	-

6. **ENERGY.** Would the project:

a. **Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?**

Summary of Certified SEIR Finding: The Certified SEIR concluded that regulatory compliance under TOP 2050 buildout conditions would promote building energy efficiency and vehicle fuel efficiency and reduce building energy demand and transportation-related fuel usage. Additionally, TOP 2050 includes policies related to land use and transportation planning and design, energy efficiency, public and active transit, and renewable energy generation that would contribute to enhanced building and transportation-related energy efficiencies and thereby reduce demands on nonrenewable sources of energy. Implementation of TOP 2050 Policies, energy efficiency and conservation measures articulated in the Community Climate Action Plan (CCAP), and compliance with regulatory requirements would ensure that energy consumption resulting from TOP 2050 buildout would not be inefficient, wasteful, or unnecessary. On this basis, the potential for TOP 2050 to result in a potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources would be less than significant (Certified SEIR, pp. 5.6-9 – 5.6-12).

Project Impacts: The Project would be implemented consistent with all applicable regulations in this regard, including applicable efficiency/conservation provisions of the CCAP and applicable CCAP updates. Additionally, the Project would adhere to all applicable TOP 2050 policies related to land use and transportation planning and design, energy efficiency, public and active transit, and renewable energy generation that would contribute to enhanced building and transportation-related energy efficiencies and thereby reduce demands on nonrenewable sources of energy. Based on the preceding, the Project would not

result in or cause wasteful, inefficient, and unnecessary consumption of energy. When compared to impacts addressed in the Certified SEIR, no new or substantially increased energy impacts would occur under the Project.

Mitigation:

Certified SEIR Measure(s)	Project Applicability
None.	-

b. **Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?**

Summary of Certified SEIR Finding: The Certified SEIR notes that TOP 2050 would comply with applicable provisions of the California Renewables Portfolio Standard Program (RPS); and current and future iterations of CALGreen. Additionally TOP 2050 includes policies supporting statewide goals to transition the electricity grid to renewable sources. Mandated compliance with the CCAP and its updates would also be required for all new development under TOP 2050. On this basis, the Certified SEIR concluded that the potential for TOP 2050 to conflict with or obstruct a state or local plan for renewable energy or energy efficiency would be less than significant (Certified SEIR, pp. 5.6-13, 5.6-14).

Project Impacts: The Project would be required to comply with incumbent Building Energy Efficiency Standards contained in the California Code of Regulations (CCR), Title 24, Part 6, Energy Efficiency Standards, including applicable CALGreen provisions. CALGreen supports the goals of the State's greenhouse gas reduction and building energy efficiency programs. The Project would also be required to implement applicable energy efficiency/conservation measures of the CCAP and its updates. Based on the preceding, the Project would not conflict with or obstruct a state or local plan for renewable energy or energy efficiency.

Mitigation:

Certified SEIR Measure(s)	Project Applicability
None.	-

7. **GEOLOGY & SOILS.** The following discussions are based primarily on information presented in the following analyses:

- *Geotechnical Evaluation of Mass Graded Site and Grading Plan Review of Proposed 10-Acre "Esperanza Townhomes" Residential Development, Buildings 1 through 28, Tentative Tract No. 20730, located North of Eucalyptus & Amherst Avenues, City of Ontario, County of San Bernardino, California* (LGC Geotechnical, Inc.) April 18, 2025.

- *Paleontological Assessment for the Eucalyptus and Amherst Avenues Project, City Of Ontario, San Bernardino County, California* (BFSA Environmental Services) April 1, 2025.

These reports are presented as Appendix E and F, respectively.

a. **Expose people or structures to potential substantial adverse effects, including the risk of loss, injury or death involving:**

i. **Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.**

Summary of Certified SEIR Finding: The Certified SEIR concluded that the City of Ontario is not within any Alquist-Priolo Earthquake Fault Zone. Therefore, impacts would be less than significant, and TOP 2050 would not result in new or a substantial increase in magnitude of impacts compared to the Certified SEIR (Certified SEIR, pp. 5.7-18 – 5.7-19).

Project Impacts: Ground rupture is the visible offset of the ground surface when an earthquake rupture along a fault affects the Earth's surface. Southern California, including the City of Ontario, is subject to the effects of seismic activity due to the active faults that traverse the area. Active faults are defined as those that have experienced surface displacement within Holocene time (approximately the last 11,000 years) and/or are in a State-designated Alquist-Priolo Earthquake Fault Zone. The Project site is not located with an Alquist-Priolo Earthquake Fault Zone; no known active faults traverse the Project site. The Geotechnical Evaluation concluded that the possibility of damage due to ground rupture is considered low since no active faults are known to cross the site (LGC Geotechnical, 2025). The Project would not result in any new, increased or substantially different impacts, other than those previously considered and addressed in the Certified SEIR.

Mitigation:

Certified SEIR Measure(s)	Project Applicability
None.	-

ii. **Strong seismic ground shaking?**

Summary of Certified SEIR Finding: The Certified SEIR concluded that projects considered for approval under TOP 2050 would be required to comply with seismic safety provisions of the CBC (Title 24, Part 2 of the California Code of Regulations). Such compliance would reduce hazards arising from ground shaking to less than significant. Therefore, impacts would be less than significant, and TOP 2050 would not result in new or a substantial increase in magnitude of impacts compared to the Certified SEIR (Certified SEIR, pp. 5.7-18 – 5.7-19).

Project Impacts: Southern California is a seismically active area and properties in the City of Ontario, including the Project site, are subject to periodic ground shaking and other effects from earthquake activity along nearby regional faults. The Project site is not at an increased risk relative to the surrounding areas.

Ontario Municipal Code Section 1803.2 requires a geotechnical investigation to evaluate soil classification, slope stability, soil strength, position and adequacy of load-bearing soils, the effect of moisture variation on soil-bearing capacity, compressibility, liquefaction, and expansiveness, as necessary, determined by the City building official. To this end, the Geotechnical Evaluation includes site-specific recommendations that would be implemented during grading and earthwork operations at the Project site. The geotechnical recommendations would provide adequate protection for the proposed development to the extent required to reduce seismic risk to an "acceptable level," as defined by the California Code of Regulations.

Additionally, the City requires compliance with the CBC through Title 8, Chapter 1, Section 8-1.01 of the Ontario Municipal Code. The CBC contains provisions for earthquake safety based on factors including occupancy type, the types of soil and rock on-site, and the probable strength of ground motion.

As structures would be designed to meet or exceed CBC standards for earthquake resistance, development of the Project would not create significant impacts related to seismic ground shaking. The Project would not result in any new, increased or substantially different impacts, other than those previously considered and addressed in the Certified SEIR.

Mitigation:

Certified SEIR Measure(s)	Project Applicability
None.	-

iii. **Seismic-related ground failure, including liquefaction?**

Summary of Certified SEIR Finding: The Certified SEIR concluded that there is currently no potential for liquefaction based on groundwater levels throughout the City being greater than 50 feet below ground surface. Therefore, no impact would occur (Certified SEIR, pp. 5.7-18 – 5.7-19).

Project Impacts: Liquefaction occurs when three general conditions coexist: 1) shallow groundwater, 2) low-density non-cohesive (granular) soils and 3) high-

intensity ground motion. Groundwater at the Project site is estimated to be at a depth of approximately 120 to 130 feet below ground surface based on available water well data. As such, the Geotechnical Evaluation concluded that the on-site soils are generally not susceptible to liquefaction due to a lack of groundwater and the relatively dense native soils in the upper 50 feet, and liquefaction potential is considered very low (LGC Geotechnical, 2025).Therefore, consistent with the findings in the Certified SEIR, the Project does not have the potential to expose people or structures to significant seismic-related liquefaction. The Project would not result in any new, increased or substantially different impacts, other than those previously considered and addressed in the Certified SEIR.

Mitigation:

Certified SEIR Measure(s)	**Project Applicability**
None.	-

iv. **Landslides?**

Summary of Certified SEIR Finding: The Certified SEIR did not identify any specific constraints regarding landslides (Certified SEIR, pp. 5.7-20 – 5.7-21).

Project Impacts: The Project site and surrounding area are generally flat with no significant slopes. Additionally, the Esperanza Specific Plan DEIR concluded that no significant landslide risk exists within the Specific Plan area. The Project would not result in any new, increased or substantially different impacts, other than those previously considered and addressed in the Certified SEIR.

Mitigation:

Certified SEIR Measure(s)	**Project Applicability**
None.	-

b. **Result in substantial soil erosion or the loss of topsoil?**

Summary of Certified SEIR Finding: The Certified SEIR concluded that the young alluvial sediment and wind-blown sand underlying the City are generally granular, poorly consolidated, and very susceptible to erosion. However, compliance with the CBC and review of grading plans for individual projects by the City Engineer would ensure no significant impacts would occur. In addition, construction activities on project sites larger than one acre are required to prepare a Stormwater Pollution Prevention Plan (SWPPP) that details best management practices (BMPs) to reduce the potential for erosion during construction activities. Furthermore, TOP 2050 includes policies addressing erosion and loss of topsoil. Therefore, impacts would be less than significant, and TOP 2050 would not result in new or a substantial increase in magnitude of impacts compared to the Certified SEIR (Certified SEIR, pp. 5.7-19 – 5.7-20).

Project Impacts: The State Water Resources Control Board (SWRCB) Order No. 2009-0009-DWQ (General Construction Permit) contains water quality standards and stormwater discharge requirements that apply to construction projects of one acre or more. The General Construction Permit was issued pursuant to the National Pollutant Discharge Elimination System (NPDES) regulations for implementing part of the federal Clean Water Act. The General Construction Permit requires preparation of a SWPPP that identifies the sources of pollution that may affect the quality of stormwater discharges and describes and ensures the implementation of BMPs to reduce the pollutants, including silt and soil, in construction stormwater discharges.

The Project would be required to comply with the NPDES permit by preparing and implementing a SWPPP specifying BMPs for minimizing pollution of stormwater with soil and sediment during Project construction.

Implementation of site-specific BMPs, as well as mandatory compliance with the recommendations set forth in the Geotechnical Evaluation, would reduce, prevent, or minimize soil erosion from Project-related demolition, site preparation and grading, and construction activities. The Project would not result in any new, increased or substantially different impacts, other than those previously considered and addressed in the Certified SEIR.

Mitigation:

Certified SEIR Measure(s)	Project Applicability
None.	-

c. **Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?**

Summary of Certified SEIR Finding: The Certified SEIR concluded that the thick alluvial deposits comprising the Chino Subbasin may be susceptible to compaction, with resulting subsidence at the surface, in the event of rapid groundwater withdrawal. Projects considered for approval under TOP 2050 could expose structures or persons to potentially significant hazards from ground subsidence. However, compliance with the CBC and review of grading plans for individual projects by the City Engineer would ensure no significant impacts would occur.

Additionally, the young sediments underlying the City are generally dry and loose in the upper few feet, and therefore are susceptible to compression. Much of the Ontario Ranch has been intensively farmed and is especially susceptible to compression. Developments approved pursuant to TOP 2050 could expose persons or structures to potentially significant hazards from compressible soils. However, compliance with the CBC and review of grading plans for individual projects by the City Engineer would ensure no significant impacts would occur. Therefore, impacts would be less than significant, and TOP 2050 would not result in new or a substantial increase in magnitude of impacts compared to the Certified SEIR. (Certified SEIR, pp. 5.7-20 – 5.7-21).

Project Impacts: The Project Geotechnical Evaluation provides recommendations that would ensure the Project would not be adversely affected by any unstable soils that may be encountered during the course of Project development. The Evaluation concludes that the Project is feasible from a geotechnical standpoint, provided the recommendations are undertaken (LGC Geotechnical, 2025). Additionally, the City requires compliance with the CBC through Title 8, Chapter

1, Section 8-1.01 of the Ontario Municipal Code. Mandatory compliance with the recommendations of the Geotechnical Evaluation and CBC requirements, as well as review of grading plans by the City Engineer would reduce, prevent, or minimize unstable soil conditions that may be present at the site. The Project would not result in any new, increased or substantially different impacts, other than those previously considered and addressed in the Certified SEIR.

Mitigation:

Certified SEIR Measure(s)	Project Applicability
None.	-

d. **Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?**

Summary of Certified SEIR Finding: The Certified SEIR concluded that expansive soils are likely in the southern parts of the City, where there are silts, sandy silts, and silty clays. Projects in the southern part of the City under TOP 2050 could expose persons or structures to potentially significant hazards from expansive soils. However, compliance with the CBC and review of grading plans for individual projects by the City Engineer would ensure no significant impacts would occur. Therefore, impacts related to expansive soils would be less than significant and TOP 2050 would not result in new or a substantial increase in magnitude of impacts compared to the Certified SEIR (Certified SEIR, p. 5.7-21).

Project Impacts: Expansive soils are defined as soils possessing clay particles that react to moisture changes by shrinking or swelling. Based on the results of the expansion index testing presented in the Project Geotechnical Evaluation, on-site soils are anticipated to have a “very low” expansion potential (LGC Geotechnical, 2025). As such, the Project would not result in any new, increased or substantially different impacts, other than those previously considered and addressed in the Certified SEIR.

Mitigation:

Certified SEIR Measure(s)	Project Applicability
None.	-

e. **Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?**

Summary of Certified SEIR Finding: Wastewater generated by new development pursuant to buildout of TOP 2050 would be conveyed to and treated at wastewater treatment facilities owned and operated by the Inland Empire Utilities Agency (Regional Plant No. 1 in the City of Ontario and Regional Plant No. 5 in the City of Chino).

The use of septic tanks for new development would be restricted to areas not "in practical proximity existing sewer mains . . ." (Certified SEIR, p. 5.7-22).

Based on the preceding, the Certified SEIR concluded that TOP 2050 would not result in adverse impacts related to use of septic tanks or alternative wastewater disposal systems and ability of soils to accept these systems.

Project Impacts: No septic tanks will be used as part of the proposed Project. The Project would connect to the existing wastewater disposal system. Accordingly, no impact would occur. The Project would not result in any new, increased or substantially different impacts, other than those previously considered and addressed in the Certified SEIR.

Mitigation:

Certified SEIR Measure(s)	Project Applicability
None.	-

f. **Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?**

Summary of Certified SEIR Finding: The Certified SEIR concluded that the City is underlain by deposits of Quaternary and upper-Pleistocene sediments deposited during Pliocene and early Pleistocene time. Quaternary Older Alluvial sediments may contain significant, nonrenewable, paleontological resources and are therefore considered to have high sensitivity. Older Pleistocene alluvial sediments can yield fossil remains, often found at depths of 10 feet or more below existing ground surface. As a result, the possibility of finding additional paleontological resources within City boundaries is moderate to high at depths of 10 feet or more below ground surface. Therefore, future development that would be accommodated by TOP 2050 could potentially unearth previously unrecorded resources. Mitigation Measure 5-2 requires that in the event of an unanticipated discovery of paleontological resources during grading and excavation of the site, a qualified paleontologist would assess the find and develop a course of action to preserve the find. With application of mitigation, the Certified SEIR concluded that TOP 2050 impacts to paleontological resources would be less than significant (Certified SEIR, pp. 5.7-22 – 5.7-25).

Project Impacts: The Paleontological Assessment identified potentially fossiliferous late Pleistocene alluvial wash or fan deposits at a depth below the Project site. The occurrence of terrestrial vertebrate fossils at shallow depths from Pleistocene alluvial fan sediments across the Inland Empire is well documented. Due to the high paleontological sensitivity rating typically assigned to Pleistocene alluvial fan sediments, the Paleontological Assessment concluded that paleontological monitoring should be implemented during mass grading and excavation activities in undisturbed Pleistocene alluvial fan sediments, as required by Mitigation Measure 7-1, below.

With the incorporation of Mitigation Measure 7-1, the Project would not result in any new, increased or substantially different impacts, other than those previously considered and addressed in the Certified SEIR.

Mitigation:

Certified SEIR Measure(s)	Project Applicability
MM 5-2 In areas of documented or inferred from evident archaeological and/or paleontological resource presence, City staff shall require applicants for development permits to provide studies to document the presence/absence of such resources. On properties where resources are identified, such studies shall provide a detailed mitigation plan, including a monitoring program and recovery and/or in situ preservation plan, based on the recommendations of a qualified cultural preservation expert. The mitigation plan shall include the following requirements: a) Archaeologists and/or paleontologist shall be retained for the project and will be on call during grading and other significant ground-disturbing activities. b) Should any cultural resources be discovered, no further grading shall occur in the area of the discovery until the Planning Director or designee is satisfied that adequate provisions are in place to protect these resources. c) Unanticipated discoveries shall be evaluated for significance by a San Bernardino County Certified Professional Archaeologist/ Paleontologist. If significance criteria are met, then the project shall be required to perform data recovery, professional identification, radiocarbon dates, and other special studies; submit materials to a museum	Pursuant to Certified SEIR MM 5-2, and consistent with the recommendations of the Project-specific Paleontological Resources Assessment, the following Project-specific mitigation is required (and negates the applicability of MM 5-2): **7-1** A Paleontological Resources Impact Mitigation Program (PRIMP) shall be prepared, in accordance with TOP Certified SEIR MM 5-2. The PRIMP shall be approved by the City Planning Department prior to the issuance of a grading permit. Additionally, full-time paleontological monitoring starting at a depth of four feet below the surface during earth disturbance activities shall be conducted. A proposed paleontological monitoring plan is presented within the report titled *Paleontological Assessment for the Eucalyptus and Amherst Avenues Project, City Of Ontario, San Bernardino County, California* (BFSA Environmental Services) April 1, 2025.

for permanent curation; and provide a comprehensive final report including a catalog with museum numbers.	

8. **GREENHOUSE GAS EMISSIONS.** Would the project:

Information presented within the section is summarized from:

- *Esperanza Specific Plan Amendment Greenhouse Gas Assessment* (Urban Crossroads, Inc.) March 28, 2025.

The Project-specific Greenhouse Gas Assessment (Urban Crossroads, 2025b) is presented in its entirety as Appendix G to this Addendum.

a. **Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?**

b. **Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?**

Summary of Certified SEIR Finding: The Certified SEIR substantiates that TOP 2050 would yield a net decrease in GHG emissions when compared to the previous General Plan (TOP 2009) GHG emissions forecasts. Further, under TOP 2050 and the Community Climate Action Plan (CCAP), the City would achieve State emissions reductions targets and would progress toward attainment of the State's carbon neutrality goals. On this basis, the Certified SEIR concluded that the potential for TOP 2050 to generate greenhouse gas emissions, either directly or indirectly, that may have an adverse impact on the environment would be less than significant (Certified SEIR, pp. 5.8-25, 5.8-26).

Project Impacts: The Project's annual GHG emissions are summarized in Table 8-1, *Project GHG Emissions*.

Table 8-1
Project GHG Emissions

Source	Emissions (lbs/day)				
	CO_2	CH_4	N_2O	Refrigerants	Total CO_2e
Annual construction-related emissions amortized over 30 years	50.28	1.79E-03	1.40E-03	2.30E-02	50.77
Mobile Source	1,800.46	0.07	0.08	2.09	1,828.80
Area Source	41.21	0.00	0.00	0.00	41.26
Energy Source	260.76	0.02	0.00	0.00	261.84
Water Source	10.91	0.22	0.01	0.00	17.97
Waste Source	10.62	1.06	0.00	0.00	37.17
Refrigerants Source	0.00	0.00	0.00	0.18	0.18
Total CO_2e (All Sources)	**2,238.00**				

Source: Urban Crossroads, 2025b

As shown in Table 8-1, the Project will result in total GHG emissions of approximately 2,238.00 MTCO_2e/yr.

There are currently no published Statewide thresholds of significance for measuring the impact of GHG emissions generated by a proposed project. CEQA Guidelines § 15064.7(b) indicates "each public agency is encouraged to develop and publish thresholds of significance that the agency uses in the determination of the significance of environmental effects." To this end, the City's 2022 CCAP contains guidance on the City of Ontario's GHG Inventory reduction goals, policies, guidelines, and implementation programs.

The CCAP contains Screening Tables which assign points for each option incorporated into a project as mitigation or a project design feature. The point values correspond to the minimum emissions reduction expected from each feature. The menu of features allows flexibility and options for how development projects can implement the GHG reduction measures. Projects that achieve at least 100 points per applicable Screening Table will be consistent with the reduction quantities consistent with the CCAP. Consistent with CEQA Guidelines, such projects would be determined to have a less than significant individual and cumulative impact for GHG emissions.

As presented previously in the Project Description (and required by the Project-specific Greenhouse Gas Assessment), the Project includes certain design features aimed at reducing GHG emissions. Table 8-2 lists the Project features along with the assigned points from the Ontario CCAP.

Table 8-2
Project Design GHG-Reduction Features

Feature	CCAP Points
Building Electrification	
Electric Space Heater	6
Electric Water Heater	8
Electric Stove	5
Electric Dryer	1
Electric Pool Heater	1
Electric Spa Heater	1
Lack of Natural Gas Infrastructure	10
Vehicle Electrification	
Installation of Level 2 EV or higher charging stations at a rate of 30% or more of required vehicle spaces.	30
Waste Diversion	
Storage and collection of green waste, organic waste, and recyclables.	33
Water Conservation	
Water efficient showerheads and faucets	1
Outdoor landscaping consists of drought tolerant, low maintenance plants with a drip irrigation or weather-based controller sprinkler system.	4
Total Points	***100***

Source: City of Ontario; Project plans.

As demonstrated above, the Project would achieve the required points for consistency with the reduction quantities presented in the CCAP. As such, the Project would have a less than significant individual and cumulative impact for GHG emissions. The Project would not result in any new, increased or substantially different impacts, other than those previously considered and addressed in the Certified SEIR.

Mitigation:

Certified SEIR Measure(s)	Project Applicability
None.	-

9. **HAZARDS & HAZARDOUS MATERIALS.**

Project site information presented in the following discussions is summarized from:

- *Phase I Environmental Site Assessment Report, 10.02 Acre Site at Northeast Corner of Amherst and Eucalyptus Avenues, Ontario, California 91761* (SCS Engineers) March 14, 2025.

The Phase I Environmental Site Assessment (ESA) is provided as Addendum Appendix H.

a. **Create a significant hazard to the public or the environment through the routine transport, use or disposal of hazardous materials?**

b. **Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?**

Summary of Certified SEIR Finding: The Certified SEIR determined that buildout in accordance with TOP 2050 would involve the transport, use, and/or disposal of hazardous materials. However, federal and State regulations, City ordinances, and TOP 2050 Policies would appropriately control handling of hazardous substances to reduce potential releases; exposure; and risks of transporting, storing, treating, and disposing of hazardous materials and wastes. On this basis, the Certified SEIR concluded that the potential for TOP 2050 to result in adverse impacts related to transport, use, and/or disposal of hazardous materials; creation of significant hazards, or result in hazardous emissions affecting schools, would be less than significant (Certified SEIR, pp. 5.1-4 – 5.1-10).

Project Impacts:

Historical Uses of the Project Site

According to the Phase I ESA prepared for the Project site, the site was historically used for agricultural purposes from approximately 1902 through 2012. Around 2016, grading activities were first visible on the eastern portion of the site, associated with activities on the adjoining site to the east. Following 2016, much more extensive grading occurred and in 2020, hundreds of soil stockpiles were placed on the central and northern portions of the site. The appearance of the stockpiles coincided with the grading and paving of the adjoining streets, it is likely that the soil was from sites with similar history (undeveloped and/or agricultural land). Further grading occurred in 2021, which likely resulted in the export or blending of that that stockpiled soil.

Current Conditions

The site is currently a vacant, undeveloped lot. A chain-link fence surrounds the site with gate access in the northeastern corner. The site is covered in low, grassy vegetation and bare soil, with small amounts of wind-blown trash observed on the outer edges of the Property (against the fence).

Regulatory database information did not identify known or suspected contamination sites in the area surrounding the Project site. No evidence of hazardous materials was noted on-site; and the Phase I determined that it was unlikely the site had been affected by activities or releases of hazardous substances from surrounding properties.

The Phase I concluded that no recognized environmental conditions, controlled recognized environmental conditions, or significant data gaps in connection with the site exist, and no further investigation is warranted (SCS, 2025).

Project Construction

During the normal course of construction and operation activities, there would be limited transport of potentially hazardous materials (e.g., gasoline, diesel fuel, paints, solvents, fertilizer, etc.) to and from the Project site. However, as presented within the Certified SEIR, the Project would be required to comply with all City and County Hazardous Materials Management Plans and regulations addressing transport, use, storage and disposal of these materials. The Project does not propose or require uses or activities that would result in atypical transportation, use, storage, or disposal of hazardous or potentially hazardous materials not addressed under current regulations and policies.

Project Operation

The Project would not result in or cause exposure(s) to hazards or potentially hazardous conditions. That is, uses proposed by the Project are not considered hazardous. Nor does the Project propose or require facilities or operations involving inherent substantial hazards.

Consistent with the findings of the Certified SEIR, with mandatory compliance City and County Hazardous Materials regulations, potential hazardous materials impacts associated with the Project is not expected to pose a significant hazard to the public or environment through the routine transport, use, or disposal of hazardous materials, nor would the Project increase the potential for accident operations which could result in the release of hazardous materials into the environment. The Project would not result in any new, increased or substantially different impacts, other than those previously considered and addressed in the Certified SEIR.

Mitigation:

Certified SEIR Measure(s)	Project Applicability
None.	-

c. **Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances or waste within one-quarter mile of an existing or proposed school?**

Summary of Certified SEIR Finding: The Certified SEIR determined that buildout in accordance with TOP 2050 would involve the transport, use, and/or disposal of hazardous materials. However, federal and state regulations, City ordinances, and TOP 2050 Policies would appropriately control handling of hazardous substances to reduce potential releases; exposure; and risks of transporting, storing, treating, and disposing of hazardous materials and wastes. On this basis, the Certified SEIR concluded that the potential for TOP 2050 to result in adverse impacts related to transport, use, and/or disposal of hazardous materials; creation of significant hazards, or result in hazardous emissions affecting schools, would be less-than-significant (Certified SEIR, pp. 5.1-4 – 5.1-10).

Project Impacts: The Project site is not located within one quarter mile of an existing or proposed school. The closest school to the Project site is Colony High School, located approximately 1.5 miles to the north. The Project does not propose or require uses that would handle hazardous or acutely hazardous materials, substances, or waste. Implementation of the Project would not have the potential to emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one quarter mile of an existing or proposed school. The Project would not result in any new, increased or substantially different impacts, other than those previously considered and addressed in the Certified SEIR.

Mitigation:

Certified SEIR Measure(s)	Project Applicability
None.	-

d. **Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?**

Summary of Certified SEIR Finding: Development in accordance with TOP 2050 would involve redevelopment and reuse of some sites listed as hazardous materials sites on environmental databases. The environmental databases document the presence of hazardous materials on those sites, but do not document hazardous releases. Redevelopment of the affected sites could potentially expose future residents and workers to hazards from known hazardous materials releases on and near the sites. Should environmental database listed sites be proposed for development, site assessments for hazardous materials and remediation of hazardous materials releases would be required in accordance with TOP 2050 Policies, federal, state, and local regulations. On this basis, the Certified SEIR concluded that the potential for development pursuant to TOP 2050 to be located on hazardous materials sites, and thereby create adverse hazard impacts affecting the public or environment would be less than significant (Certified SEIR, pp. 5.9-38, 5.9-39).

Project Impacts: A records review conducted as part of the Phase I Environmental Site Assessment did not identify the site as a hazardous material site pursuant to Government Code Section 65962.5. Additionally, no adjacent sites were identified as potentially affecting the Project site (SCS, 2025). Therefore, the Project would not create a hazard to the public or the environment and no impact is anticipated. When compared to the Certified SEIR findings, no new or substantially increased impacts related to development affecting Government Code Section 65962.5-listed sites would result from the Project.

Mitigation:

Certified SEIR Measure(s)	Project Applicability
None.	-

e. **For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area?**

Summary of Certified SEIR Finding: Ontario International Airport (ONT), as well as a small portion of the Chino Airport property, is located within the City of Ontario. The Certified SEIR determined that TOP 2050 Policies and established processes for consistency reviews of new development with the appropriate Airport Land Use Compatibility Plan (ALUCP) would be sufficient to prevent significant impacts (Certified SEIR, p. 5.8-27).

Project Impacts: The Project site is located approximately four miles south of the Ontario International Airport (ONT). The ONT Airport Land Use Compatibility Plan (ALUCP) was adopted by Ontario City Council on April 19, 2011 (amended 2018) to promote compatibility between the airport and the land uses that surround it. The Project site is located within the area subject to provisions of The ONT ALUCP, which defines the ONT Airport Influence Area (AIA) as an area in which current and future airport-related noise, overflight, safety, and airspace protection factors may significantly affect land uses or necessitate restriction on those uses. The Project site is located outside the ONT safety zones (see: TOP 2050 Policy Plan Figure LU-06, *Airport Safety Zones & Influence Areas*). As with the development anticipated under TOP 2050, and evaluated in the Certified SEIR, the Project would comply with all requirements set forth within the ALUCP. Based on the preceding, the potential for the Project to result in airport-related safety hazard impacts would be less than significant.

The Project site is located approximately 2.5 miles east of the Chino Airport (CNO). The Project site is located outside the CNO airport influence area and airport safety zones. At this distance, airport hazards from CNO would be less than significant.

The Project would not result in a safety hazard for people residing or working in the Project area. The Project would not result in any new, increased or substantially different impacts, other than those previously considered and addressed in the Certified SEIR.

Mitigation:

Certified SEIR Measure(s)	Project Applicability
None.	-

f. **Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?**

Summary of Certified SEIR Finding: In 2018, the City of Ontario prepared a Local Hazard Mitigation Plan (LHMP) to identify the City's hazards, review and assess past disaster occurrences, estimate the probability of future occurrences, and set goals to reduce or eliminate long-term risk to people and property from natural and man-made hazards. Wildfire hazard is rated the highest risk of the 23 hazards evaluated, followed by flooding. Under the LHMP, interstate highways would serve as major emergency response and evacuation routes. TOP 2050 Policies and local roadways are designed and constructed so as to facilitate access under normal and emergency conditions.

A review of emergency access is included as part of the standard City's Design Review process. Additionally, the Ontario Fire Department reviews development applications to ensure that adequate emergency accessibility is provided based on local and state guidance.

Based on the preceding, the Certified SEIR concluded that buildout of the City in accordance with TOP 2050 would not impair implementation of, or physically interfere with, an adopted emergency response plan or emergency evacuation plan. Impacts in these regards would be less than significant (Certified SEIR, p. 5.9-41).

Project Impacts: The Project does not propose or require permanent alteration of vehicle circulation routes, and would not interfere with any identified emergency response or emergency evacuation plan. Standard City design review processes include coordination with fire and police departments during pre-construction review of plans to ensure that potential interference with emergency response plans and evacuation plans are avoided. Based on the preceding, the Project

would not impair implementation of, or physically interfere with, an adopted emergency response plan or emergency evacuation plan. Impacts in these regards would be less than significant. The Project would not result in any new, increased or substantially different impacts, other than those previously considered and addressed in the Certified SEIR.

Mitigation:

Certified SEIR Measure(s)	Project Applicability
None.	-

g. **Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?**

Summary of Certified SEIR Finding: The Certified SEIR identifies available resources addressing wildland fires and associated potential impacts. These resources include: CAL FIRE 2019 Strategic Fire Plan for California, the California Fire Code, County of San Bernardino Multi-jurisdiction Hazard Management Plan, the Ontario LHMP, and fire services from the Ontario Fire Department. The Certified SEIR determined that adherence to existing regulations and review of building plans by the Ontario Fire Department, development and infrastructure associated with TOP 2050 would not exacerbate risk or result in post-wildfire hazards. No significant impacts were identified (Certified SEIR, p. 5.9-41).

Project Impacts: The Project site is located in an urbanized area, and no wildlands are located in the vicinity of the site. Fire protection services are provided by the Ontario Fire Department. Pre-construction coordination with Ontario Fire Department staff and adherence to local fire department regulations during construction and operation of the Project would be required. As such, no new or substantially increased impacts related to wildland fire impacts would result from the Project. The Project would not result in any new, increased or substantially different impacts, other than those previously considered and addressed in the Certified SEIR.

Mitigation:

Certified SEIR Measure(s)	Project Applicability
None.	-

10. **HYDROLOGY & WATER QUALITY**. Would the project:

Project-specific information presented in the following discussions is primarily based on information contained within the following documents:

- *Drainage Study for Tract No. 20730 Esperanza – PA 11, Eucalyptus Avenue & Amherst Avenue, Ontario, CA* (Walden & Associates) March 2025.

- *Preliminary Water Quality Management Plan (PWQMP),* March 12, 2025.

These reports are presented as Appendices I1 and I2 to this Addendum.

a. **Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?**

Summary of Certified SEIR Finding: The Certified SEIR recognizes that buildout of the City pursuant to TOP 2050 would increase concentrations of pollutants during construction and post-construction activities. To address potential water quality impacts resulting from project construction and operations, projects are required to comply with provisions of the City's National Pollutant Discharge Elimination System (NPDES) permit. NPDES permit requirements include, but are not limited to, mandated preparation of a Stormwater Pollution Prevention Plan (SWPPP) and Water Quality Management Plan (WQMP). Mandated SWPPPs and WQMPs are required to develop and implement Best Management Practices (BMPs) to reduce construction-source and operational-source stormwater pollutant discharges. Based on compliance with the City NPDES Permit and implementation of required SWPPPs and WQMPs, the Certified SEIR did not identify any significant water quality impacts (Certified SEIR, p. 5.10-21).

Project Impacts: Consistent with City requirements, a Preliminary WQMP has been prepared for the Project. The WQMP identifies the Source Control and Treatment Control BMPs to be implemented by the Project, including:

Source Control BMPs

- Minimize non-stormwater site runoff through efficient irrigation system design and controllers.
- Minimize trash and debris in storm runoff through a regular parking lot, storage yard and roadway sweeping program.
- Provide solid roofs over all trash enclosures.
- Site Owner(s)/Property Manager/HOA or POA will be familiar with the Project WQMP and stormwater BMPs.
- Owner or HOA or POA to provide education/training of site occupants and employees on stormwater BMPs.
- Install stormwater placards/stenciled messages with a "No Dumping" message on all on-site/off-site storm drain inlets.

Treatment Control BMPs

- Proprietary Filter Inserts for on-site storm drain inlets or retention basin/trench overflow drains

City review and approval of the WQMP and SWPPP documents is required prior to issuance of grading permits. As determined by the Certified SEIR, implementation of an approved SWPPP and WQMP would reduce the potential for the development under the Project to violate water quality standards or otherwise adversely affect water quality to levels that would be less than significant.

Based on the preceding, the Project's potential to violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality is considered less than significant. When compared to the Certified SEIR findings, no new or substantially increased water quality impacts would result from the Project.

Mitigation:

Certified SEIR Measure(s)	Project Applicability
None.	-

b. **Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?**

Summary of Certified SEIR Finding: As discussed in the Certified SEIR, "[a]pproximately 46 percent of the City's water supply is groundwater pumped by the City from the Chino Groundwater Basin; groundwater pumping is managed by OMUC so that domestic demands do not exceed the safe yield for the basin, consistent with the Chino Basin Watermaster's Optimum Basin Management Program, commonly called the 'OBMP Peace Agreement'" (Certified SEIR, p. 5.10-22). The Certified SEIR notes further "the Chino Groundwater Basin is adjudicated and is considered by DWR to be a very low priority groundwater basin. Each water purveyor has an allotted amount of water that can be pumped from the basin so that the safe yield is not exceeded. The City has access to additional water supplies that can accommodate the proposed increase in growth with buildout of [TOP 2050] and would not interfere with sustainable management of the groundwater basin" (Certified SEIR, p. 5.10-22).

The Certified SEIR recognizes that development pursuant to TOP 2050 would increase the amount of impervious surface within the City. However, groundwater recharge efforts would not be hindered. To these ends, all development projects within the City would be required to prepare project-specific hydrology studies, implement low impact development BMPs and comply with NPDES regulations supporting TOP 2050 Policies promoting infiltration of runoff and groundwater recharge.

Based on the preceding, TOP 2050 would not result in substantial adverse impacts affecting groundwater supplies, groundwater recharge, or groundwater sustainability (Certified SEIR, p. 5.10-23).

Project Impacts: Direct additions to or withdrawals of groundwater are not proposed or required by the Project. Construction proposed by the Project would not involve massive substructures at depths that would significantly impair or alter the direction or rate of flow of groundwater. The Project does not propose or require uses or facilities that would affect designated groundwater recharge areas. The Project has prepared a Drainage Study and Preliminary WQMP, and would comply with NPDES regulations supporting TOP 2050 Policies promoting groundwater recharge.

Based on the preceding, the Project would not result in substantial adverse impacts affecting groundwater supplies, groundwater recharge, or groundwater sustainability. When compared to the Certified SEIR findings, no new or substantially increased water quality impacts would result from the Project.

Mitigation:

Certified SEIR Measure(s)	**Project Applicability**
None.	-

c. **Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would?**

i. **Result in substantial erosion or siltation on- or off-site;**

Summary of Certified SEIR Finding: Consistent with NPDES requirements, runoff quantities would not be permitted to substantially increase as a result of a development under TOP 2050. In this regard, projects would be required to prepare project-specific hydrology studies. Further, existing City policies encourage the use of low impact development strategies to intercept runoff, reduce stormwater discharge rates, increase infiltration and ultimately reduce discharge volumes to traditional storm drain systems.

The Certified SEIR notes that while the amount of impervious surfaces would be increased under TOP 2050 (and thus surface water flows into drainage systems),

compliance with existing City and County requirements would ensure significant impacts related to alteration of drainage patterns do not occur. Additionally, City policies and regulations act to minimize or avoid development or other actions that would potentially result in impedance or redirection of flood flows (Certified SEIR, pp. 5.10-23 – 5.10-27).

Project Impacts: The Project site currently drains in a southwesterly direction towards the intersection of Eucalyptus Avenue and Amherst Avenue where an onsite detention basin is located. The basin has a 36-inch inlet that joins a public storm drain in Amherst Avenue. The Project would implement an on-site storm drain system that generally maintains the existing drainage pattern and connects to the existing storm drain in Amherst Avenue.

Additionally, compliance with construction-related BMPs and the SWPPP would control and minimize erosion and siltation, resulting in a less than significant impact. The Project would not result in any new, increased or substantially different impacts, other than those previously considered and addressed in the Certified SEIR.

Mitigation:

Certified SEIR Measure(s)	Project Applicability
None.	-

ii. **Substantially increase the rate or amount of surface runoff in a manner which would result in flooding on or off-site;**

Summary of Certified SEIR Finding: The Certified SEIR concluded that future development would increase the amount of impermeable surfaces in the City, which could result in future on- and off-site flooding. The City's standard conditions of approval for new development also require the preparation of hydrology studies and drainage analyses that document the peak runoff rates from the developed site and evaluate the capacity of the storm drain system to accept these flow rates. Additionally, TOP 2050 policies would direct the City to incorporate strategies to capture, slow, or treat run-off and to reduce the flooding

potential down-gradient of new development. These policies would reduce the potential for on- and off-site flooding during the operational phase of future development projects. Therefore, impacts would be less than significant and TOP 2050 would not result in new or a substantial increase in magnitude of impacts compared to the Certified SEIR (Certified SEIR pp. 5.10-23 – 5.10-26).

Project Impacts: Based on the capacity of the surrounding storm drain system, the maximum permitted outflow from the developed site is 15.64 cubic feet per second (cfs). The Project-specific Drainage Study documents the post-development peak runoff rates and verifies that the Projects on-site storm drainage system would function as a flow restriction by oversizing the on-site system capacity and providing on-site storage. Outflow would be released from the site at no more than 15.64 cfs at any time. As such, runoff from the Project site would not have an adverse effect to the existing storm drain system downstream. The Project would not substantially increase the rate or amount of surface runoff in a manner which would result in flooding on or off-site. The Project would not result in any new, increased or substantially different impacts, other than those previously considered and addressed in the Certified SEIR.

Mitigation:

Certified SEIR Measure(s)	Project Applicability
None.	-

iii. **Create or contribute runoff water which would exceed the capacity or existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff;**

Summary of Certified SEIR Finding: The Certified SEIR concluded that projects considered for approval under TOP 2050 would be required to prepare project-specific hydrology and hydraulic studies as required by the City. In compliance with the MS4 Permit and San Bernardino County Stormwater Program, new development projects would also be mandated to install stormwater treatment BMPs that retain the 2-year, 24-hour rainfall event. Because new development in the City would be required to prepare a hydrology study and drainage analysis

in accordance with the San Bernardino County Hydrology Manual, no significant impacts would occur. Therefore, TOP 2050 would not result in new or a substantial increase in magnitude of impacts compared to the Certified SEIR (Certified SEIR pp. 5.10-23 – 5.10-26).

Project Impacts: As stated above, the proposed on-site storm drainage system would function as a flow restriction by oversizing the on-site system capacity and providing on-site storage. Outflow would be released from the site consistent with the capacity of the surrounding storm drain system.

Accordingly, the Project would not create or contribute runoff that would exceed the capacity of any existing stormwater drainage system. Consistent with the finding of the Certified SEIR, stormwater generated by the Project will be discharged in compliance with the Statewide NPDES General Construction Activities Stormwater Permit and San Bernardino County MS4 permit requirements.

The Project would not result in any new, increased or substantially different impacts, other than those previously considered and addressed in the Certified SEIR.

Mitigation:

Certified SEIR Measure(s)	Project Applicability
None.	-

iv. **Impede or redirect flood flows?**

Summary of Certified SEIR Finding: The Certified SEIR concluded that only small portions of the City adjacent to flood control channels, detention basins, and creeks are in the 100-year floodplain. The western portion of Ontario Ranch is labeled Zone D, undetermined flood hazard, and no hazard analysis has been completed for this area. TOP 2050 includes policies to reduce impacts of potential development within 100-year flood zones. Additionally, Chapter 13 of the Ontario Municipal Code requires that a development permit be obtained prior to development in a special flood hazard area to ensure that the site is reasonably safe from flooding and flood hazards. With implementation of existing policies, the

potential for the project to impede or redirect flood flows is considered less than significant. Therefore, TOP 2050 would not result in new or a substantial increase in magnitude of impacts compared to the Certified SEIR (Certified SEIR pp. 5.10-23 – 5.10-26).

Project Impacts: According to the Federal Emergency Management Agency (FEMA) flood map No. 06071C9375J, the Project site is located within Zone X, an area of minimal flood hazard (FEMA, 2024). Additionally, as shown in Figure 5.10-2 of the Certified SEIR, the Project site is not located within an identified flood hazard zone. Therefore, the Project would not impede or redirect flood flows and no impact would occur. The Project would not result in any new, increased or substantially different impacts, other than those previously considered and addressed in the Certified SEIR.

Mitigation:

Certified SEIR Measure(s)	Project Applicability
None.	-

d. **In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?**

Summary of Certified SEIR Finding: As discussed in the Certified SEIR, "there are no large bodies of water that would result in a seiche during seismic activity. Additionally, the reservoirs/aboveground water tanks within the City are enclosed, thereby minimizing the possibility of a seiche. The [City] is inland and approximately 30 miles from the ocean and is not at risk of flooding due to tsunamis.

The western and southern portions of the City are in the dam inundation zone of San Antonio Dam. The probability of dam failure is very low, and Ontario has never been impacted by a major dam failure. In addition, dam owners are required to maintain emergency action plans that include procedures for damage assessment and emergency warnings. Because the likelihood of catastrophic failure of the San Antonio Dam is very low and the City has emergency action

plan (EAP) notification procedures, impacts of release of pollutants due to dam inundation are considered less than significant.

Based on the preceding, the Certified SEIR concluded that TOP 2050 would not result in adverse impacts related to flood hazard, tsunami, or seiche zones, risk release of pollutants due to inundation (Certified SEIR, pp. 5.10-26, 5.10-27).

Project Impacts: Conditions at the Project site with regard flood hazard impacts, tsunami hazard impacts, or seiche hazard impacts have not changed since preparation of the Certified SEIR – the site remains unaffected by substantial potential flood hazards, tsunami hazards, or seiche hazards. The potential for the Project to result in release of pollutants due to an inundation event would be less than significant. The Project would not result in any new, increased or substantially different impacts, other than those previously considered and addressed in the Certified SEIR.

Mitigation:

Certified SEIR Measure(s)	Project Applicability
None.	-

e. **Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?**

Summary of Certified SEIR Finding: As discussed in the Certified SEIR, "[p]rojects approved under TOP 2050 would be required to comply with the Santa Ana River Basin Plan and to control pollutants in discharges of stormwater from post-construction activities under NPDES Permit No. CAS618036 through preparation of a WQMP identifying BMPs for prevention of stormwater pollution during the post-construction phase, including site-design, source-control, and/or treatment BMPs. Therefore, [TOP 2050] would not obstruct or conflict with the RWQCB's Basin Plan or any groundwater management plan, and impacts would be less than significant" (Certified SEIR, p. 5.10-27).

Project Impacts: Project-related construction and operational activities would be required to comply with the Santa Ana RWQCB's Santa Ana River Basin Water Quality Control Plan by preparing and adhering to an SWPPP and WQMP.

The Project site is located within the Chino Groundwater Basin. Upon development, the Project site will be connected to the City's public water supply and there will be no on-site wells for use of groundwater. The City manages both the potable and non-potable supplies to ensure withdrawals from the Chino Groundwater Basin do not exceed the safe yield for the Basin, as per the Chino Basin Watermaster's Optimum Basin Management Program (OBMP). Therefore, the Project would not obstruct or conflict with the OBMP. The Project would not result in any new, increased or substantially different impacts, other than those previously considered and addressed in the Certified SEIR.

Mitigation:

Certified SEIR Measure(s)	Project Applicability
None.	-

11. **LAND USE & PLANNING.** Would the project:

a. **Physically divide an established community?**

Summary of Certified SEIR Finding: The Certified SEIR concluded that the changes in land use that would occur upon the implementation of TOP 2050 Land Use Plan would not result in the physical division of an established community. The Land Use Element of TOP 2050 contains policies and programs that encourage the preservation or enhancement of the existing, primarily residential community through infill development, open space opportunities, and development of compatible uses that would reduce the amount of conflict between contradicting land uses and enhance the existing character of Ontario. TOP 2050 would avoid conflicting land uses and would not divide an established community (Certified SEIR, p. 5.11-6).

Project Impacts: The Project site is currently vacant; No established community is located within the site. The Esperanza Specific Plan assumed the site would be developed with residential uses, should the Mountain View School District choose not to acquire the site. The site is surrounded by existing/proposed residential development, and the Project represents the logical continuation of such uses. The Project would not otherwise result in potential division of an established community. The Project would have no impacts in this regard.

Mitigation:

Certified SEIR Measure(s)	Project Applicability
None.	-

b. **Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?**

Summary of Certified SEIR Finding: The Certified SEIR concluded that implementation of TOP 2050 would not result in significant land use impacts (Certified SEIR, p. 5.11-11).

Project Impacts: The Project site is designated for School use by the TOP 2050 and the Esperanza Specific Plan. To accommodate the proposed uses, the Project would require a General Plan Amendment and Specific Plan Amendment to redesignate the site as Medium Density Residential (MDR). The Project would be implemented consistent with all Design Guidelines and Development Regulations presented in the Esperanza Specific Plan for MDR uses. The Project would not result in any new, increased or substantially different impacts, other than those previously considered and addressed in the Certified SEIR.

Mitigation:

Certified SEIR Measure(s)	Project Applicability
None.	-

12. **MINERAL RESOURCES.** Would the project:

a. **Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?**

b. **Result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?**

Summary of Certified SEIR Finding: The Certified SEIR concluded that implementation of TOP 2050 would have a less than significant potential to result in the loss of a known mineral resource of value to the region or the state; or result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan (Certified SEIR, p. 5.12-6).

Project Impacts: Underlying conditions at the subject site have not changed since preparation of the Certified SEIR or the Esperanza Specific Plan DEIR. The Project site is located within a mostly developed area surrounded by urban land uses. As shown in Figure 5.12-1 of the Ontario Plan 2050 Draft SEIR, the Project site is designated as MRZ-3. The Certified SEIR states, "[d]evelopment in an MRZ-3 area would not result in significant impacts because mineral resources of statewide or local importance are not identified on the California Geological Survey's P-C maps." Additionally, the Esperanza Specific Plan DEIR concluded that buildout of the Specific Plan area would not result in significant impacts to mineral resources. The Project would not result in any new, increased or substantially different impacts, other than those previously considered and addressed in the Certified SEIR.

Mitigation:

Certified SEIR Measure(s)	Project Applicability
None.	-

13. **NOISE.**

The information presented within this section is summarized from:

- *Esperanza Specific Plan Amendment Noise Impact Analysis, City of Ontario* (Urban Crossroads, Inc.) April 24, 2025.

The Noise Impact Analysis (Urban Crossroads, 2025c) is presented in its entirety as Appendix J to this Addendum.

a. **Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?**

Summary of Certified SEIR Finding: The Certified SEIR determined that new development implemented pursuant to TOP 2050 would result in temporary noise increases at sensitive receptors during construction activities (Certified SEIR, p. 5.13-28). Certified SEIR Mitigation Measure 12-4, below, would reduce construction noise but would not avoid this impact or reduce the impact to levels that would be less than significant. No other significant impacts in this regard were identified.

Project Impacts:

Noise Standards

Noise impacts would be considered significant if any of the following criteria shown in Table 13-1 were exceeded.

Table 13-1
Significance Criteria Summary

Analysis	Receiving Land Use	Condition(s)	Significance Criteria	
			Daytime	Nighttime
Off-Site Traffic	All	If ambient is < 60 dBA CNEL	≥ 5 dBA CNEL Project increase	
		If ambient is 60 - 64 dBA CNEL	≥ 3 dBA CNEL Project increase	
		If ambient is >= 65 dBA CNEL	≥ 1.5 dBA CNEL Project increase	
On-Site Traffic	All	See Exhibit 3-A of the Noise Impact Analysis.		
Operational	Noise-Sensitive	Exterior Noise Level Standards	65 dBA L_{eq}	45 dBA L_{eq}
		if ambient is < 60 dBA L_{eq}	≥ 5 dBA L_{eq} Project increase	
		if ambient is 60 - 65 dBA L_{eq}	≥ 3 dBA L_{eq} Project increase	
		if ambient is > 65 dBA L_{eq}	≥ 1.5 dBA L_{eq} Project increase	
Construction	Noise-Sensitive	Noise Level Threshold	80 dBA L_{eq}	
		Vibration Level Threshold	0.3 PPV (in/sec)	

Source: Urban Crossroads, 2025c

Sensitive Receivers

The following receiver locations, shown at Noise Impact Analysis Exhibit 9-A, Receiver Locations, were identified as representative noise impact analysis locations.

R1: Location R1 represents the future residential area east of Clifton Avenue, approximately 83 feet east of the Project site. Receptor R1 is placed at the nearest potential location for future housing facing the Project site.

R2: Location R2 represents the future residential area northeast of the intersection of Clifton Avenue and Chatham Street, approximately 92 feet northeast of the Project site. Receptor R2 is placed at the nearest potential location for future housing facing the Project site.

R3: Location R3 represents the future park north of Chatham Street, approximately 75 feet north of the Project site. Receptor R3 is placed at the nearest potential location within the park use facing the Project site.

R4: Location R4 represents an existing residence at 4508 S. Amherst Avenue, approximately 130 feet west of the Project site. Receptor R4 is placed at the private outdoor living areas (backyards) facing the Project site.

R5: Location R5 represents the existing residence at 4095 E. Amigos Privado, approximately 202 feet south of the Project site. Receptor R5 is placed at the private outdoor living areas (backyards) facing the Project site.

R6: Location R6 represents the existing residence at 4556 S. Afton Privado, approximately 142 feet southeast of the Project site. Receptor R6 is placed at the private outdoor living areas (backyards) facing the Project site.

Construction-Source Noise Impacts

In the evaluation of construction-source noise impacts, the Noise Impact Analysis employs empirical reference noise measurements obtained from similar construction activities. Based on the reference construction noise levels, maximum received noise levels attributable to the Project construction activities were calculated and are summarized at Table 13-2. Compliance with applicable significance thresholds is also presented.

Table 13-2
Construction Noise Level Compliance

Location	Highest Construction Noise Levels	Threshold	Threshold Exceeded
R1	67.6	80	No
R2	66.1	80	No
R3	66.6	80	No
R4	63.3	80	No
R5	59.5	80	No
R6	64.3	80	No

Source: Urban Crossroads, 2025c

As shown at Table 13-2, received construction-source noise levels would not exceed the applicable threshold and would therefore be less than significant.

Operational-Source Noise Impacts

The Project is considered a noise-sensitive receiving land use and is not expected to include any specific type of operational noise levels beyond those typically associated with residential land uses in the Project study area. Additionally, Section 21085 of the California Public Resources Code states in part, "...for residential projects, the effects of noise generated by project occupants and their guests on human beings is not a significant effect on the environment." A review of the legislative record indicates the author's intent for Section 21085 was to "remove the potential for litigants to challenge residential development based on the speculation that the new residents will create unwanted noises. It would also reestablish existing precedent that minor and intermittent noise nuisances, such as from unamplified human voices, be addressed through local nuisance ordinances and not via CEQA. Consequently, activities solely associated with occupants and quests, such as the swimming pool/spa activities, dog park activities, and outdoor activities in common spaces, are not considered part of this operational noise analysis for CEQA."

Based on the intent of the author of Section 21085, the operational noise sources are limited to the mechanical and non-verbal noise sources that occur on-site, including air conditioning units, trash enclosure activity, and parking lot movements. The Noise Impact Analysis employs empirical reference noise measurements obtained from similar operational activities. Based on the reference noise levels, maximum received noise levels attributable to the Project operational activities were calculated and are summarized at Table 13-3. Compliance with applicable significance thresholds is also presented.

Table 13-3
Operational Noise Level Compliance

Location	Project Operational Noise Levels (dBA Leq)		Noise Level Standard (dBA Leq)		Noise Level Exceeded?	
	Daytime	Nighttime	Daytime	Nighttime	Daytime	Nighttime
R1	46.4	44.1	65	45	No	No
R2	38.3	36.0	65	45	No	No
R3	40.3	37.8	65	45	No	No
R4	43.8	41.3	65	45	No	No
R5	39.4	36.8	65	45	No	No
R6	38.4	35.8	65	45	No	No

Source: Urban Crossroads, 2025c

As shown above, the operational noise levels associated with the Project will satisfy the City of Ontario 65 dBA Leq daytime and 45 dBA Leq nighttime exterior noise level standards at all the nearest receiver locations. Therefore, the operational noise impacts are considered less than significant at the nearest noise-sensitive receiver locations.

To describe the Project operational noise level increases, the Project operational noise levels are combined with the existing ambient noise level measurements for the nearest receiver locations potentially impacted by Project operational noise sources. Noise levels that would be experienced at receiver locations when Project-source noise is added to the daytime and nighttime ambient conditions are presented in Tables 13-4 and 13-5, respectively.

Table 13-4
Daytime Project Operational Noise Level Increases

Location	Total Operational Noise Level	Ambient	Combined	Project Increase	Increase Criteria	Exceeded?
R1	46.4	67.9	67.9	0.0	1.5	No
R2	38.3	45.1	45.9	0.8	5.0	No
R3	40.3	47.4	48.2	0.8	5.0	No
R4	43.8	53.2	53.7	0.5	5.0	No
R5	39.4	60.3	60.3	0.0	3.0	No
R6	38.4	66.0	66.0	0.0	1.5	No

Source: Urban Crossroads, 2025c

Table 13-5
Nighttime Project Operational Noise Level Increases

Location	Total Operational Noise Level	Ambient	Combined	Project Increase	Increase Criteria	Exceeded?
R1	44.1	55.3	55.6	0.3	5.0	No
R2	36.0	36.9	39.5	2.6	5.0	No
R3	37.8	34.9	39.6	4.7	5.0	No
R4	41.3	53.3	53.6	0.3	5.0	No
R5	36.8	53.4	53.5	0.1	5.0	No
R6	35.8	45.2	45.7	0.5	5.0	No

Source: Urban Crossroads, 2025c

Vehicular-Source Noise Impacts

Off-Site Traffic Noise

Based on the Project trip generation analysis, the Project's traffic volumes would not result in an increase on vicinity roadways greater than those assumed under TOP 2050 or analyzed within the Esperanza Specific Plan DEIR. As such, off-site traffic noise impacts would be less than significant.

On-Site Traffic Noise

An on-site noise impact analysis has been completed to determine the noise exposure levels resulting from adjacent transportation noise sources in the Project study area and identify potential noise attenuation measures that would achieve acceptable Project exterior and interior noise levels.

The on-site exterior traffic noise analysis indicates that all buildings would experience exterior noise levels ranging from 59.3 to 64.4 CNEL. Based on the City of Ontario Land Use Compatibility for Community Noise Exposure (Noise Impact Analysis Exhibit 3-A), the Project land uses would be considered clearly acceptable to normally acceptable with exterior noise levels of less than 65 dBA CNEL.

To ensure that the interior noise levels comply with the interior noise level standards, future exterior noise levels were calculated at the first, second, and

third floor building façade/balcony locations. The interior noise level is the difference between the predicted exterior noise level at the building facade and the noise reduction of the structure. Typical building construction will provide a noise reduction of approximately 12 dBA with "windows open" and a minimum 25 dBA noise reduction with "windows closed." With standard construction, the following interior noise levels are expected:

- First Floor: 33.9 to 39.4 dBA CNEL
- Second Floor: 38.5 to 40.5 dBA CNEL
- Third Floor: 35.4 to 40.3 dBA CNEL

Based on the preceding, on-site interior traffic noise levels will not exceed the City of Ontario 45 dBA CNEL interior noise level standard for residential development.

Summary

As demonstrated in the preceding analysis, Project construction-source, operational-source, and/or vehicular-source noise would not result in the generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the Project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies.

Mitigation:

Certified SEIR Measure(s)	**Project Applicability**
MM 12-4 Construction activities associated with new development that occurs near sensitive receptors shall be evaluated for potential noise impacts. Construction contractors shall implement the following measures for construction activities in the City of Ontario. Construction plans submitted to the City shall identify these measures on demolition, grading, and construction plans. The City of Ontario Planning and Building	**Applicable.** Project construction noise has been evaluated consistent with MM 12-4; No significant impacts have been identified. Regardless, the construction requirements listed within MM 12-4 shall be implemented during construction of the Project.

Departments shall verify that grading, demolition, and/or construction plans submitted include these notations prior to issuance of demolition, grading, and/or building permits. • Construction activity is limited to the hours between 7:00 am and 6:00 pm Monday through Friday and 9:00 am to 6:00 pm Saturdays and Sundays, as prescribed in Municipal Code Section 5-29.09. • During the entire active construction period, equipment and trucks used for project construction shall use the best-available noise control techniques wherever feasible (e.g., improved mufflers, equipment re-design, use of intake silencers, ducts, engine enclosures, and acoustically attenuating shields or shrouds). • Impact tools (e.g., jack hammers and hoe rams) shall be hydraulically or electrically powered wherever possible. Where the use of pneumatic tools is unavoidable, an exhaust muffler on the compressed air exhaust shall be used along with external noise jackets on the tools. • Stationary equipment such as generators and air compressors shall be located as far as feasible from nearby noise-sensitive uses. • Stockpiling shall be located as far as feasible from nearby noise-sensitive receptors. • Construction traffic shall be limited, to the extent feasible, to approved	

haul routes established by the City's Engineering Department. • At least 10 days prior to the start of construction activities, a sign shall be posted at the entrance(s) to the job site, clearly visible to the public, that includes permitted construction days and hours as well as the telephone numbers of the City's and contractor's authorized representatives that are assigned to respond in the event of a noise or vibration complaint. If the authorized contractor's representative receives a complaint, he/she shall investigate, take appropriate corrective action, and report the action to the City. • Signs shall be posted at the job site entrance(s), within the on-site construction zones, and along queueing lanes (if any) to reinforce the prohibition of unnecessary engine idling. All other equipment shall be turned off if not in use for more than 5 minutes. • During the entire active construction period and to the extent feasible, the use of noise producing signals, including horns, whistles, alarms, and bells, shall be for safety warning purposes only. The construction manager shall use smart back-up alarms, which automatically adjust the alarm level based on the background noise level or switch off back-up alarms and replace with human spotters in compliance with all safety requirements and laws. Erect temporary noise barriers (at least	

as high as the exhaust of equipment and breaking line-of-sight between noise sources and sensitive receptors), as necessary and feasible, to maintain construction noise levels at or below the performance standard of 80 dBA Leq. Barriers shall be constructed with a solid material that has a density of at least 1.5 pounds per square foot with no gaps from the ground to the top of the barrier and may be lined on the construction side with an acoustical blanket, curtain, or equivalent absorptive material.	

b. **Generation of excessive groundborne vibration or groundborne noise levels?**

Summary of Certified SEIR Finding: The Certified SEIR determined that mobile-source and stationary/area-source vibration impacts associated with buildout of TOP 2050 would be less-than-significant. However, construction activities associated with buildout of the individual land uses could expose sensitive uses to strong levels of groundborne vibration. The Certified SEIR concluded even with the implementation of Mitigation Measure 12-2, construction-source groundborne vibration impacts would be significant and unavoidable (Certified SEIR, pp. 5.13-38 – 5.13-41).

Project Impacts: Using reference vibration levels and methods defined by the FTA, Table 13-6 presents the expected Project-related vibration levels at the nearby receiver locations.

Table 13-6
Project Construction Vibration Levels

Location	Distance	Small Bulldozer	Jackhammer	Loaded Trucks	Large Bulldozer	Highest Vibration Level	Thresholds PPV (in/sec)	Thresholds Exceeded
R1	82’	0.00	0.01	0.01	0.01	0.01	0.30	No
R2	92’	0.00	0.00	0.01	0.01	0.01	0.30	No
R3	75’	0.00	0.01	0.01	0.02	0.02	0.30	No
R4	130’	0.00	0.00	0.01	0.01	0.01	0.30	No
R5	202’	0.00	0.00	0.00	0.00	0.00	0.30	No
R6	142’	0.00	0.00	0.01	0.01	0.01	0.30	No

Source: Urban Crossroads, 2025c

As shown above, at distances ranging from 75 to 202 feet from Project construction activities, construction vibration velocity levels are estimated to range from less than 0.01 to 0.02 in/sec PPV. Based on the Caltrans maximum acceptable continuous vibration threshold of 0.30 PPV (in/sec), the typical Project construction vibration levels will fall below applicable thresholds at all the receiver locations. Moreover, the vibration levels at the sensitive receiver locations are unlikely to be sustained during the entire construction period but will occur rather only during the times that heavy construction equipment is operating adjacent to the Project site perimeter.

Based on the preceding, the Project would not result in any new or increased groundborne vibration or groundborne noise impacts than those previously considered and addressed in the Certified SEIR.

Mitigation:

Certified SEIR Measure(s)	Project Applicability
12-2 Prior to issuance of a building permit, individual projects that involve vibration-intensive construction activities, such as pile drivers, jack hammers, and vibratory rollers near sensitive receptors shall be evaluated for potential vibration impacts. For construction within 135 feet of fragile structures, such as historical resources,	**Implemented.** The Project has been evaluated consistent with Certified SEIR Measure 12-2. No further mitigation is necessary.

within 100 feet of nonengineered timber and masonry buildings (e.g., most residential buildings), or within 75 feet of engineered concrete and masonry (no plaster); or a vibratory roller within 25 feet of any structure, the project applicant shall prepare a noise and vibration analysis to assess and mitigate potential noise and vibration impacts related to these activities. This noise and vibration analysis shall be conducted by a qualified and experienced acoustical consultant or engineer. The vibration levels shall not exceed Federal Transit Administration (FTA) architectural damage thresholds (e.g., 0.12 inches per second [in/sec] peak particle velocity [PPV] for fragile or historical resources, 0.2 in/sec PPV for nonengineered timber and masonry buildings, and 0.3 in/sec PPV for engineered concrete and masonry). If vibration levels would exceed this threshold, alternative uses shall be used, such as drilling piles as opposed to pile driving and static rollers as opposed to vibratory rollers. If necessary, construction vibration monitoring shall be conducted to ensure vibration thresholds are not exceeded.	

c. **For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?**

Summary of Certified SEIR Finding: The Certified SEIR concluded that Chino Airport does not significantly affect sensitive receptors within the City of Ontario. However, sensitive land uses within the 65 dBA CNEL noise contour of the Ontario International Airport would be exposed to substantial levels of airport-related

noise. Even with the implementation of Mitigation Measure 12-1, airport-related noise was deemed a significant and unavoidable impact of TOP 2050 (Certified SEIR, pp. 5.13-38 – 5.13-41).

Project Impacts: The Project site is located approximately four miles south of the Ontario International Airport (ONT). The Ontario International Airport Land Use Compatibility Plan was adopted by Ontario City Council on April 19, 2011 (amended 2018) to promote compatibility between the airport and the land uses that surround it. The Project site is located within the ONT airport influence area, but is not located within a designated noise impact zone. The Project would therefore not be exposed to excessive airport/airfield-source noise levels associated with ONT operations.

The Project site is located approximately 2.5 miles east of the Chino Airport (CNO). The Project site is not located within a designated CNO noise impact zone. At this distance, airport noise level impacts would be less than significant.

The Project would not otherwise be exposed to potentially adverse airport/airfield-source noise levels, nor does the Project propose or require uses that would contribute to or exacerbate airport-source noise impacts. Based on the preceding, the Project would not be adversely affected by airport/airfield noise, nor would the Project contribute to or result in adverse airport/airfield noise impacts. When compared to the Certified SEIR findings, no new or substantially increased airport/airfield noise impacts would result from the Project.

Mitigation:

Certified SEIR Measure(s)	**Project Applicability**
12-1 Prior to the issuance of building permits for any project that involves a noise-sensitive use within the 65 dBA CNEL contour of the Ontario International Airport, the project property owner/developers shall retain an acoustical engineer to conduct an acoustic analysis and identify, where	**Not Applicable.** The Project site is not located within a designated airport noise impact zone. As such, Certified SEIR Measure 12-1 is not applicable to the Project.

appropriate, site design features and/or required building acoustical improvements (e.g., sound transmission class rated windows, doors, and attic baffling), to ensure compliance with the City's Noise Compatibility Criteria and the California State Building Code and California Noise Insulation Standards (Titles 24 and 21 of the California Code of Regulations).	

14. **POPULATION & HOUSING.** Would the project:

a. **Induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of road or other infrastructure)?**

Summary of Certified SEIR Finding: The Certified SEIR concluded that implementation of TOP 2050 accommodates population growth through land use designations, goals, and policies that provide a vision and guide growth in the City. TOP 2050 would increase population, dwelling units, and nonresidential buildings but would result in a small decrease in employment. Although the increase in population, housing, and employment under TOP 2050 would exceed SCAG's regional forecasts for the City of Ontario, TOP 2050 would improve the job-housing balance. Consequently, impacts would be less than significant, and TOP 2050 would not result in new or a substantial increase in magnitude of impacts compared to the Certified SEIR (Certified SEIR, pp. 5.14-9 – 5.14-12).

Project Impacts: The Project would result in the development of 161 residential units. The Esperanza Specific Plan noted that 46 residential units could be developed within the Project site, should the school not be developed. This means that the Project would result in 115 residential units not originally anticipated by the Specific Plan.

According to the SCAG's Connect SoCal 2024, housing production within the region has historically lagged behind the growing population. While housing unit production has increased since 2000, the region still has a backlog of unmet

housing needs from previous decades. (SCAG, 2024) As further detailed in the Certified SEIR, the City of Ontario has an imbalanced jobs-housing ratio of 2.3 (ideal range is 1.3 to 1.7). The population in Ontario is expected to increase from 172,200 in 2020 to 269,100 persons, a difference of 96,900 persons (a 56.3 percent increase) between 2016 and 2045. The number of housing units in the City are forecast to increase from 48,269 to 78,174, a difference of 29,906 (a 62 percent increase) between 2016 and 2045.

The addition of the 161 residential units proposed by the Project in a jobs-rich region such as Ontario would not induce substantial unplanned population growth in the area. The Project would not result in any new, increased or substantially different impacts, other than those previously considered and addressed in the Certified SEIR.

Mitigation:

Certified SEIR Measure(s)	Project Applicability
None.	-

b. **Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?**

Summary of Certified SEIR Finding: The Certified SEIR concluded that land use changes under TOP 2050 would increase opportunities for housing in the City. The TOP 2050 Land Use Plan would provide land use designations for a variety of housing types and provide for additional residential opportunities throughout Ontario. TOP 2050 includes policies supporting an increase in the provision of housing and diversity of housing opportunities in the City. Therefore, impacts would be less than significant and would not result in new or a substantial increase in magnitude of impacts compared to the Certified SEIR (Certified SEIR, pp. 5.14-9 – 5.14-12).

Project Impacts: The Project site does not contain any housing and there are no people living at the Project site that would be displaced by the Project. Therefore, no impacts are anticipated. The Project would not result in any new, increased or

substantially different impacts, other than those previously considered and addressed in the Certified SEIR.

Mitigation:

Certified SEIR Measure(s)	Project Applicability
None.	-

15. **PUBLIC SERVICES**. Would the project:

a. **Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:**

i. **Fire protection?**

Summary of Certified SEIR Finding The Certified SEIR concluded that existing Ontario Fire Department facilities would not be adequate to meet increased demands from the implementation of TOP 2050. While the construction of future facilities could result in potential environmental impacts, future environmental review would occur once specific locations have been determined. Without a definitive location for the development of future facilities, the analysis of potential impacts is too speculative to conduct. Future projects would be reviewed by the City and the Ontario Fire Department on an individual basis and would be required to comply with requirements in effect at the time building permits are issued, including the payment of Development Impact Fees that contribute to funding for additional staffing, facilities, and equipment. Therefore, impacts to fire protection services would be less than significant (Certified SEIR, pp. 5.15-3 5.15-5).

Project Impacts: The Project does not propose or require construction or modification of fire protection facilities. The Project site is not designated or

proposed as the location for new or modified fire protection facilities. Incremental fire protection service demands generated by the Project are offset through the payment of Development Impact Fees. A portion of the City's Development Impact Fees are allocated for fire protection services. The Project Applicant would pay incumbent City Development Impact Fees at issuance of building permit(s).

To the satisfaction of the Ontario Fire Department, the Project would comply with City and Fire Department fire prevention and suppression requirements, including building/site design requirements, fire flow adequacy, and provisions for emergency access, thereby reducing potential increased demands for fire protection services.

Based on the preceding, the potential for the Project to result in substantial adverse physical impacts associated with the provision of the new or physically altered fire protection facilities is considered less than significant. The Project would not result in any new, increased or substantially different impacts, other than those previously considered and addressed in the Certified SEIR.

Mitigation:

Certified SEIR Measure(s)	Project Applicability
None.	-

ii. **Police protection?**

Summary of Certified SEIR Finding: The Certified SEIR concluded that the Ontario Police Department has enough staffing to meet current demands, but would require additional staffing as population increases to accommodate buildout of TOP 2050. While the construction of future facilities could result in potential environmental impacts, future environmental review would occur once specific locations have been determined. Without a definitive location for the development of future facilities, the analysis of potential impacts is too speculative to conduct. Future development would also be subject to development impact fees which pay for police services. Therefore, impacts to police protection services would be less than significant (Certified SEIR pp. 5.15-6 – 5.15-7).

Project Impacts: The Project does not propose or require construction or modification of police protection facilities. The Project site is not designated or proposed as the location for new or modified police protection facilities. Incremental police protection service demands generated by the Project are offset through the payment of Development Impact Fees. A portion of the City's Development Impact Fees are allocated for police protection services. The Project Applicant would pay incumbent City Development Impact Fees at issuance of building permit(s).

Additionally, the Project site plan concept and proposed building designs would be reviewed by the Ontario Police Department to ensure incorporation of appropriate safety and security elements. Such design features would include secure building designs, defensible spaces, and area and facility security lighting. These design features would act to reduce Project demands for police protection services.

Based on the preceding, the potential for the Project to result in substantial adverse physical impacts associated with the provision of the new or physically altered police protection facilities is considered less than significant. The Project would not result in any new, increased or substantially different impacts, other than those previously considered and addressed in the Certified SEIR.

Mitigation:

Certified SEIR Measure(s)	Project Applicability
None.	-

iii. **Schools?**

Summary of Certified SEIR Finding: The Certified SEIR concluded that although the increased demand on school facilities would have the potential to impact one or more of the school districts that serve Ontario, payment of impact fees in compliance with SB 50 would reduce the impacts to an acceptable level. Therefore, impacts to school services would be less than significant and implementation of TOP 2050 would not result in new or a substantial increase in magnitude of impacts compared to the Certified SEIR (Certified SEIR, p. 5.15-14)

Project Impacts: The Project would develop 161 residential units that could result in populations of resident school-aged children. As determined by the Certified SEIR, Project incremental impacts to school services would be offset through payment of school impact fees. The Project Applicant would pay incumbent school impact fees at issuance of building permit(s). Payment of school impact fees would reduce the Project's potential impacts to school services to levels that would be less than significant.

The Project would not result in any new, increased or substantially different impacts, other than those previously considered and addressed in the Certified SEIR.

Mitigation:

Certified SEIR Measure(s)	**Project Applicability**
None.	-

iv. **Parks?**

Summary of Certified SEIR Finding: Park service was discussed under the Recreation section of the Certified SEIR. The Certified SEIR concluded that impacts to recreation would be less than significant, and implementation of TOP 2050 would not result in new or a substantial increase in magnitude of impacts compared to the Certified SEIR (Certified SEIR, pp. 5.16-12 – 5.16-14). Details of the summary findings are discussed below in Section 16, *Recreation*.

Project Impacts: As discussed in Section 16, *Recreation*, the Project proposes residential uses that could increase the use of neighborhood and regional parks or other recreational facilities. As presented within the Certified SEIR, the Project would be required to provide sufficient public parkland or pay in-lieu fees. Additionally, the development would provide on-site recreational amenities to serve future residents, including a pool/spa, playground, shaded barbeque/picnic area, fitness stations, and open turf areas. As such, the Project would not result in any new, increased or substantially different impacts, other than those previously considered and addressed in the Certified SEIR.

Mitigation:

Certified SEIR Measure(s)	Project Applicability
None.	-

v. **Other public facilities?**

Summary of Certified SEIR Finding: The Certified SEIR concluded that implementation of TOP 2050 would not result in potentially significant other public services impacts (Certified SEIR, pp. 5.15-17 – 5.15-18)

Project Impacts: Development of the Project would require established public agency oversight including, but not limited to, various plan check and permitting actions by the City. Impacts of the Project would fall within routine tasks of these agencies/departments and are paid for via plan check and inspection fees. Impacts of the Project would not be of such magnitude that new or physically altered facilities would be required. There are no known or probable other public facilities that would be substantially affected by the Project. Based on the preceding, the potential for the Project to result in substantial adverse physical impacts associated with the provision of the new or physically altered other public facilities is considered less than significant. The Project would not result in any new, increased or substantially different impacts, other than those previously considered and addressed in the Certified SEIR.

Mitigation:

Certified SEIR Measure(s)	Project Applicability
None.	-

RECREATION. Would the project:

b. **Increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?**

Summary of Certified SEIR Finding: The Certified SEIR concluded that future growth in the City in accordance with buildout of TOP 2050 would increase the demand for parks and increase existing park usage. The Certified SEIR determined that because new development would be required to provide sufficient public parkland or pay in-lieu fees, impacts to recreational facilities would be less than significant (Certified SEIR, pp. 5.16-12 – 5.16-14).

Project Impacts: The Project proposes residential uses that could increase the use of neighborhood and regional parks or other recreational facilities. As presented within the Certified SEIR, the Project would be required to provide sufficient public parkland or pay in-lieu fees. Additionally, the development would provide on-site recreational amenities to serve future residents, including a pool/spa, playground, shaded barbeque/picnic area, fitness stations, and open turf areas. In total, these active common open space amenities would encompass 60,950 sf (1.40 acre). As such, the Project would not result in any new, increased or substantially different impacts, other than those previously considered and addressed in the Certified SEIR.
Mitigation:

Certified SEIR Measure(s)	Project Applicability
None.	-

c. **Does the project include recreational facilities or require the construction or expansion of recreational facilities that have an adverse physical effect on the environment?**

Summary of Certified SEIR Finding: The Certified SEIR concluded that TOP 2050 includes planned park facilities; however, it is speculative to determine the location of proposed park facilities in the City and impacts arising from development of individual park projects. Existing federal, State, and local regulations as well as goals, policies, and actions in TOP 2050 would mitigate potential adverse impacts to the environment that may result from buildout of TOP 2050, including expansion of parks, recreational facilities, and multiuse trails. Furthermore, subsequent environmental review would be required for development of park projects under the TOP 2050 Land Use Plan. Therefore,

impacts would be less than significant (Certified SEIR, pp. 5.16-12 – 5.16-14).

Project Impacts: As mentioned above, the Project would include recreational amenities to serve future residents, including a pool/spa, playground, shaded barbeque/picnic area, fitness stations, and open turf areas. These amenities are part of the Project; the disturbance footprint, construction techniques, and associated impacts have been accounted for within this Addendum (and associated technical analyses). Potential impacts addressed within this Addendum are substantiated to be less than significant, or less than significant as mitigated. As such, implementation of the Project would not result in any adverse physical effects on the environment due to the construction of recreational facilities. The Project would not result in any new, increased or substantially different impacts, other than those previously considered and addressed in the Certified SEIR.

Mitigation:

Certified SEIR Measure(s)	Project Applicability
None.	-

16. **TRANSPORTATION/TRAFFIC.**

Project-specific information presented under this topic is summarized from:

- *Esperanza Specific Plan Trip Generation Assessment* (Urban Crossroads, Inc.) May 29, 2024.

- *PA-11 of the Esperanza Specific Plan Vehicle Miles Traveled (VMT) Analysis* (Urban Crossroads, Inc.) May 29, 2024.

The Project's Trip Generation Assessment (Urban Crossroads, 2024d) and VMT Analysis (Urban Crossroads, 2024e) are presented as Addendum Appendices K1 and K2, respectively.

a. **Conflict with a program, plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities?**

Summary of Certified SEIR Finding: TOP 2050 includes policies to encourage and provide access to the regional transit network, to enhance connectivity to the City's nonmotorized transportation network, and proposes the changes to the Mobility Element that have the potential to affect infrastructure projects identified in the Regional Transportation Plan. As such, Certified SEIR Section 5.17, Transportation, concluded that implementation of TOP 2050 would not conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities (Certified SEIR, pp. 5.17-18 – 5.17-23).

Project Impacts:

Project Trip Generation

Trip generation represents the amount of traffic that is attracted to and produced by a development project. The Project's Trip Generation Assessment compared the trips anticipated from the proposed Project with those of the approved elementary school use, as shown in Table17-1.

Table 17-1
Trip Generation Comparison

Use	AM Peak Hour			PM Peak Hour			Daily
	In	Out	Total	In	Out	Total	
Elementary School	169	140	309	96	110	206	949
Multifamily Residential	27	81	108	72	53	125	944
Net Change	-142	-59	-201	-24	-57	-81	-5

Source: Urban Crossroads, 2024d

As shown, the Project is anticipated to generate a net reduction of 5 two-way trips per day with a reduction of 201 AM peak hour trips and 81 fewer PM peak hour trips as compared to the approved elementary school use.

Alternative Transportation

The Project does not propose elements or aspects that would conflict with adopted alternative transportation policies. Transit services are currently provided to the City and the Project vicinity by Omnitrans, with a stop located at the corner of Eucalyptus Avenue and Hamner Avenue, less than 1,000 feet from the Project site. The Project would provide internal driveways and pedestrian paths that connect to the existing street and sidewalk network surrounding the Project site.

Transit agencies routinely review and adjust their ridership schedules to accommodate shifts in demand for services. As part of the City's standard development review processes, the need for transit-related facilities, bicycle, and pedestrian access would be coordinated between the City and the Applicant.

The Project would not interfere with the City Multipurpose Trails and Bikeway Corridor Plan. The Project would provide internal and perimeter pedestrian and bicycle amenities consistent with provisions of Esperanza Specific Plan and City Conditions of Approval.

Goals and Policies

Applicable goals and policies addressing the circulation system are established under TOP 2050. Project consistency with applicable provisions of TOP 2050 is summarized in Table 5 of the VMT Analysis provided as Addendum Appendix K2. As presented therein, no conflicts would occur.

Conclusion

Based on the preceding, the potential for the Project to conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities would be less than significant. The Project would not result in any new, increased or substantially different impacts, other than those previously considered and addressed in the Certified SEIR.

Mitigation:

Certified SEIR Measure(s)	Project Applicability
None.	-

b. **Conflict or be inconsistent with CEQA Guidelines Section 15064.3, subdivision (b)?**

Summary of Certified SEIR Finding: The Certified SEIR concluded that there is a net increase in citywide Boundary VMT primarily due to the increase in population accommodated by TOP 2050. Mitigation Measure T-1 would reduce potential impacts for future development projects to the extent feasible. Future development projects consistent with TOP 2050 would need to consider transportation demand management (TDM) measures consistent with those identified in the Mobility Element. TDM techniques include incentives to use transit; incentives to form carpools rather than drive alone; and making home, work, and shopping closer together to shorten travel distances. Because the VMT impact is citywide, mitigation measures to reduce VMT would need to focus on changing or improving the citywide travel patterns, transportation network, or infrastructure. Given the uncertainty of the effectiveness of implementing these types of mitigation measures at a citywide level and of their effectiveness at reducing citywide VMT, VMT impacts would remain significant and unavoidable (Certified SEIR, p. 5.17-34).

Project Impacts: The City of Ontario developed and adopted their own VMT methodologies and thresholds (Resolution No. 2020-071) (City Guidelines) in June 2020. Projects that do not result in significant VMT impacts per City Guidelines would not conflict or be inconsistent with CEQA Guidelines Section 15064.3, subdivision (b).

Project-generated VMT has been estimated using the Origin/Destination Method and Boundary Method, consistent with City Guidelines, VMT has been presented as total VMT and total VMT per Service Population (i.e., population and employees). Total VMT encompasses all VMT generated in the City of Ontario or by the Project on a typical weekday, while total VMT per Service Population (SP)

is an efficiency metric representing VMT generated on a typical weekday per person who resides and/or works in the City or who resides within the Project.

The City of Ontario has adopted the following thresholds of significance related to VMT for land use projects:

- A significant impact would occur if the project VMT per SP exceeds the Citywide average VMP per SP under General Plan Buildout Conditions.

- A significant impact would occur if the project caused total daily VMT per SP within the City to be higher than the no project scenario under cumulative conditions.

The City of Ontario's average VMT per SP under General Plan Buildout conditions was calculated using the TOP General Plan Buildout (2050) model, and is presented in Table 17-2.

Table 17-2
TOP 2050 Buildout
Citywide VMT Per Service Population

Service Population	707,369
VMT	19,506,377
VMT per SP	27.6

Source: Urban Crossroads, 2024e

VMT impacts of the Project employing the Origin/Destination VMT Methodology are presented at Table 17-3.

Table 17-3
Project VMT Impacts
Origin/Destination VMT Methodology

	Baseline	General Plan Buildout Year (2050)
Service Population	564	564
OD VMT	12,582	13,364
OD VMT/SP	22.3	23.7

Table 17-3
Project VMT Impacts
Origin/Destination VMT Methodology

	Baseline	General Plan Buildout Year (2050)
City Threshold	27.6	27.6
Threshold Exceeded	No	No

Source: Urban Crossroads, 2024e

VMT impacts of the Project employing the Boundary Method are presented at Table 17-4.

Table 17-4
Project VMT Impacts
Boundary VMT Methodology

	City Boundary		10-Mile Boundary	
	No Project	With Project	No Project	With Project
Service Population	706,494	707,058	2,579,062	2,579,626
Boundary VMT	9,602,250	9,598,040	41,605,554	41,614,834
VMT per SP	13.6	13.6	16.1	16.1
Change in VMT	0.0		0.0	
Threshold Exceeded	No		No	

Source: Urban Crossroads, 2024e

Based on the preceding, the following findings are made:

- Project-generated VMT per SP was found to be below the City's adopted impact threshold of Citywide average VMT per SP under General Plan Buildout Conditions and is considered less than significant.

- Total daily VMT per SP within the City is forecast to remain unchanged with the addition of the proposed Project and is considered less than significant.

Based on the preceding discussion, no new significant, substantially increased, or substantially different VMT impacts would occur as a result of the Project. No changed or new information has been identified to indicate that any potential VMT impacts resulting from the Project would be different from those that would result under the Certified SEIR.

Mitigation:

Certified SEIR Measure(s)	**Project Applicability**
T-1 Prior to approval of discretionary projects subject to VMT reduction analysis, applicants shall demonstrate compliance with the City's VMT Guidelines for CEQA assessment of VMT impacts. For projects with VMT per Service Population exceeding the County's significance threshold, a mitigation plan shall be developed and implemented. Mitigation should consist of Transportation Demand Management (TDM) measures analyzed under a VMT-reduction methodology consistent with the California Air Pollution Control Officers Association's (CAPCOA) Final Handbook for Analyzing Greenhouse Gas Emission Reductions, Assessing Climate Vulnerabilities, and Advancing Health and Equity (2021) and approved by the City of Ontario (if applicable). Examples of measures include but are not limited to: • Pedestrian Network Improvements: constructing new sidewalks and/or improving damaged or substandard sidewalks that connect to a larger pedestrian network. • Construct or Improve Bike Facilities: constructing new or enhancing a single existing Class	**Implemented.** The Project's VMT Analysis (Addendum Appendix K2) fulfills Certified SEIR Mitigation Measure T-1.

I, II or IV bike facility that connects to a larger bike network. • Construct or Improve Bike Boulevards: implementing a Class III bike boulevard on a local or collector street that is one travel lane in each direction, has a design speed of 25 mph or less and a design volume of 5,000 ADT or less. • Expand Bikeway Networks: constructing a network of interconnected new Class I, II, or IV bike facilities. • Provide End of Trip Bicycle Facilities: constructing facilities that support cyclists such as bike parking, lockers, and showers. • Implement Transit-Supportive Roadway Treatments: funding infrastructure improvements such as traffic signal modifications and roadway signing and striping that are dedicated to improving transit travel times and reliability. • Transit Passes: proving discounted or free transit fare to a specific geographic area, population group, or to the general public. • Vanpool Program: providing groups of 5 to 15 people with direct shuttle service between their workplace and residence. • Carshare Program (conventional or EV): providing access to a shared fleet of on-demand vehicles for short-term use/rental. Best practice is to discount carshare membership and provide priority parking for	

carshare vehicles to encourage use of the service. • Bikeshare Program (conventional or EV): providing access to a shared fleet of on-demand bicycles for short-term use/rental. Best practice is to discount bikeshare membership and dedicate bikeshare parking to encourage use of the service. • Rideshare Program: providing access to and encouraging the use of a ridesharing platform or service. This could be an app, website, or other service that provides ride-matching coordination services. • Community-Based Travel Planning (CBTP): CBTP is a residential based approach to outreach, performed by trained advisors, that provides households within a targeted geographic area with customized information, incentives, and support to encourage the use of transportation alternatives in place of single occupancy vehicles. Commute Trip Reduction (CTR) Program: CTR programs can be mandatory or voluntary, and involve providing information, coordination, services, infrastructure, and/or incentives for alternative modes such as ridesharing, vanpool, transit passes, and cycling.	

c. **Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?**

d. **Result in inadequate emergency access?**

Summary of Certified SEIR Finding: The Certified SEIR concluded that buildout of the City pursuant to TOP 2050 would result in changes to the circulation network. Such changes would however be implemented consistent with City roadway classification and roadway design standards, acting to preclude potential design hazards. Additionally, City Design Review processes ensure that adequate emergency access is provided for all new development projects. On this basis, there would be no impacts related to hazardous design features, or emergency access provisions (Certified SEIR, pp. 5.17-25, 5.17-26).

Project Impacts: The Project does not propose elements or aspects that would substantially increase transportation/traffic hazards. Moreover, all improvements under the Project would be designed and implemented consistent with City traffic engineering and safety standards, thereby minimizing the potential to result in or cause hazardous traffic/transportation conditions.

The Project would generate urban traffic comparable to and compatible with the vehicle mix and vehicle categories present within the area roadway system. Residential uses proposed by the Project would therefore not cause or result in incompatible vehicle movements or traffic that would substantively increase hazards. Further, based on the projected trip generation under the Project, no new or different traffic hazards would occur when compared to the Certified SEIR.

All Project plans would be reviewed and approved by the Ontario Fire Department to ensure design standards related to adequate emergency access are met. Based on the preceding, the potential for the Project to substantially increase hazards due to a geometric design feature, incompatible uses, or inadequate emergency access is considered less than significant. The Project would not result in any new, increased or substantially different impacts, other than those previously considered and addressed in the Certified SEIR.

Mitigation:

Certified SEIR Measure(s)	Project Applicability
None.	-

17. **TRIBAL CULTURAL RESOURCES.** Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:

a. **Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k)?**

b. **A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision(c) of Public Resources Code section 5024.1. In applying the criteria set forth in subdivision(c) of Public Resources Code section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.**

Summary of Certified SEIR Finding: The Certified SEIR concluded that grading and construction activities in undeveloped areas or redevelopment that requires deeper soil excavation than in the past have the potential to disturb tribal cultural resources. With the implementation of mitigation, the Certified SEIR concluded that impacts to prehistoric archeological resources, including tribal cultural resources, would be less than significant (Certified SEIR, pp. 5.18-8 – 5.18-11).

Project Impacts: No resources that are eligible for listing in the California Register of Historical Resources or in a local register of historical resources as defined by Public Resources Code Section 5020.1(k) were identified as part of the Cultural Resources Study conducted for the Project site. Implementation of the Project would not result in a substantial adverse change in the significance of a listed historical resource.

Senate Bill 18 (SB 18) requires local (city and county) governments to consult with California Native American tribes to aid in the protection of traditional tribal cultural places ("cultural places") through local land use planning. The consultation and notice requirements apply to adoption and amendment of both general plans (defined in Government Code Section 65300 et seq.) and specific plans (defined in Government Code 65450 et seq.), and not the CEQA process. To this end, outreach letters were sent to 21 individuals representing local Native American tribal groups to elicit information on Native American cultural resources that may be in the vicinity of the Project site. In response, the Gabrieleno Band of Mission Indians – Kizh Nation (Kizh Nation) requested consultation with the City.

Similar to the findings of the Certified SEIR, the Kizh Nation has requested mitigation measures be implemented to preclude impacts in this regard. Specifically, the Tribe has proposed Measures 18-1 through 18-3, which require Native American monitoring of ground-disturbing activities, as well as protocol for the treatment and disposition of tribal cultural resources should they be discovered during Project development. These Tribe-specific measures shall replace Certified SEIR Measures 5-4, TCR-1, and TCR-2.

As a result, consistent with the findings of the Certified SEIR, mitigation would preclude potential impacts to tribal cultural resources as defined in Public Resources Code 5024.1(c). Therefore, the Project would not result in any new, increased or substantially different impacts, other than those previously considered and addressed in the Certified SEIR.

Mitigation:

Certified SEIR Measure(s)	**Project Applicability**
MM 5-3 Upon receipt of an application for a proposed project subject to CEQA and within the City's jurisdiction, the City's representative shall consult with the relevant tribe(s)' representative(s) to determine if the proposed project is within a culturally sensitive area to the tribe. If sufficient	**Implemented.** The City has consulted with the responding Tribe. Additionally, a Project-specific Cultural Resources Assessment has been prepared and the results incorporated herein.

evidence is provided to reasonably ascertain that the site is within a tribal culturally sensitive area, an archaeologist shall prepare then a cultural resources assessment. The findings of the cultural resources assessment shall be incorporated into the CEQA documentation. A copy of the report shall be forwarded to the tribe(s). If mitigation is recommended in the CEQA document, the procedure described in Mitigation Measure 5-4 shall be followed.	
MM 5-4 Prior to the issuance of grading permits for a proposed project for which the CEQA document defines cultural resource mitigation for potential tribal resources, the project applicant shall contact the designated tribe(s) to notify them of the grading, excavation, and monitoring program. The applicant shall coordinate with the City of Ontario and the tribal representative(s) to develop mitigation measures that address the designation, responsibilities, and participation of tribal monitors during grading, excavation, and ground-disturbing activities; scheduling; terms of compensation; and treatment and final disposition of any cultural resources, sacred sites, and human remains discovered on the site. The City of Ontario shall be the final arbiter of the conditions for projects within the City's jurisdiction.	**Revised.** At the request of the Kizh Nation (the consulting Tribe), Measures 5-4 and TCR-1 are replaced with Measure 18-1. **18-1: Retain a Native American Monitor Prior to Commencement of Ground-Disturbing Activities** A. The Project Applicant shall retain a Native American Monitor from or approved by the Gabrieleño Band of Mission Indians – Kizh Nation. The monitor shall be retained prior to the commencement of any "ground-disturbing activity" for the subject Project at all Project locations (i.e., both on-site and any off-site locations that are included in the Project description/definition and/or required in connection with the Project, such as public improvement work). "Ground-disturbing activity" shall include, but is not limited to, demolition, pavement removal, potholing, auguring, grubbing, tree removal, boring, grading, excavation, drilling, and trenching. B. A copy of the executed monitoring agreement shall be submitted to the Lead Agency prior to the earlier of the

	commencement of any ground-disturbing activity, or the issuance of any permit necessary to commence a ground-disturbing activity. C. The monitor will complete daily monitoring logs that will provide descriptions of the relevant ground-disturbing activities, the type of construction activities performed, locations of ground-disturbing activities, soil types, cultural-related materials, and any other facts, conditions, materials, or discoveries of significance to the Tribe. Monitor logs will identify and describe any discovered TCRs, including but not limited to, Native American cultural and historical artifacts, remains, places of significance, etc. (collectively, tribal cultural resources, or "TCR"), as well as any discovered Native American (ancestral) human remains and burial goods. Copies of monitor logs will be provided to the Project Applicant/ Lead Agency upon written request to the Tribe. D. On-site tribal monitoring shall conclude upon the latter of the following: (1) written confirmation to the Kizh from a designated point of contact for the Project Applicant/Lead Agency that all ground-disturbing activities and phases that may involve ground-disturbing activities on the Project site or in connection with the Project are complete; or (2) a determination and written notification by the Kizh to the Project Applicant/Lead Agency that no future, planned construction activity and/or development/ construction phase at the Project site possesses the potential to impact Kizh

	TCRs.
TCR-1 Tribal Cultural Resources Monitoring. The project archaeologist, in consultation with interested tribes, the developer, and the City of Ontario, shall develop an archaeological monitoring plan (AMP) to address the details, timing, and responsibility of archaeological and cultural activities that will occur on the project site. Details in the AMP shall include: 1. Project-related ground disturbance (including, but not limited to, brush clearing, grading, trenching, etc.) and development scheduling; 2. The development of a rotating or simultaneous schedule in coordination with the developer and the project archeologist for designated Native American Tribal Monitors from the consulting tribes during grading, excavation and ground disturbing activities on the site: including the scheduling, safety requirements, duties, scope of work, and Native American Tribal Monitors' authority to stop and redirect grading activities in coordination with all project archaeologists (if the tribes cannot come to an agreement on the rotating or simultaneous schedule of tribal monitoring, the Native American Heritage Commission shall designate the schedule for the on-site Native American Tribal Monitor for the proposed project); 3. The protocols and stipulations	See Measure 18-1, above.

that the developer, City, Tribes, and project archaeologist will follow in the event of inadvertent cultural resources discoveries, including any newly discovered cultural resource deposits that shall be subject to a cultural resource's evaluation. At least 30 days prior to application for a grading permit and before any brush clearance, grading, excavation, and/or ground disturbing activities on the site, the developer shall retain a tribal cultural monitor to monitor all ground-disturbing activities in an effort to identify any unknown archaeological resources. Pursuant to the AMP, a tribal monitor from the consulting tribe shall be present during the initial grading activities. If tribal resources are found during grubbing activities, the tribal monitoring shall be present during site grading activities.	
TCR-2 Treatment and Disposition of Cultural Resources. In the event that Native American cultural resources are inadvertently discovered during the course of any ground-disturbing activities, including but not limited to brush clearance, grading, trenching, etc., for the proposed project, the following procedures will be carried out for treatment and disposition of the discoveries: 1. Temporary Curation and Storage: During the course of construction, all discovered resources shall be temporarily curated in a secure location on-site or at the offices of the	**Revised.** At the request of the Kizh Nation (the consulting Tribe), Measure TCR-2 is replaced with Measures 18-2 and 18-3. **18-2: Unanticipated Discovery of Tribal Cultural Resource Objects (Non-Funerary/Non-Ceremonial)** A. Upon discovery of any TCRs, all construction activities in the immediate vicinity of the discovery shall cease (i.e., not less than the surrounding 50 feet) and shall not resume until the discovered TCR has been fully assessed by the Kizh monitor and/or Kizh archaeologist. The Kizh will recover and retain all discovered TCRs

project archaeologist. The removal of any artifacts from the project site will need to be thoroughly inventoried with tribal monitor oversight of the process; 2. Treatment and Final Disposition: The landowner(s) shall relinquish ownership of all cultural resources, including sacred items, burial goods, and all archaeological artifacts and nonhuman remains as part of the required mitigation for impacts to cultural resources. The applicant shall relinquish the artifacts through one or more of the following methods and provide the City of Ontario with evidence of same: a. Accommodate the process for on-site reburial of the discovered items with the consulting Native American tribes or bands. This shall include measures and provisions to protect the future reburial area from any future impacts. Reburial shall not occur until all cataloging, basic analysis, other analyses as recommended by the project archaeologist and approved by consulting tribes, and basic recordation have been completed; all documentation should be at a level of standard professional practice to allow the writing of a report of professional quality;	in the form and/or manner the Tribe deems appropriate, in the Tribe's sole discretion, and for any purpose the Tribe deems appropriate, including for educational, cultural, and/or historic purposes. **18-3: Unanticipated Discovery of Human Remains and Associated Funerary or Ceremonial Objects** A. Native American human remains are defined in PRC 5097.98(d)(1) as an inhumation or cremation, and in any state of decomposition or skeletal completeness. Funerary objects, called associated grave goods in Public Resources Code Section 5097.98, are also to be treated according to this statute. B. If Native American human remains and/or grave goods are discovered or recognized on the Project site, then Public Resource Code 5097.9 as well as Health and Safety Code Section 7050.5 shall be followed. C. Human remains and grave/burial goods shall be treated alike per California Public Resources Code Section 5097.98(d)(1) and (2). D. Preservation in place (i.e., avoidance) is the preferred manner of treatment for discovered human remains and/or burial goods. E. Any discovery of human remains/burial goods shall be kept confidential to prevent further disturbance.

b. A curation agreement with an appropriate qualified repository in San Bernardino County that meets federal standards per 36 CFR Part 79, and therefore the resource would be professionally curated and made available to other archaeologists/ researchers for further study. The collections and associated records shall be transferred, including title, to an appropriate curation facility in San Bernardino County, to be accompanied by payment of the fees necessary for permanent curation; c. For purposes of conflict resolution, if more than one Native American tribe or band is involved with the project and cannot come to an agreement as to the disposition of cultural materials, materials shall be curated at the San Bernardino County Museum by default; At the completion of grading, excavation, and ground-disturbing activities on the site, a Phase IV Monitoring Report shall be submitted to the City documenting monitoring activities conducted by the project archaeologist and Native Tribal Monitors within 60 days of completion of grading. This report shall document the impacts to the known resources on the property; describe how each mitigation measure was fulfilled;	

document the type of cultural resources recovered and the disposition of such resources; provide evidence of the required cultural sensitivity training for the construction staff held during the required pregrade meeting; and, in a confidential appendix, include the daily/weekly monitoring notes from the archaeologist. All reports produced will be submitted to the City, County Museum, and consulting tribes.	

18. **UTILITIES AND SERVICE SYSTEMS.**

Information presented within the following discussions was obtained from the following Project-specific analyses:

- *Water System Analysis For The Esperanza PA 11 Project in Ontario Ranch in the City of Ontario* (Dexter Wilson Engineering, Inc.) April 17, 2025.

- *Sewer System Analysis for the Esperanza PA 11 Project in Ontario Ranch in the City Of Ontario* (Dexter Wilson Engineering, Inc.) April 17, 2025.

These reports are provided as Appendices L and M, respectively, to this Addendum.

a. **Require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?**

Summary of Certified SEIR Finding: The Certified SEIR concluded that, although buildout of TOP 2050 would generate additional wastewater, it would be adequately treated in accordance with Regional Water Quality Control Board and California Department of Public Health requirements. City sanitary sewer

systems, and stormwater management would be expanded to accommodate growth associated with the buildout of TOP 2050.

Other utilities systems would be extended and improved consistent with purveyor master plans and as warranted by market conditions. Compliance with regulatory requirements and standard conditions of approval acts to reduce impacts on utilities systems generally, improve system efficiencies, and reduce system maintenance requirements. Collectively, this diminishes the requirement to construct new systems or replace existing systems.

Construction of utilities systems serving the City under TOP 2050 buildout conditions would not result in substantially different impacts than would result from development of TOP 2050 land uses generally.

The Certified SEIR concluded that with implementation of regulatory requirements and standard conditions of approval, the potential for TOP 2050 to require or result in the relocation or construction of new or expanded utilities systems, the construction or relocation of which would result in adverse environmental impacts would be less than significant (Certified SEIR, p. 5.19-11).

Project Impacts:

Water and Wastewater

The Project would include the installation of water and wastewater lines within the Project site. The Project on-site water system would connect to two existing 8-inch water lines in Amherst Avenue and Chatham Street, adjacent to the site. The Water System Analysis concluded that the existing and proposed water infrastructure has adequate capacity to serve the Project and necessary fire flow.

The proposed on-site sewer collection system would connect to an existing 8-inch line located in south Amherst Avenue, adjacent to the site. The Sewer System Analysis concluded that all existing and proposed sewer lines have adequate capacity to convey peak flows from existing development plus the proposed Project while maintaining City criteria.

Although the Project would result in new water and wastewater line connections, these connections would occur on-site and would be part of the Project's construction phase, which is evaluated throughout this Addendum. The construction of the Project's water and wastewater lines necessary to serve the Project would not result in any significant physical effects on the environment that are not already identified and disclosed as part of this Addendum. The Project would not result in any new, increased or substantially different impacts, other than those previously considered and addressed in the Certified SEIR.

Stormwater Drainage

The Project site currently drains in a southwesterly direction towards the intersection of Eucalyptus Avenue and Amherst Avenue where an on-site detention basin is located. The basin has a 36-inch inlet that joins a public storm drain in Amherst Avenue. The Project would implement an on-site storm drain system that generally maintains the existing drainage pattern and connects to the existing storm drain in Amherst Avenue. The Projects on-site storm drainage system would function as a flow restriction by oversizing the on-site capacity and providing on-site storage to ensure outflow would be consistent with the capacity of the surrounding storm drainage system. As such, the Project would not require relocation or construction of new or expanded storm water drainage infrastructure which could cause significant environmental effects. The Project would not result in any new, increased or substantially different impacts, other than those previously considered and addressed in the Certified SEIR.

Dry Utilities

Dry utilities serving the Project area include Southern California Edison, Southern California Gas Company (although natural gas service is not required for the Project), and various telecommunication providers. The Project would include installation of on-site dry utility infrastructure that is anticipated to connect with the existing infrastructure available in the vicinity.

Connection is inherent to the Project's construction phase and has been evaluated throughout this Addendum. The Project would not result in any new,

increased or substantially different impacts, other than those previously considered and addressed in the Certified SEIR.

Mitigation:

Certified SEIR Measure(s)	Project Applicability
None.	-

b. **Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?**

Summary of Certified SEIR Finding: The City of Ontario 2020 Urban Water Management Plan (UWMP) substantiates that there would be sufficient and reliable water supplies available to the City through 2045. The Certified SEIR concludes that buildout of the City under TOP 2050 would incrementally increase water demands. However, water demands of the City would remain below 2020 UWMP water demand projections. On this basis, there would be sufficient water supplies available to the City under TOP 2050 buildout conditions. The potential for there to be insufficient water supplies available to serve the City and reasonably foreseeable future development during normal, dry and multiple dry years is therefore considered less than significant (Certified SEIR, pp. 5.19-30, 5.19-31).

Project Impacts: Ontario Municipal Utilities Company (OMUC) is responsible for supplying potable water to the Project site. The UWMP includes an analysis of water supply reliability projected through 2045 under normal years, single dry year, and multiple dry years. As stated above, the City is anticipated to have adequate water supplies to meet all its demands from the implementation of TOP 2050 at buildout until the year 2045 under a normal year, single dry year, and multiple dry years.

Based on the Water System Analysis calculations, the water demand of the proposed residential uses can be compared to that of the approved school use, as shown in Table 19-1.

Table 19-1
Water Demand Comparison

Use	Size	Demand Factor	Total Demand
Approved Elementary School	10.02 acres	3,500 gpd/acre[1]	35,070 gpd
Multifamily Residential	161 units	323 gpd/du[2]	52,003 gpd

[1] City of Ontario Water Master Plan, Table 4-8
[2] Dexter Wilson, 2025a

As shown above, the Project would result in an increased water demand of 16,933 gpd.

The Water Supply Assessment (WSA) prepared for the New Model Colony (NMC) determined that water demand for the NMC, as a whole, would be approximately 10.2 mgd. The City's projected 2025 water demand is 100.9 mgd, and the 2025 supply is projected at 166.1 mgd (Esperanza SP DEIR, p.III-12-14).

Based on the City's surplus water supply, as determined by the WSA for the NMC, sufficient water supply exists to accommodate the Project-related increase. As such, the Project would not result in any new, increased or substantially different impacts, other than those previously considered and addressed in the Certified SEIR.

Mitigation:

Certified SEIR Measure(s)	Project Applicability
None.	-

c. **Result in a determination by the wastewater treatment provider that serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?**

Summary of Certified SEIR Finding: The Certified SEIR recognizes that buildout of the City under TOP 2050 would result in increased wastewater treatment demands. However, existing wastewater treatment plants have excess capacity sufficient to meet these increased demands. Planned wastewater treatment

plant expansion would provide additional capacity available to serve the City under TOP 2050 buildout conditions. Treated wastewater meets or exceeds RWQCB and NPDES standards and requirements. On this basis, the Certified SEIR concluded that the potential for buildout of City under TOP 2050 to result in or cause insufficient or inadequate wastewater treatment would be less than significant.

Project Impacts: Based on the Sewer System Analysis prepared for the Project, Table 19-2 presents a comparison of the wastewater generation associated with the approved elementary school and the Project.

Table 19-2
Wastewater Generation Comparison

Use	Size	Generation Factor[1]	Total Generation
Approved Elementary School	10.02 acres	2,000 gpd/acre[1]	20,000 gpd
Multifamily Residential	161 units	174 gpd/du[2]	28,014 gpd

[1] Esperanza Specific Plan DEIR, Table III-12-A

[2] Dexter Wilson, 2025b

As shown above, the Project would result in a wastewater generation increase of 8,014 gpd when compared to the approved school use.

Wastewater from the site would be treated at IEUA Regional Water Recycling Plant No. 5 (RP-5) located in Chino. RP-5 currently treats about 9 million gallons per day (mgd), with a total treatment capacity of 16.3 mgd. RP-5 is currently undergoing an expansion which will increase capacity to 22.5 mgd. Ultimately, RP-5 will treat 30 mgd with a peak flow of 60 mgd. (IEUA, 2024)

The Project increase represents approximately 0.05 percent of RP-5's current treatment capacity. Given the existing freeboard, in addition to the ongoing expansion of RP-5, the IEUA's existing wastewater treatment facilities are anticipated to have adequate capacity to serve the Project's demand in addition to its existing commitments. Therefore, the Project would not result in any new, increased or substantially different impacts, other than those previously considered and addressed in the Certified SEIR.

Mitigation:

Certified SEIR Measure(s)	Project Applicability
None.	-

d. **Generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?**

e. **Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?**

Summary of Certified SEIR Finding: The Certified SEIR concluded that buildout of TOP 2050 would be served by landfills with sufficient permitted capacities to accommodate all solid waste disposal needs. Additionally, no conflicts with federal, State, and local management and reduction statutes and regulations related to solid waste were identified. The Certified SEIR determined that impacts related to solid waste would be less than significant (Certified SEIR, p. 5.17-31).

Project Impacts: Using a solid waste generation factor from CalRecycle, the operational solid waste anticipated from the proposed Project can be compared to that of the approved school use, as evaluated in the Esperanza Specific Plan DEIR (p. III-12-16). This comparison is presented in Table 19-3.

Table 19-3
Solid Waste Generation Comparison

Use	Size	Disposal Factor	Tons/Year
Approved Elementary School	65,000 sq. ft.	0.0013 tons/sq. ft./year[1]	84.5
Multifamily Residential	161 units	4 lbs./dwelling unit/day[2]	117.5

[1]https://www.ontarioca.gov/sites/default/files/Ontario-Files/Planning/Reports/environmental-reports/esperanza_potentially_significant_environmental_effects_deir.pdf
[2]https://www2.calrecycle.ca.gov/wastecharacterization/general/rates

As shown above, the Project represents an increase in solid waste generation for the site. According to the Certified SEIR, solid waste collected from the City of Ontario is taken to either the Badlands Sanitary Landfill in Moreno Valley or the El

Sobrante Sanitary Landfill in Corona. Table 19-4 presents the disposal overview of both landfills.

Table 19-4
Landfill Overview

	Badlands Sanitary Landfill	El Sobrante Sanitary Landfill
Max Permitted Throughput (tons/day)	4,800	16,054
2020 Average Daily Disposal (tons/day)	2,813	10,995
Excess Daily Capacity (tons/day)	1,987	5,059
Remaining Capacity (cubic yards)	15,748,799	143,977,170
Estimated Closing Date	2073	2051

Source: TOP 2050 Certified SEIR

Solid waste generation anticipated by the Project represents approximately 0.065 percent (0.32 ton/day) of the current daily maximum throughput for the Badlands Landfill and 0.002 percent of the current daily maximum throughput for the El Sobrante Landfill. Given the excess daily capacity, solid waste generated by the proposed uses can be accommodated by either of these existing landfill facilities.

Additionally, the Project would comply with applicable solid waste management and reduction statutes and regulations (summarized below), acting to reduce solid waste management impacts of the Project.

- *City of Ontario Construction & Demolition Recycling Plan (CDRP)*
  Pursuant to Ontario Municipal Ordinance (OMC) Sec. 6-3.602 Construction & Demolition Recycling Plan and the 2016 California Green Building Standards Code (CALGreen), all building and demolition permit applicants are required to prepare and submit a Construction & Demolition Recycling Plan (CDRP) and a CDRP Summary Report. OMC Sec. 6-3.602 and CALGreen require all construction and qualifying renovation and demolition projects to divert at least 65% of all generated waste materials. The City oversees compliance with OMC Sec. 6-3.602 and CALGreen construction waste diversion mandates.

- *AB 939 - California Integrated Waste Management Act of 1989*
  Solid waste management is guided by the California Integrated Waste Management Act of 1989 (AB 939), which emphasizes resource conservation through reduction, recycling, and reuse of solid waste. AB 939 requires that localities conduct a Solid Waste Generation Study (SWGS) and develop a Source Reduction Recycling Element (SRRE), providing for a minimum 50 percent reduction in waste sent to landfills. Diversion rates are calculated and tracked by the California Integrated Waste Management Board (Board). Alternatively, the Board can determine that a jurisdiction's "good faith efforts" to implement comprehensive diversion programs have satisfied the requirement even if diversion levels are below 50 percent.

  To reduce waste disposal, AB 939 requires every California city and county to divert 50 percent of its waste from landfills. Residential, commercial and governmental waste recycling programs in support of the SRRE have been implemented by the City. The City is currently meeting or exceeding all AB 939 solid waste diversion targets.

- *AB 341 - Commercial Recycling*
  Assembly Bill 341 mandates recycling for businesses producing four or more cubic yards of solid waste per week, and multifamily dwellings of five units or more. Under the law, business must separate recyclables from trash and then either subscribe to City of Ontario recycling services, self-haul their recyclables, or contract with a permitted private recycler.

- *SB 1383 - Organic Waste Management Requirements*
  SB 1383 establishes targets to achieve a 50 percent reduction in the level of the Statewide disposal of organic waste from the 2014 level by 2020 and a 75 percent reduction by 2025. The law grants CalRecycle the regulatory authority required to achieve the organic waste disposal reduction targets and establishes an additional target that not less than 20 percent of currently disposed edible food is recovered for human consumption by 2025.

The City is currently developing programs and strategies to address the requirements of SB 1383, the Project would be required to ultimately abide by those requirements.

As stated in the Certified SEIR, impacts to solid waste services and facilities from new development are further addressed through the payment of development impact fees as outlined in the City of Ontario Development Impact Fee Calculation and Nexus Fee Schedules. With the payment of required development impact fees and compliance with existing solid waste regulations, the Project would not result in any new or substantially increased solid waste impacts not previously identified within the Certified SEIR.

Based on the preceding, the Project would not generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals would be less than significant. Additionally, the Project would comply with applicable solid waste management and reduction statutes and regulations. On this basis, the Project would result in less than significant solid waste management impacts. The Project would not result in solid waste management impacts substantially greater than solid waste management impacts considered and addressed in the Certified SEIR.

Mitigation:

Certified SEIR Measure(s)	Project Applicability
None.	-

19. **WILDFIRE.** If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project:

a. **Substantially impair an adopted emergency response plan or emergency evacuation plan?**

b. **Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to, pollutant concentrations from a**

wildfire or the uncontrolled spread of a wildfire?

c. **Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?**

d. **Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?**

Summary of Certified SEIR Finding: As discussed in the Certified SEIR, CAL FIRE has determined that the City contains no areas subject to very high wildfire risk. The City recognizes that even though fuel loading is light in Ontario and fire risk comes primarily from urban fires, not wildfires, there is some risk related to wildfires. There are many resources available to address wildland fires should they arise - CAL FIRE's 2019 Strategic Fire Plan for California, the CFC, County of San Bernardino MJHMP, City of Ontario LHMP, and fire services from the City of Ontario Fire Department. With adherence to these building practices, development and infrastructure associated with TOP 2050 would not exacerbate risk or result in post-wildfire hazards (e.g., landslides, mudflows, and flooding). In addition, TOP 2050 incorporates policies to prevent wildfire hazards and support the community during wildfire events (Certified SEIR, pp. 5.20-15, 5.20-16). On this basis, the Certified SEIR concluded that potential wildfire impacts resulting from TOP 2050 would be less than significant.

Project Impacts: Development of the site has been anticipated under TOP 2050. By extension, potential wildfire impacts affecting the Project site are reflected in the assessment of wildfire impacts affecting the City under TOP 2050, as considered and addressed in the Certified SEIR. Per CAL FIRE, *Fire Hazard Severity Zone Maps*, the City and the Project site are not located within or near a state responsibility area, or within an area classified as a very high fire hazard severity zone.

Fire protection services for the Project site and vicinity are currently provided by the Ontario Fire Department. Adherence to Fire Department building and site

design requirements, and compliance with codified fire protection and prevention measures during construction and operation of the Project are required. On this basis, when compared to the Certified SEIR findings, no new or substantially increased wildfire impacts would result from the Project.
Mitigation:

Certified SEIR Measure(s)	Project Applicability
None.	-

20. **MANDATORY FINDINGS OF SIGNIFICANCE.**

a. **Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat or a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?**

b. **Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current project, and the effects of probable future projects.)**

c. **Does the project have environmental effects that will cause substantial adverse effects on human beings, either directly or indirectly?**

Project Impacts: This Addendum defines, describes, compares, and contrasts potential environmental impacts of the Project in the context of the environmental impacts assessed in the Certified SEIR. In so doing, this Addendum substantiates consistency with applicable CEQA Guidelines provisions addressing preparation of an Addendum to a previously-Certified SEIR.

As supported by the discussions presented herein, the Project would not result in or cause any new significant impacts, substantively increased impacts, or

substantively different environmental impacts than those previously considered and addressed in the Certified SEIR. Analysis beyond that presented in this Addendum is not required or warranted.

EARLIER ANALYSES

(Earlier analyses may be used where, pursuant to the tiering, program EIR, or other CEQA process, one or more effects have been adequately analyzed in an earlier EIR or Negative Declaration. Section 15063(c)(3)(D)):

1) Earlier Analyses Used. Identify earlier analyses used and state where they are available for review.

a) The Ontario Plan Final Environmental Impact Report

b) The Ontario Plan/Policy Plan

c) City of Ontario Zoning

d) Esperanza Specific Plan Draft Environmental Impact Report

All documents listed above are on file with the City of Ontario Planning Department, 303 East "B" Street, Ontario, California 91764, (909) 395-2036.

REFERENCES

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Urban Crossroads, 2025c. Urban Crossroads, Inc. April 24, 2025. *Esperanza Specific Plan Amendment Noise Impact Analysis, City of Ontario*.

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Walden, 2025. Walden & Associates. March 2025. *Drainage Study for Esperanza – PA 11, Eucalyptus Avenue & Amherst Avenue, Ontario, CA.*

WQMP, 2025. March 12, 2025. *Preliminary Water Quality Management Plan (PWQMP)*.

Esperanza PA-11 SPA/File Nos.: PPA24-0139, PGPA24-004, PSPA24-004, PDEV24-017, PMTT24-008, PDA25-003

Mitigation Monitoring and Reporting Program

Impact Heading	Mitigation Measure	Responsible Party/Monitoring Party	Implementation Stage	Compliance Date and Signature
Air Quality				
The Ontario Plan 2050 Supplemental EIR Mitigation Measures				
Air Quality	**MM 3-1** Prior to discretionary approval by the City of Ontario for development projects subject to CEQA (California Environmental Quality Act) review (i.e., nonexempt projects), project applicants shall prepare and submit a technical assessment evaluating potential project construction-related air quality impacts to the City of Ontario Planning Department for review and approval. The evaluation shall be prepared in conformance with South Coast Air Quality Management District (South Coast AQMD) methodology for assessing air quality impacts. If construction-related criteria air pollutants are determined to have the potential to exceed the South Coast AQMD–adopted thresholds of significance, City of Ontario Building Department shall require feasible mitigation measures to reduce air quality emissions. Potential measures shall be incorporated as conditions of approval for a project and may include: • Require fugitive dust control measures that exceed South Coast Air Quality Management District's Rule 403, such as: o Requiring use of nontoxic soil stabilizers to reduce wind erosion. o Applying water every four hours to active soil disturbing activities. o Tarping and/or maintaining a minimum of 24 inches of freeboard on trucks hauling dirt, sand, soil, or other loose materials. • Using construction equipment rated by the United States Environmental Protection Agency as having Tier 4 interim or higher exhaust emission limits. • Ensuring construction equipment is properly serviced and maintained to the manufacturer's standards. • Limiting nonessential idling of construction equipment to no more than five consecutive minutes. • Using Super-Compliant VOC paints for coating of architectural surfaces whenever possible. A list of Super-Compliant architectural coating manufactures can be found on the South Coast Air Quality Management District's website at: http://www.aqmd.gov/prdas/brochures/Super-Compliant_AIM.pdf.	Project Applicant/ City Planning Department and Building Department	n/a	This measure has been implemented as part of the Addendum. The Project-specific Air Quality Impact Analysis is provided in its entirety as Addendum Appendix C. Project construction would not exceed SCAQMD thresholds; further mitigation is not required.

Impact Heading	Mitigation Measure	Responsible Party/Monitoring Party	Implementation Stage	Compliance Date and Signature
	These identified measures shall be incorporated into all appropriate construction documents (e.g., construction management plans) submitted to the City and shall be verified by the City's Planning Department.			
	MM 3-2 The City of Ontario shall evaluate new development proposals within the City and require all developments to include access or linkages to alternative modes of transportation, such as transit stops, bike paths, and/or pedestrian paths (e.g. sidewalks).	Project Applicant/City Planning Department	Prior to discretionary approval	
	MM AQ-1 Prior to discretionary approval by the City of Ontario for development projects subject to CEQA (California Environmental Quality Act) review (i.e., nonexempt projects), project applicants shall prepare and submit a technical assessment evaluating potential project operation-phase-related air quality impacts to the City of Ontario Planning Department for review and approval. The evaluation shall be prepared in conformance with South Coast Air Quality Management District (South Coast AQMD) methodology in assessing air quality impacts. If operation-related air pollutants are determined to have the potential to exceed the South Coast AQMD–adopted thresholds of significance, the City of Ontario Planning Department shall require that applicants for new development projects incorporate mitigation measures to reduce air pollutant emissions during operational activities. The identified measures shall be included as part of the conditions of approval. Possible mitigation measures to reduce long-term emissions could include, but are not limited to the following: • For site-specific development that requires refrigerated vehicles, the construction documents shall demonstrate an adequate number of electrical service connections at loading docks for plug-in of the anticipated number of refrigerated trailers to reduce idling time and emissions. • Applicants for manufacturing and light industrial uses shall consider energy storage and combined heat and power in appropriate applications to optimize renewable energy generation systems and avoid peak energy use. • Site-specific developments with truck delivery and loading areas and truck parking spaces shall include signage as a reminder to limit idling of vehicles while parked for loading/unloading in accordance with California Air Resources Board Rule 2845 (13 CCR Chapter 10 sec. 2485).	Project Applicant/ City Planning Department	n/a	This measure has been implemented as part of the Addendum. The Project-specific Air Quality Impact Analysis is provided in its entirety as Addendum Appendix C. Project operations would not exceed SCAQMD thresholds; further mitigation is not required.

Impact Heading	Mitigation Measure	Responsible Party/Monitoring Party	Implementation Stage	Compliance Date and Signature
	• Provide changing/shower facilities as specified in Section A5.106.4.3 of CALGreen (Nonresidential Voluntary Measures). • Provide bicycle parking facilities per Section A4.106.9 of CALGreen (Residential Voluntary Measures). • Provide preferential parking spaces for low-emitting, fuel-efficient, and carpool/van vehicles per Section A5.106.5.1 of CALGreen (Nonresidential Voluntary Measures). • Provide facilities to support electric charging stations per Section A5.106.5.3 and Section A5.106.8.2 of CALGreen (Nonresidential Voluntary Measures; Residential Voluntary Measures). • Applicant-provided appliances shall be Energy Star–certified appliances or appliances of equivalent energy efficiency (e.g., dishwashers, refrigerators, clothes washers, and dryers). Installation of Energy Star–certified or equivalent appliances shall be verified by the City during plan check.			
Biological Resources				
Esperanza Specific Plan EIR Mitigation Measures				
Biological Resources	**MM BIO-1** There is a possibility of owl colonization within the project site prior to site grading. To ensure that no direct loss of individuals occurs, mitigation will be carried prior to initiation of on-site grading activities for each development phase. A pre-construction survey for resident burrowing owls shall be conducted by a qualified biologist. The survey shall be conducted 30 days prior to construction activities. If ground-disturbing activities are delayed or suspended for more than 30 days after the preconstruction survey, the site shall be resurveyed for owls. If owls are determined to be present within the construction footprint, they shall be captured and relocated. If non-breeding owls must be moved away from the disturbance area, passive relocation techniques will be used. The pre-construction survey and any relocation activity shall be conducted in accordance with the CDFG Report on Burrowing Owl Mitigation, 1995. According to CDFG guidelines, mitigation actions will be conducted from September 1 to January 31, which is prior to the nesting season. However, burrowing owl nesting activity is variable, and as such the time frame will be adjusted accordingly. Should eggs or fledglings be discovered in any owl burrow, the burrow cannot be disturbed (pursuant to CDFG guidelines) until	Project Applicant and Biologist/City Planning Department	Prior to ground-disturbing activities	

Impact Heading	Mitigation Measure	Responsible Party/Monitoring Party	Implementation Stage	Compliance Date and Signature
	the young have hatched and fledged (matured to a stage that they can leave the nest on their own). Occupied burrows shall not be disturbed during the nesting season (February 1 through August 31) unless a qualified biologist approved by the Department of Fish and Game verifies through non-invasive methods that either: a) the adult birds have not begun egg-laying and incubation; or b) the juveniles from the occupied burrows are foraging independently and are capable of independent survival. If a biologist is unable to verify one of the above conditions, then no disturbance shall occur within 300 feet of the burrowing owl's nest during the breeding season to avoid abandonment of the young. Passive relocation can be used to exclude owls from their burrows (outside the breeding season or once the young are able to leave the nest and fly) by installing one-way doors in burrow entrances. These one-way doors allow the owl to exit the burrow, but not enter it. These doors should be left in place 48 hours to ensure owls have left the burrow. Artificial burrows should be provided nearby. The project area should be monitored daily for one week to confirm owl use of burrows before excavating burrows in the impact area. Burrows should be excavated using hand tools and refilled to prevent reoccupation. Sections of flexible pipe should be inserted into the tunnels during excavation to maintain an escape route for any animals inside the burrow.			
	MM BIO-2 The project proponent shall be required to pay City of Ontario open space mitigation fees. Fees collected will be used "to acquire and restore mitigation lands to offset impacts to species now living in the New Model Community and impacts to existing open space", according to the City of Ontario Development Impacts Fee Calculation Report and the Settlement and general Release Agreement.	Project Proponent/City Planning Department	Prior to discretionary approval	
Cultural Resources				
Esperanza Specific Plan EIR Mitigation Measures				
Cultural Resources	**MM CUL-1** Should any cultural and/or archaeological resources be accidentally discovered during construction, construction activities shall be moved to other parts of the project site and a qualified archaeologist shall be contacted to determine the significance of these resources. If the find is determined to be a historical or unique archaeological resource, as defined in Section 15064.5 of the CEQA Guidelines, then procedures outlined in Section 15064.5 of the CEQA Guidelines shall be followed. Additionally, Ontario's Local CEQA Guidelines provide that curation may be an	Project Developer or Contractor, Project Archaeologist/City Planning Department	During construction activities	

Impact Heading	Mitigation Measure	Responsible Party/Monitoring Party	Implementation Stage	Compliance Date and Signature
	appropriate mitigation measure for an artifact that must be removed during project excavation or testing. (Local CEQA Guidelines, Section 5.13.)			
	MM CUL-2 If human remains are uncovered at any time, all activities in the area of the find shall be halted by the developer or its contractor and the County Coroner shall be notified immediately pursuant to CA Health & Safety Code Section 7050.5 and CA PRC Section 5097.98. If the Coroner determines that the remains are of Native American origin, the Coroner shall proceed as directed in Section 15064.5(e) of the CEQA Guidelines.	Project Developer or Contractor/City Planning Department or County Coroner	If human remains are uncovered	
Geology and Soils				
Project-Specific Mitigation Measure				
Geology and Soils	**MM 7-1** A Paleontological Resources Impact Mitigation Program (PRIMP) shall be prepared, in accordance with TOP Certified SEIR MM 5-2. The PRIMP shall be approved by the City Planning Department prior to the issuance of a grading permit. Additionally, full-time paleontological monitoring starting at a depth of four feet below the surface during earth disturbance activities shall be conducted. A proposed paleontological monitoring plan is presented within the report titled *Paleontological Assessment for the Eucalyptus and Amherst Avenues Project, City Of Ontario, San Bernardino County, California* (BFSA Environmental Services) April 1, 2025.	Project Applicant, Project Paleontologist/City Planning Department	Prior to issuance of grading permit	
Esperanza Specific Plan EIR Mitigation Measure				
Geology and Soils	**MM Geo-1** To address potential wind erosion effects, prior to construction, all grading and other construction activities will apply for and adhere to the permit given by the City of Ontario and enforced by the Building Official found in Title 6, Chapter 12, sections 6-12.01 – 6-12.07. The permit lasts for one (1) year, therefore, all construction lasting for a period of more than one calendar year from the date of issue will reapply for the permit and pay the current annual fee. At a minimum, the permit prohibits the disturbance of the surface or subsurface of more than one (1) acre of land without meeting permit requirements which can include such things as the application of soil stabilizers and limitations on grading activities during wind events.	Project Applicant/City Building Department	Prior to construction activities	
Noise				
The Ontario Plan 2050 Supplemental EIR Mitigation Measures				
Noise	**MM 12-4** Construction activities associated with new development that occurs near sensitive receptors shall be evaluated for potential noise impacts. Construction contractors shall implement the following measures for construction activities in the City of Ontario. Construction plans submitted to the City shall identify these measures on demolition, grading, and construction plans. The City of Ontario Planning and Building	Project Contractor/City Planning and Building Department	During construction activities	Project construction noise has been evaluated consistent with MM 12-4; No

Impact Heading	Mitigation Measure	Responsible Party/Monitoring Party	Implementation Stage	Compliance Date and Signature
	Departments shall verify that grading, demolition, and/or construction plans submitted include these notations prior to issuance of demolition, grading, and/or building permits. • Construction activity is limited to the hours between 7:00 am and 6:00 pm Monday through Friday and 9:00 am to 6:00 pm Saturdays and Sundays, as prescribed in Municipal Code Section 5-29.09. • During the entire active construction period, equipment and trucks used for project construction shall use the best-available noise control techniques wherever feasible (e.g., improved mufflers, equipment re-design, use of intake silencers, ducts, engine enclosures, and acoustically attenuating shields or shrouds). • Impact tools (e.g., jack hammers and hoe rams) shall be hydraulically or electrically powered wherever possible. Where the use of pneumatic tools is unavoidable, an exhaust muffler on the compressed air exhaust shall be used along with external noise jackets on the tools. • Stationary equipment such as generators and air compressors shall be located as far as feasible from nearby noise-sensitive uses. • Stockpiling shall be located as far as feasible from nearby noise-sensitive receptors. • Construction traffic shall be limited, to the extent feasible, to approved haul routes established by the City's Engineering Department. • At least 10 days prior to the start of construction activities, a sign shall be posted at the entrance(s) to the job site, clearly visible to the public, that includes permitted construction days and hours as well as the telephone numbers of the City's and contractor's authorized representatives that are assigned to respond in the event of a noise or vibration complaint. If the authorized contractor's representative receives a complaint, he/she shall investigate, take appropriate corrective action, and report the action to the City. • Signs shall be posted at the job site entrance(s), within the on-site construction zones, and along queueing lanes (if any) to reinforce the prohibition of unnecessary engine idling. All other equipment shall be turned off if not in use for more than 5 minutes.			significant impacts have been identified. Regardless, the construction requirements listed within MM 12-4 shall be implemented during construction of the Project.

Impact Heading	Mitigation Measure	Responsible Party/Monitoring Party	Implementation Stage	Compliance Date and Signature
	• During the entire active construction period and to the extent feasible, the use of noise producing signals, including horns, whistles, alarms, and bells, shall be for safety warning purposes only. The construction manager shall use smart back-up alarms, which automatically adjust the alarm level based on the background noise level or switch off back-up alarms and replace with human spotters in compliance with all safety requirements and laws. Erect temporary noise barriers (at least as high as the exhaust of equipment and breaking line-of-sight between noise sources and sensitive receptors), as necessary and feasible, to maintain construction noise levels at or below the performance standard of 80 dBA Leq. Barriers shall be constructed with a solid material that has a density of at least 1.5 pounds per square foot with no gaps from the ground to the top of the barrier and may be lined on the construction side with an acoustical blanket, curtain, or equivalent absorptive material.			
	MM 12-2 Prior to issuance of a building permit, individual projects that involve vibration-intensive construction activities, such as pile drivers, jack hammers, and vibratory rollers near sensitive receptors shall be evaluated for potential vibration impacts. For construction within 135 feet of fragile structures, such as historical resources, within 100 feet of nonengineered timber and masonry buildings (e.g., most residential buildings), or within 75 feet of engineered concrete and masonry (no plaster); or a vibratory roller within 25 feet of any structure, the project applicant shall prepare a noise and vibration analysis to assess and mitigate potential noise and vibration impacts related to these activities. This noise and vibration analysis shall be conducted by a qualified and experienced acoustical consultant or engineer. The vibration levels shall not exceed Federal Transit Administration (FTA) architectural damage thresholds (e.g., 0.12 inches per second [in/sec] peak particle velocity [PPV] for fragile or historical resources, 0.2 in/sec PPV for nonengineered timber and masonry buildings, and 0.3 in/sec PPV for engineered concrete and masonry). If vibration levels would exceed this threshold, alternative uses shall be used, such as drilling piles as opposed to pile driving and static rollers as opposed to vibratory rollers. If necessary, construction vibration monitoring shall be conducted to ensure vibration thresholds are not exceeded.	Project Applicant and Project Acoustical Consultant/City Planning Department	n/a	This measure has been implemented as part of the Addendum; No significant impacts have been identified. No further mitigation is necessary.
Esperanza Specific Plan EIR Mitigation Measures				
Noise	**MM Noi-1** The construction activities of the proposed project shall comply with the City of Ontario Noise Ordinance that prohibits construction activities on Sundays, federal holidays, and other days between the hours of 7:00 p.m. and 7:00 a.m.	Project Applicant and Project Contractor/City Planning Department	During construction activities	

Impact Heading	Mitigation Measure	Responsible Party/Monitoring Party	Implementation Stage	Compliance Date and Signature
	MM Noi-2 Construction staging areas shall not be located within 150 feet of existing sensitive receptors and construction equipment shall be fitted with properly operating and maintained mufflers.	Project Applicant and Project Contractor/City Planning Department	During construction activities	
	MM Noi-6 Architectural plans shall be submitted to the City of Ontario for an acoustical plan check prior to the issuance of building permits to assure that second story windows are upgraded for sound reduction and proper ventilation systems are incorporated. Plans shall include a final acoustical report to be reviewed and approved by the Planning Department prior to building permit issuance to ensure that City standards are maintained (45 dB CNEL interior and 65 dB CNEL exterior).	Project Applicant and Project Acoustical Consultant/City Planning Department	Prior to issuance of building permit	
Public Services				
Esperanza Specific Plan EIR				
Public Services	**MM Serv 2** To reduce fire hazards, adequate fire hydrant locations and water main sizes shall meet standards established by the City of Ontario Fire Department and reviewed and implemented by the Engineering Department.	Project Applicant/City Fire Department and Engineering Department	Prior to discretionary approval	
	MM Serv 3 To reduce fire hazards, adequate fire flow pressure shall be provided for residential areas and non-residential projects in accordance with currently adopted City standards.	Project Applicant/City Engineering Department	Prior to discretionary approval	
	MM Serv 4 To reduce fire hazards, adequate water supply shall be provided as approved by the Fire Department prior to the framing stages of construction.	Project Applicant/City Fire Department	Prior to the framing stages of construction	
	MM Serv 5 To reduce fire hazards, houses located on cul-de-sacs longer than 300 feet shall be constructed with residential fire sprinklers.	Project Applicant/City Engineering Department	Prior to discretionary approval	
	MM Serv 6 To reduce fire hazards, access roadways designed in accordance with Fire Department standards to within 150' of all structures, shall be provided prior to the framing stages of construction. This access is to be maintained in an unobstructed manner throughout construction.	Project Applicant/City Fire Department	Prior to the framing stages of construction	

Impact Heading	Mitigation Measure	Responsible Party/Monitoring Party	Implementation Stage	Compliance Date and Signature
	MM Serv 7 To mitigate for potential impacts to library, police, and fire departments, the developer shall pay library, police, and fire service development impacts fees.	Project Developer/City Planning Department	Prior to issuance of building permit	
	MM Serv 9 The developer shall pay school fees or otherwise meet project obligations to schools, as approved by Mountain View School and Chaffey Joint Union High School Districts.	Project Developer/City Planning Department	Prior to issuance of building permit	
	MM Serv 10 To adequately address the need for recreation within the City, park development impact fees, Quimby fees, and/or developed parkland shall be provided to the City commensurate with the requirements of the General Plan equivalent to 24 acres total. The park fees shall be paid on a pro-rata share as building permits are issued in accordance with the negotiated DIF agreement. (Note: parkland shall be provided to the City commensurate with the requirements of the General Plan equivalent to 25 acres, if 46 additional homes are built in lieu of the school.)	Project Developer/City Planning Department	Prior to issuance of building permit	
Transportation				
The Ontario Plan 2050 Supplemental EIR Mitigation Measures				
Transportation	**MM T-1** Prior to approval of discretionary projects subject to VMT reduction analysis, applicants shall demonstrate compliance with the City's VMT Guidelines for CEQA assessment of VMT impacts. For projects with VMT per Service Population exceeding the County's significance threshold, a mitigation plan shall be developed and implemented. Mitigation should consist of Transportation Demand Management (TDM) measures analyzed under a VMT-reduction methodology consistent with the California Air Pollution Control Officers Association's (CAPCOA) Final Handbook for Analyzing Greenhouse Gas Emission Reductions, Assessing Climate Vulnerabilities, and Advancing Health and Equity (2021) and approved by the City of Ontario (if applicable). Examples of measures include but are not limited to: • Pedestrian Network Improvements: constructing new sidewalks and/or improving damaged or substandard sidewalks that connect to a larger pedestrian network. • Construct or Improve Bike Facilities: constructing new or enhancing a single existing Class I, II or IV bike facility that connects to a larger bike network. • Construct or Improve Bike Boulevards: implementing a Class III bike boulevard on a local or collector street that is one travel lane in each	Project Applicant/City Planning Department	n/a	This measure has been implemented as part of the Addendum. The Project's VMT Analysis (Addendum Appendix K2) fulfills Certified SEIR Mitigation Measure T-1.

Impact Heading	Mitigation Measure	Responsible Party/Monitoring Party	Implementation Stage	Compliance Date and Signature
	direction, has a design speed of 25 mph or less and a design volume of 5,000 ADT or less. • Expand Bikeway Networks: constructing a network of interconnected new Class I, II, or IV bike facilities. • Provide End of Trip Bicycle Facilities: constructing facilities that support cyclists such as bike parking, lockers, and showers. • Implement Transit-Supportive Roadway Treatments: funding infrastructure improvements such as traffic signal modifications and roadway signing and striping that are dedicated to improving transit travel times and reliability. • Transit Passes: proving discounted or free transit fare to a specific geographic area, population group, or to the general public. • Vanpool Program: providing groups of 5 to 15 people with direct shuttle service between their workplace and residence. • Carshare Program (conventional or EV): providing access to a shared fleet of on-demand vehicles for short-term use/rental. Best practice is to discount carshare membership and provide priority parking for carshare vehicles to encourage use of the service. • Bikeshare Program (conventional or EV): providing access to a shared fleet of on-demand bicycles for short-term use/rental. Best practice is to discount bikeshare membership and dedicate bikeshare parking to encourage use of the service. • Rideshare Program: providing access to and encouraging the use of a ridesharing platform or service. This could be an app, website, or other service that provides ride-matching coordination services. • Community-Based Travel Planning (CBTP): CBTP is a residential based approach to outreach, performed by trained advisors, that provides households within a targeted geographic area with customized information, incentives, and support to encourage the use of transportation alternatives in place of single occupancy vehicles.			

Impact Heading	Mitigation Measure	Responsible Party/Monitoring Party	Implementation Stage	Compliance Date and Signature
	• Commute Trip Reduction (CTR) Program: CTR programs can be mandatory or voluntary, and involve providing information, coordination, services, infrastructure, and/or incentives for alternative modes such as ridesharing, vanpool, transit passes, and cycling.			
Esperanza Specific Plan EIR Mitigation Measures				
Transportation	**MM Trans 1** Install traffic signal at the intersection of Mill Creek Avenue/Merrill Avenue with the following geometrics: Northbound: One left-turn lane. One shared through and right-turn lane. Southbound: One left-turn lane. One shared through and right-turn lane. Eastbound: One left-turn lane. One shared through and right-turn lane. (These developments to be constructed by development located west of the Specific Plan.) Westbound: One left-turn lane. One shared through and right-turn lane.	Project Developer/City Planning Department	Prior to issuance of building permit	
	MM Trans 2 Install traffic signal at the intersection of Project Street (W)/Merrill Avenue with the following geometrics: Northbound: One shared left, through and right-turn lane. Southbound: One shared left, through and right-turn lane. Eastbound: One left-turn lane. One shared through and right-turn lane. Westbound: One left-turn lane. One shared through and right-turn lane.	Project Developer/City Planning Department	Prior to issuance of building permit	
	MM Trans 3 Install traffic signal at the intersection of Project Street (E)/Merrill Avenue with the following geometrics: Northbound: One shared left, through and right-turn lane. Southbound: One shared left, through and right-turn lane. Eastbound: One left-turn lane. One through lane. One shared through and right-turn lane. Westbound: One left-turn lane. One through lane. One shared through and right-turn lane.	Project Developer/City Planning Department	Prior to issuance of building permit	
	MM Trans 4 Install traffic signal at the intersection of Milliken/Hamner Avenue/Merrill Avenue with the following geometrics: Northbound: One left-turn lane. Two through lanes. One shared through and right-turn lane. Southbound: One left-turn lane. Three through lanes. One right-turn lane. Eastbound: Two left-turn lanes. One shared through and right-turn lane. Westbound: (This leg of the intersection to be constructed by development in Riverside County.) One left-turn lane. One shared through and right-turn lane.	Project Developer/City Planning Department	Prior to issuance of building permit	

Impact Heading	Mitigation Measure	Responsible Party/Monitoring Party	Implementation Stage	Compliance Date and Signature
	MM Trans 5 Install traffic signal at the intersection of Mill Creek Avenue/Bellegrave Avenue with the following geometrics (Note: Riverside County encroachment permits required for some improvements.): Northbound: One shared left, through and right-turn lane. Southbound: One shared left, through and right-turn lane. Eastbound: One left-turn lane. One shared through and right-turn lane. Westbound: Two left-turn lanes. One shared through and right-turn lane.	Project Developer/City Planning Department	Prior to issuance of building permit	
	MM Trans 6 Modify the intersection of Milliken/Hamner Avenue/Bellegrave Avenue to include the following geometrics (Note: Riverside County encroachment permits required for some improvements.): Northbound: One left-turn lane. Two through lanes. One shared through and right-turn lane. Southbound: Two left-turn lanes. Two through lanes. One shared through and right-turn lane. Eastbound: One left-turn lane. Two through lanes. One right-turn lane. Westbound: Two left-turn lanes. Two through lanes. One right-turn lane.	Project Developer/City Planning Department	Prior to issuance of building permit	
	MM Trans 7 Sight distance at the project entrance roadways should be reviewed with respect to the City of Ontario Standard Drawing for Sight Distance in effect at the time of preparation of final grading, landscape and street improvement plans.	Project Applicant/City Planning Department	Prior to approval of final grading, landscape, and street improvement plans	
	MM Trans 8 Signing/striping should be implemented in conjunction with detailed construction plans for the project site.	Project Applicant/City Planning Department	Prior to approval of construction plans	
	MM Trans 9 Intersection, median opening and traffic signal spacing shall be in accordance with the City of Ontario New Model Colony Access Guidelines.	Project Applicant/City Planning Department	Prior to approval of street improvement plans	
	MM Trans 10 Construction of full width of internal roadways and part width of the following roadways shall comply with City of Ontario Standards:	Project Developer/City Planning Department	Prior to issuance of building permit	

Impact Heading	Mitigation Measure	Responsible Party/Monitoring Party	Implementation Stage	Compliance Date and Signature
	• Construct partial width improvements on the easterly side of Mill Creek Avenue at its ultimate cross-section as a collector street (88' right-of-way) adjacent to project boundary line. • Construct partial width improvements on the westerly of Milliken/Hamner Avenue at its ultimate cross-section as a divided arterial parkway 1 (140' or more right-of-way) adjacent to project boundary line. • Construct partial width improvements on the northerly side of Bellegrave Avenue at its ultimate cross-section as a standard arterial (100' right-of-way) adjacent to project boundary line.			
	MM Trans 13 The project will participate in the cost of off-site improvements through fairshare payment of the Development Impact fee as established by the City of Ontario. These fees should be collected and utilized by the City to construct the improvements necessary to maintain the required level of service.	Project Developer/City Planning Department	Potential fairshare fees to be collected prior to issuance of building permit	
	MM Trans 14 Reconfigure Milliken Avenue/SR 60 WB Ramps to include the following geometrics: Northbound: Two left turn lanes and two through lanes. Southbound: Two through lanes and one right-turn lane. Eastbound: NA Westbound: One left-turn lane. One shared left and through lane. One right-turn lane.	Project Developer/City Planning Department	Potential fairshare fees to be collected prior to issuance of building permit	
	MM Trans 15 Reconfigure Milliken Avenue/SR 60 EB Ramps to include the following geometrics: Northbound: Three through lanes. One right-turn lane. Southbound: One left turn lane. Three through lanes. Eastbound: One shared left and through lane. One through lane. Two right-turn lanes. Westbound: NA	Project Developer/City Planning Department	Potential fairshare fees to be collected prior to issuance of building permit	
	MM Trans 16 Reconfigure Milliken/Hamner Avenue/Riverside Avenue intersection to include the following geometrics: Northbound: One left-turn lane. Three through lanes. One shared right-turn and through lane. Southbound: Two left-turn lanes. Four through lanes. One right-turn lane. Eastbound: Two left-turn lanes. Two through lanes. One shared through and right-turn lane. Westbound: One left-turn lane. Two through lanes. One right-turn lane.	Project Developer/City Planning Department	Potential fairshare fees to be collected prior to issuance of building permit	

Impact Heading	Mitigation Measure	Responsible Party/Monitoring Party	Implementation Stage	Compliance Date and Signature
	MM Trans 17 Reconfigure Milliken/Hamner Avenue/Chino Avenue intersection to include the following geometrics: Northbound: Two left-turn lanes. Two through lanes. One shared right-turn and through lane. Southbound: One left-turn lane. Two through lanes. One shared through and right-turn lane. Eastbound: One left-turn lane. One through lane. One shared through and right-turn lane. Westbound: One left-turn lane. One through lane. One shared through and right-turn lane.	Project Developer/City Planning Department	Potential fairshare fees to be collected prior to issuance of building permit	
	MM Trans 18 Install traffic signal at the intersection of Archibald Avenue/Schaefer Avenue and configure with the following geometrics: Northbound: One left-turn lane. Two through lanes. One shared through and right-turn lane. Southbound: One left-turn lane. Two through lanes. One shared through and right-turn lane. Eastbound: One shared through and left-turn lane. One through lane. One shared through and right-turn lane. Westbound: One shared through and left-turn lane. One through lane. One shared through and right-turn lane.	Project Developer/City Planning Department	Potential fairshare fees to be collected prior to issuance of building permit	
	MM Trans 19 Reconfigure Archibald Avenue/Edison Avenue intersection to include the following geometrics: Northbound: Two left-turn lanes. Four through lanes. One right-turn lane. Southbound: Two left-turn lanes. Four through lanes. One right-turn lane. Eastbound: Two left-turn lanes. Three through lanes. Two shared right-turn/shared lanes. Westbound: Two left-turn lanes. Three through lanes. One right-turn lane.	Project Developer/City Planning Department	Potential fairshare fees to be collected prior to issuance of building permit	
	MM Trans 20 Install traffic signal at the intersection of Schaefer Avenue/Edison Avenue and reconfigure with the following geometrics: Northbound: NA Southbound: One shared left and right-turn lane. Eastbound: One left-turn lane. One through lane. Westbound: One through lane. One shared through and right-turn lane.	Project Developer/City Planning Department	Potential fairshare fees to be collected prior to issuance of building permit	

Impact Heading	Mitigation Measure	Responsible Party/Monitoring Party	Implementation Stage	Compliance Date and Signature
	MM Trans 21 Install traffic signal at the intersection of Haven Avenue/Edison Avenue and reconfigure with the following geometrics: Northbound: One left-turn lane. One through lane. One shared through and right-turn lane. Southbound: One left-turn lane. One through lane. One right-turn lane. Eastbound: Two left-turn lanes. One through lane. One shared through and right-turn lane. Westbound: One left-turn lane. One through lane. One shared through and right-turn lane.	Project Developer/City Planning Department	Potential fairshare fees to be collected prior to issuance of building permit	
	MM Trans 22 Install traffic signal at the intersection of Archibald Avenue/Merrill Avenue and reconfigure with the following geometrics: Northbound: One left-turn lane. Three through lanes. One shared through and right-turn lane. Southbound: Two left-turn lanes. Three through lanes. One shared through and right-turn lane. Eastbound: One left-turn lane. One through lane. One shared through and right-turn lane. Westbound: Two left-turn lanes. One through lane. One shared through and right-turn lane.	Project Developer/City Planning Department	Potential fairshare fees to be collected prior to issuance of building permit	
	MM Trans 23 Install traffic signal at the intersection of Haven Avenue/Merrill Avenue and reconfigure with the following geometrics: Northbound: One left-turn lane. One through lane. One shared through and right-turn lane. Southbound: One left-turn lane. One through lane. One shared through and right-turn lane. Eastbound: One left-turn lane. Two through lanes. One shared through and right-turn lane. Westbound: One left-turn lane. Two through lanes. One shared through and right-turn lane.	Project Developer/City Planning Department	Potential fairshare fees to be collected prior to issuance of building permit	
	MM Trans 24 Install traffic signal at the intersection of Mill Creek (Cleveland) Avenue/Merrill Avenue and reconfigure with the following geometrics: Northbound: One left-turn lane. One through lane. One shared through and right-turn lane. Southbound: One left-turn lane. One through lane. One shared through and right-turn lane.	Project Developer/City Planning Department	Potential fairshare fees to be collected prior to issuance of building permit	

Impact Heading	Mitigation Measure	Responsible Party/Monitoring Party	Implementation Stage	Compliance Date and Signature
	Eastbound: One left-turn lane. One through lane. One shared through and right-turn lane. Westbound: One left-turn lane. One through lane. One shared through and right-turn lane.			
	MM Trans 25 Install traffic signal at the intersection of Project Street West/Merrill Avenue and reconfigure with the following geometrics: Northbound: One shared through and left-turn lane. One through lane. One shared through and right-turn lane. Southbound: One shared through and left-turn lane. One through lane. One shared through and right-turn lane. Eastbound: One left-turn lane. One through lane. One shared through and right-turn lane. Westbound: One left-turn lane. One through lane. One shared through and right-turn lane	Project Developer/City Planning Department	Potential fairshare fees to be collected prior to issuance of building permit	
	MM Trans 26 Install traffic signal at the intersection of Project Street East/Merrill Avenue and reconfigure with the following geometrics: Northbound: One shared through and left-turn lane. One through lane. One shared through and right-turn lane. Southbound: One left-turn lane. One through lane. One shared through and right-turn lane. Eastbound: One left-turn lane. One through lane. One shared through and right-turn lane. Westbound: One left-turn lane. One through lane. One shared through and right-turn lane.	Project Developer/City Planning Department	Potential fairshare fees to be collected prior to issuance of building permit	
	MM Trans 27 Install traffic signal at the intersection of Milliken/Hamner Avenue/Merrill Avenue and reconfigure with the following geometrics: Northbound: One left-turn lane. Three through lanes. One shared through and right-turn lane. Southbound: One left-turn lane. Three through lanes. One right-turn lane. Eastbound: Two left-turn lanes. One through lane. One shared through and right-turn lane. Westbound: One left-turn lane. One through lane. One shared through and right-turn lane.	Project Developer/City Planning Department	Potential fairshare fees to be collected prior to issuance of building permit	

Impact Heading	Mitigation Measure	Responsible Party/Monitoring Party	Implementation Stage	Compliance Date and Signature
	MM Trans 28 Install traffic signal at the intersection of Mill Creek (Cleveland) Avenue/Bellegrave Avenue and reconfigure with the following geometrics: Northbound: One shared left-turn lane. One through lane. One shared through and right-turn lane. Southbound: One shared through and left-turn lane. One through lane. One shared through and right-turn lane. Eastbound: One left-turn lane. One through lane. One shared through and right-turn lane. Westbound: Two left-turn lanes. One through lane. One shared through and right-turn lane.	Project Developer/City Planning Department	Potential fairshare fees to be collected prior to issuance of building permit	
	MM Trans 29 Reconfigure Milliken/Hamner Avenue/Bellegrave Avenue intersection to include the following geometrics: Northbound: One left-turn lane. Three through lanes. One shared through and right-turn lane. Southbound: Two left-turn lanes. Three through lanes. One shared through and right-turn lane. Eastbound: One left-turn lane. Two through lanes. One right-turn lane. Westbound: Two left-turn lanes. Two through lanes. One right-turn lane.	Project Developer/City Planning Department	Potential fairshare fees to be collected prior to issuance of building permit	
	MM Trans 30 Reconfigure Hamner Avenue/Limonite Avenue intersection to include the following geometrics: Northbound: Two left-turn lanes. Three through lanes. One right-turn lane. Southbound: Two left-turn lanes. Three through lanes. One right-turn lane. Eastbound: Two left-turn lanes. Three through lanes. One right-turn lane. Westbound: Two left-turn lanes. Three through lanes. One right-turn lane.	Project Developer/City Planning Department	Potential fairshare fees to be collected prior to issuance of building permit	
	MM Trans 31 Reconfigure I-15/Limonite SB Ramps to include the following geometrics: Northbound: NA Southbound: One left-turn lane. One shared left, through, and right-turn lane. One right-turn lane. Eastbound: Three through lanes. One right-turn lane. Westbound: Three through lanes. One free-right-turn lane.	Project Developer/City Planning Department	Potential fairshare fees to be collected prior to issuance of building permit	
	MM Trans 32 Reconfigure I-15/Limonite NB Ramps to include the following geometrics: Northbound: One left-turn lane. One shared left, through, and right-turn lane. One right-turn lane. Southbound: NA.	Project Developer/City Planning Department	Potential fairshare fees to be collected prior to	

Impact Heading	Mitigation Measure	Responsible Party/Monitoring Party	Implementation Stage	Compliance Date and Signature
	Eastbound: Three through lanes. One free right-turn lane. Westbound: Three through lanes. One right-turn lane.		issuance of building permit	
Tribal Cultural Resources				
The Ontario Plan 2050 Supplemental EIR Mitigation Measures				
Tribal Cultural Resources	**MM 5-3** Upon receipt of an application for a proposed project subject to CEQA and within the City's jurisdiction, the City's representative shall consult with the relevant tribe(s)' representative(s) to determine if the proposed project is within a culturally sensitive area to the tribe. If sufficient evidence is provided to reasonably ascertain that the site is within a tribal culturally sensitive area, an archaeologist shall prepare then a cultural resources assessment. The findings of the cultural resources assessment shall be incorporated into the CEQA documentation. A copy of the report shall be forwarded to the tribe(s). If mitigation is recommended in the CEQA document, the procedure described in Mitigation Measure 5-4 shall be followed.	Project Applicant and Project Archaeologist/City Planning Department	n/a	This measure has been implemented as part of the Addendum. The City has consulted with the responding Tribe. Additionally, a Project-specific Cultural Resources Assessment has been prepared and the results incorporated within the Addendum.
Project-Specific Mitigation Measures				
Tribal Cultural Resources	**MM 18-1** Retain a Native American Monitor Prior to Commencement of Ground-Disturbing Activities A. The Project Applicant shall retain a Native American Monitor from or approved by the Gabrieleño Band of Mission Indians – Kizh Nation. The monitor shall be retained prior to the commencement of any "ground-disturbing activity" for the subject Project at all Project locations (i.e., both on-site and any off-site locations that are included in the Project description/definition and/or required in connection with the Project, such as public improvement work). "Ground-disturbing activity" shall include, but is not limited to, demolition, pavement removal, potholing, auguring, grubbing, tree removal, boring, grading, excavation, drilling, and trenching. B. A copy of the executed monitoring agreement shall be submitted to the Lead Agency prior to the earlier of the commencement of any ground-disturbing activity, or the issuance of any permit necessary to commence a ground-disturbing activity.	Project Applicant/Native American Monitor	Prior to ground-disturbing activities	

Impact Heading	Mitigation Measure	Responsible Party/Monitoring Party	Implementation Stage	Compliance Date and Signature
	C. The monitor will complete daily monitoring logs that will provide descriptions of the relevant ground-disturbing activities, the type of construction activities performed, locations of ground-disturbing activities, soil types, cultural-related materials, and any other facts, conditions, materials, or discoveries of significance to the Tribe. Monitor logs will identify and describe any discovered TCRs, including but not limited to, Native American cultural and historical artifacts, remains, places of significance, etc. (collectively, tribal cultural resources, or "TCR"), as well as any discovered Native American (ancestral) human remains and burial goods. Copies of monitor logs will be provided to the Project Applicant/ Lead Agency upon written request to the Tribe. D. On-site tribal monitoring shall conclude upon the latter of the following: (1) written confirmation to the Kizh from a designated point of contact for the Project Applicant/Lead Agency that all ground-disturbing activities and phases that may involve ground-disturbing activities on the Project site or in connection with the Project are complete; or (2) a determination and written notification by the Kizh to the Project Applicant/Lead Agency that no future, planned construction activity and/or development/ construction phase at the Project site possesses the potential to impact Kizh TCRs.			
	MM 18-2 Unanticipated Discovery of Tribal Cultural Resource Objects (Non-Funerary/Non-Ceremonial) A. A. Upon discovery of any TCRs, all construction activities in the immediate vicinity of the discovery shall cease (i.e., not less than the surrounding 50 feet) and shall not resume until the discovered TCR has been fully assessed by the Kizh monitor and/or Kizh archaeologist. The Kizh will recover and retain all discovered TCRs in the form and/or manner the Tribe deems appropriate, in the Tribe's sole discretion, and for any purpose the Tribe deems appropriate, including for educational, cultural, and/or historic purposes.	Project Archaeologist/Native American Monitor	Upon discovery of any Tribal Cultural Resources	
	MM 18-3 Unanticipated Discovery of Human Remains and Associated Funerary or Ceremonial Objects A. Native American human remains are defined in PRC 5097.98(d)(1) as an inhumation or cremation, and in any state of decomposition or skeletal completeness. Funerary objects, called associated grave goods in Public Resources Code Section 5097.98, are also to be treated according to this statute. B. If Native American human remains and/or grave goods are discovered or recognized on the Project site, then Public Resource Code 5097.9 as well as Health and Safety Code Section 7050.5 shall be followed.	Project Archaeologist/Native American Monitor	Upon discovery of any Human Remains and Associated Funerary or Ceremonial Objects	

Impact Heading	Mitigation Measure	Responsible Party/Monitoring Party	Implementation Stage	Compliance Date and Signature
	C. Human remains and grave/burial goods shall be treated alike per California Public Resources Code Section 5097.98(d)(1) and (2). D. Preservation in place (i.e., avoidance) is the preferred manner of treatment for discovered human remains and/or burial goods. E. Any discovery of human remains/burial goods shall be kept confidential to prevent further disturbance.			
Utilities and Service Systems				
Esperanza Specific Plan EIR				
Utilities and Service Systems	**MM Util 1** To provide adequate water and sewer service, all water and sewer pipelines within and adjacent to the project boundaries, as required and conditioned to serve the associated Tentative Tract Maps, shall be constructed by the developer based on the NMC Infrastructure Master Plans phased by tract and to the satisfaction of the City.	Project Developer/City Planning Department	Prior to approval of Tentative Tract Map	
	MM Util 2 To ensure that adequate sewer facilities are in place to serve the proposed project, the Archibald trunk sewer line off-site connection to the IEUA Kimbal Avenue interceptor shall be completed by IEUA and operational prior to the City of Ontario's issuance of the first certificates of occupancy. The applicant shall participate on a fair share basis in the development of the necessary sewer facilities.	Project Developer/City Planning Department	Prior to issuance of first certificate of occupancy	
	MM Util 3 To ensure adequate water service to the project, off-site water lines, tanks, interconnectors and other facilities required in the Water Master Plan for the Francis loop to provide water to the site shall be constructed by the City and be in place and operational prior to the City of Ontario's issuance of the first certificate of occupancy. The applicant shall participate on a fair share basis in the development of these off-site facilities.	Project Developer/City Planning Department	Prior to issuance of first certificate of occupancy	
	MM Util 4 To mitigate for possible conflicts with existing utilities, prior to obtaining grading permit(s), the project proponent shall coordinate with the applicable natural gas, electrical, and telephone utility providers for the project site to ensure that all existing underground and overhead lines are not damaged during project construction.	Project Developer/City Planning Department	Prior to issuance of grading permit	
	MM Util 5 To reduce the quantity of energy used and to conserve water resources, the project developer and City of Ontario should work to include sustainable systems for use of water and energy within the project design. One source of assistance in this regard is Southern California Gas Company Commercial/ Industrial Support Center at 1-800-GAS-2000, which should be contacted at the time of development of the commercial center located within the project.	Project Developer/City Planning Department	Prior to issuance of building permit	

ONTARIO ESPERANZA SPECIFIC PLAN

City of Ontario
303 East 'B' Street
Ontario, California 91764

Armada LLC
430 Thirty Second Street
Suite 200
Newport Beach, California 92663

February 6, 2007

ADOPTION

ESPERANZA
FILE NUMBER: PSP05-002
City Council Ordinance Number: 2852 *Adopted February 6, 2007*

AMENDMENTS

FILE NUMBER: PSPA14-001 *Adopted June 16, 2014*
Zoning Administrator Decision Number: ZA 14-001

FILE NUMBER: PSPA18-007 *Adopted April 22, 2019*
Zoning Administrator Decision Number: ZA 19-008

FILE NUMBER: PSPA19-0033 *Adopted October 20, 2020*
City Council Resolution Number: R2020-17676

FILE NUMBER: PSPA19-005 *Adopted August 12, 2022*
Zoning Administrator Decision Number ZA22-014

ONTARIO ESPERANZA SPECIFIC PLAN

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Section 1. Executive Summary

The Esperanza Specific Plan is a proposal for the development of approximately 223 acres located within the City of Ontario ~~New Model Colony (NMC)~~ Ontario Ranch. The master plan for Esperanza will provide for development of a distinctive residential planned community offering a variety of housing types within walking distance to parks and private recreational amenities. The regional context and local setting of the Esperanza Specific Plan are illustrated in Exhibit 1, "Regional Location Map" and Exhibit 2, "Vicinity Map."

The Esperanza Specific Plan comprises all of Planning Subarea 25 as depicted on the City of Ontario ~~New Model Colony (NMC)~~ Ontario Ranch General Plan Land Use Map. The Esperanza Specific Plan reflects the current Land Use Plan in The Ontario Plan (General Plan). It encompasses the eastern edge of The Ontario Ranch Master Planned Community. The Specific Plan is bounded by Bellegrave Avenue to the south, ~~Milliken~~ Hamner Avenue to the east, and Mill Creek Avenue to the west. Old Edison Road abuts the Specific Plan area on the north. Approximately 174.10 net acres of Esperanza are proposed for residential uses along with 9.89 net acres of park uses.

The Esperanza Specific Plan establishes the regulations and guidelines which will govern development of the master planned community within the Ontario Ranch General Plan. The development plan as illustrated in Exhibit 3 "Land Use Plan," is consistent with the goals and policies of the ~~NMC~~ Ontario Ranch General Plan combining livable residential neighborhoods served by public and recreational facilities as well as active open space offering opportunities for social interaction among residents.

Pedestrian accessibility is provided throughout Esperanza, through a system of sidewalks separated from the street by landscaped parkways and landscaped buffer areas. Bicycle mobility is provided within the community through a system of on-street bicycle trails.

~~The NMC~~ The Ontario Ranch General Plan, adopted by the City of Ontario, designates The Esperanza Specific Plan for development of up to 1,456 residential dwelling units, however, ~~46~~ 161 residential dwelling units will be developed within the Specific Plan area originally anticipated to be a 10.02 acre school site within Esperanza. On ~~XX-XX-2020~~ 10-20-2020, a request to increase PA4 to 14DU/AC was approved in order to accommodate a more efficient, economical sized design, and more appropriate product type. The increase allows for the development of up to ~~1,640~~ 1,652 units.

Governing Documents

Development of Esperanza will be governed by the following:

- The City of Ontario ~~NMC~~ Ontario Ranch General Plan, as amended, which establishes policies governing land use, circulation, housing, conservation and open space, noise, safety, and public facilities within the Esperanza Specific Plan area.
- The Esperanza Specific Plan which includes a Land Use Plan, Infrastructure Plan, Design Guidelines, and Development Regulations. Where the Esperanza Specific Plan is silent, the City of Ontario Development Code shall govern.
- The City of Ontario Subdivision Ordinance regulating the subdivision of land within the Esperanza Specific Plan area.
- A development agreement to include methods for financing, acquisition, and construction of infrastructure, acquisition and development of parks and schools, as well as the provision for housing opportunities consistent with the regional housing needs assessment.
- Covenants, Conditions, and Restrictions (CC&R's) to be established by the developers of Esperanza as a means of ensuring and enforcing quality design and development of the master planned community.

Specific Plan Components

The Esperanza Specific Plan is organized into the following sections in addition to Section 1, Executive Summary.

Section 2
Introduction

The Introduction serves to acquaint the reader with:

- Community vision and objectives,
- The project setting,
- A general description of the project proposal,
- The goals and policies of the Esperanza Specific Plan,
- The entitlements to accompany the Esperanza Specific Plan; and
- The relationship of the Esperanza Specific Plan to the City of Ontario ~~NMC~~ Ontario Ranch General Plan, and the City of Ontario Development Code.

Section 3
Existing Conditions

The physical setting for Esperanza is described in this section outlining the existing physical conditions on and around the Specific Plan area.

Section 4
Land Use

The Land Use Section describes residential planning areas and residential types, allocations of residential dwelling units per planning area as well as the system of parks and public facilities planned within the community.

Section 5
Infrastructure and Services

This section provides information on circulation improvements, planned backbone water, sewer, and storm drain systems, the grading concept for the development of the project, and a discussion of public utilities and services to serve the Specific Plan.

Section 6
Development Regulations

Development Regulations established in this section will govern the permitted uses and the standards regulating the development of various residential types within the Esperanza Specific Plan area. The relationship of the Esperanza Specific Plan development regulations to the City of Ontario Development Code is also provided. The policies and procedures for the City's review and approval of specific development proposals within Esperanza are presented in this section as well as the methods and procedures for interpreting and amending the Esperanza Specific Plan as necessary.

Section 7
Implementation

The policies and procedures for the City's review and approval of specific development proposals, within Esperanza, are presented in this section. This section provides the methods and procedures for interpreting and amending the Esperanza Specific Plan as necessary. A summary of project financing and project maintenance responsibilities for new development within the Specific Plan area is provided in this section.

Section 8
Design Guidelines

The Esperanza Design Guidelines are intended to direct the site planning, landscaping, and architectural quality of the development. Streetscapes, entries, edge treatments, walls and fencing, lighting, signage, and architectural design are some of the features to be addressed in the Design Guidelines.

Exhibit 1
Regional Location Map

Section 9
General Plan Consistency

This section includes the City of Ontario General Plan consistency matrix describing the relationship of the Esperanza Specific Plan to each policy of the ~~NMC~~ Ontario Ranch General Plan.

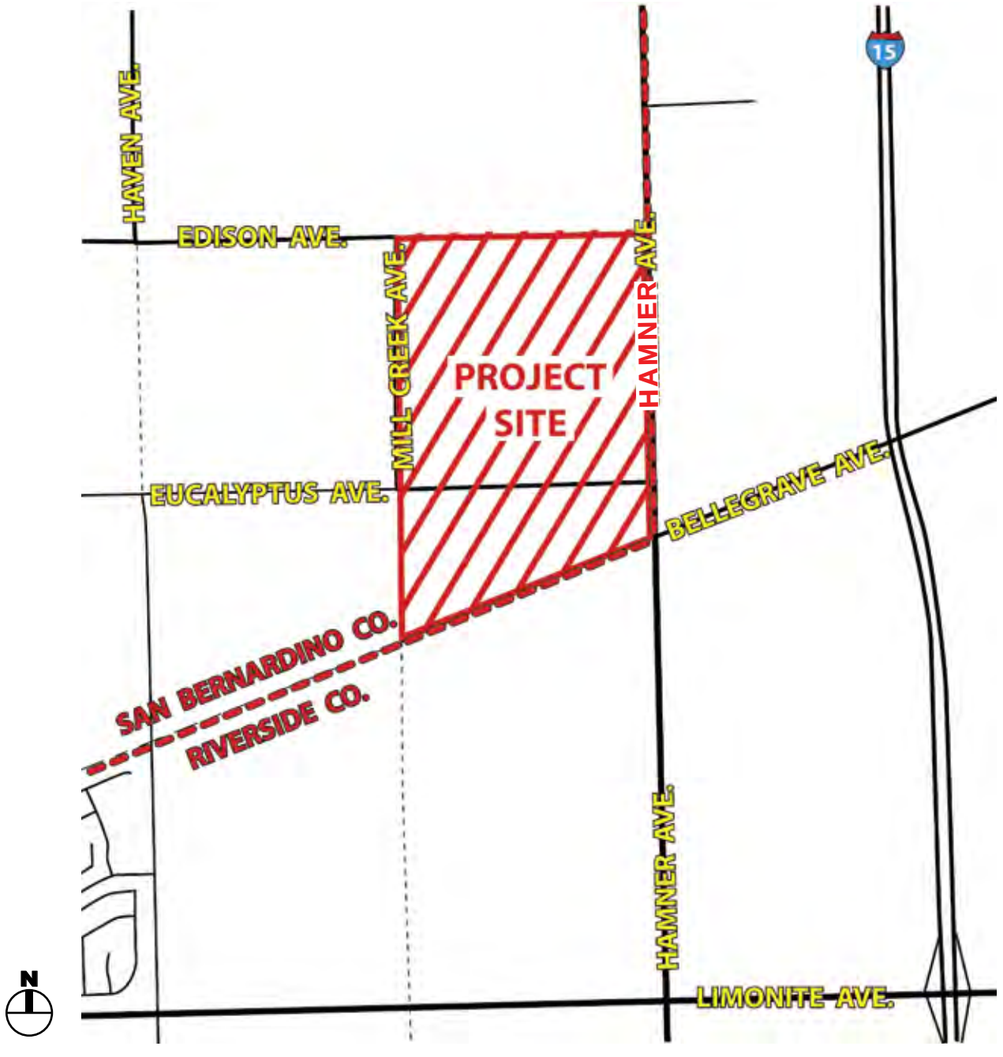


Exhibit 2
Vicinity Map

Exhibit 3
Land Use Plan

LAND USE	UNITS	GROSS ACRES	UNITS/ GROSS ACRES	NET ACRES	UNITS/ NET ACRES
Residential Uses					
PA-1 (RD-7/ Row Townhomes, RD-8/ Motorcourt Townhomes)	319 DU	29.35 AC	10.87 DU/AC	28.97 AC	11.01 DU/AC
PA-2 (RD-4/ SFD Cottages, RD-6/ 6-Pack Courtyard)	113 DU	22.84 AC	4.95 DU/AC	17.36 AC	6.51 DU/AC
PA-3 (RD-7 & RD-8/ Row Townhomes)	156 DU	11.40 AC	13.68 DU/AC	11.10 AC	14.05 DU/AC
PA-4 (RD-6/ 6-Pack Courtyard, 8-Pack Courtyard, Row Townhomes)	303 DU	27.41 AC	11.05 DU/AC	19.30 AC	15.70 DU/AC
PA-5 (RD-5/ 4-Pack Courtyard)	157 DU	23.78 AC	6.60 DU/AC	17.64 AC	8.90 DU/AC
PA-6 (RD-4/ SFD Cottages)	78 DU	13.64 AC	5.72 DU/AC	10.00 AC	7.80 DU/AC
PA-7 (RD-1/ SFD 50' wide lots)	76 DU	14.36 AC	5.29 DU/AC	12.56 AC	6.05 DU/AC
PA-8 (RD-2/ SFD 55' wide lots)	107 DU	23.72 AC	4.51 DU/AC	19.26 AC	5.56 DU/AC
PA-9 (RD-1/ SFD 50' x 80')	82 DU	17.75 AC	4.62 DU/AC	13.27 AC	6.18 DU/AC
PA-10 (RD-3/ SFD 2-Pack)	100 DU	19.92 AC	5.02 DU/AC	14.62 AC	6.84 DU/AC
PA-11 (RD-7/ Row Townhomes)	161 DU	13.10 AC	12.29 DU/AC	10.02 AC	16.07 DU/AC
Park 1		5.75*AC			
Residential land Use Total	**1,652 DU**	**223.00 AC**	**7.41 DU/AC**	**174.10 AC**	**9.49 DU/AC**
Parks				9.89 AC	
Neighborhood Edge Buffers				6.62 AC	
Roadways				28.25 AC	
SCE Easements and Well Sites				4.14 AC	
PROJECT TOTAL	**1,652 DU**	**223.00 AC**		**223.00 AC**	

NOTES:

1. *Gross residential acres do not include the 13.10 gross acres for a school site.*
2. *Net residential acres are gross acres less parks, neighborhood edge buffers, roadways, and easements and net area for school site.*

** PA-2 includes 3.45 AC of Park 1*

Exhibit 3 (cont.)
Land Use Table

Section 2. Introduction

The Esperanza Specific Plan (Specific Plan) includes 223 acres of land designated for residential uses as part of the Ontario Ranch area within the City of Ontario. Esperanza, at build out will be a residential master planned community within the City of Ontario with a traditional neighborhood design similar to that found in older established communities.

2.1 Community Vision and Objectives

The community vision for the Esperanza Specific Plan is implemented through the application of key design objectives guiding the development of the Specific Plan as discussed below.

Objective: Create a Livable Environment

The Esperanza Specific Plan combines residential, recreation and public facilities designed to create a livable community and includes features such as:

- A design which allows for alternative modes of travel such as biking and walking.
- Opportunities for informal neighborhood interaction.
- Diverse architectural design of a high quality.
- Connectivity among neighborhoods.
- Diversity and choice of housing types and opportunities to address a variety of lifestyles and economic segments of the marketplace.
- Residential neighborhoods developed at a human scale oriented to pedestrian activities with connectivity among residential neighborhoods, parks, and schools.
- A simple and well-designed street system providing street separated sidewalks and active and passive recreational opportunities allowing residents to experience increased outdoor living opportunities.
- A variety of housing types incorporated into the land use plan addressing lifestyle considerations of singles, families, and empty nesters.
- Residential neighborhoods designed around a network of centrally located parks, promoting outdoor activity and casual social interaction among neighbors.

Objective: Plan for a Circulation System Serving Motorists, Bicyclists and Pedestrians

The circulation plan for the Esperanza Specific Plan provides a comprehensive system of arterial, collector, and local streets accommodating bicycle and pedestrian travel as well as the safe and efficient movement of automobiles within the Specific Plan area:

- Street design includes landscaped buffer areas and pedestrian walkways, separated from the street, to create an intimate environment promoting social interaction.
- Internal project streets are designed to slow vehicular traffic through the use of traffic calming devices such as a roundabout at "A" Street adjacent to the neighborhood park, landscaped areas adjacent to local streets, and narrowed intersections to influence a driver's peripheral vision and encourage drivers to proceed more slowly.
- A system of bikeways is integrated into the design of the community to encourage bicycle travel as an alternative to the automobile.

Objective: Provide for Adequate Public Community Facilities

The Esperanza Specific Plan provides for the development of needed public facilities to serve the community as follows:

- New water, sewer, and storm drain facilities to serve the Specific Plan area.
- New planned bike paths connecting to the City of Ontario bikeway master plan bike paths.

Objective: Provision of New Parks and Open Space

New public park and open space amenities are provided to enhance outdoor recreational opportunities to residents of Esperanza and the surrounding community.

- Provision of approximately 9.89 acres of public parks, distributed throughout the community, will offer active and passive recreational opportunities within walking distance of all residential areas.
- Approximately 4.4 acres adjacent to Mill Creek Avenue, including a Southern California Edison Easement, will be landscaped for use as linear open space.
- Approximately 6.62 acres of landscaped open space to include pedestrian trails adjacent to public arterial and collector streets will be provided.
- A bicycle/pedestrian trail system will be developed within the street system of the Specific Plan area connecting the residential areas of the Specific Plan to parks and points surrounding the community providing accessibility to bicyclists and pedestrians throughout the community.

Objective: Promote Exceptional Architecture and Site Planning

Diverse and varied architecture combined with comprehensive site planning within the Esperanza Specific Plan will produce neighborhoods that have aesthetic and functional harmony, preserve residents privacy, and encourage neighborhood interaction.

- Streets will be linked together in a manner, which is pedestrian friendly, but also auto-accessible connecting homes with other neighborhoods, open space, public facilities, and recreational areas for residents to either walk, bike, or drive to.
- A variety of housing types, including attached and detached single family homes, will be provided within the Specific Plan area, all of which are located close to parks and open space.
- Residential planning areas include a variety of housing types oriented toward the street adding interest and encouraging neighborhood interaction along the street.
- Residential neighborhoods are designed with houses addressing the street by:
  - Designing homes to a more human level with porches, stoops, and walkways creating opportunities for neighborly interaction.
  - Homes fronting the street with garages accessed from rear alleys.
  - Minimizing views of garage doors through setback requirements, location, design elements, and landscaping.
  - Incorporating varied architectural styles and elements within each neighborhood.

2.2 SPECIFIC PLAN PURPOSE

The City of Ontario will adopt the Esperanza Specific Plan by ordinance thereby establishing the land use plan, development standards, infrastructure requirements, and implementation requirements for the Specific Plan area. The Esperanza Specific Plan establishes the type and distribution of residential land uses, defines the development regulations and design guidelines for residential land use, establishes appropriate locations for development of public parks, and describes the infrastructure requirements and the level of improvements necessary to support development of the Specific Plan area. The Esperanza Specific Plan establishes the procedures and requirements to approve new development within the Specific Plan area and identifies, where applicable, City of Ontario Development Code requirements.

2.3 SPECIFIC PLAN PROPOSAL

2.3.1 Project Summary

The Esperanza Land Use Plan is described below and in the Specific Plan "Statistical Summary," Table 1.

2.3.1.1 Residential Uses

Esperanza will provide for development of a variety of residential housing types oriented toward open space amenities and designed to promote walkability and interaction among residents. Residential development within the approximately 223 acre Specific Plan area will contain up to ~~1,594~~ 1,652 residential dwelling units, providing a mix of single family detached and single family attached housing types as described below. In the event Planning Area 11, reserved as for a 10.02 acre school site, is not purchased by the Mountain View School District Planning Area 11 may revert to a residential zoning district for development of up to ~~46~~ 161 additional dwelling units subject to approval by the City of a Specific Plan Amendment.

2.3.2.2 Residential Detached

Esperanza offers six different types of single family detached residential products for development within the Specific Plan area.

- SFD Conventional – Conventional single family detached residential units are proposed on lots ranging from 3,900 square feet to 4,900 square feet in size. Vehicular access is provided from interior streets and garages are set back from the front of the residence emphasizing the architectural elements forming the streetscene. These residential types will be developed at density levels between 5.56 to 6.18 dwelling units per net acre.
- SFD Cottage – Alley served single family detached residential dwelling units will be developed in two planning areas designed with an architectural orientation to the street by locating garages to the rear of residential units. Alley loaded residential areas will be developed at an average density of 7.89 dwelling units per net acre with a minimum lot size of 2,400 square feet.
- SFD 2 Pack – Residential single family detached development on minimum lots of 3,400 square feet in size will be developed in a 2 Pack configuration. Residential 2 Pack housing will be developed at a density of 6.84 dwelling units per net acre. Garages within this housing type are alternately placed to the rear of the lot or placed a significant distance from the street maintaining an architecture forward streetscene.

- SFD Courtyard – Two types of single family detached courtyard housing types are planned for Esperanza. Courtyard single family residential consisting of four units per courtyard will be developed at approximately 8.9 dwelling units per net acre. This type of housing will be developed around a 1 acre public park and will be served by public streets with private drive aisles accessing residential units developed around a common motorcourt. Courtyard single family residential courts of six units per courtyard will be developed at approximately 7.48 dwelling units per net acre. This type of courtyard housing will be developed around private streets and parks with private drive aisles serving residential units developed around a common motorcourt. The courtyard design planned for both housing types places garages in alternating side on and street facing conditions either minimizing or eliminating visibility of garages from the street.

2.3.1.3 Residential Attached

Two types of single family attached residential development products are planned within Esperanza. Alley loaded row townhomes designed around a private common green will be developed at approximately 14.05 dwelling units per net acre within PA 3 and at approximately 16.07 dwelling units per net acre in PA 11. Single family attached motorcourt townhomes will be developed at approximately 13.76 dwelling units per net acre. The motorcourt townhome residential housing type will be served by private streets with drive aisles providing access to a motorcourt serving 10 to 12 residential dwelling units. Both the alley loaded row townhome and the motorcourt townhome residential housing types are designed with garages located to the rear or turned to side on to the street preserving an architecturally interesting streetscene.

2.3.1.4 Parks, Trails, and Open Space

A centrally located 5.36 acre neighborhood park is planned to serve the Specific Plan area providing opportunities for informal active recreation such as soccer and baseball. Four additional parks ranging in size from .84 to 1.39 acres are provided offering opportunities for active and passive recreation and informal gathering among neighbors. Approximately 6.62 acres of the Specific Plan area will be developed as enhanced landscaped parkways along major streets serving the community. These enhanced parkways will include pedestrian walkways providing connectivity to and from the Specific Plan area and to the pedestrian network to be developed within the community, connecting all residential neighborhoods to parks. Within the townhome residential areas, private open space as well as private active recreation centers, including swimming pools and spas, will be provided.

2.4 AUTHORITY AND REQUIREMENTS

2.4.1 Authority

State of California Government Code, Title 7, Division 1, Chapter 3, Article 8, Section 65450-57 grants authority to cities to adopt Specific Plans for purposes of implementing the goals and policies of their General Plans. The Government Code specifies that Specific Plans may be adopted either by resolution or by ordinance and that the Specific Plan is required to be consistent with the General Plan. The City of Ontario will adopt the Esperanza Specific Plan by ordinance thereby establishing the zoning regulations for development of the Specific Plan area. The requirements of the Esperanza Specific Plan shall take precedence over the City of Ontario Development Code. In instances where the Esperanza Specific Plan is silent, the City of Ontario Development Code shall prevail.

LAND USE	ACRES
Residential Detached	**Residential Acres are Net [1]**
• RD 1 - 50 foot wide lots/PA-7 and PA-9	25.83 AC
• RD 2 – Typical 55 foot wide lots/ PA-8	19.26 AC
• RD 3 – 2 Pack lots/PA-10	14.62 AC
• RD 4 – Cottages 2,640 sf lots/PA-2 and PA-6	27.36 AC
• RD 5 – 4 Pack Courtyard/ PA-5	17.64 AC
• RD 6 – 6 Pack Courtyard & Rowtown/ PA-2 and PA-4	19.30 AC
Residential Attached	
• RD 7 – Row Townhomes/ PA-1, PA-3 and PA-11	30.67 AC
• RD 8 – Motorcourt Townhomes / PA-1 and PA-3	19.42 AC
Subtotal Residential:	**174.10 AC**
Other	
Neighborhood Park	5.36 AC
Pocket Parks	4.53 AC
Neighborhood Edge Buffers	6.62 AC
Roadways [2]	28.25 AC
SCE Easements and Well Sites	4.14 AC
Subtotal Other:	**48.90 AC**
PROJECT TOTAL	**223.00 AC**

NOTES:

1. *Net acres excludes all streets and uses listed as "Other Uses" but includes interior local streets and drive aisles.*
2. *Includes all Master Plan Streets, Street 'A' and Local Streets serving the Neighborhood Park and School Site.*

TABLE 1

Specific Plan Statistical Summary

2.4.2 Requirements of the Specific Plan

California Government Code Section 65451 sets forth the minimum requirements and review procedures for Specific Plans as follows.

A Specific Plan shall include a text and a diagram or diagrams, which specify all of the following in detail:

1. The distribution, location, and extent of the uses of land, including open space, within the area covered by the plan;
2. The proposed distribution, location, and extent and intensity of major components of public and private transportation, sewage, water, drainage, solid waste disposal, energy, and other essential facilities proposed to be located within the area covered by the plan and needed to support the land uses described in the plan;
3. Standards and criteria by which improvements will proceed, and standards for the conservation, development, and utilization of natural resources, where applicable;
4. A program of implementation measures including regulations, programs, public works projects and the financing measures necessary to carry out paragraphs 1, 2, and 3 above.
5. A statement of the relationship of the Specific Plan to the General Plan.

The Esperanza Specific Plan meets the requirements of the State of California Government Code.

2.5 DEVELOPMENT APPROVAL COMPONENTS

The components of the development approval process for Esperanza are discussed below.

2.5.1 Specific Plan

The Esperanza Specific Plan, when adopted, provides the zoning for the Specific Plan area. It serves as a "blueprint" for development by establishing the distribution of land use and criteria for development as set forth herein. The Esperanza Specific Plan also serves as the legal document to implement the City's General Plan.

2.5.2 Development Agreement

Unless done in a coordinated manner and with adequate fiscal planning, development projects within the ~~NMC~~ Ontario Ranch are likely to present a challenge in their implementation because of the lack of existing public facilities including street, sewerage, transportation, drinking water, school and utility facilities. California law has established a mechanism for ensuring the adequate provision of such facilities while at the same time providing assurances to applicants that, upon approval of the project, the applicants can proceed with their projects. Approval of this Specific Plan without a development agreement may result in a waste of resources, escalate the cost of housing to the consumer, and discourage investment in and commitment to comprehensive planning as envisioned by the City, which seeks to make maximum efficient utilization of resources at the least economic cost to the public.

Therefore, a statutory development agreement, authorized pursuant to California Government Code sections 65864 et seq., shall be required as part of the approval of this Specific Plan. For the above-mentioned reasons, the development agreement for this Specific Plan shall include, among other things, methods for financing acquisition and construction of infrastructure, acquisition and development of adequate levels of parkland, and schools, as well as the provision of adequate housing opportunities for various segments of the community consistent with the regional housing needs assessment. Such development agreement shall have been fully approved before the issuance of the first building permit for this project.

2.5.3 Subdivision Maps

A tentative tract map(s) will be approved by the City of Ontario for the Specific Plan area indicating the approximate location of lot lines, streets, and proposed grading. Following approval by the City of the tentative tract map(s), a final map(s) will be prepared. The final map(s) becomes a legal document that is recorded and defines legal parcels and lots that can be sold for development.

2.5.4 Development Plan Review

All development proposals for individual Planning Areas within the Specific Plan will be subject to the Development Plan Review process pursuant to Article 8 of the City's Development Code.

2.6 CEQA COMPLIANCE

A Project Environmental Impact Report (EIR) prepared by the City of Ontario for the Esperanza Specific Plan, in accordance with the California Environmental Quality Act (CEQA), addresses impacts associated with the Specific Plan and subdivision map(s). The EIR recommends mitigation measures to reduce impacts of the project to a less than significant level. The EIR has been prepared as a basis for the environmental review for all subsequent discretionary and ministerial actions.

2.7 RELATIONSHIP TO GENERAL PLAN AND ZONING

The City of Ontario ~~NMC~~ Ontario Ranch General Plan designates the Specific Plan area for development of the following land uses:

Land Use Designation	Approximate Acres (Gross)
Residential – Low Density (4.6 d.u. per gross acre)	95.1 AC
Residential – Medium Density (12.0 d.u. per gross acre)	114.8 AC
Residential – High Density (18.0 d.u. per gross acre)	13.1 AC
Total	**223 AC**

The General Plan establishes a target development capacity of ~~1,456~~ 1,652 residential dwelling units as further described below:

Single Family	878 dwelling units
Multi-Family	774 dwelling units
Total	**1,652 dwelling units**

The table below provides a summary of how the Esperanza Specific Plan land use plan implements the General Plan target development capacity.

GENERAL PLAN TARGET DEVELOPMENT CAPACITY			
Land Use	**Target DUs**	**Gross Acres**	**Gross Density**
Residential Medium Density	1,535 DU	127.9 AC	12.0 DU/AC
Residential Low Density	285 DU	95.1 AC	3.0 DU/AC
Total	**1,820 DU**	**223.0 AC**	8.2 **DU/AC**
ESPERANZA SPECIFIC PLAN LAND USE DISTRIBUTION			
Land Use	**Target DUs**	**Gross Acres**	**Gross Density**
Residential Medium Density	1,209 DU	127.9 AC	9.5 DU/AC
Residential Low Density	443 DU	95.1 AC	4.7 DU/AC
Total	**1,652 DU**	**223.0 AC**	7.4 **DU/AC**

The General Plan allows for development of multi-family residential units as small lot, single family detached units with a variety of parcel sizes and product types on property designated for multi-family uses, including "Residential-Medium" and "Residential-High" density housing.

The City of Ontario has pre-zoned the Specific Plan area as SP/AG (Specific Plan AG preserve). The zoning designation of "SP" requires the Specific Plan area to implement the objectives of the ~~NMC~~ Ontario Ranch General Plan land uses.

The Esperanza Specific Plan is designed to meet the requirements of the State of California Government Code and the City of Ontario ~~NMC~~ Ontario Ranch General Plan. The City of Ontario will adopt the Esperanza Specific Plan by ordinance, thereby establishing the zoning regulations for the development of the Specific Plan area. The requirements of the Specific Plan shall take precedence over the City of Ontario Development Code. In instances where the Specific Plan is silent, the City of Ontario Development Code shall prevail.

Section 3. Existing Conditions

This section describes the existing physical conditions within and surrounding the Esperanza Specific Plan area.

3.1 Property Ownerships

The Specific Plan area is comprised of approximately 223 gross acres. Richland Communities owns approximately 85 gross acres and RCCD Development owns the remaining 138 acres of the Specific Plan Area. Exhibit 4, "Existing Property Ownerships and Williamson Act Contract Status" illustrates the property ownerships within the Esperanza Specific Plan boundary.

3.2 Williamson Act Contracts

Exhibit 4, "Existing Property Ownerships and Williamson Act Contract Status" illustrates the status of Williamson Act Contracts within the Esperanza Specific Plan boundary.

3.3 Existing Improvements

The Specific Plan area historically has been used for agricultural purposes, primarily dairy and crop farming, and is currently in development as illustrated on Exhibit 5, "Existing and Surrounding Land Uses." Existing improvements within northern and eastern portions of the Specific Plan area controlled by RCCD Development, are currently in development. All dairy related structures in this area have been demolished and removed. Existing agricultural related facilities such as modular structures and feedlots located within the properties owned by Richland Communities have also been demolished and removed in preparation for development.

3.4 Surrounding Land Use Characteristics

Land uses adjacent to the Specific Plan area include:

North	Future Planned Residential Community and Mixed Use Development
West	Rural Residential and Dairy Operations
South	Planned Residential Communities
East	Commercial, Industreial, and Vacant Land

The City of Ontario ~~NMC~~ Ontario Ranch General Plan designates the undeveloped areas located directly to the west of the Specific Plan area as "LMDR - Low Medium Density Residential" and "MDR - Medium Density Residential". The undeveloped areas located to the north of the Specific Plan are designated as "MDR - Medium Density Residential" and "MU - Mixed Use". Land adjacent to the Specific Plan area to the east is located within Riverside County and is developed as a mixed use/retail center. Land south of the Specific Plan area is also located in Riverside County and developed with single family and low density residential land uses. Exhibit 6, "Land Use Designations" illustrates the proposed land uses adjacent to the Specific Plan area within the ~~NMC~~ Ontario Ranch and the County of Riverside.

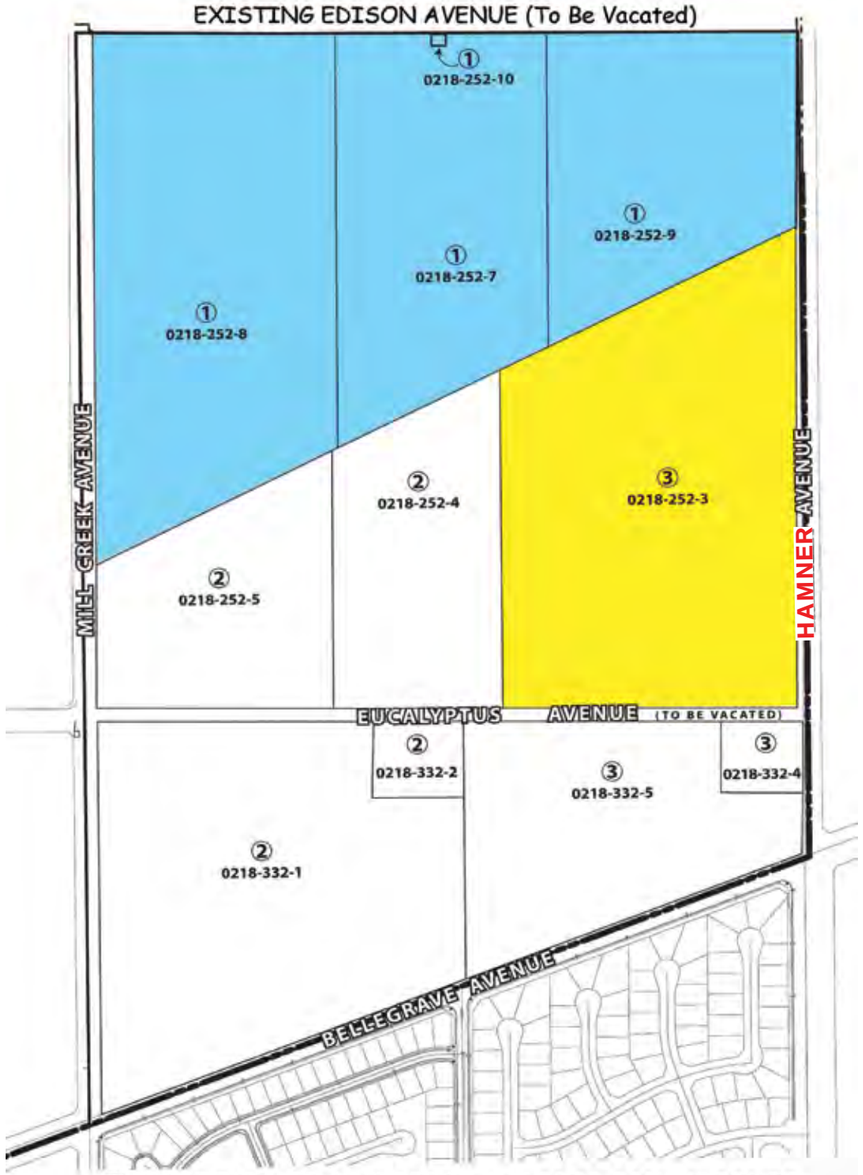


EXHIBIT 4

Existing Property Ownerships and Williamson Act Contract Status

EXHIBIT 5

Existing and Surrounding Land Uses

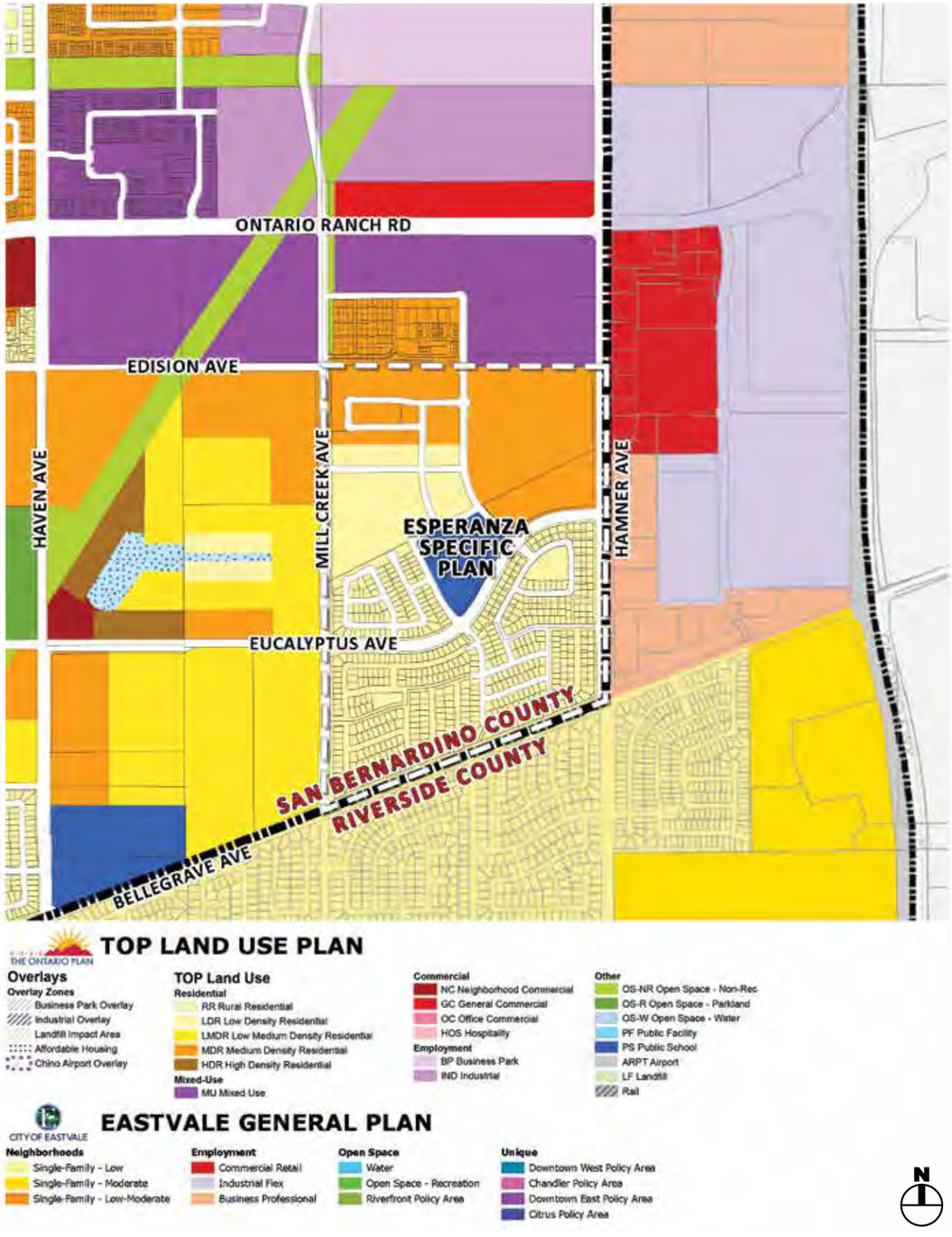


Exhibit 6
Land Use Designations

3.5 Topography

The Specific Plan area is relatively flat and generally slopes from the northeast to southwest as illustrated on Exhibit 7, "Existing Site Topography and Well Locations." The site falls at an average slope of approximately two percent (2%). There is an existing earthen drainage interceptor ditch paralleling the southerly boundary of the site and an existing drainage basin located in the southwest corner of the Specific Plan area.

3.6 Existing Circulation and Access

Interstate 15 (I-15) is located one-half mile east of the Specific Plan area. Access to I-15 is located approximately 1.5 miles southeast of the Specific Plan area, via Hamner and Limonite Avenues. The Specific Plan area is approximately 1.8 miles south of State Route 60.

Bellegrave Avenue, designated as a "Standard Arterial" in the City of Ontario's ~~NMC~~ Ontario Ranch General Plan, borders the Specific Plan on the south. The south half of Bellegrave Avenue within Riverside County has been improved with 55 feet of paving and a 21-foot parkway as part of the residential development to the south. ~~Milliken~~ Hamner Avenue, designated as a "Divided Arterial Parkway 1-1" borders the Specific Plan area on the east. ~~Milliken~~ Hamner Avenue is partially improved with two lanes for traffic and 38 feet of paving. Mill Creek Avenue, designated as a "Collector" street, borders the Specific Plan area to the west. Mill Creek Avenue is partially improved, north of Eucalyptus Avenue with two lanes for traffic and 20 feet of paving. Existing Edison Avenue borders the Specific Plan to the north and is partially improved with two lanes for traffic and 20 feet of paving. Existing Eucalyptus Avenue bisects the Specific Plan area and is partially improved with two lanes for traffic and 20 feet of paving.

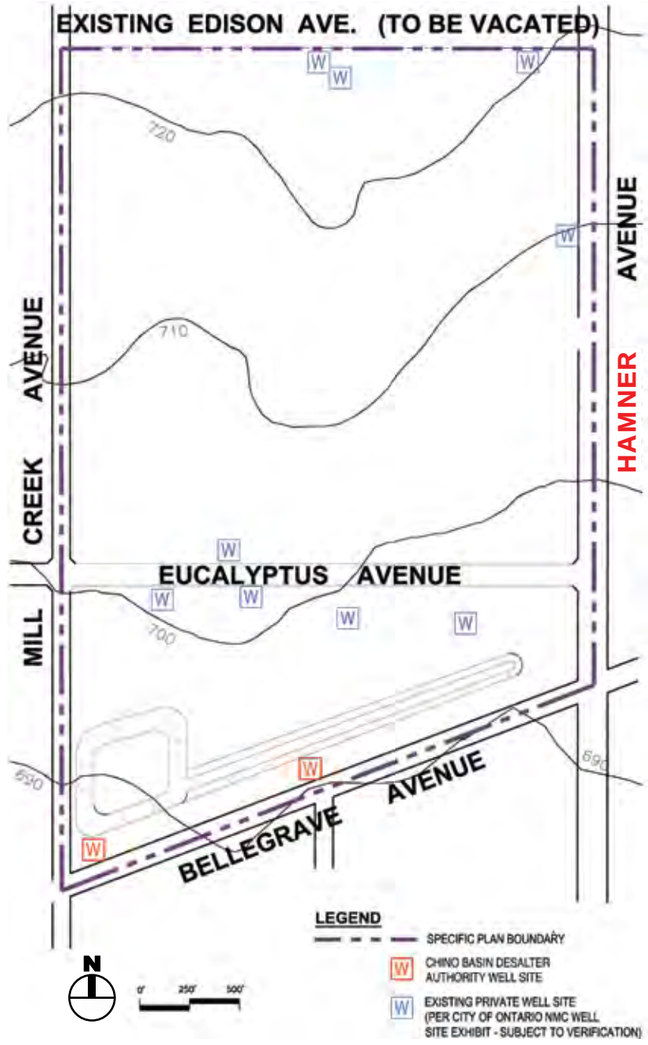


Exhibit 7
Existing Site Topography and Well Locations

3.7 EXISTING INFRASTRUCTURE / UTILITIES / PUBLIC SERVICES

3.7.1 Water

The Specific Plan area is located within the 925' Zone. The City of Ontario does not have water facilities in the vicinity of the project. The nearest City of Ontario water mains are in Riverside Drive, approximately 1.5 miles north of the Specific Plan area. These existing water mains have not been sized to serve development in the 925' Zone. On site residential use on the site are served by private wells. Existing well locations within the Specific Plan area are illustrated on Exhibit 7, "Existing Site Topography and Well Locations." A well use/destruction plan and schedule for all existing private or agricultural wells shall be submitted prior to issuance of permits for any construction activity. If a private well is actively used for water supply, the developer shall submit a plan to abandon the well and connect residential users to the City's domestic water system and agricultural users to the City's recycled water system when available. Well destruction requires permitting from the County Health Department. A copy of the permit and Well Completion Report DWR form 188 shall be provided to the City's Development Engineering Department and the Utilities Engineering Department prior to issuance of grading and/or building permits. If the developer proposes temporary use of an existing agricultural well for purposes other than agriculture, such as grading or dust control during project construction, the developer shall make a formal request to the City of Ontario for such use prior to issuance of permits for the construction activity. Upon approval, the developer shall enter into an agreement with the City of Ontario and pay any applicable fees as set forth by the agreement.

An existing 16" high-pressure water main is located along the east side of ~~Milliken~~ Hamner Avenue, adjacent to the Specific Plan area, in the County of Riverside, and is owned by Jurupa Community Services District, (JCSD). JCSD also owns a 30" water main in Bellegrave Avenue east of ~~Milliken~~ Hamner Avenue and a 30" water main in Hamner Avenue south of Bellegrave Avenue which provides water to the existing residential areas on the south side of Bellegrave Avenue.

3.7.2 Sewer

The City of Ontario does not have sewer facilities in the vicinity of the Specific Plan area. Existing on site residences utilize private septic systems. Prior to grading operations, existing septic tanks and subsurface disposal fields will need to be abandoned in accordance with Department of Health Services requirements. An existing 42" Santa Ana Regional Interceptor (SARI) sewer main extends southerly in Hamner Avenue south of Bellegrave Avenue. The SARI line is primarily available for industrial wastewater, which is conveyed to Orange County for treatment and disposal. JCSD is currently utilizing the SARI line for the disposal of residential wastewater, and has excess capacity for this purpose.

3.7.3 Drainage

The County Line Channel is located within Bellegrave Avenue. The channel is a City of Ontario Master Plan facility intended to carry urban runoff from those properties tributary to the north, to the Cucamonga Creek Channel. With the exception of the County Line Channel, the existing storm drain system throughout the Specific Plan area, is generally unimproved and consists primarily of open earthen swales along area roadways and the earthen drainage interceptor ditch paralleling the southerly boundary of the Specific Plan area which outlets into the existing drainage basin located at the southwest corner of the site. The drainage basin outlets into an existing Riverside County storm drain line in Mill Creek Avenue, formerly known as Cleveland Avenue. The on site basin and the connection to the Riverside County storm drain line are interim improvements. Upon development of the Specific Plan area the basin will be eliminated and the storm flows from the Specific Plan area will be tributary to the County Line Channel.

3.7.4 Recycled Water

The Specific Plan area is located within the 930 Zone. The City of Ontario does not have recycled water facilities in the vicinity of the project. As a part of the development of the Specific Plan area, the construction of new recycled water system facilities will be required by the developer consistent with the City's approved Recycled Water Master Plan.

3.7.5 Electricity

The Esperanza Specific Plan is located within the service territory of Southern California Edison Company.

3.7.6 Natural Gas

The Southern California Gas Company provides natural gas service within the Specific Plan area. Facilities in this area include an existing 6-inch main on ~~Milliken~~ Hamner Avenue; an existing 2-inch main on Eucalyptus Avenue; and an existing 2inch main on Cleveland Avenue (future Mill Creek Avenue).

3.7.7 Communication Systems

Verizon provides telephone service within the Specific Plan area.

3.7.8 Solid Waste

The City of Ontario Public Works Agency currently, by request, provides solid waste collection and disposal to the ~~NMC~~ Ontario Ranch.

3.8 HYDROLOGY

Since most of the Specific Plan area has been in agricultural use, only a limited portion of the Specific Plan area is now covered with impervious surfaces. Normal rainfall to the area is able to percolate through on-site soils and does not result in high volumes of surface runoff as is typically associated with urban use. During periods of heavy rainfall, when ground surfaces are saturated, surface runoff is collected in the existing storm drains, culverts, and retention basins located within the Specific Plan area.

With the exception of major regional flood control channels such as the Cucamonga Creek Channel, intended primarily to carry urban runoff, the existing storm drain system throughout the Specific Plan area is generally unimproved and consists primarily of open earthen swales along area roadways or curbed roadway surfaces.

Ground waters within the ~~NMC~~ Ontario Ranch; as a whole, contain high concentrations of salt, attributable to historic agricultural activities such as dairy farming. The high organic content of on-site soils has contributed incrementally to the degradation of surface and groundwater quality. Removal of the organic materials, which constitute by-products of those dairy operations, and compliance with National Pollution Discharge Elimination System (NPDES) and other storm water permit requirements, will beneficially impact regional water quality.

3.9 GEOLOGY AND SOILS

The City of Ontario ~~NMC~~ Ontario Ranch General Plan EIR identifies the Specific Plan area as underlain by Pleistocene age (older than 12,000 years) and Holocene age (less than 12,000 years old) alluvial deposits. The youngest surficial deposit is eolian sands (Qhs), comprising wind-blown sands having fine- to medium-sized grains.

These loose sands form sheets and low-dune deposits that have been stabilized by vegetation. These deposits are exposed in the eastern portion of the ~~NMC~~ Ontario Ranch area and extend westward to an area defined generally by a diagonal line extending from Harrison Avenue, within Riverside County, on the south to Vineyard Avenue on the north.

It is expected that most of these materials will be uncemented and subject to consolidation when saturated under structural loads. Erosion potential is considered high. Foundation and backfill suitability should be satisfactory with proper over-excavation, mixing with a finer-grained binder material, and compaction.

The Specific Plan area contains delhi series soils, as mapped by the United States Department of Agriculture, Soil Conservation Service in 1971 and 1980. Delhi series soils have been used for agriculture, primarily for grapes and citrus, since the 1800's. As part of the EIR prepared for the Esperanza Specific Plan additional geologic and soils information for the Specific Plan area will be provided.

3.10 SEISMICITY

The City of Ontario ~~NMC~~ Ontario Ranch General Plan EIR identified numerous earthquake faults within a 50-mile radius of the Specific Plan area. Major mapped faults include, but are not limited to, the Chino, Whittier and North Elsinore, and Cucamonga Faults. For the "maximum probable earthquake" (MPE), defined as the 100-year event normally considered in the design of noncritical structures, the values range from about 0.13 to 0.20 g (i.e., the unit force of gravity). In the design of certain critical or important facilities such as hospitals and dams, the "maximum credible earthquake" (MCE) event is considered. For the three faults, the MCE should yield an estimated peak horizontal acceleration in the range of 0.33 to 0.52 g.

A zone of concentrated, relatively low-magnitude seismicity extends to the southwest from the San Jacinto fault zone (Rialto-Colton branch) along what is referred to an "inferred fault near Fontana." Where the "inferred fault" (Fontana trend) stops, this zone of micro-seismicity continues in a southwesterly to westerly direction terminating in the Sphere of Influence area. It is expected that the MPE for this fault structure could produce horizontal accelerations in the range of 0.3 to 0.5g. More distant faults are capable of larger earthquakes with a higher probability of occurrence. The San Andreas fault is expected to generate a MCE event every 150 to 200 years, yielding a peak horizontal ground acceleration of approximately 0.21 to 0.26 g in the ~~NMC~~ Ontario Ranch.

In accordance with the "Uniform Building Code" (UBC), the Esperanza Specific Plan area is located within Seismic Zone No. 4. UBC procedures have been designed to ensure that all subsequent development occurs in a safe manner relative to those known hazards. As part of the EIR prepared for the Esperanza Specific Plan, additional seismicity analysis will be prepared.

3.11 VEGETATION

The Specific Plan area has been extensively used for agricultural operations including dairy use. Those areas not in active agricultural production are occupied by rural residential housing. The natural vegetation and soils conditions that once occurred throughout the Specific Plan area have been significantly altered through agricultural uses, leaving little or no native vegetation. As part of the EIR prepared for the Esperanza Specific Plan, additional vegetation analysis will be prepared.

SECTION 4. LAND USE

4.1 INTRODUCTION

The Esperanza Specific Plan offers a variety of residential housing types within a community designed around a system of parks located within easy walking distance from each residential Planning Area. Pedestrian and bicycle connectivity is provided through a system of street separated walkways and on-street bicycle trails linking each residential Planning Area and connecting to parks located within Esperanza.

Residential development, comprised of approximately ~~164.08~~ 174.10 net acres, is designed to address a variety of lifestyles, such as singles, families, executives and "empty nesters." Single family detached housing types will include conventional detached homes on lots varying between 3,900 and 4,900 square feet in size, homes designed in a 2-Pack configuration, alley loaded cottage homes, and two types of courtyard homes. Attached housing will include row townhomes and motorcourt townhomes designed around a common motorcourt.

Parks comprise approximately 9.89 net acres of Esperanza and are distributed throughout the community offering recreational opportunities within close proximity to each residential neighborhood.

The Land Use Plan shown in Exhibit 8, "Land Use Plan" depicts the proposed land uses for Esperanza. The "Land Use Summary," Table 2, provides a tabulation of land uses by acreage and residential density.

4.2 RESIDENTIAL USE

The Esperanza Specific Plan permits the development of up to ~~1,594~~ 1,652 residential dwelling units providing single-family detached homes and single family attached homes. Residential land use areas are contained within 11 distinctive Planning Areas linked by a network of street separated sidewalks and on-street bicycle paths connecting all the Planning Areas to a centrally located park.

4.2.1 Variety of Housing Types

Esperanza provides a mix of housing types to address a variety of lifestyle choices and economic segments. Single family detached and single family attached residential products, with a variety of architectural styles, will be offered within Esperanza. Altogether, a total of ~~1,594~~ 1,652 residential dwelling units will be developed at an overall average density of ~~7.65~~ 7.41 dwelling units per gross acre.

4.2.1.1 Single Family Detached – RD-1 (50' wide lots)

The Esperanza Specific Plan allows for the development of approximately 158 conventional single-family detached dwelling units at an average density of approximately 6.12 dwelling units per net acre. The RD-1 neighborhoods will be designed with access to homes from the local street with an emphasis on architectural orientation toward the street. Garage configurations will include shallow recessed garages, mid or deep recessed garages, split garages, and tandem garages, to highlight the home's architecture and create a more attractive streetscene. RD-1 homes are located within Planning Areas 7 and 9.

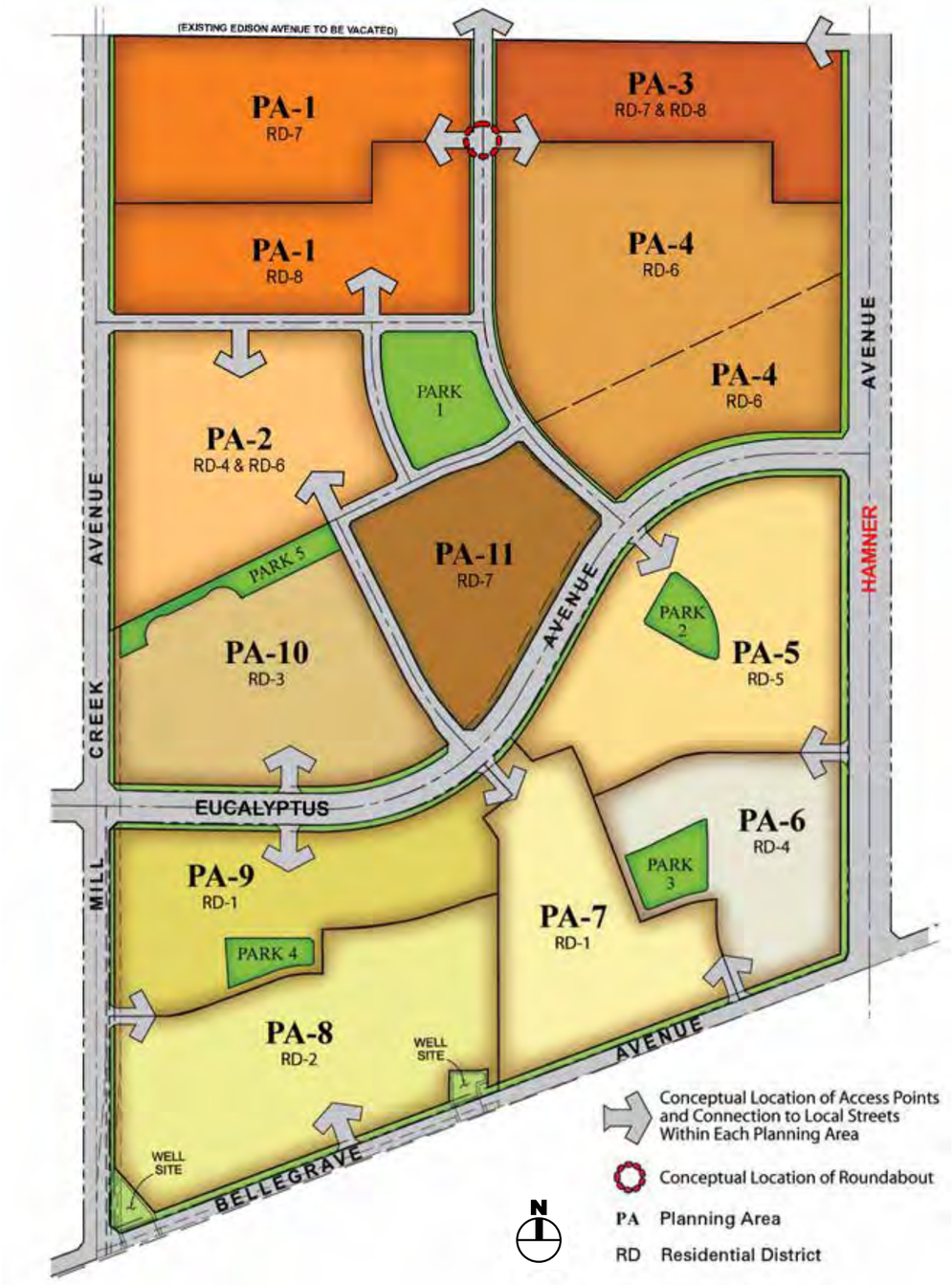


EXHIBIT 8
Land Use Plan

LAND USE	UNITS	GROSS ACRES	UNITS/ GROSS ACRES	NET ACRES	UNITS/ NET ACRES
Residential Uses					
PA-1 (RD-7/ Row Townhomes, RD-8/ Motorcourt Townhomes)	319 DU	29.35 AC	10.87 DU/AC	28.97 AC	11.01 DU/AC
PA-2 (RD-4/ SFD Cottages, RD-6/ 6-Pack Courtyard)	113 DU	22.84 AC	4.95 DU/AC	17.36 AC	6.51 DU/AC
PA-3 (RD-7 & RD-8/ Row Townhomes)	156 DU	11.40 AC	13.68 DU/AC	11.10 AC	14.05 DU/AC
PA-4 (RD-6/ 6-Pack Courtyard, 8-Pack Courtyard, Row Townhomes)	303 DU	27.41 AC	11.05 DU/AC	19.30 AC	15.70 DU/AC
PA-5 (RD-5/ 4-Pack Courtyard)	157 DU	23.78 AC	6.60 DU/AC	17.64 AC	8.90 DU/AC
PA-6 (RD-4/ SFD Cottages)	78 DU	13.64 AC	5.72 DU/AC	10.00 AC	7.80 DU/AC
PA-7 (RD-1/ SFD 50' wide lots)	76 DU	14.36 AC	5.29 DU/AC	12.56 AC	6.05 DU/AC
PA-8 (RD-2/ SFD 55' wide lots)	107 DU	23.72 AC	4.51 DU/AC	19.26 AC	5.56 DU/AC
PA-9 (RD-1/ SFD 50' x 80')	82 DU	17.75 AC	4.62 DU/AC	13.27 AC	6.18 DU/AC
PA-10 (RD-3/ SFD 2-Pack)	100 DU	19.92 AC	5.02 DU/AC	14.62 AC	6.84 DU/AC
PA-11 (RD-7/ Row Townhomes)	161 DU	13.10 AC	12.29 DU/AC	10.02 AC	16.07 DU/AC
Park 1		5.75*AC			
Residential land Use Total	**1,652 DU**	**223.00 AC**	**7.41 DU/AC**	**174.10 AC**	**9.49 DU/AC**
Parks				9.89 AC	
Neighborhood Edge Buffers				6.62 AC	
Roadways				28.25 AC	
SCE Easements and Well Sites				4.14 AC	
PROJECT TOTAL	**1,652 DU**	**223.00 AC**		**223.00 AC**	

NOTES:

1. *Gross residential acres do not include the 13.10 gross acres for a school site.*
2. *Net residential acres are gross acres less parks, neighborhood edge buffers, roadways, and easements and net area for school site.*

** PA-2 includes 3.45 AC of Park 1*

TABLE 2
Land Use Summary

4.2.1.2 Single Family Detached – RD-2 (55' wide lots)

The Esperanza Specific Plan allows for the development of approximately 107 conventional single-family dwelling units at a density of approximately 5.56 dwelling units per net acre. The RD-2 neighborhood is designed with access from the local street with garage configurations which include recessed garages, mid or deep recessed garages, split garages and tandem garages to present an architecture forward streetscene. RD-2 homes are planned within Planning Area 8.

4.2.1.3 Single Family Detached – RD-3 (2-Pack)

Approximately 100 residential 2-Pack dwelling units will be developed on approximately 14.62 acres at a density of 6.84 dwelling units per net acre with a minimum lot size of 3,400 square feet. By configuring the units in a 2 Pack design, a larger usable sideyard area is provided for each unit and garages can be either located to the rear of the lot or set back from the front of the homes at a distance, which preserves the streetscene for home frontage. Residential housing in a 2 Pack design is planned for Planning Area 10.

4.2.1.4 Single Family Detached – RD-4 (Cottage Homes)

Esperanza will allow for approximately 243 single family detached cottage home residential dwelling units developed on approximately 30.81 acres on lots of approximately 2,400 minimum square feet at an average density of 7.89 dwelling units per net acre. This alley loaded residential development will be designed to embrace the street and maintain an architectural orientation for the street. Cottage single family detached residential dwelling units are proposed for Planning Areas 2 and 6 within Esperanza.

4.2.1.5 Single Family Detached or Attached – RD-5 and RD-6 (Courtyard & Row-Townhomes)

Two types of single family detached housing in a courtyard design are proposed for Esperanza. A total of 157 dwelling units will be developed as RD-5 residential housing within a module comprised of 4 residential units surrounding a common motorcourt. RD-5 residential products are proposed for 17.64 acres of Esperanza within Planning Area 5 at a density of 8.90 dwelling units per net acre. A total of 303 dwelling units will be developed as RD-6 residential housing within a module comprised of 6 residential units surrounding a common motorcourt or row townhomes. RD-6 residential products are proposed for 19.92 acres of Esperanza within Planning Areas 2 and 4 at a density of 16.72 dwelling units per net acre. Garages are accessed from the motorcourt or alley, which allows for the fronts of garages to be turned away from the street or set back far enough from the street that the residential architecture is the predominant streetscene feature.

4.2.1.6 Single Family Attached – RD-7 (Row Townhomes)

RD-7 residential product proposed for Esperanza consists of 319 units of attached row and motorcourt townhomes within Planning Area 1, 156 units of attached row townhomes to be developed on approximately 11.1 acres at density of 14.05 dwelling units per net acre within Planning Area 3 and ~~46~~ 161 row townhomes at approximately 16.07 dwelling units per net acre in PA 11. RD-7 residential product is designed with alley access maintaining an architectural streetscene.

4.2.1.7 Single Family Attached – RD-8 (Motorcourt Townhomes)

RD-8 residential product proposed for Esperanza consists of 238 units of attached townhomes designed around a common motorcourt. RD-8 residential product will be developed on approximately 19.42 acres at a density of 13.76 dwelling units per net acre within Planning Area 3.

4.2.2 Neighborhood Design

The community plan for Esperanza offers a neighborhood design reminiscent of older traditional Southern California neighborhoods. The design features described below are intended to create a strong identity and sense of neighborhood for the residents of Esperanza.

A "modified grid" style of street design in residential neighborhoods with sidewalks separated by landscaped parkways provide visual interest, slow traffic on each street by providing alternate routes, and enhance a pedestrian orientation for neighborhoods. Sidewalks separated from streets by landscaped parkways promote pedestrian mobility and encourage opportunities for neighbors to meet and greet each other along the street.

A human scale of architecture within Esperanza will enhance the pedestrian friendly character of the community. Architectural features such as front porches, railings, enhanced entries, a mix of materials and textures, and authentic detailing on elements such as windows and doors, columns, balconies, and lighting combine to create a human scale of residential architecture.

Innovative garage designs will be utilized in order to de-emphasize the visual impact of garage doors on the streetscene. Such design techniques will include shallow, mid, or deep recessed garages , split-garages, turn-in garages, tandem garages, garages located on rear alleys, and garages located around a common courtyard in order to de-emphasize their view from the street.

4.3 Parks

Parks are provided throughout the Esperanza Specific Plan area within easy walking distance to any residential neighborhood. Exhibit 9, "Master Plan of Parks," illustrates the types and locations of parks planned for Esperanza.

4.3.1 Neighborhood Park

An approximately 5.39 net acre centrally located neighborhood park will be developed as part of Esperanza. The neighborhood park will include picnic areas, tot lots, trails, and open play fields.

4.3.2 Pocket Parks

An approximately .84 net acre park will be provided for recreational use within Planning Area 9. An approximately 1.29 net acre park will be located within Planning Area 6, a one acre park will be provided within Planning Area 5, and an approximately 1.39 net acre linear park will be provided in Planning Area 10. Private open space areas of approximately ½ acre in size will be provided as part of the development of Planning Areas 1, 3 and 4. The exact size and locations of these private open space areas will be determined as part of the final site design for these neighborhoods.

4.4 School Site

A 10.02 net acre site was originally reserved within the Esperanza Specific Plan for the development of an elementary school to serve the K-5 school age needs of the Ontario community. In the event the school site in Esperanza is not purchased by the Mountain View School District the 10.02 acre site may revert to a residential zone for the development of an additional ~~46~~ 161 row townhome residential dwelling units pursuant to the provisions established in Section 7, "Implementation."

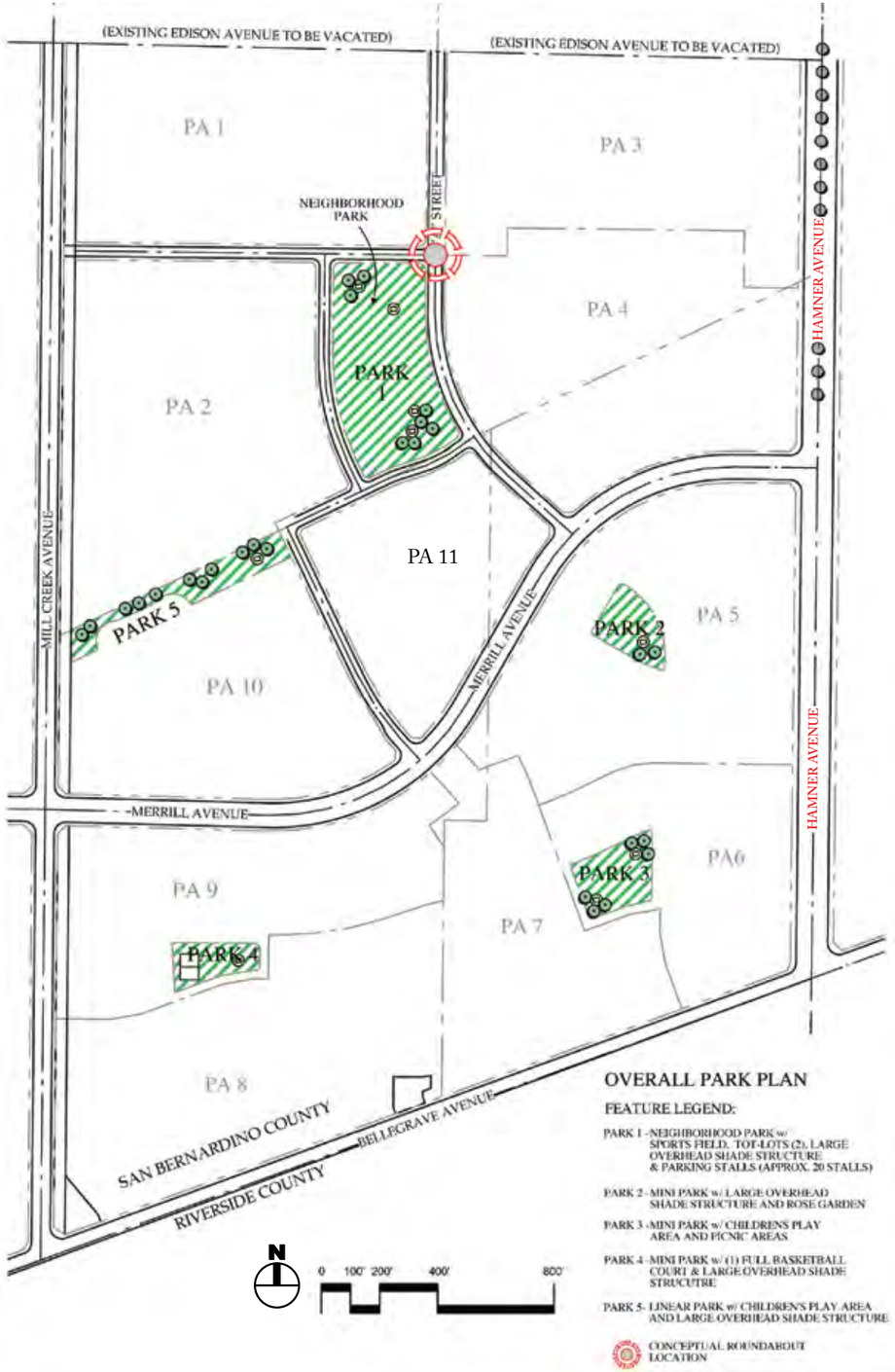


Exhibit 9
Master Plan of Parks

Section 5. Infrastructure and Services

The infrastructure, utilities, and public services to be provided as part of the development of the Esperanza Specific Plan are discussed in this section.

5.1 Circulation

The circulation plan for Esperanza reinforces the objectives of providing a traditional neighborhood design. In addition to providing safe and efficient movement of vehicular traffic through the project, the Circulation Plan also provides a safe environment for pedestrian movement and bicycle traffic reducing the reliance on the automobile as a means of travel. In addition, transit stops and bus turnouts will be provided as required by Omnitrans, along the Master Plan streets, which are a part of the Esperanza community. The "Master Circulation Plan," Exhibit 10 establishes the hierarchy and general location of roadways within Esperanza.

The minimum design speeds to be used for centerline curve radii, super elevation, corner sight distance; vertical and horizontal alignment and sight distance, etc. are listed below:

Hamner Avenue	50 m.p.h.
Eucalyptus Avenue	40 m.p.h.
Bellegrave Avenue	45 m.p.h.
Mill Creek Avenue	40 m.p.h.
"A" Street	45 m.p.h.

5.1.1 Master Planned Roadways

The Esperanza Specific Plan is bounded on the east, south, west, and is bisected by four City of Ontario Master Plan roadways, which will provide access to and from the Specific Plan area. Additional rights of way may be needed at critical intersections to accommodate additional left and right turn lanes pursuant to the recommendations of the traffic study prepared for the Ontario Ranch. Hamner Avenue bounds the Specific Plan area to the east and is the county line between San Bernardino and Riverside Counties; Bellegrave Avenue bounds the Specific Plan area to the south and is also the county line between San Bernardino and Riverside Counties; Mill Creek Avenue bounds the Specific Plan area to the west, and Eucalyptus Avenue bisects the Specific Plan area in an east/west direction.

Where the Specific Plan limits extend to the centerline of any roadway, the development project shall construct the full half-width street improvement, plus a 14-foot travel lane with a 5-foot paved shoulder beyond the centerline. If the roadway includes a raised median, the project shall construct the full median, and the additional 14-foot travel lane with a 5-foot paved shoulder. The 14-foot travel lane is a minimum that may be increased as necessary pursuant to the requirements of the City Engineer.

5.1.1.1 Hamner Avenue

Hamner Avenue abuts the Specific Plan area on the east. Hamner Avenue is a designated Divided Arterial Parkway 1-1 roadway with a total right-of-way of 148 feet. Hamner Avenue will carry regional traffic to and from Esperanza and will provide access to the specific plan area along the eastern boundary of the specific plan area. Exhibit 11, "Hamner Avenue" illustrates the improvements for Hamner Avenue. The developer of the Specific Plan area adjacent to Hamner Avenue will be responsible for all on site improvements for the westerly half of Hamner Avenue as determined by the City Engineer and pursuant to the mitigation measures identified in the EIR and the Conditions of Approval established on the approved tentative maps for the project. Bus turnouts will be required along Hamner Avenue to the satisfaction of the City Engineering Department and Omnitrans. Parking will be prohibited on Hamner Avenue.

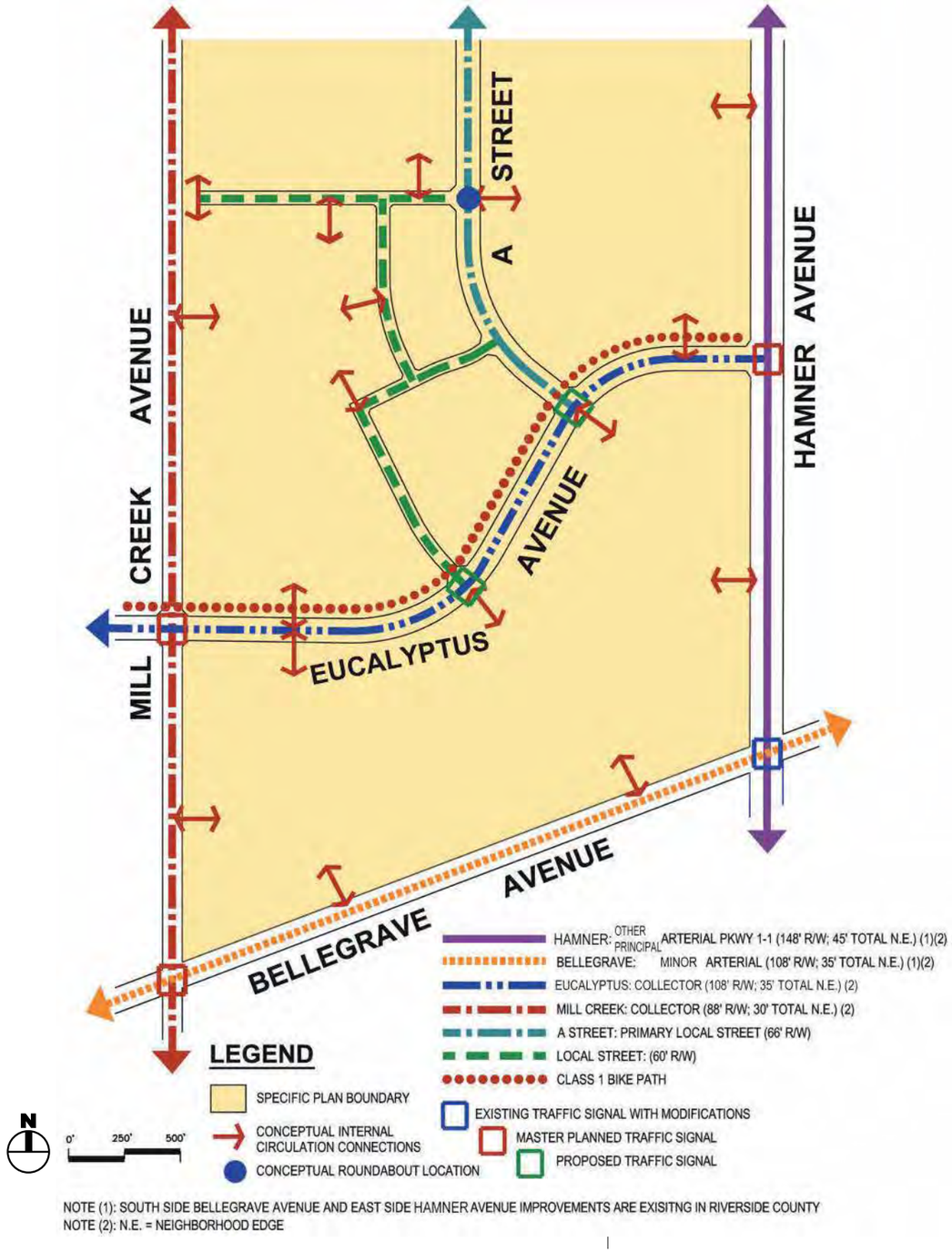


Exhibit 10
Master Circulation Plan

5.1.1.2 Bellegrave Avenue

Bellegrave Avenue, a Standard Arterial roadway, abuts the Specific Plan area on the south and carries regional east/west traffic to and from Esperanza. Improvements to the south side of Bellegrave Avenue currently exist. Exhibit 12, "Bellegrave Avenue" illustrates the half-street improvements for Bellegrave Avenue. The developer will be responsible for all on site improvements for the northerly half of Bellegrave Avenue. Phasing of the improvements will be determined by the City Engineer and pursuant to the mitigation measures identified in the EIR and the Conditions of Approval established on the approved tentative maps for the project. Bus turnouts will be required along Bellegrave Avenue to the satisfaction of the City and Omnitrans.

5.1.1.3 Mill Creek Avenue

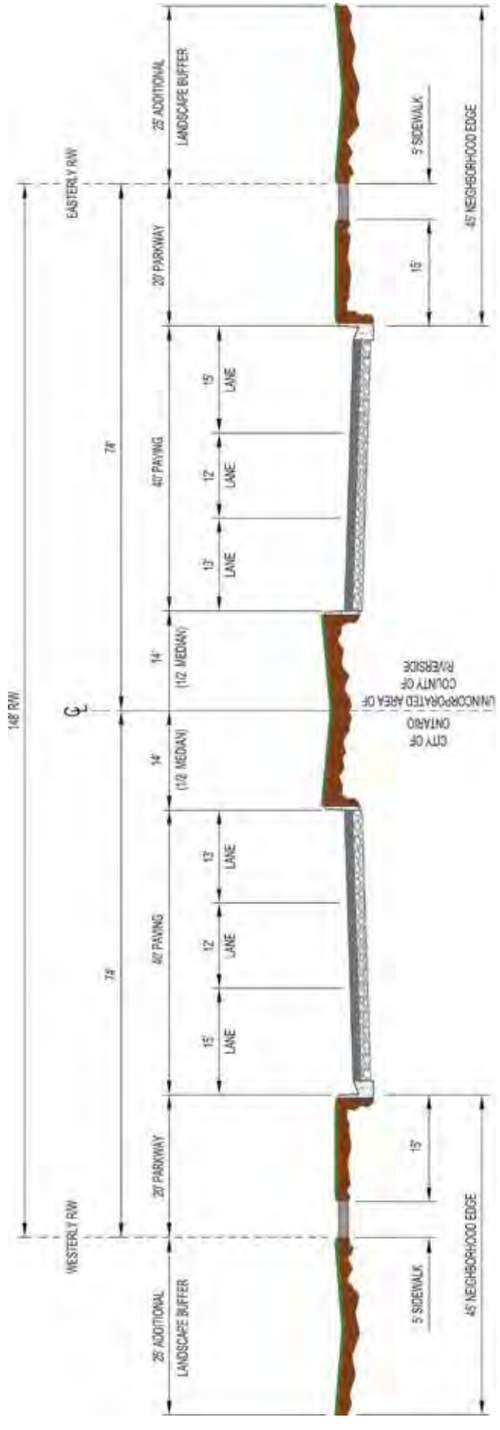
Mill Creek Avenue abuts the Specific Plan area on the west. Mill Creek Avenue is a designated Collector Street with an ultimate right-ofway of 88 feet, with 64 feet of paved area and a 12-foot parkway on each side of the street, to include a 5-foot sidewalk separated from the street by a 7-foot landscaped area. In addition a landscaped buffer of 18 feet in width will be provided between the back of the sidewalk and the residential community wall. The rightof-way improvements required to Mill Creek Avenue are illustrated in Exhibit 13, "Mill Creek Avenue." The developer(s) will be responsible for the off site improvements as determined by the City Engineer and pursuant to the mitigation measures identified in the EIR and the Conditions of Approval established on the approved tentative maps for the project. Bus turnouts will be required along Mill Creek Avenue to the satisfaction of the City and Omnitrans. Parking will be prohibited on Mill Creek Avenue. Exhibit 13, "Mill Creek Avenue" illustrates these improvements.

5.1.1.4 Eucalyptus Avenue

Eucalyptus Avenue bisects the Specific Plan area and is designated as a Standard Arterial roadway. Exhibit 14, "Eucalyptus Avenue" illustrates the Eucalyptus Avenue full-street improvements. The developer will be responsible for all improvements to Eucalyptus Avenue. The phasing of these improvements will be determined by the City Engineer and pursuant to the mitigation measures identified in the EIR and the Conditions of Approval established on the tentative maps for the project. Parking will be prohibited on Eucalyptus Avenue.

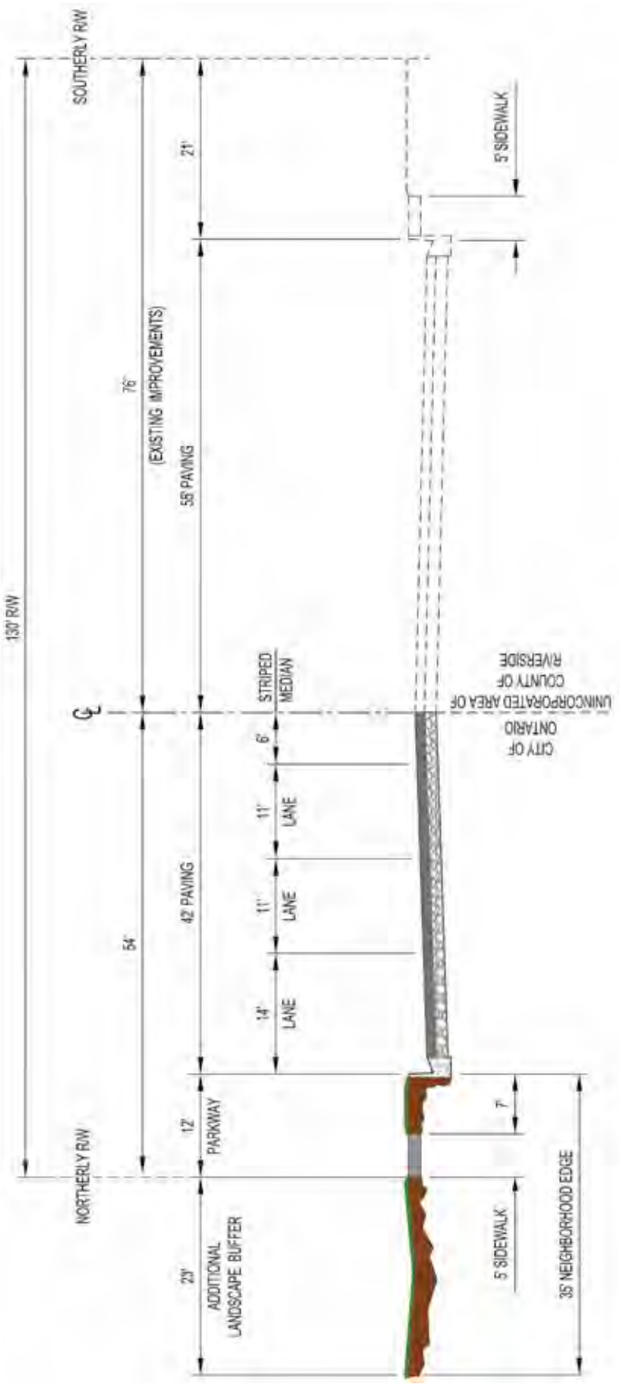
5.1.2 Local Streets and Alleys

Within the Specific Plan area neighborhood streets of varying design will provide access and circulation through the community. Many of the neighborhoods will be served by private alleys, which are located in the rear of residences, in order to maintain a traditional, "architecture forward" streetscape for the community. Public and private local streets within residential areas are designed to distribute vehicular traffic from the public arterial and collector streets adjacent to the Specific Plan area into and through residential neighborhoods. Local streets and private alleys proposed for Esperanza are illustrated on Exhibit 15, "A Street" – Primary Local Street" Exhibit 16, "Local Streets and Cul-De-Sac Sections;" Exhibit 17, "Private Neighborhood Streets;" and Exhibit 18, "Private Alley and Drive Aisle Sections;" and discussed below.



Other Principal Arterial Parkway 1-1
Hamner Avenue
(On Street Parking is Prohibited)

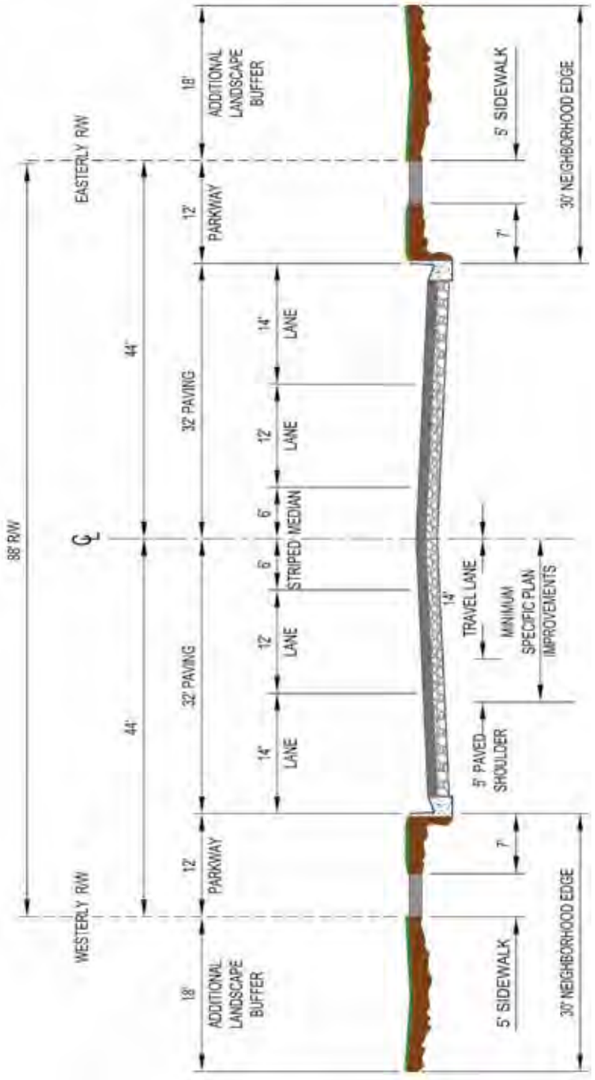
Exhibit 11
Hamner Avenue



Minor Arterial
Bellegrave Avenue
(On Street Parking is Prohibited)

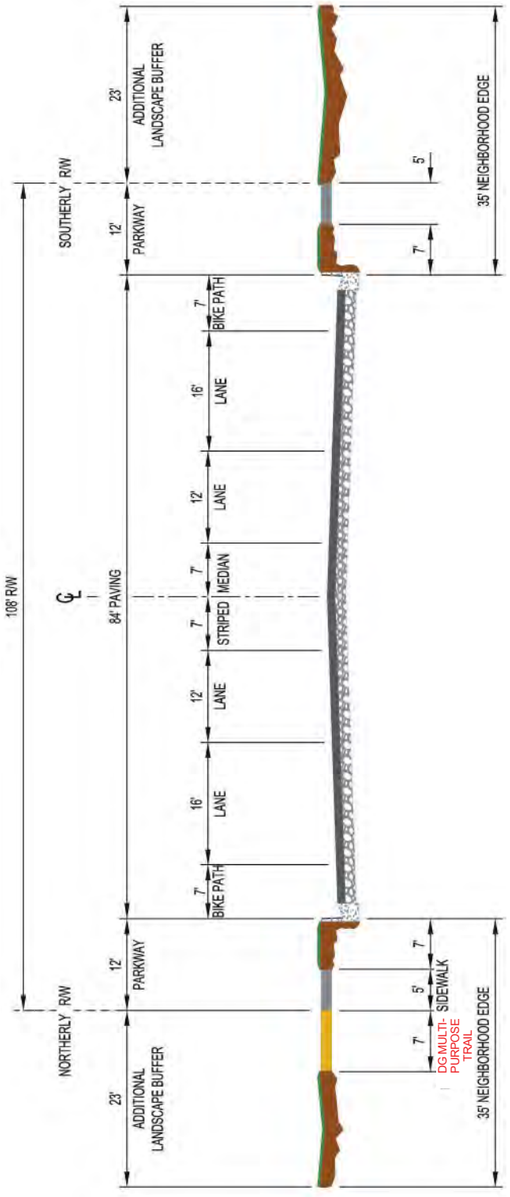
Note: Final required level of improvement of Bellegrave Avenue within the City of Ontario to be determined by City of Ontario and Riverside County.

Exhibit 12
Bellegrave Avenue



Collector
Mill Creek Avenue
(On Street Parking is Prohibited)

Exhibit 13
Mill Creek Avenue



Collector
Eucalyptus Avenue
(On Street Parking is Prohibited)

Exhibit 14
Eucalyptus Avenue

5.1.2.1 "A" Street

"A Street" bisects the Specific Plan area in a north/south direction and is designated as a Primary Local Street. "A Street" will provide internal access and connectivity between residential areas and the Neighborhood Park. Exhibit 15, "A Street" – Primary Local Street" illustrates the improvements planned for "A Street."

5.1.2.2 Local Neighborhood Streets and Cul-De-Sac Streets

A network of local public neighborhood streets and cul-de-sac streets will provide internal circulation throughout Esperanza for residents. Exhibit 16, "Local Streets and Cul-de-sac Sections" illustrates these street concepts.

5.1.2.3 Private Neighborhood Streets

Private neighborhood streets will provide internal circulation within single family attached and single family courtyard product areas. Water, recycled water, and sewer utilities may be designated as "public utilities" if located within public or private streets. All public utilities within private streets shall be designed per City standards and contained within acceptable easements. The CC&Rs for the project shall contain language requiring all work proposed by the HOA within such easements to be plan checked and inspected by the City, including applicable fees. Generally, utilities will not be accepted as public within alleys, parking areas or driveways. The extent to which said utilities will be accepted as public utilities shall be at the full discretion of the City during final design review. Private Neighborhood Streets planned for Esperanza are illustrated in Exhibit 17, "Private Neighborhood Streets."

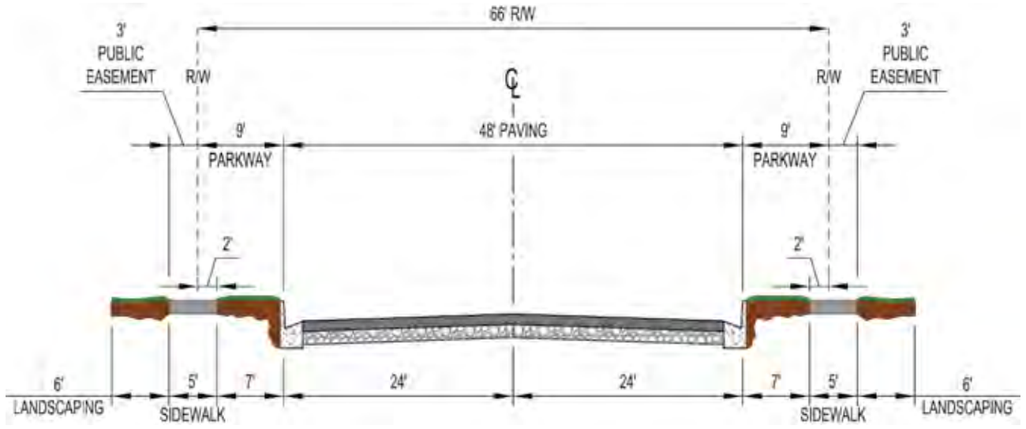
5.1.2.4 Private Alleys

Private alleys within the residential development will have a minimum of 20 feet of paved area with 5 feet of landscaping on each side. In areas where fire access is required, the minimum paved area will be 24 feet with 3 feet of landscaping on each side. Alleys with "dead end" conditions will be a maximum length of 150 feet. Parking is prohibited along alleys. Tapers will be incorporated at the point where private alleys intersect with public streets. The taper width will be determined per the approval of City of Ontario Fire Department, Engineering Department and Planning Department.

5.1.2.5 Private Drive Aisles

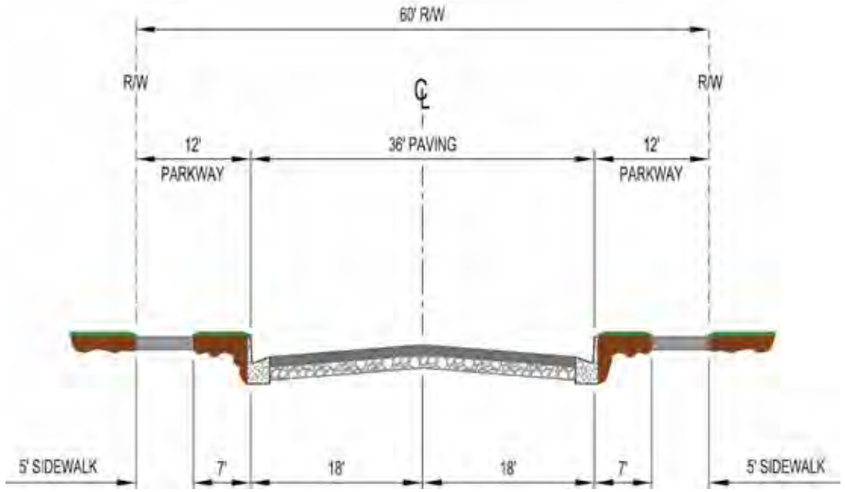
Private drive aisles are planned with a total paved width of 24 feet and an 18 foot deep parking area on each side.

Water, recycled water, and sewer utilities may be designated as "public utilities" if located within public or private streets. All public utilities within private streets shall be designed per City standards and contained within acceptable easements. The CC&Rs for the project shall contain language requiring all work proposed by the HOA within such easements to be plan checked and inspected by the City, including applicable fees. Generally, utilities will not be accepted as public within alleys, parking areas or driveways. The extent to which said utilities will be accepted as public utilities shall be at the full discretion of the City during final design review. Private Alleys and Private Drive Aisles planned for Esperanza are illustrated in Exhibit 18, "Private Alley and Drive Aisle Sections."



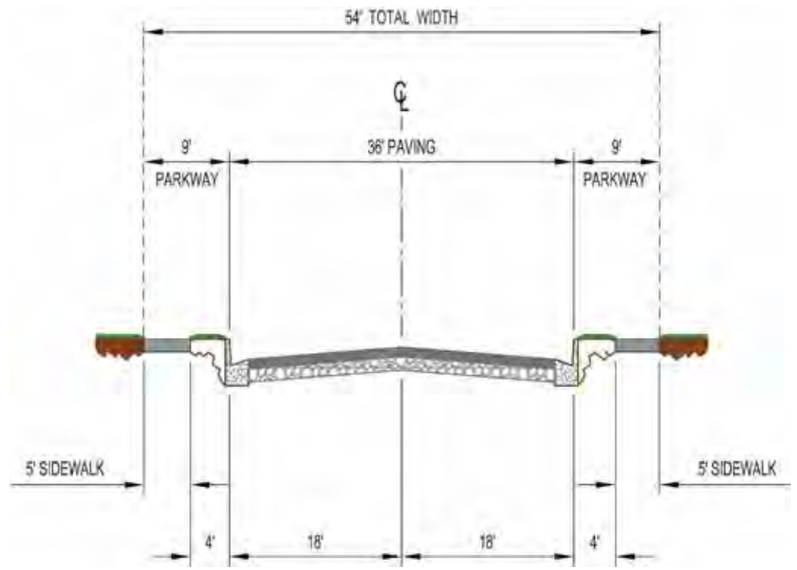
"A" Street
(Parking Permitted)

Exhibit 15
"A" Street - Primary Local Street



Note: Parking may be restricted within 100-150 feet of ~~Merrill~~ Eucalyptus Avenue, 'A' Street, Mill Creek Avenue and Hamner Avenue Intersections.

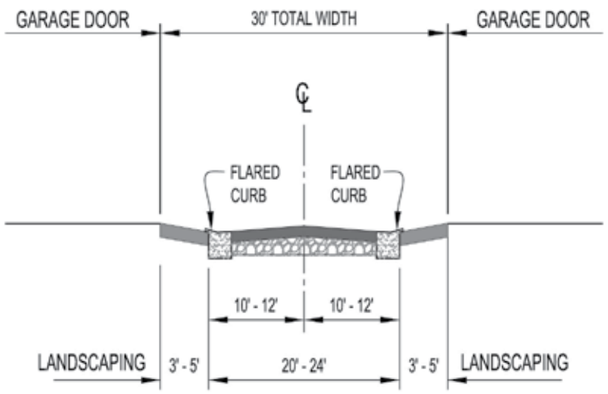
Exhibit 16
Local Street and Cul-De-Sac Sections



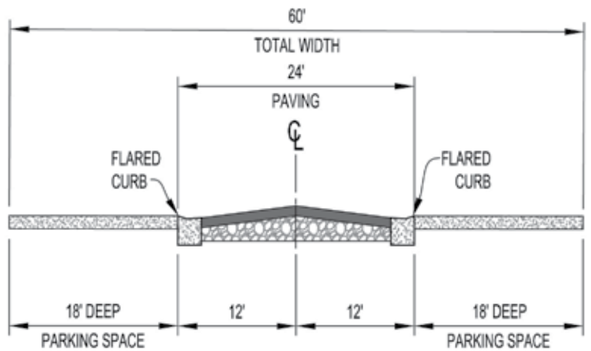
Private Neighborhood Streets
(Located in Planning Areas 1, 3, 4, 5 & 11)

Note: All public utilities within private streets shall be designed per City standards and contained within acceptable easements. The extent to which said utilities will be accepted as public utilities shall be determined at the full discretion of the City during final design reviews.

Exhibit 17
Private Neighborhood Streets



Private Alley
(On Street Parking is Prohibited)



Private Drive Aisle

Notes:

1. *Final Alley Design is subject to approval by the City Engineer, Fire Department and Planning Department.*
2. *All public utilities within private streets shall be designed per City standards and contained within acceptable easements. The extent to which said utilities will be accepted as public utilities shall be determined at the full discretion of the City during final design review.*

Exhibit 18
Private Alley and Drive Aisle Sections

5.1.3 Traffic Calming

The Esperanza Specific Plan includes design features within residential neighborhoods to encourage drivers to proceed slowly and reduce traffic noise on streets contributing to safe and livable neighborhoods in which to walk, bike, and drive.

Traffic calming within the Esperanza Specific Plan is designed to address the following goals:

- Reduction in traffic speeds.
- Reduction in traffic related noise.
- A safe and pedestrian friendly circulation system to encourage walking.

The following design features will be implemented in the roadways within Esperanza.

Local Neighborhood Street Design

Neighborhood streets within Esperanza are designed in a "modified grid" with landscaping on either side within parkways to add interest in the street encouraging drivers to slow their travel speed and observe their surroundings. Incorporating tapered intersections for local streets as illustrated in Exhibit 19, "Neighborhood Street Tapers," may reduce traffic speeds on local residential streets.

Alleys Tapers

Private alleys within Esperanza will consist of 20-24 feet of paved travel area with 3-5 feet of landscaping on each side. Speeds for traffic entering the alleys and cut through traffic can be reduced by incorporating tapers at the entrance to these alleys as illustrated on Exhibit 20, "Alley Tapers."

Landscaping

Landscaping adjacent to streets within the Specific Plan area will combine the use of shade trees, shrubs, and groundcover adjacent to sidewalks to create a more intimate streetscape encouraging drivers to reduce driving speeds. The landscape concept for Esperanza is designed to contribute to a sense of the street system as a pedestrian protected area to promote slower traffic speeds.

Roundabouts

A roundabout will be incorporated into the street design at the intersection of two local streets as illustrated in Exhibit 10, "Master Circulation Plan." The use of a roundabout rather than a conventional all-way stop at this intersection will maintain traffic flow by requiring traffic entering the roundabout to yield to traffic traveling within the roundabout. The lack of a stop sign allows entering traffic to merge with the flow of traffic.

5.1.4 Pedestrian Circulation

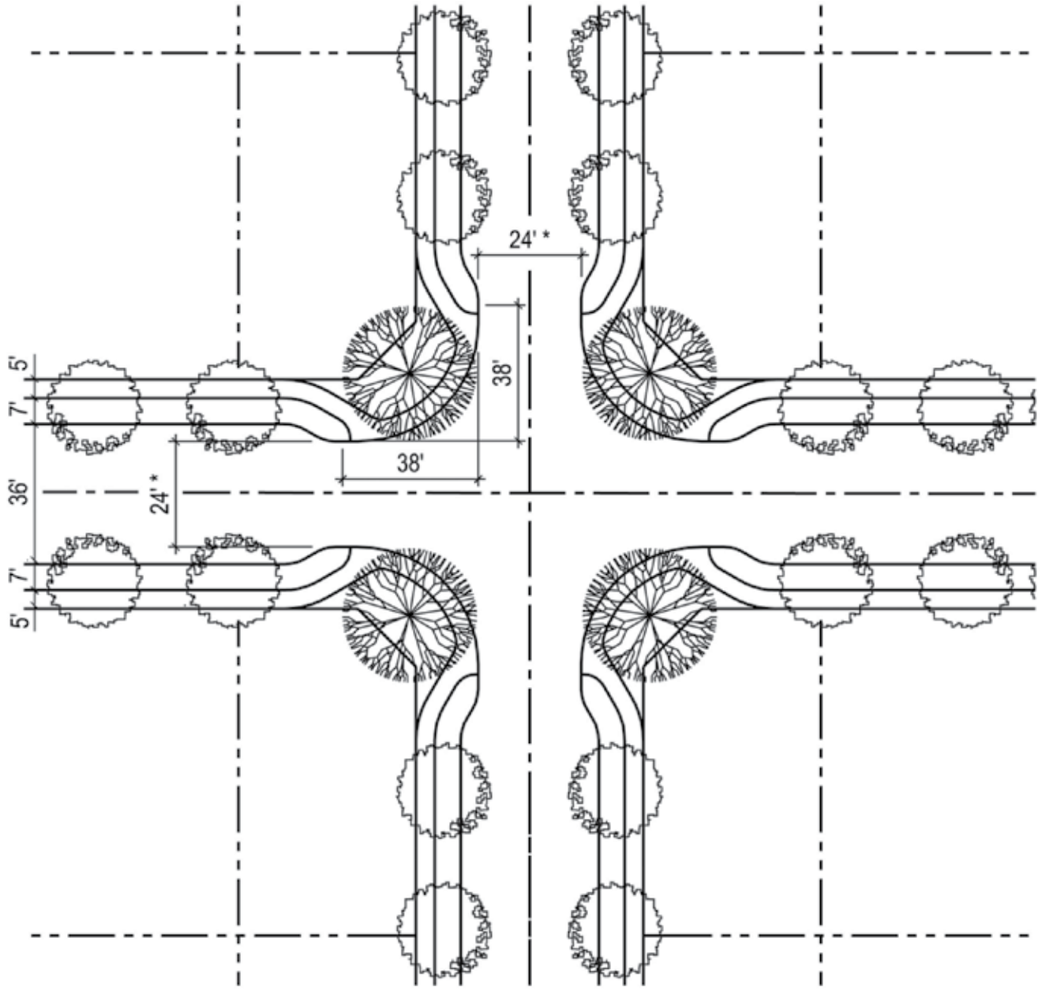
Off-street pedestrian circulation will be available throughout Esperanza by means of the interconnected, paved sidewalk system within the roadway right-of-way, separated from vehicular travel lanes by a landscaped parkway. The Esperanza pedestrian system provides connectivity among residential neighborhoods to the Neighborhood Park and pocket parks within the Specific Plan area.

5.1.5 Bicycle Trails

Bicycle trails are an integral element to creating accessibility and mobility within Esperanza. A Class 1 bike trail will be provided within the parkway on the north side of Eucalyptus Avenue and an on-street bike trail will be provided on both sides of Eucalyptus Avenue connecting to on-street bike trails provided on local residential streets within the Specific Plan to connect all residential neighborhoods to one another, and to the Neighborhood Park located towards the center of the Specific Plan boundary.

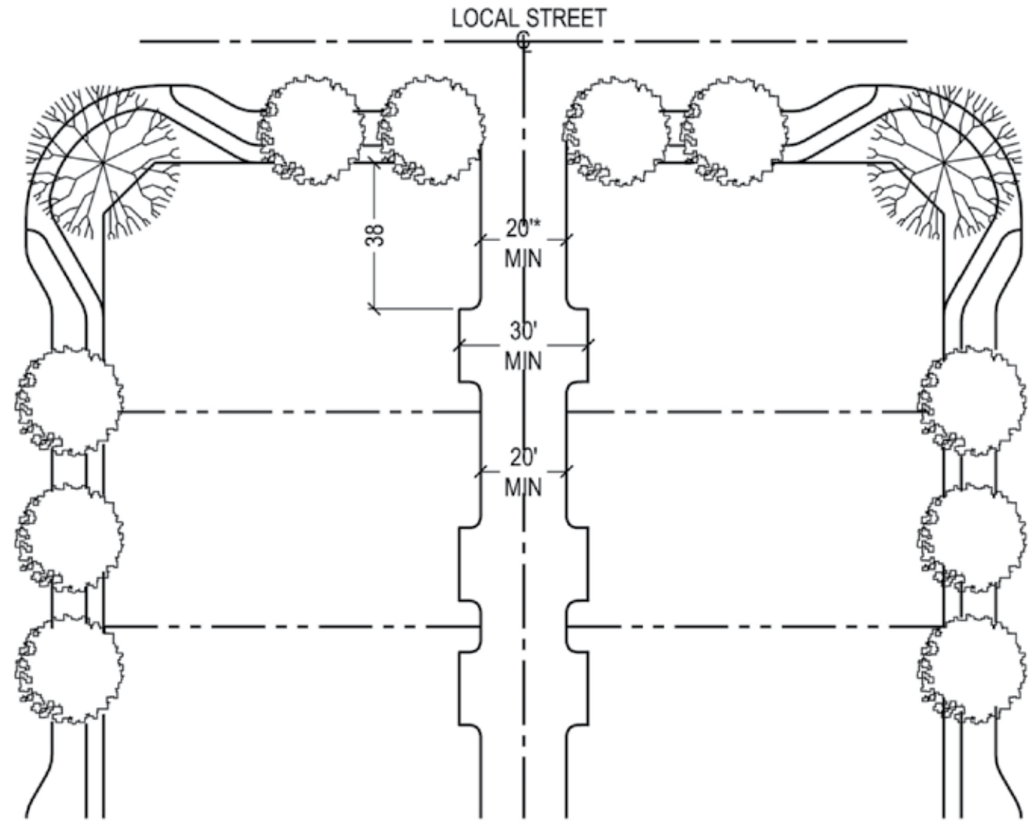
Class II on-street striped bike lanes shall be provided on roadways within the Esperanza Specific Plan area as determined by City Engineer.

The Master Plan for pedestrian and bicycle circulation for Esperanza is illustrated on Exhibit 21, "Pedestrian and Bicycle Circulation Plan."



* (TAPER WIDTHS SUBJECT TO PLANNING, ENGINEERING, & FIRE DEPARTMENT APPROVAL)

Exhibit 19
Neighborhood Street Tapers



(*) TAPER WIDTHS ARE SUBJECT TO PLANNING, ENGINEERING, & FIRE DEPARTMENT APPROVAL

Exhibit 20
Alley Tapers

Exhibit 21
Pedestrian and Bicycle Circulation Plan

5.2 Domestic and Recycled Water Master Plan

Domestic water will be provided by the City of Ontario. The Ontario Ranch Water Master Plan Phase 1 (Phases 1a–1d) identifies new water facilities to include one reservoir, three groundwater wells and potable and reclaimed transmission water lines. Construction of the on site and off site Master Plan water service improvements shall be the responsibility of the developer(s) and is required prior to issuance of building permits for Esperanza. Two of the waterlines included in the Phase 1 improvements are a 24 inch water line in Hamner Avenue, adjacent to the site on the east, and a 24-inch water main in Eucalyptus Avenue, which goes through the center of the project.

5.2.1 Domestic Water

The project lies within the 925 Zone. New domestic water mains to be constructed as part of the development of Esperanza will include a 12-inch Master Plan water main in Mill Creek Avenue, from the northerly boundary of the Specific Plan to Eucalyptus Avenue. Within the Specific Plan area, a network of 8-inch and 12' inch water lines will be installed. The On Site water system will include connections to two different transmission mains.

The City is in the process of updating the Water Master Plan. Any changes resulting from the updated Master Plan will be incorporated into the Esperanza Water Master Plan.

There are two groundwater wells located adjacent to Bellegrave Avenue to the north. These wells and water transmission lines in Bellegrave Avenue, are owned and operated by the Chino Basin Desalter Authority (CDA). As part of the development of the Specific Plan area, improvements shall be made, to the satisfaction of the CDA and the City of Ontario, surrounding the two existing well sites located at the north side of the ultimate right of way of Bellegrave Avenue. Improvements shall include, but are not limited to, perimeter fencing, relocation of existing utilities within the ultimate right of way, street landscaping within the right of way fronting the project, and driveway approaches. The Master Plan for domestic water for Esperanza is illustrated on Exhibit 22, "Conceptual Domestic Water Master Plan." The conceptual on site domestic water system is illustrated on Exhibit 23 "On Site Domestic Water Plan."

5.2.2 Recycled Water System

The Inland Empire Utilities Agency (IEUA) will ultimately provide recycled water from IEUA's RP-1 and RP-1 outfall parallel located in Carpenter Avenue via City of Ontario recycled water mains as presented in the Water Master Plan for the Ontario Ranch. The Specific Plan area is located within the 930 Zone. The construction phase source of recycled water to serve the Specific Plan area will be conveyed to the 930 Zone from the 1050 Zone via a Master Plan pressure reducing station located in Archibald Avenue north of Chino Avenue. The master planned recycled water mains to be constructed as part of the development of Esperanza will include the following:

- A 12-inch recycled water line in Mill Creek Avenue from the northerly boundary of the Specific Plan area to Eucalyptus Avenue.
- An 8-inch recycled water line in Hamner Avenue from the northern boundary of the Specific Plan area to Eucalyptus Avenue.
- An 8-inch recycled water line in Eucalyptus Avenue from Hamner Avenue to Mill Creek Avenue.
- A 12-inch line in Eucalyptus Avenue from Mill Creek Avenue to Haven Avenue.
- A 16-inch line in Eucalyptus Avenue from Haven Avenue to Archibald Avenue.
- A 16-inch line in Archibald Avenue from Eucalyptus Avenue to Edison Avenue.
- A 20-inch line in Archibald Avenue from Edison Avenue to Schaefer Avenue.
- A 36-inch line in Archibald Avenue reducing to a 24-inch line from Schaefer Avenue to Chino Avenue.
- Utilization of the existing 10-inch main which extends from the IEUA facility adjacent to Westwind Park to the intersection of Archibald Avenue and Schaefer Avenue.

The developer will provide all recycled water lines required to serve the Specific Plan area.

Within the Specific Plan area, 8-inch recycled water mains are proposed to serve the development. The City's goal is to maximize the use of recycled water including but not limited to irrigation of parks, schools, street landscaping, recreation trails, common area residential landscaping and commercial/industrial landscaping edges. The parks and landscaped areas that will be irrigated with recycled water and the calculated recycled water demand are contained in the report titled, "Esperanza Water and Recycled Water Hydraulic Analysis." An Engineer's Report approved by the City and the Department of Health is required prior to the use of recycled water.

The conceptual Master Plan for recycled water for Esperanza is illustrated on Exhibit 24, "Conceptual Recycled Water Plan." The conceptual on site recycled water system is illustrated on Exhibit 25, "Conceptual On Site Recycled Water System."

5.3 Sewer Master Plan

Sewer service for Esperanza will be provided by the City of Ontario. The City's Sewer Master Plan identifies ultimate sewer facilities from the Specific Plan area to the Eastern Trunk Sewer. These Master Planned facilities include a 15inch sewer main extending from the northerly boundary of the Specific Plan area, along Mill Creek Avenue increasing to a 21-inch sewer main at Eucalyptus Avenue and a 24-inch sewer main along Bellegrave Avenue westerly to the Master Planned Eastern Trunk Sewer. Completion of these Master Plan improvements is required to provide the ultimate sewer service to Esperanza. Within the Specific Plan area a network of 8-inch and 15-inch sewer lines will be installed. The sizing and alignment of all off site sewer improvements necessary for mitigation of impacts shall follow the results of the approved Sanitary Sewer Technical Study.

The Conceptual Sewer Master Plan for Esperanza is illustrated on Exhibit 26, "Sewer Master Plan." The conceptual on site sewer lines are illustrated on Exhibit 27, "Conceptual On Site Sewer."

5.4 Drainage

The City's Storm Drain Master Plan identifies new storm drain facilities to serve the Specific Plan area extending northerly from the County Line Channel within Mill Creek Avenue. Completion of these Master Plan improvements will provide permanent storm drain service to Esperanza.

That portion of the Master Planned line, which lies within Esperanza, will be constructed as a part of the development of the project. These improvements include a 90-inch storm drain in Mill Creek Avenue transitioning to a 102inch storm drain, connecting to the County Line Channel.

On site storm drains will be constructed to convey the on site flows to the proposed Master Planned storm drain line in Mill Creek Avenue. The locations and size of on site storm drains within Esperanza will be established in accordance with City requirements as part of the approval by the City of Ontario of tentative tract maps for the Esperanza Specific Plan area.

The Drainage Master Plan for Esperanza is illustrated in Exhibit 28, "Storm Drain Master Plan." The size and location of the proposed storm drain may change based on the final design.

5.4.1 NPDES Compliance

The grading and drainage of the Esperanza Specific Plan area shall be designed to detain, filter and treat surface runoff, in a manner and combination which is practical, to comply with the most recent requirements of the San Bernardino County NPDES Storm Water Program's Quality Management (WQMP) for significant new development projects. The objective of the WQMP for this project is to minimize the detrimental effects of urbanization on the beneficial uses of receiving waters, including effects caused by increased pollutants and changes in hydrology. These effects may be minimized through the implementation of site designs that reduce runoff and pollutant transport by minimizing impervious surfaces and maximizing on-site infiltration, Source Control Best Management Practices (BMP's) and/or either on-site Structural Treatment Control BMP's, or participation in regional or watershed-based Treatment Control BMP's.

Prior to the issuance of a grading or construction permit, a Storm Water Pollution Prevention Plan (SWPPP) will also be prepared. The SWPPP will be prepared to comply with the California State Water Resources Control Board's (State Water Board) current, "General Permit to Discharge Storm Water Associated With Construction Activity" and the current Area Wide Urban Storm Water Runoff (Regional NPDES Permit). The SWPPP will identify and detail all appropriate Best Management Practices (BMP's) to be implemented or installed during construction of the project.

In addition to the preparation of a SWPPP for construction-related activities, and as part of the approval of any grading plans within the Specific Plan Area, the applicant will be required to submit a Water Quality Management Plan (WQMP) on the regional model form provided by the City. The WQMP shall identify and detail all Site Design BMP's, Source Control BMP's and Treatment Control BMP's to be implemented or installed at this site in order to reduce storm water pollutants and site runoff.

An off site regional stormwater runoff treatment facility with capacity to accept and treat drainage from portions of the Specific Plan Area has been constructed. This regional treatment facility will be part of an overall solution for storm water treatment within this planned development area. Projects with reserved treatment capacity allocations sin the regional facility will utilize this off-site facility as their primary BMP for addressing urban runoff water quality and hydro-modification impacts, in their respective WQMPs. If a project cannot obtain treatment capacity in the regional stormwater treatment facility, alternative on-site or off-site Low Impact Design BMBs will be required based on the must current MS4 Permit requirements.

5.5 Schools

The Mountain View School District is the school district serving the K-8 school needs of Esperanza. The Chaffey Joint Union High School District serves the 9-12 school age needs of the Specific Plan area. Additional elementary, middle, and high schools are needed to serve the needs of school age children within the Ontario Ranch. An elementary school site has been proposed within the Esperanza Specific Plan and a middle school site has been proposed in Planning Subarea 24. Colony High School is located at the southwest intersection of Mill Creek Avenue and Riverside Drive and a future high school has been proposed in Planning Subarea 23. Development of the Esperanza Specific Plan area will generate an estimated student population as follows (based on student generation numbers supplied by the City of Ontario, "School Generation for Ontario Ranch Subareas," July 2, 2004. The developer(s) of Esperanza will be required to pay school fees as required by State of California.

Grades K- 5
Generation Factor 0.38/D.U.
0.38 x 1594 = 606

Grades 6-8
Generation Factor 0.22/D.U.
0.22 x 1594 = 351

Grades 9-12
Generation Factor 0.20/D.U.
0.20 x 1594 = 319

5.6 Public Utilities

5.6.1 Natural Gas

The Gas Company will provide natural gas to the Specific Plan area. Gas mains will be installed to the Specific Plan area by the Gas Company as necessary.

5.6.2 Electricity

Southern California Edison will provide electricity to the Specific Plan area from existing facilities in the vicinity of the Specific Plan area. Proposed new facilities to serve the project will be owned and operated by the City of Ontario and located underground. Existing lines within the Specific Plan area shall be placed underground by developer and according to the City of Ontario adopted ordinance.

5.6.3 Telecommunications

The City of Ontario will be providing OntarioNet, fiber-to-the-home. OntarioNet is a fiber-optic telecommunications system capable of providing advanced Internet/data services to all homes and businesses within the Ontario Ranch. OntarioNet will provide community related services including: traffic management; on-line civic services; meter reading; educational services; and a variety of other community services. Based on the demographics of the Ontario Ranch and the traffic issues into Orange and Los Angeles Counties, the demand for telecommuting in the Ontario Ranch is anticipated to be significant. OntarioNet and the high-speed data services it provides will allow residents of the Esperanza Specific Plan to effectively telecommute to their jobs and in general provide a significant economic benefit to Ontario. Verizon currently provides telephone service within the Specific Plan area and can provide telecommunication service if they choose to do so.

5.6.4 Solid Waste

The City of Ontario provides solid waste collection services for the Ontario Ranch and will service the Specific Plan area. The project will comply with Municipal Code Section 6-3.314, "Commercial Storage Standards" and Section 6-3.601, "Business Recycling Plan" for the use of any commercial bin service for apartment development. All residential development shall comply with Municipal Code Section 6-3.308.9 (a) and (d), "Residential Receptacles, Placement" for curbside automated container service. The project shall comply with Municipal Code Article 6, "Recycling Requirements for Specified Business Activity", Section 6-3.601 Business Recycling Plan, and Section 6-3.602, "Construction and Demolition Recycling Plan." All site development shall comply with the City of Ontario refuse collection standards. All project sites shall be designed to meet all the Integrated Waste Department's requirements, including the requirements for Sizing of Storage, Location of Collection Area, Accessibility for Collection Vehicles, and Collection of Sorted/ Diverted Waster Types including Organics.

5.7 Grading Concept

The site falls at an average slope of approximately two percent (2%). The Grading Concept for Esperanza is to work with the existing topography to maintain natural grade and elevations wherever possible. The grading operation for the Specific Plan area will generally consist of the removal of any manure remaining from dairy operations, clearing and grubbing, demolition of existing structures, and moving of surface soils to construct building pads and streets. Additionally, where slope conditions are present, the property shall be located at the top of the slope. In areas adjacent to a ridgeline or in moderate slope areas, dwelling units and structures should be sited to:

- Use the natural ridgeline as a backdrop for structures;
- Use landscape plant materials as a backdrop; and
- Use structure to maximize concealment of cut slope.

If retaining walls are required, the following criteria shall be used:

- Exposed walls and fences facing roadways shall be no greater than 3-feet retaining (9-foot total wall) in height, except as necessary for acoustical purposes to satisfy the intent of the noise ordinance.
- Where retaining walls or fences face roadways, they shall be built, when feasible, of decorative materials consistent with the wall theme of the neighborhood.

The Conceptual Grading Plan, as illustrated in Exhibit 29, "Conceptual Grading Plan," will provide for a balance of cut/fills for the site Grading plans for each tract in the Specific Plan area will be reviewed and approved by the City of Ontario Building, Planning, and Engineering Departments prior to the issuance of grading permits. All grading plans and activities will conform to the City grading ordinance and dust and erosion control requirements.

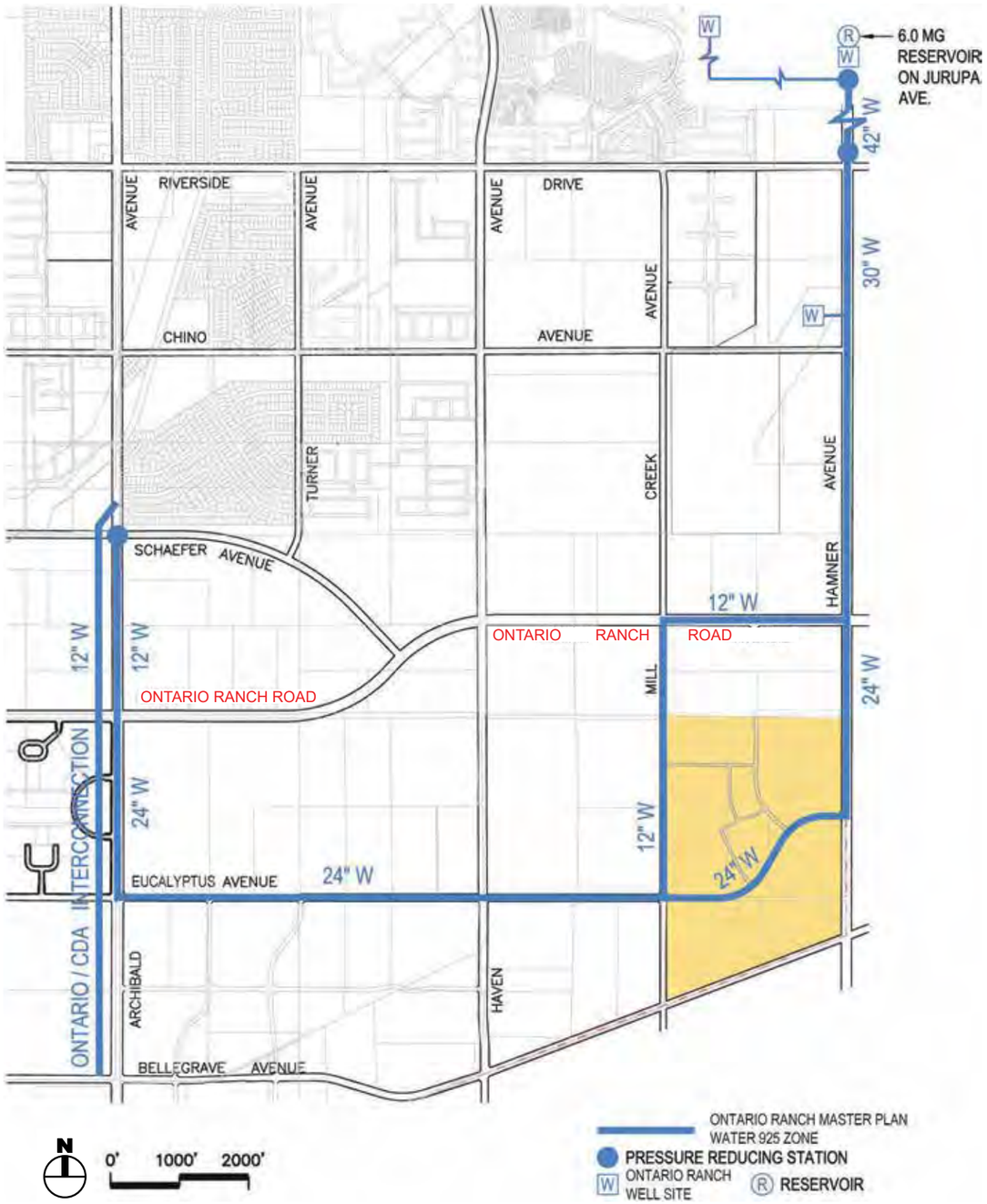


Exhibit 22

Conceptual Domestic Water Master Plan

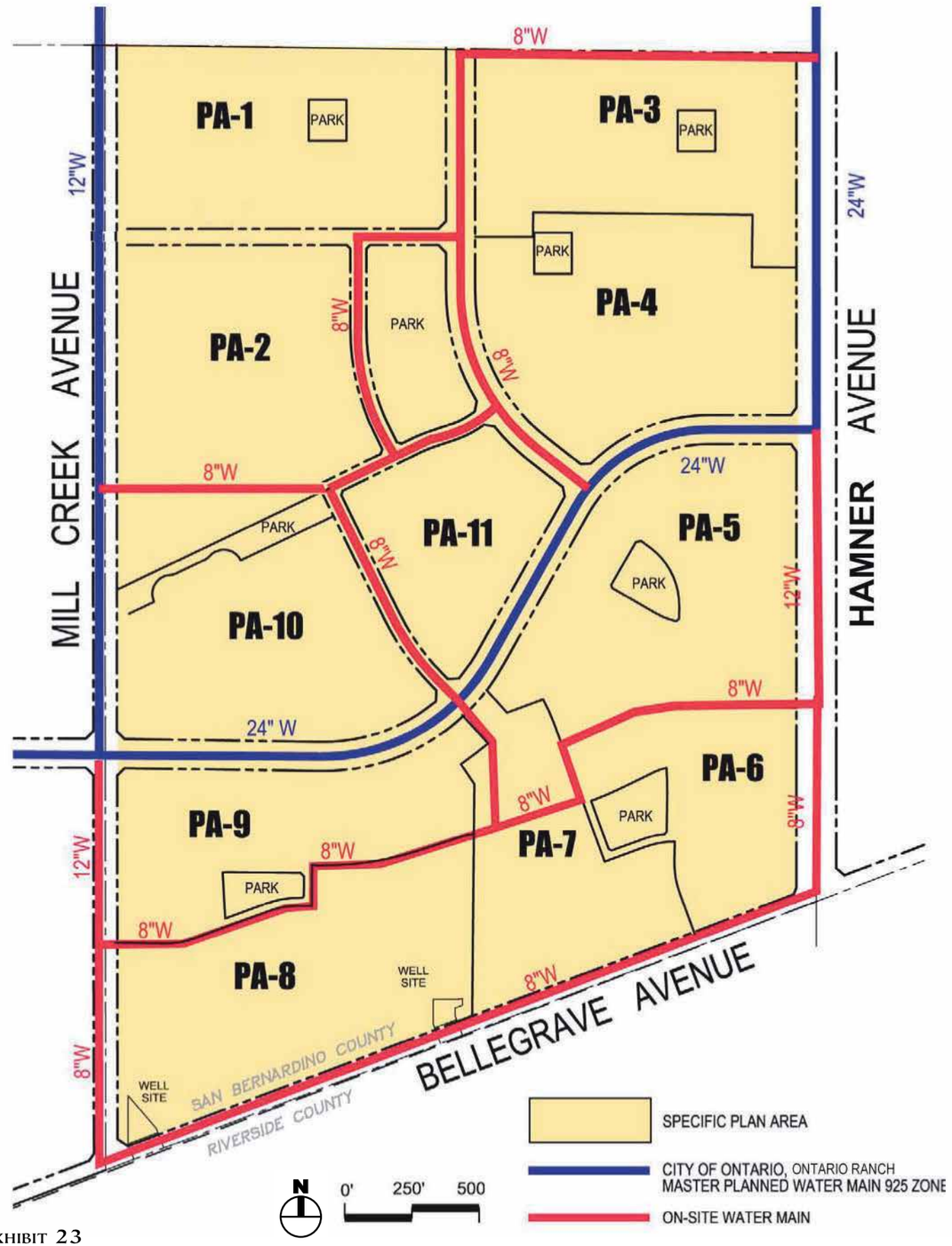


Exhibit 23

On Site Domestic Water Plan

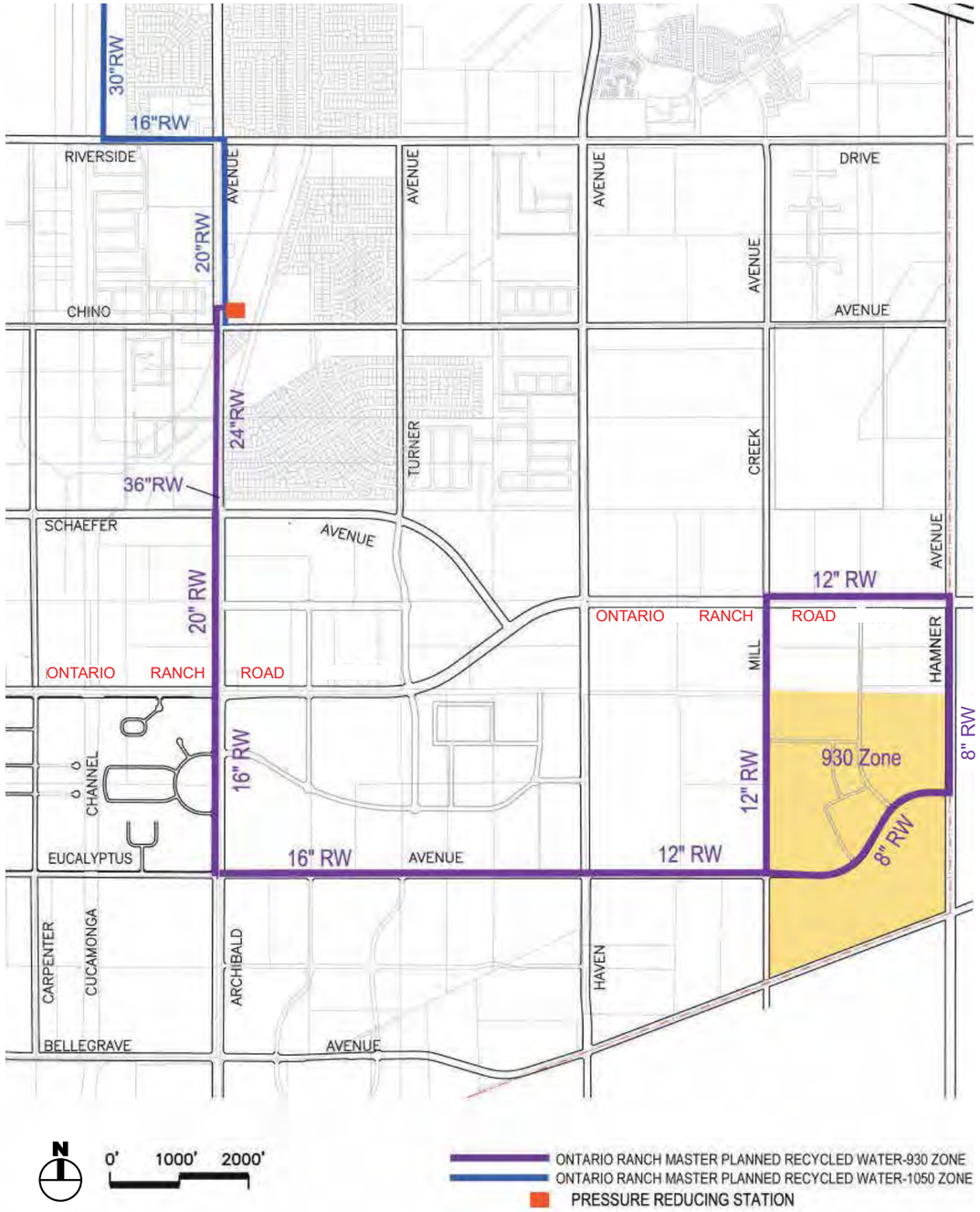


Exhibit 24
Conceptual Recycled Water Plan

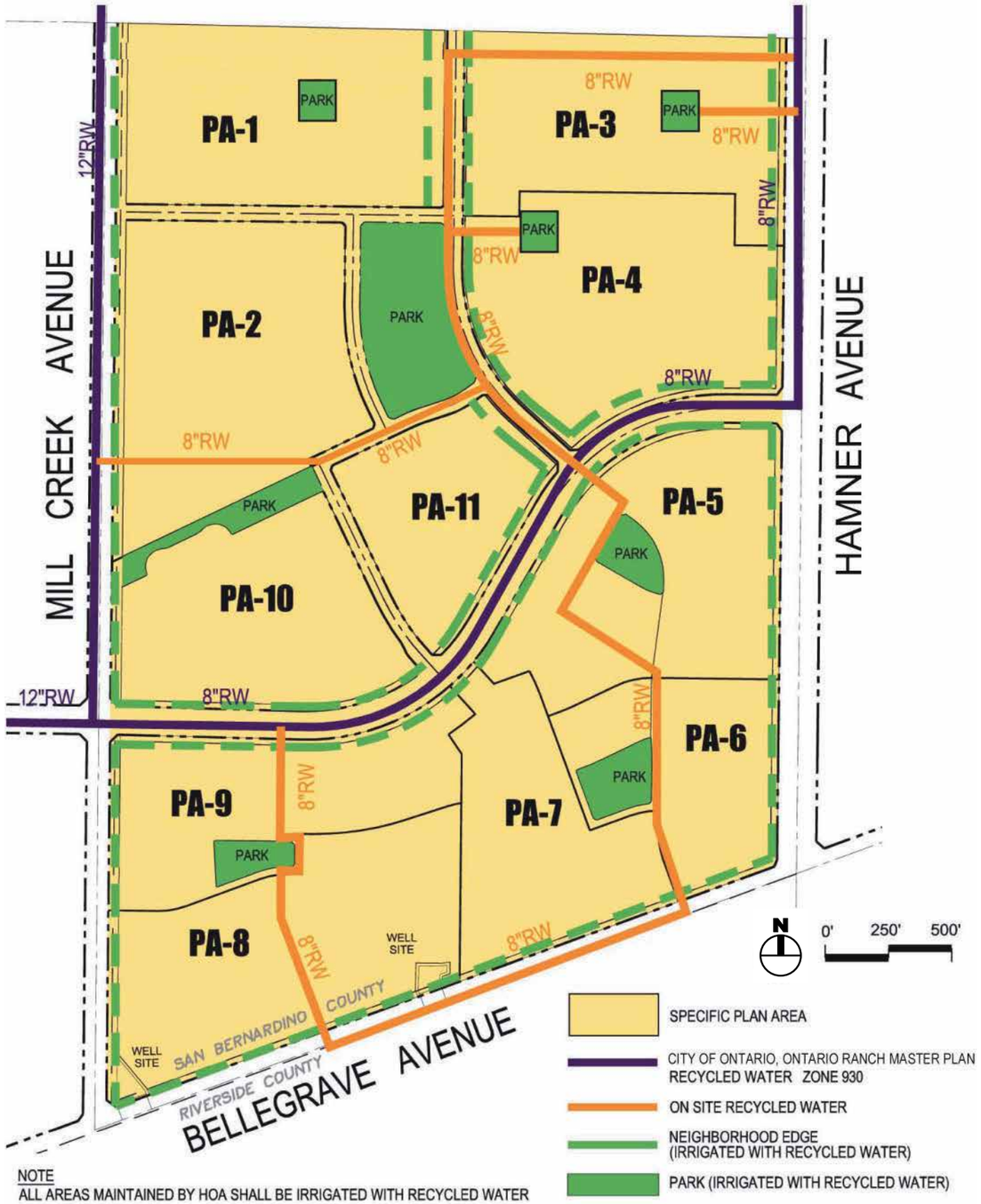


Exhibit 25
Conceptual On Site Recycled Water System

Exhibit 26
Sewer Master Plan

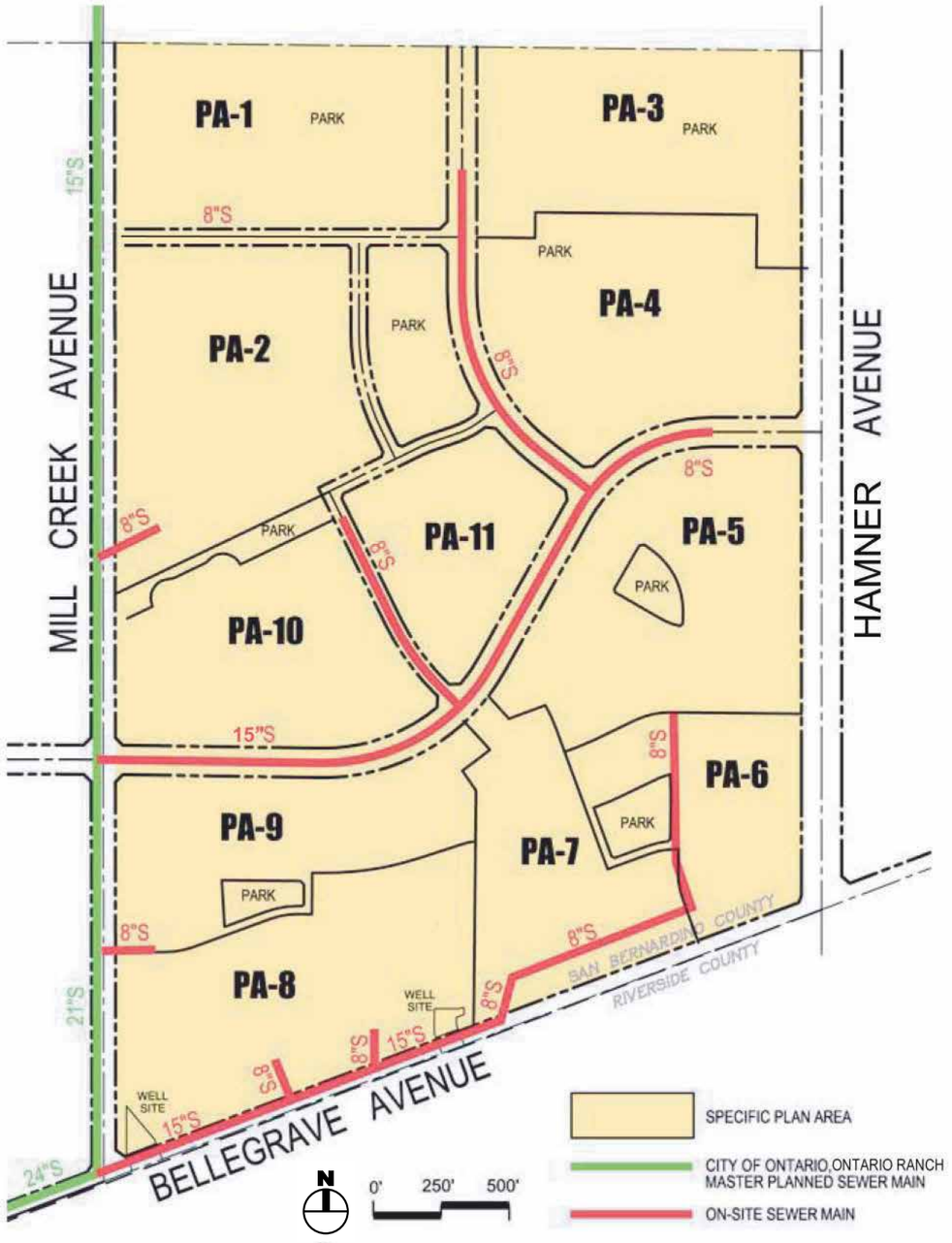


Exhibit 27
Conceptual On Site Sewer

Exhibit 28
Storm Drain Master Plan

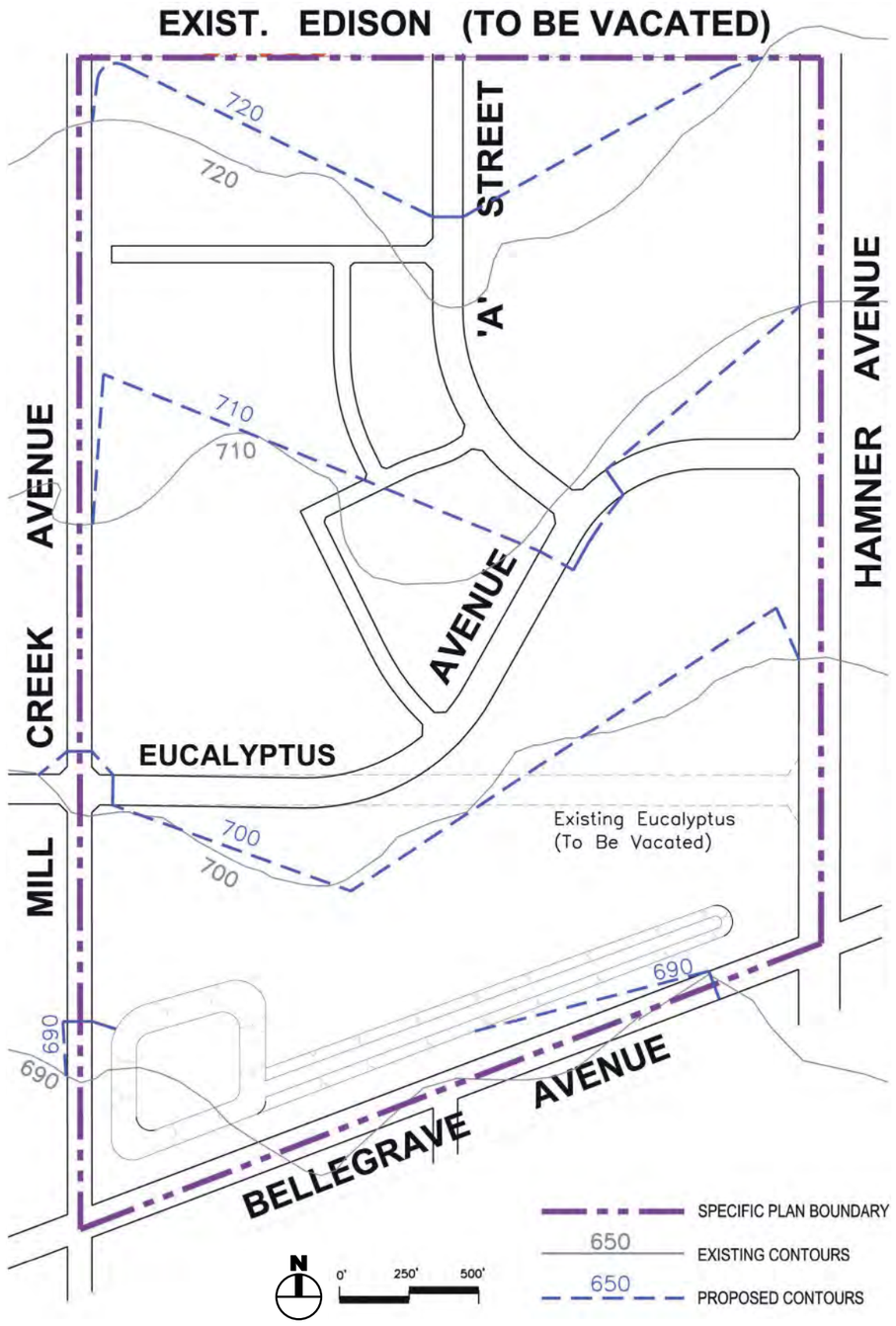


Exhibit 29
Conceptual Grading Plan

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Section 6. Development Regulations

6.1 Introduction

The provisions contained herein will regulate design and development within the Esperanza Specific Plan.

6.2 Definition of Terms

The meaning and construction of words, phrases, titles, and terms shall be the same as provided in the City of Ontario Development Code Article 2, "Definitions," unless otherwise specifically provided herein. The definitions of product types shall be those defined in Section 4, "Land Use" within the discussion of each respective product type. The definition of architectural and design terms shall be the same as those provided in the City of Ontario Glossary of Design Terms which follows the City of Ontario Development Code.

6.3 Applicability

The development regulations contained herein provide specific standards for land use development within the Esperanza Specific Plan area. Regulations address residential land uses and provide for general landscaping regulations. Application of the following regulations is intended to encourage the most appropriate use of the land, ensure the highest quality of development, and protect the public health, safety, and general welfare. Whenever the provisions and development standards contained herein conflict with those contained in the City of Ontario Development Code, the provisions of the Esperanza Specific Plan shall take precedence. Where the Esperanza Specific Plan is silent, City codes shall apply. These regulations shall reinforce specific site planning, architectural design, and landscape design guidelines contained in Section 8, "Design Guidelines" of the Esperanza Specific Plan.

6.4 Administration

The Esperanza Specific Plan, upon adoption, will serve as the implementation tool for the General Plan as well as the zoning for the Specific Plan area. The Esperanza Specific Plan Development Regulations address general provisions, permitted uses, and development standards for the community.

6.5 General Site Development Criteria

The following general site development criteria shall apply to all land development proposed in Esperanza.

1. **Gross Acres** - Except as otherwise indicated, gross acres for all development areas are measured to the centerline of streets.
2. **Grading** - Development within the Specific Plan area shall utilize grading techniques as approved by the City of Ontario. Grading concepts shall respond to the design guidelines included in the Esperanza Specific Plan which guide the development of land use toward the goal of providing for a livable community with streets and entries designed for walking and resident interaction.
3. **Building Modification** - Additions and alterations permitted by the Esperanza Specific Plan shall match the architectural style of the primary unit and shall be constructed of the same materials, details, and colors as the primary unit.
4. **Utilities** - All new and existing public utility distribution lines of 35.5kV or less shall be subsurface throughout the planned community.
5. **Technology** - All homes and businesses shall accommodate modern telecommunications technology (OntarioNet) for computer internet access, phone, fax, and television. Broadband fiber optics cable will be installed to all the properties per the approved Fiber Optic Master Plan.

6. **Transfer of Dwelling Units** -The Esperanza Specific Plan allocates a total number of units to each Planning Area as indicated in the "Land Use Summary" Table 2, Section 4, of the Esperanza Specific Plan. Variations in the number and type of dwelling units within each residential Planning Area may occur at the time of final design of the neighborhood depending upon the residential product identified for development. Changes in allocation of residential units, up to a maximum of fifteen percent (15%), are permitted among the residential planning areas within the Esperanza Specific Plan, subject to approval by the City and upon agreement of each respective property owner/developer, provided the total number of units established for the Esperanza Specific Plan area is not exceeded.

7. **Best Management Practices –** Development of storm water runoff improvements, within the Esperanza Specific Plan, shall adhere to currently adopted Best Management Practices (BMP's). The Site Design BMP's may include but not be limited to creating landscape strips and landscaped setback areas that can be swaled and depressed to retain and infiltrate irrigation water and runoff from smaller storm events, drain rooftops into rain gutters which would drain into an area of porous subgrade, and depressing the park areas to provide storm water infiltration and water quality treatment. Common area landscaping and parks shall be designed to function as a series of shallow storm water treatment basins and infiltration zones for storm water runoff from surrounding areas wherever moderately well draining soils exist. Currently the City of Ontario is considering construction of a regional storm water runoff treatment facility for the sub-watershed area that this project lies within. If the treatment facility is constructed, it may satisfy the requirement for on-site treatment control BMP's for the Esperanza project.

8. **Maximum Number of Dwelling Units** - The maximum number of residential dwelling units permitted within the Esperanza Specific Plan is ~~1,594~~ 1,491 unless the 10.02 acre elementary school site is not purchased by the Mountain View School District. Pursuant to approval of a Specific Plan Amendment the total permitted residential dwelling units within the Esperanza Specific Plan area shall be ~~1,640~~ 1,652 dwelling units.

9. **Agricultural Buffer** - A minimum 100-foot separation shall be required between a new residential structure and an existing animal feed trough, corral/pen or an existing dairy/feed lot including manure stockpiles and related wastewater detention basins. The 100-foot separation requirement may be satisfied through an off-site easement with adjacent properties, acceptable to the Planning Director, submitted with a final map, and recorded prior to or concurrent with a final map.

10. **Solid Waste/Recycling** - Development within the Esperanza Specific Plan area shall comply with City of Ontario requirements for the provision and placement of solid waste and recycling receptacles.

6.6 RESIDENTIAL DEVELOPMENT STANDARDS

6.6.1 Residential Detached (RD-1 through RD-6)

6.6.1.1 General

This category includes the development of single family detached dwelling units. The purpose of the residential standards for single family detached housing is to establish the minimum criteria for the development of these product types on individual lots within the neighborhoods specified within Esperanza.

6.6.1.2 Permitted Uses

1. Single family detached dwellings.
2. Public or private parks, recreational buildings, greenbelts, and open space.
3. Accessory uses to include the following:
   a. Garages.
   b. Granny Flats (i.e. Second Dwelling Units, in accordance the City's Development Code.)
   c. Home occupations.
   d. Swimming pools, spas, sports courts, and other similar outdoor recreational amenities.
   e. Patios and patio covers.
   f. Storage, garden structures, cabanas, and greenhouses.
   g. Monument signage.
   h. Model home and subdivision sales trailers; temporary construction parking, offices, and facilities; real estate signs, signage indicating future development and directional signage in accordance with the City's Development Code.
   i. Second story additions to existing single story dwelling units.
   j. Small family child care/day care facilities (up to 8 children), in accordance with the City's Development Code.

6.6.1.3 Conditionally Permitted Uses

1. Places of worship including but not limited to churches and synagogues.
2. Large family child/day care facilities (between 8-14 children), in accordance with the City's Development Code.

6.6.1.4 Temporary Uses

1. Temporary uses shall be permitted pursuant to Article 13 of the City's Development Code.

6.6.1.5 Free Standing Satellite Dish / Antennas

1. Free standing satellite dishes and/or antennas are permitted pursuant to Article 32, Section 9.1.3289 of the City of Ontario Development Code.

6.6.1.6 Recreational Vehicle Storage and Parking

1. Recreational Vehicle (RV) storage is prohibited on public and private streets and in private alleys. RV parking on public and private streets is limited to 72 hours.

PRODUCT TYPE	RD-1	RD-2	RD-3	RD-4	RD-5	RD-6
	50' Wide Lots PA-7 & PA-9	55' Wide Lots PA-8	40' 2-Pack PA-10	Cottage PA-2 & PA-6	4-Pack Courtyard PA-5	6-Pack/8-Pack Courtyard Row Townhomes PA-2 & PA-4
LOT CRITERIA						
Min. Lot Width at Front Setback Line for Standard Lot	50'	55'	40'	33'	NA	NA
Min. Lot Width at PL for Cul de sac, standard knuckle or modified knuckle lots (Min. side and rear yard setbacks to be maintained)	35'	35'	35'	33'	NA	NA
Min. Lot Width on Corner	55'	60'	45'	38'	NA	NA
Min. Lot Depth	80'	90'	75'	75'	NA	NA
Min. Lot Size	3,900 sq.ft.	4,800 sq.ft.	3,400 sq.ft.	2,400 sq.ft.	2,500 sq.ft.	2,200 sq.ft.
MINIMUM SETBACKS [1]						
All setbacks are measured from PL except for RD-5 and RD-6 where front and streetside setbacks are measured from back of sidewalk.						
Front Setbacks						
• Living Area	10'	12'	10'	10'	10'	10'
• Porch w/single story plate	8' [2]	8' [2]	8' [2]	8' [2]	8'	8'
• Front Entry Garage (street facing door) [3]	18'	18'	18'	NA	18'	18'
• Turn in Garage	10'	10'	NA	NA	NA	NA
Side [4]						
• From Interior PL	5'	5'	5'	4'	4'	4'
• From Residential Street or Parking Lot	10'	10'	10'	10'	10'	10'
Rear						
• Main Structure 1st Floor	15'	15'	10'	5' from Alley ROW	10'	5'
• Main Structure 2nd Floor	15'	15'	10'	5'	10'	5'
• Garage (Single Story Plate Line)	5'	5'	5'	3'	5'	5'
• Patio Cover / 2nd Story Deck	5'	5'	5'	5'	5'	10'
LOT COVERAGE						
Max. Coverage	50%	50%	50%	55%	55%	55%

TABLE 3

Residential Detached Site Development Standards

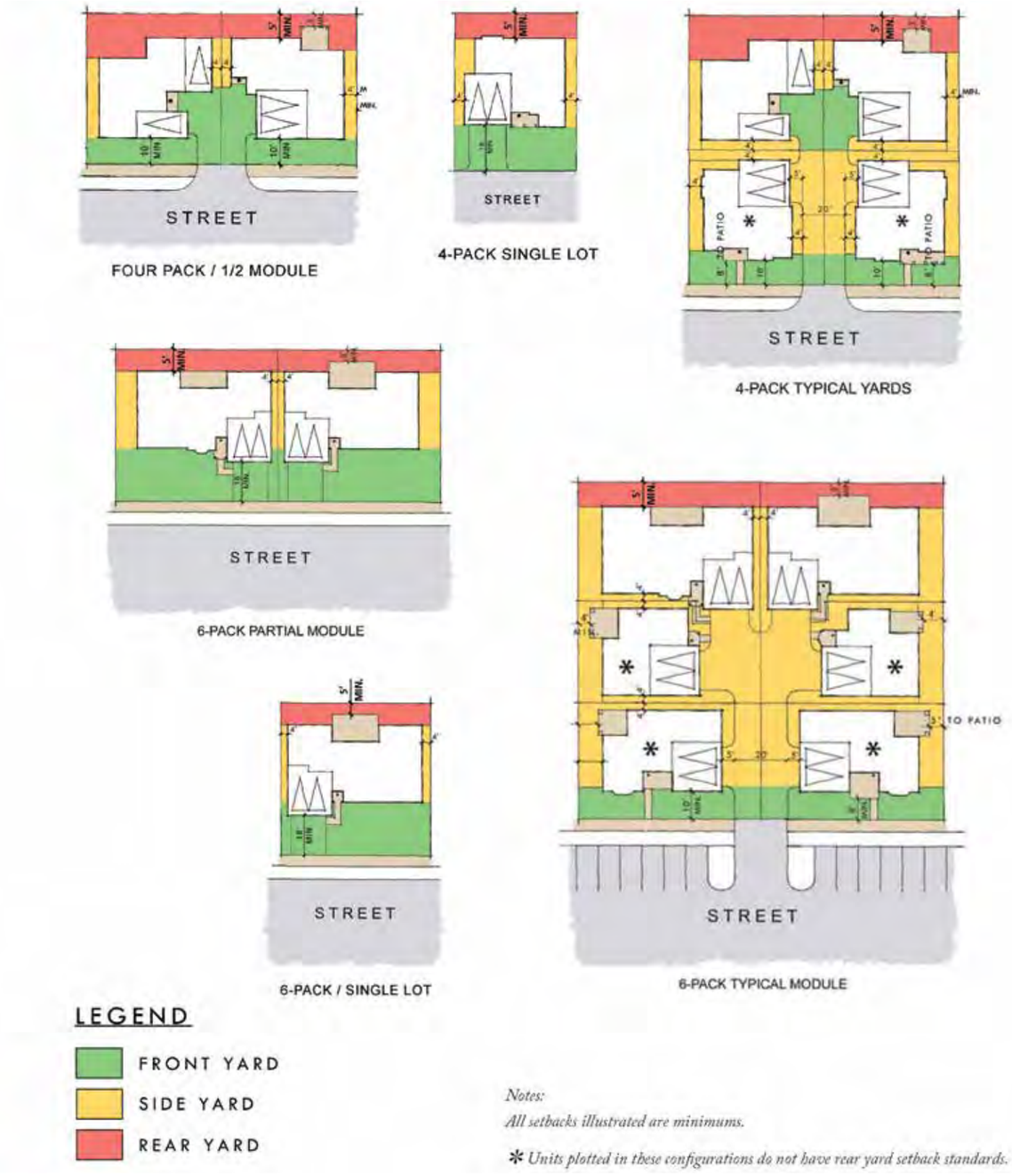
PRODUCT TYPE	RD-1	RD-2	RD-3	RD-4	RD-5	RD-6
	50' Wide Lots PA-7 & PA-9	55' Wide Lots PA-8	40' 2-Pack PA-10	Cottage PA-2 & PA-6	4-Pack Courtyard PA-5	6-Pack/8-Pack Courtyard Row Townhomes PA-2 & PA-4
MINIMUM BUILDING SEPARATION						
Between main structures rear to rear	20'	20'	15'	30'	6'	10'
Between main structures front to front	NA	NA	NA	20'	NA	30'
Between structures side to side [1]	10'	10'	10'	8'	6'	6'
Between main structures front to side	NA	NA	NA	NA	8'	6'
Between front porch/ balcony to front porch/balcony	NA	NA		15'		
MAXIMUM BUILDING HEIGHT						
Main Structure	35'	35'	35'	35'	35'	35'
MAXIMUM BUILDING HEIGHT						
Maximum Height at Front and Street Side Property Line [5]	3'	3'	3'	3'	3'	3'
Maximum Height at Interior or Rear Property Line [6]	6'	6'	6'	6'	6'	6'
Maximum Height of Retaining Walls	3'	3'	3'	3'	3'	3'
PARKING						
Min. Number of Parking Spaces Required Per Unit [7]	2	2	2	2	2	2

NOTES:

1. *Architectural projections may project a maximum of 3 feet into required front, rear or side setback areas; however, in no case shall such projection be closer than 3 feet to any property line. An architectural projection is defined as an element that articulates the building elevation such as eaves, window and door pop-out surrounds, media niches, bay windows, pot shelves, chimneys, enhanced window sills, shutter details, window trim, balconies and entry gates, and other similar elements.*
2. *The minimum depth of a porch shall be 7 feet with a minimum clear area of 70 square feet.*
3. *Minimum 20' for front facing/ garage forward design.*
4. *RD-3, RD-4, RD-5 and RD-6 with shared-use easement sideyards.*
5. *Solid masonry walls or wood fencing materials may be permitted on the front property line. Fences, walls, hedges or similar view obstructing structures or plants that reduce safe ingress or egress of vehicles or pedestrians shall not exceed three feet in height in any required front yard.*
6. *Walls may exceed six feet in height for noise attenuation purposes subject to an Acoustical Study and Planning Department approval.*
7. *All parking spaces to be within an enclosed garage (minimum 20' x 20' clear inside dimension) for two spaces and 10' x 20' for single spaces.*
8. *For single story homes only, the maximum lot coverage may increase up to a maximum of 60%.*

TABLE 3

Residential Detached Site Development Standards (cont.)



4-Pack and 6-Pack Typical Plotting

6.6.2 Residential Attached (RD-7 and RD-8)

6.6.2.1 General

This category includes the development of attached type residential dwelling units such as townhomes, and other attached multi-family products.

6.6.2.2 Permitted Uses

1. Single family attached row townhomes, motorcourt townhomes, paired homes, condominiums, apartments, and duplexes.
2. Public or private parks, recreational buildings, greenbelts, pocket parks, and/or open space.
3. Accessory uses to include the following:
   - Garages.
   - Home occupations in accordance with the City's Development Code.
   - Swimming pools, spas, tennis courts, sports courts, and other similar outdoor recreational amenities.
   - Patios and patio covers.
   - Mailboxes.
   - Recreation center buildings.
   - Maintenance storage buildings.
   - Monument signage.
   - Model units, sales offices, and subdivision sales trailers, temporary construction offices and facilities, real estate signs, signage indicating future development and directional signage in accordance with the City's Development Code.
   - Small family child care facilities/day care facilities, up to 8 children in accordance with the City's Development Code.
   - Permanent Leasing Offices.

6.6.2.3 Conditionally Permitted Uses

1. Places of worship including but not limited to churches and synagogues.
2. Large family child care facilities/day care facilities (8-14 children) in accordance with the City's Development Code.

6.6.2.4 Temporary Uses

1. Temporary uses shall be permitted pursuant to Article 13 of the City's Development Code.

6.6.2.5 Free Standing Satellite Dish/Antennas

1. Free standing satellite dishes and/or antennas are permitted pursuant to Article 32, Section 9.1.3289 of the City of Ontario Development Code.

6.6.2.6 Recreational Vehicle Storage and Parking

1. Recreational Vehicle (RV) storage is prohibited on public and private streets and in private alleys. RV parking on public and private streets is limited to 72 hours.

6.6.2.7 Open Space

1. A minimum of 150 square feet of private open space shall be provided per dwelling unit as follows:
   a. Private open space features may include fenced yards, patio areas, and balconies.
   b. At least one-half (½) of the required open space area must be provided at the ground level, not including front yard setbacks, and not more than ½ of the open space requirement is to be satisfied by balconies or roof decks. For the Row Townhome product (RD-6) open space may be satisfied by balconies for up to 33% of the units proposed.

c. Private open space located at ground level shall have a minimum contiguous area of one hundred and fifty (150) square feet in area with a minimum dimension ten (10) feet in any one direction and shall be landscaped. Open space located on roof decks or balconies must have a minimum contiguous area of fifty (50) square feet in area and a minimum dimension of five (5) feet in any one direction.

d. Private, ground level open space on the street side of a structure is to be suitably screened from streets by a fence, densely planted shrub, or combination of both.

2. A minimum of 250 square feet of common open space shall be provided per unit as follows:

a. Common Open space features include, but are not limited to, landscaping, picnic and barbecue areas, pools and spas, tennis and sport courts, clubhouse, tot lots or playgrounds, paseos, and trails.

b. Common open space shall have a minimum contiguous area of three hundred (300) square feet with no dimension less than 15 feet in any direction.

c. All required ground level common open spaces shall be planted with permanent landscaping or be devoted to recreational facilities, such as swimming pools, tennis courts, tot lots, patios or similar open space and/or recreational facilities.

d. Common and private open spaces are to be permanently maintained in an orderly fashion.

e. Parking areas, driveways or service areas shall not be counted in the minimum open space requirement.

PRODUCT TYPE	**RD-6 & RD-7**	RD-8
	Row Townhomes **PA-1**. PA-3. **PA-4** & PA-11	**Motorcourt Townhomes** PA-1 & **PA-3**
MINIMUM SETBACKS [1]		
All front and corner setbacks for RD-8 are measured from the property line at back of sidewalk. All other setbacks for RD-8 are measured from the parcel line of the cluster. All setbacks for RD-7 are measured from property line unless otherwise noted.		
Front		
• Living Area	10'	10'
• Porch [2]	8'	8'
Side		
• From Residential Street	10'	10'
• From any local streetside property line	10'	10'
• From interior property line for RD-7 or parcel line for RD-8	5'	4'
Rear		
• 1st floor from alley R/W for RD-7 or parcel line for RD-8	3'	10'
• 2nd floor from alley R/W for RD-7 or parcel line for RD-8	3'	15'
MINIMUM BUILDING SEPARATION		
• Front to front	25'	25'
• Side to Side	10'	25'
• Front to Side	NA	25'
• Rear to Rear	25'	NA
• Front of garage to front of garage	30'	30'
BUILDING SITE COVERAGE		
Max. Coverage	60% of site	60% of site
MAXIMUM BUILDING HEIGHT		
Main Structure	45'	35'

TABLE 4
Residential Attached Site Development Standards

PRODUCT TYPE	RD-6 & RD-7	RD-8
	Row Townhomes **PA-1. PA-3. PA-4 & PA-11**	**Motorcourt Townhomes** **PA-1 & PA-3**
WALLS, FENCES, AND HEDGES		
Maximum Height at Front and Street Side Property Line [3]	3'	3'
Maximum Height at Interior or Rear Property Line [4]	6'	6'
Maximum Height of Retaining Walls	3'	3'
PARKING [5]		
Min. Resident Parking Required	1.75 spaces per one bedroom unit including 1 in a garage or carport, 2 spaces per two bedroom unit including 1 in a garage or carport, and 2.5 spaces per three or more bedroom unit including 2 in a garage or carport.	
Min. Guest Parking Required	1 space for each 4 units under 50 on the building lot. 1 space for every 5 units between 51-100 units on the building lot. 1 space for every 6 units over 100 units on the building lot. Public on-street parking may be counted toward guest requirement.	

NOTES:

1. *Architectural projections may project a maximum of 3 feet into required front, rear or side setback areas; however, in no case shall such projection be closer than 3 feet to any property line. An architectural projection is defined as an element that articulates the building elevation such as eaves, window and door pop-out surrounds, media niches, bay windows, pot shelves, chimneys, enhanced window sills, shutter details, window trim, balconies and entry gates, and other similar elements.*
2. *The minimum depth of a porch shall be 7 feet with a minimum clear area of 70 square feet.*
3. *Solid masonry walls or wood fencing materials may be permitted on the front property line. Fences, walls, hedges or similar view obstructing structures or plants that reduce safe ingress or egress of vehicles or pedestrians shall not exceed three feet in height in any required front yard.*
4. *Walls may exceed six feet in height for noise attenuation purposes subject to an Acoustical Study and Planning Department approval.*
5. *All parking spaces within an enclosed garage shall have a minimum 20'x20' clear inside dimension for double spaces and 10' x 20' single spaces.*

TABLE 4

Residential Attached Site Development Standards (cont.)

6.7 LANDSCAPE STANDARDS

6.7.1 General Provisions

1. All landscape and irrigation plans for streetscapes and graphic designs with regard to the identity of Esperanza, neighborhood identity or entry monuments shall conform to the Design Guidelines and regulations as set forth herein and shall be subject to review and approval by the City of Ontario at the time of Development Plan review. The form and content of landscape plans for streets, parks, and other common areas shall conform to the requirements of the City's Development Plan application requirements.
2. The Landscape/Streetscape improvements for the Esperanza Specific Plan shall establish a landscape theme reminiscent of the regional landscape character of the surrounding area.
3. The design and improvement of all parks, including landscape and irrigation plans, within Esperanza shall be reviewed and approved by the City at the time of Development Plan review and shall conform with the requirements of the City's Parks and Maintenance Department.
4. Installation of landscaping and automatic irrigation within the front yards of all residential areas will be provided by the home builder. At a minimum, the builder will install turf and appropriate shrubs and trees in the front yards of homes within residential areas. At a minimum two trees shall be installed, of which at least one, is a shade tree. A variety of front yard landscape designs shall be provided by the developer for use by homeowners. Within multi-family residential areas the builder shall be responsible for the installation of full landscape improvements within the multi-family development. Areas not used for hardscape shall be fully landscaped. All landscape plans shall be reviewed and approved by the City at the time of Development Plan review.

6.7.2 Landscape Standards

1. Landscaping within the Esperanza Specific Plan area shall be provided in accordance with the Design Guidelines utilizing plant materials specified on the Plant Palette included in Section 8, "Design Guidelines" established for the Esperanza Specific Plan.
2. Boundary landscaping will be required adjacent to residential areas. Landscaping shall generally be placed along the entire perimeter property line.
3. Landscaping and automatic irrigation systems within the public rights of way of the Esperanza Specific Plan area shall be installed by the developer.
4. Freestanding perimeter walls and view fencing shall be provided within, and at the perimeter of the Specific Plan area as specified in the Wall and Fence Master Plan contained within, Section 8, "Design Guidelines." Such walls and fences will be constructed concurrently with the construction of improvements required for development of the neighborhoods of the Specific Plan.
5. Walls and Fencing - Perimeter walls shall be constructed in locations and of a design consistent with the "Wall Master Plan" and "Wall Details" Exhibits located within Section 8, "Design Guidelines." Perimeter walls shall not exceed six feet in height from finished grade. If required for sound attenuation, perimeter walls may exceed six feet in height, subject to the recommendations of an acoustical study and approval by the Planning Department. Perimeter walls shall be constructed of either masonry or other permanent, durable, low maintenance material. Thematic perimeter fencing shall be constructed of all durable materials, which may include materials with a wood-like appearance, or tubular steel subject to approval by the City. In no instance shall wooden fencing be permitted along perimeters.

Individual residential lot side and rear yard walls and fencing shall not exceed six feet in height from highest adjacent finished grade. Side and rear walls may exceed six feet (6') in height if required by the City for sound attenuation pursuant to the recommendations of an Acoustical Report. Walls and fencing within the residential front yard setback area shall not exceed three feet in height. Side and rear yard walls shall be of decorative masonry construction on both sides of the wall or other permanent low maintenance materials. Front yard fences may be constructed of either wood, or any other durable materials with a wood like appearance, subject to approval by the Planning Department. View fencing may be of a decorative wrought iron, tubular steel/aluminum glass panels, or other durable material approved by the City.

6. All perimeter wall and fence materials throughout Esperanza will be of uniform manufacture with colors specified for the overall design theme.
7. The developer will provide site inspection of all construction and installation of open space areas in accordance with City of Ontario requirements.
8. Non-toxic vegetation shall be utilized adjacent to all public open space areas.

6.8 Signage

A Master Sign Program shall be submitted by the developer(s) of Esperanza and approved by the City of Ontario pursuant to Article 31 of the City's Development Code to address residential project entries, residential neighborhood identification signs, and way finding signs within Esperanza. No project signs shall be permitted in the public right-of-way. All other signs shall be subject to the approval of a sign permit pursuant to the City's Development Code.

6.8.1 Master Sign Program Contents

All sign programs shall address, at a minimum, the following:

1. Permitted signs.
2. Prohibited signs.
3. The hierarchy of signage.
4. Definition of types of signs.
5. Locations and dimensions for monument signs, neighborhood identification signs, and public facilities signs.
6. Locations and dimensions of directional signage.
7. Provisions for size, location, and duration of display of temporary signs.
8. Permitted sign types, styles, construction materials, colors, and lettering styles.
9. Requirements for a sign permit application.
   a. Procedures for obtaining approval of a sign permit.
   b. Procedures for amendments to the sign program.

6.9 Lighting

6.9.1 Street Lights along Public Streets

Streetlights along public streets, within the Esperanza Specific Plan shall be high-pressure sodium vapor. Design of fixtures shall be approved by the City as part of the City's Development Plan Review.

6.9.2 Alley Lighting Fixtures

Alley lighting fixtures shall be on sensors for automatic nighttime lighting. Style and specifications for alley lights shall be approved by the City as part of the City's Development Plan Review.

6.9.3 Lighting within Parks, Paseos, Tot Lots and Other Recreational Areas

Lighting within Parks, paseos, tot lots and other recreational areas shall be approved by the City as part of the City's Development Plan Review of these facilities.

6.10 Park Furniture

Park furniture, including but not limited to, benches, barbeques and picnic tables, shall be approved as part of the City's Development Plan Review of parks, paseos and other public gathering places.

6.11 Bus Shelters

Bus shelters shall be installed in a number of locations designated by OmniTrans and shall be compatible with the architectural character established at the project entries to Esperanza.

6.12 Mailboxes

Within RD-3 through RD-8 Residential Planning areas mailboxes shall be clustered and installed in locations approved by the City as part of the City Development Plan Review of each resident project within Esperanza.

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SECTION 7. IMPLEMENTATION

The City of Ontario will adopt the Esperanza Specific Plan by ordinance. Following approval by the City, the Esperanza Specific Plan will serve as the implementation tool for the ~~NMC~~ Ontario Ranch General Plan as well as the zoning for the Specific Plan area. Concurrently with the adoption of the Specific Plan, the City Planning Commission will also approve tentative tract maps establishing legal residential lots within the Esperanza Specific Plan area.

7.1 METHODS AND INTERPRETATION

Development within the Esperanza Specific Plan shall be implemented through the approval by the City of tentative and final tract maps and through development plans approved through the Development Plan Review process as established in the City of Ontario Development Code. The implementation process described below provides the mechanisms for review and approval of development projects within the Esperanza Specific Plan area.

7.2 APPLICABILITY

All development proposals within the Esperanza Specific Plan shall be subject to the implementation procedures established herein. Whenever the provisions and development standards contained herein conflict with those contained in the City of Ontario Development Code, the provisions of the Esperanza Specific Plan shall take precedence.

7.3 INTERPRETATION

Unless otherwise provided, any ambiguity concerning the content or application of the Esperanza Specific Plan shall be resolved by the City of Ontario Planning Director (Director) or his/her designee in a manner consistent with the goals, policies, purpose and intent established in this Specific Plan.

7.4 SEVERABILITY

If any portion of these regulations is declared to be invalid or ineffective in whole or in part, such decision shall not affect the validity of the remaining portions thereof. The legislative body hereby declares that they would have enacted these regulations and each portion thereof irrespective of the fact that any one or more portions be declared invalid or ineffective.

7.5 IMPLEMENTATION OF DESIGN GUIDELINES

Adoption of the Esperanza Specific Plan by the City includes adoption of the design guidelines contained herein, which shall be the design criteria by which development projects within the Specific Plan area will be reviewed during Development Plan Review. The design guidelines are intended to be flexible in nature while establishing basic evaluation criteria for the review by the City of developer projects during Development Plan Review.
Any major deviation from the design guidelines within the Esperanza Specific Plan shall require approval by the Planning Commission. The determination of a major deviation from the design guidelines shall be made by the Director.

7.6 DEVELOPMENT REVIEW PROCESS

7.6.1 Subdivision Maps

Approval of tentative tract maps may occur concurrently with the adoption of the Esperanza Specific Plan. All tentative and final tract maps will be reviewed and approved pursuant to applicable provisions of the City of Ontario Subdivision Ordinance and consistent with the applicable provisions of Land Use, Infrastructure, Design Guidelines, and Development Regulations contained within the Esperanza Specific Plan.

7.6.2 Development Plan

All development projects within Esperanza shall be subject to the Development Plan Review Process as established in Article 8 of the City's Development Code. Pursuant to these provisions, the Development Plan process constitutes a design review of project architecture, site plans, and landscape plans. Adoption of the Specific Plan by the City includes adoption of the design guidelines contained within the Specific Plan and which provide direction for the design of development projects within Esperanza. Where the Esperanza Specific Plan development regulations and design guidelines are silent, the applicable development regulations and design guidelines contained within the City's Development Code shall apply. The design guidelines are intended to be flexible in nature while establishing basic evaluation criteria for the review by the City of developer projects during design review.

All development project applications shall include a landscape and irrigation plan describing plant materials and their growth habits, plant size and spacing, methods of irrigation and landscaping maintenance, site plans, architectural elevations, floor plans, grading plans and other requirements as specified by the City.

7.6.3 Additional Entitlement Requirements

All entitlement applications shall prepare and submit a Conceptual Utilities Systems Map, Integrated Waste Management Report, and Solid Waste Handling Plan in accordance with requirements of the Development Application.

7.7 Dwelling Unit Allocations

The Esperanza Land Use Plan allocates a maximum number of dwelling units to each residential Planning Area. Variations in number of dwelling units, per Planning Area, may occur at the time of final design of the Planning Area subject to approval by the City and agreement by affected property owners/developers, depending upon the residential product identified for development. Variations in allocation of units within the Planning Areas of the Esperanza Specific Plan are permitted provided the increased number of dwelling units in a Planning Area does not exceed 15% and the maximum dwelling unit count for the entire Specific Plan area does not exceed that established for Esperanza.

1. Water and Sewer Technical Studies shall be prepared to study how the transfers change the quantity and locations of sewer and water demands and how those changes impact the Water and Sewer Master Plan Systems and local sewer and water systems.
2. If unit transfers result in net changes to the overall projected water demands, then the initializing project shall be responsible for processing an Amendment to the Water Master Plan as part of the entitlement process of Implementation.
3. If unit transfers result in net changes to the overall projected sewer demands or the sewer demands are transferred between different Master Plan Trunk Sewer Tributary Areas and Specific Plan Sewer Tributary Areas, then the initializing project shall be responsible for processing an Amendment to the Sewer Master Plan as part of the entitlement process of Implementation.

7.8 Specific Plan Modifications and Amendments

7.8.1 Minor Modifications

The following constitute minor modifications to the Specific Plan, not requiring a Specific Plan Amendment, and are subject to review and approval by the Zoning Administrator. The Zoning Administrator shall have the discretion to refer any such request for modification to the Planning Commission or the City Council.

1. Change in utility and/or public service provider.
2. Collector roadway alignment when the change results in a centerline shift of less than 250 feet.
3. An increase of more than fifteen percent (15%) in the number of units within an individual Planning Area are subject to approval of the City and agreement of the property owners, provided the total number of units for the entire Specific Plan area does not exceed that established in the Specific Plan.
4. Adjustment of a Planning Area boundary or acreage designated for a Planning Area provided the total acreage of the affected Planning Area does not increase by more than 15%.
5. Minor changes to landscape materials, wall materials, wall alignment, entry design, and streetscape design which are consistent with the conceptual design set forth in the design guidelines contained within the Specific Plan.
6. Minor changes to the design guidelines, which are intended to be conceptual in nature only, and are intended to be flexible in implementation.
7. Other modifications of a similar nature to those listed above, which are deemed minor by the Zoning Administrator, which are in keeping with the purpose and intent of the approved Esperanza Specific Plan and which are in conformance with the ~~NMC~~ Ontario Ranch General Plan.

7.8.2 Reversion of Planning Area 11 to Residential Uses

The ~~NMC~~ Ontario Ranch General Plan establishes a total residential unit allocation of ~~1,456~~ 1,652 units for the Esperanza Specific Plan. The Land Use Plan for Esperanza designates a total of ~~1,410~~ 1,491 residential dwelling units within Planning Areas 1-10 and reserves Planning Area 11, a 10.02 acre site, ~~for~~ was not purchased ~~and use~~ by the Mountain View School District (School District). ~~of an elementary school. In the event the School District does not purchase Planning Area 11 for development of an elementary school,~~ Planning Area 11 ~~may revert~~ will be converted to a Residential – Medium Density zoning district permitting development of a maximum of ~~46~~ 161 residential dwelling units subject to approval by the City of a Specific Plan Amendment. On ~~XX-XX-2020~~ 10-20-2020 a request for an increase in density for Planning Area 4, from 6.26 gross DU/AC to 14.0 gross DU/AC and an accompanying general plan amendment to increase the density from low density residential (2.1-5 DU/AC) to medium density residential (11.1-25 DU/AC) was approved, which increased the total residential allocation of ~~1,640~~ 1,652 units (~~1,594~~ 1,491 units if the school remains a school). The Environmental Impact Report prepared for the Esperanza Specific Plan has evaluated the impacts of development of Planning Area 11 alternatively for ~~46~~ 161 residential dwelling units in conjunction with the analysis of all other project related impacts. Development of Planning Area 11 for residential land uses shall be subject to all other review and administrative and discretionary approvals requirements required for residential land uses as established within the Esperanza Specific Plan.

7.8.3 Specific Plan Amendments

Amendments to the Esperanza Specific Plan may be requested by the applicant or by the City at any time pursuant to Section 65453(a) of the Government Code. Amendments shall be processed pursuant to the provisions of the Government Code for Specific Plan Amendments. In the event the proposed amendment requires supplemental environmental analysis pursuant to the California Environmental Quality Act (CEQA), the applicant(s) are responsible for preparing the necessary CEQA documentation.

7.9 VARIANCES

Variances and Administrative Exceptions to the development regulations contained in the Esperanza Specific Plan with respect to landscaping, screening, site area, site dimensions, yards and projects into yards, heights of structures, distances between buildings, open space and off-street parking and loading can be considered pursuant to Article 10, "Variances and Administrative Exceptions" of the City of Ontario Development Code.

7.10 CONDITIONAL USE PERMITS

Uses specified as conditionally permitted uses within Section 6, "Development Regulations, of the Esperanza Specific Plan shall be reviewed and approved by the City pursuant to the requirements of Article 9, "Conditional Use Permits."

7.11 COMPLIANCE WITH MITIGATION MONITORING PLAN

Certification of an Environmental Impact Report (EIR) shall be required prior to approval of the Esperanza Specific Plan. Development within the Esperanza Specific Plan area shall comply with all approved mitigation measures as described in the Mitigation Monitoring Program included as part of the Esperanza EIR.

7.12 PROJECT PHASING

Phasing of the Esperanza Specific Plan will meet the following objectives:

- Orderly build-out of the community based upon market and economic conditions.
- Provision of adequate infrastructure and public facilities as determined and deemed necessary by the City Engineer concurrent with development of each phase.
- Protection of public health, safety and welfare.
- Accommodation of continued agricultural operations within the proposed Specific Plan area.

7.12.1 Residential Development

The phasing of residential development areas will be determined by the developer. The development of residential uses will be implemented through the approval of tentative and final tract maps and development permits for each Planning Area as developed. Appropriate levels of infrastructure and community facilities shall be subject to the review and approval of the City Engineer and shall be installed and available to serve each subsequent phase of residential development as it occurs.

7.12.2 Infrastructure

Backbone infrastructure to serve all areas of Esperanza shall be installed by the developer in accordance with the City's adopted Master Plan or any approved amendments to it. Infill service mains will be installed and constructed in phases as development proceeds and conditioned by the City Engineer's office to support individual phases of development, which may require installation of offsite infrastructure improvements beyond a given phase boundary.

Grading and installation of infrastructure to serve Esperanza are anticipated to be completed in three phases. Following completion of grading and infrastructure installation, the developer will construct models for each product type within each neighborhood. Phase I will include installation of infrastructure adequate to serve Planning Areas 5-9 located south of Eucalyptus Avenue between Hamner Avenue and Mill Creek Avenue. Phase II will include installation of infrastructure adequate to serve Planning Areas 4A and 10. Phase III will include installation of infrastructure adequate to serve Planning Areas 1-4B and the Neighborhood Park. As the Specific Plan is Phased, the following minimum criteria shall be met for each Subdivision and Development of each Phase:

1. For Domestic Water, all the Master Plan, Regional and Local Infrastructure identified in Section 5 and the Conceptual Domestic Water Plan for the Water Pressure Zone that the Phase is within shall be completed as part of the Phase's infrastructure requirements. Also, any domestic water infrastructure necessary to provide primary looping, secondary looping, and meet all hydraulic criteria and fire fl ow shall be completed as part of the Phase's infrastructure requirements.
2. For Recycled Water, all the Master Plan, Regional and Local Infrastructure identified in Section 5 and the Conceptual Recycled Water Plan for the Recycled Water Pressure Zone that the Phase is within shall be completed as part of the Phase's infrastructure requirements. Also, any recycled water infrastructure necessary to provide primary looping, secondary looping, and meet all hydraulic criteria shall be completed as part of the Phase's infrastructure requirements.
3. For Sewer, all the Master Plan, Regional and Local Infrastructure identified in Section 5 and the Conceptual Sewer Plan for the Master Plan Sewer Tributary Area that the Phase is within and upstream of shall be completed as part of the Phase's infrastructure requirements. Also, any sewer infrastructure necessary to meet all hydraulic criteria shall be completed as part of the Phase's infrastructure requirements.

7.12.4 Parks

Following issuance of Certificates of Occupancy for no more than 50% of the total dwelling units within Esperanza, Park 1, the Neighborhood Park, will be developed. The timing for installation of infrastructure and utilities and the provision of public services will be determined as part of the City's approval of tentative maps or development plans. Facilities will be constructed and services made available in a timely manner as development progresses. Pocket Park 2 will be developed at the time of issuance of 50% of Certificates of Occupancy for Planning Area 5. Pocket Park 3 will be developed at the time of build-out of Planning Areas 6 and 7 combined. Pocket Park 4 will be developed at the time of issuance of 50% of Certificates of Occupancy for Planning Areas 8 and 9. Pocket Park 5 will be developed at the time of issuance of 50% of Certificates of Occupancy for Planning Area 10.

7.12.4 Community Facilities and Services

The timing for installation of community facilities and payment of impact fees for public improvements and services for the Esperanza Specific Plan will be determined as part of the City's approval of tentative tract maps in accordance with the provisions of the existing City development impact fee ordinances. Community facilities such as bike trails will be developed in conjunction with construction of the public street improvements.

7.13 APPEALS

Appeals from any determination of the City Planning Director, Zoning Administrator or the Planning Commission, may be made by the applicant or any other aggrieved party filing an application on forms provided by the City of Ontario and accompanied by the appropriate filing fee, where applicable, within ten (10) days following the final date of action for which an appeal is made. Appeals shall be processed consistent with the provisions of Article 5, "Appeals" of the City of Ontario Development Code.

7.14 PROJECT FINANCING

The financing of construction, operation, and maintenance of public improvements and facilities (the "facilities"), and public services will include funding through a combination of financing mechanisms. Final determination as to the facilities to be constructed and as to maintenance responsibilities, whether publicly or privately maintained, will be made prior to recordation of final maps. In order for the project to be fiscally self sufficient, the following financing options can be considered for implementation:

7.14.1 Facilities and Services

- Private capital investment for the construction of facilities.
- Community Facilities District (CFD) established pursuant to the Mello-Roos Community Facilities District Act of 1982, or other special district, to provide funding for the construction of a variety of public facilities and the provision of public services.

7.14.2 Operation and Maintenance

- By individual private property owner.
- By private property owners or Home Owners Association (HOA).
- By Community Facilities District (CFD) established pursuant to the Mello-Roos Community Facilities District Act of 1982, or other special district.

City Council approval is a prerequisite for the implementation and establishment of any and all special district-financing mechanisms. The use of the Mello-Roos Community Facilities District Act of 1982 (the "Act") to finance public facilities and services will be at the City's sole discretion. Moreover, the use of the Act must be consistent with the City's adopted goals and policies concerning the use of the Act.

7.15 MAINTENANCE RESPONSIBILITIES

The public and private improvements constructed within Esperanza will be maintained through a combination of public and private entities as described below and in Table 5.

7.15.1 Public Maintenance

1. All streets and sidewalks serving residential product areas RD–1 through RD–6 single family detached or attached residential will be dedicated as public streets to the City of Ontario and will be maintained by the City.
2. Landscape improvements within the public right-of-way of Master Plan streets, neighborhood edges, community and neighborhood entries, and public street lights within Esperanza shall be maintained through a landscape and lighting district or other special maintenance district established by the City for the ~~New Model Colony~~ Ontario Ranch.
3. All on site water, sewer, and storm drain facilities that meet public improvement design criteria within the public streets or easements dedicated to the City shall be constructed by the developer and, upon acceptance, shall be maintained by the City.
4. Offsite infrastructure improvements such as water, sewer and storm drain facilities will be maintained by the City. The City intends to participate in a Regional Water Quality Basin. In the event permanent on site basins are developed within Esperanza as an alternative to a regional water quality basin, such facilities shall be maintained by the HOA.
5. NPDES facilities within public streets and/or easements. Operation and Maintenance (O&M) requirements for all NPDES storm water runoff source control and treatment control Best Management Practices (BMP's) shall be identified in the approved Water Quality Management Plan for the project. An O&M Plan shall be created to ensure ongoing long-term maintenance of all structural and non-structure BMP's.

7.15.2 Homeowner Association

A Homeowner Association will be established for the maintenance of common area landscape improvements within residential areas of Esperanza. Improvements to be maintained by the Homeowner Association include: Designated private alleys and adjacent landscaping.

- Designated private streets and landscaping. During the course of maintenance of public utilities within public streets, private streets, private drive aisles, or alleys, the City will restore the streets to City standards for trench backfill, pavement repair, and hardscape or landscape, as applicable. Restoration of any enhancements above and beyond City standards, including but not limited to architectural paving, hardscape and landscape enhancements shall be the responsibility of the HOA or other entity maintaining those enhancements.
- Courts, parkways and landscaping within the residential areas.
- Parkways of Interior Local Streets including sidewalks, landscaping and street lights as well as common areas distinct to individual residential types and neighborhoods.
- Maintenance of interior local streets including landscaping and associated architectural monument elements required to restore these areas to their condition as originally installed.
- Internal slopes fronting streets and slope areas in the rear of homes.
- All internal open spaces, parks, and common areas.
- NPDES facilities within private streets and/or common areas.

	City CFD	Private Homeowners Association (HOA)	Private Homeowner	Utility Entity
Master Plan Roadways (Bellegrave Avenue, ~~Milliken~~ Hamner Avenue, Mill Creek Avenue, ~~Merrill~~ Eucalyptus Avenue)	●			
Interior Public Project Streets (curb to curb for primary entry streets, secondary entry streets, and neighborhood streets)	●			
Parkways of Master Plan Roadways and Neighborhood Edges (curb to perimeter walls, including landscape, sidewalks and street lights)	●			
Parkways of Interior Project Streets (landscaping and sidewalks)		●		
Traffic Signals and Street Lights	●			
Traffic Control Signs	●			
Alleys and Drive Aisles		●		
Interior Streets within Single Family Attached (Multi-Family) Developments		●		
Off -site and In-Tract Water, Sewer, and Storm Drain Improvements (only those facilities in public roads and those in private streets within public utilities easements that meet public improvement design criteria)				●
On-site water, sewer, and storm drain improvements (improvements that are: private, laterals, and lines behind meters and /or DCDAs, improvements serving only one lot/parcel, not within public or private roads, not within public utility easements, or not meeting public improvement design criteria)		●		
Neighborhood Park		●		
Pocket Parks		●		
Linear Parks		●		
Private Recreation Areas		●		
Front Yard and Corner Streetside Landscaping for Single Family Detached Areas RD-1 through RD-4			●	
Front Yard and Corner Streetside Landscaped Areas RD-5 through RD-8		●		
Community Theme Wall on Master Planned Roadways (outside face for graffiti removal and paint)	●			
Community Theme Wall on Master Planned Roadways: Surface (interior) opposite streetside (structural integrity and face repair)		●		
Private Interior Yard Walls		●	●	
Alley Landscaping and Lighting		●		
Police and Fire	●			
Electricity and Natural Gas				●
Communication Systems	●			●
NPDES Facilities (onsite) W.Q.M.P. (1)	●			
NPDES Facilities/Interim Detention Basin on Private Property		●		

NOTES:

(1) Only those facilities in public roads and/or easements, including restoration work following public street repair.

TABLE 5
Maintenance Responsibilities

SECTION 8. DESIGN GUIDELINES

8.1 INTRODUCTION

On a sunny morning in the fall of 1882, George Chaffey stands on a mesa between the floodwater washes of Cucamonga Canyon to the east and San Antonio Canyon on the west, gazing at the country directly in front of him lying at the foot of snow-capped Old Baldy, beneath the Sierra Madre Mountain Range. Having little capital, George would rely on his powers of leadership and vision and, at that moment, would throw his heart and soul into the new colonizing movement sweeping Southern California. With help of his brother William and surveyor J. C. Dunlap, he would purchase 6,218 acres and design what would become the "City of Ontario," named after his former home in Ontario, Canada. His vision of a model colony featured the first reclamation irrigation system, abundant electricity power and a beautiful parkway that captured the imagination and interest of people throughout the world. His vision was one of hope for a great community. "Esperanza," which means "hope" in Spanish and accurately describes the original vision intended for the "new" Ontario.

Ontario is a thriving city today, although the orchards and packing houses have since given way to new landmarks such as Ontario Mills, Ontario Convention Center and Ontario International Airport. Hundreds of new businesses have discovered that Ontario is "The Gateway" to Southern California, conveniently located 35 miles east of Los Angeles, and easily accessible to I-10, I-15 and I-60 freeways.

Ontario spans nearly 28,000 square miles, with a population of over 168,000, and is one of Southern California's fastest growing cities. Ontario's sun-belt mild weather and 312 days of sunshine, allows you to enjoy the many parks as well as the nearby mountains, beaches, and deserts. The world-class Empire Lakes Golf Course, designed by Arnold Palmer, will challenge the avid golfer. The wine aficionados will love sampling California's finest at Galleano Winery, Joseph Filippi Winery, and Vineyards.

8.2 DESIGN GUIDELINES FOR ARCHITECTURAL CHARACTER

Architectural design should provide for high quality neighborhoods.

- Residential project design should consider the total context of the site with the incorporation of appropriate scale and proportions of building massing and details.
- The use of transitional spaces between common and private areas such as entry courtyards, private patios, low walls, and porches is encouraged.
- The variation of both front and rear building setbacks should be implemented to create visual variety.
- The variation of garage placement on adjacent lots is encouraged to provide a more diverse street scene.
- Residential structures should be varied in massing and articulation to provide visual interest.

Neighborhoods should be sustained over time.

- Architectural design themes should reflect historic Southern California styles.
- The use of natural indigenous building materials and colors is encouraged.
- Structures should incorporate genuine architectural details and decorative features.
- Architectural design should relate to human scale.
- The location of doors and windows should consider indoor/outdoor relationships to create intimate and secure spaces.
- Architectural designs should create a cohesive community without dominating the overall street scene.

Building design should be sensitive to climatic conditions and context.

- Building elevations should consider sun orientation by including shaded and sheltered areas.
- Variation of architectural designs should include methods of protection from inclement weather.
- Residential structures should be compatible with, and responsive to, the environmental setting.
- Building designs should incorporate spaces that encourage outdoor use to take advantage of temperate climatic conditions.

Architectural design should incorporate materials and techniques that are cost effective.

- The use of building materials should reflect the implementation of efficient construction methods.
- Building elevations should include compatible window and doors sizes that create a consistent design theme.
- Construction techniques should incorporate the use of standard components and dimensions.

Varied floor plans and elevations in single-family detached residential architectural packages should be incorporated as follows:

Reverse elevations and floor plans are considered as a separate elevation and floor plan. Reverse floor plans and elevations are considered as a separate floor plan and/or elevation for purposes of implementing the table below.

Diversity is a fundamental guiding principle at Esperanza. This ensures that neighborhoods are varied and that blanket uniformity is avoided.

Builders are required to produce a minimum of two styles for a 3-plan design program, and three styles for a 4-plan or more design program.

Number of Dwelling Units	Number of Differing Floor Plans and Elevations
5-10	As required by Planning Commission
11-25	2
26-50	3
51-75	3
76-100	4
Over 100	4; +1 additional floor plan with 4 elevations for each additional 50 units exceeding 100

8.3 Architectural Context

The original model colony of Ontario has a rich agricultural legacy of farming including citrus orchards, grape vineyards and alfalfa fields. Typical of Southern California farming communities, Ontario has a variety of traditional architectural styles. Western European and East Coast architectural details and forms were incorporated into the farm houses and local styles evolved from Country French and Tuscan styles and new interpretations of Monterey, Traditional, Craftsman and Ranch styles were erected. Architectural styles, elements and massing were reinvented utilizing available indigenous building materials. Plan designs and elements such as window sizes and proportions were modified to address local climatic conditions which were warmer and drier. Materials were plaster, stucco and siding with brick, stone or other masonry accent materials. The sunny Southern California climate allowed year round use of outdoor spaces and inspired covered porches and balconies.

Southern California was also influenced by Spanish architectural styles brought to the region by Spanish settlers and missionaries. These homes were well suited for the temperate climate of Southern California. The architectural theme for Esperanza is based upon these historical styles found in Ontario and the architectural styles have been selected in order to be reflective of older neighborhoods of historic Ontario.

Each architectural style outlined in these guidelines should be detailed with elements that represent the authentic character of that particular style.

Together the styles should be designed to create a neighborhood character that will be sustainable over time. Each home should contribute to the architectural character of the neighborhood. Design elements such as porches, recessed windows, architectural details and accents, alternate garage configurations / orientations, covered balconies, and articulated elevations are encouraged to enhance individual homes and to promote the overall neighborhood character.

8.3.1 Residential Design Objectives

- Interpret architectural styles that are authentic and reflect the historical character of the region.
- Emphasize styles of architecture that are compatible, yet vary enough to create interest and diversity.
- Create visually interesting neighborhood streets by varying elevation and floor plan plotting.
- Utilize authentic materials and colors that reinforce the overall design theme.
- Emphasize front elevations that relate strongly to the street and contribute to the livability of that realm.
- Provide alternative garage configurations.

The Esperanza Design Guidelines are to be used as a tool to ensure the character and design quality anticipated for the Community. The Guidelines express objectives and approaches rather than formulas and standards, allowing certain architectural creativity and flexibility. The images and sketches illustrated in the Guidelines are intended to be conceptual in nature and are to be used as general visual aids in understanding the basic architectural design intent of Esperanza. They are not meant to depict specific floor plans or architectural elevations.

These Guidelines are organized into the following sections:

- Architectural Styles
- Massing Principles
- Materials & Detailing
- Home Types
- Landscape Design

8.3.2 Architectural Styles

The architectural character within each neighborhood shall consist of complementary traditional architectural styles. The materials and colors of these home styles shall complement the overall neighborhood design.

Architectural styles within each neighborhood and product area within each neighborhood should be compatible with one another and blend with the character of each neighborhood.

Within cluster court style residential products, a consistent architectural style shall be used throughout the individual cluster.

Acceptable architectural styles within Esperanza include:

- Country French
- Tuscany
- Monterey
- Spanish Colonial
- Craftsman
- Traditional
- Western Ranch

The styles selected share similar design attributes and have been selected in response to the following considerations:

- They have a historic relevance to the region.
- They are compatible and complementary.
- They can be interpreted in a variety of ways.
- They are generally accepted by the market.
- They can be constructed using current building materials and methods.

Note: Additional styles proposed by the homebuilder must be submitted to, and approved by, the City of Ontario. Builders may submit home designs using alternative architectural styles that meet the design objectives of the specific plan, provided they are appropriate to the region and compatible with the character of Esperanza.

8.3.2.1 Country French

History and Character:

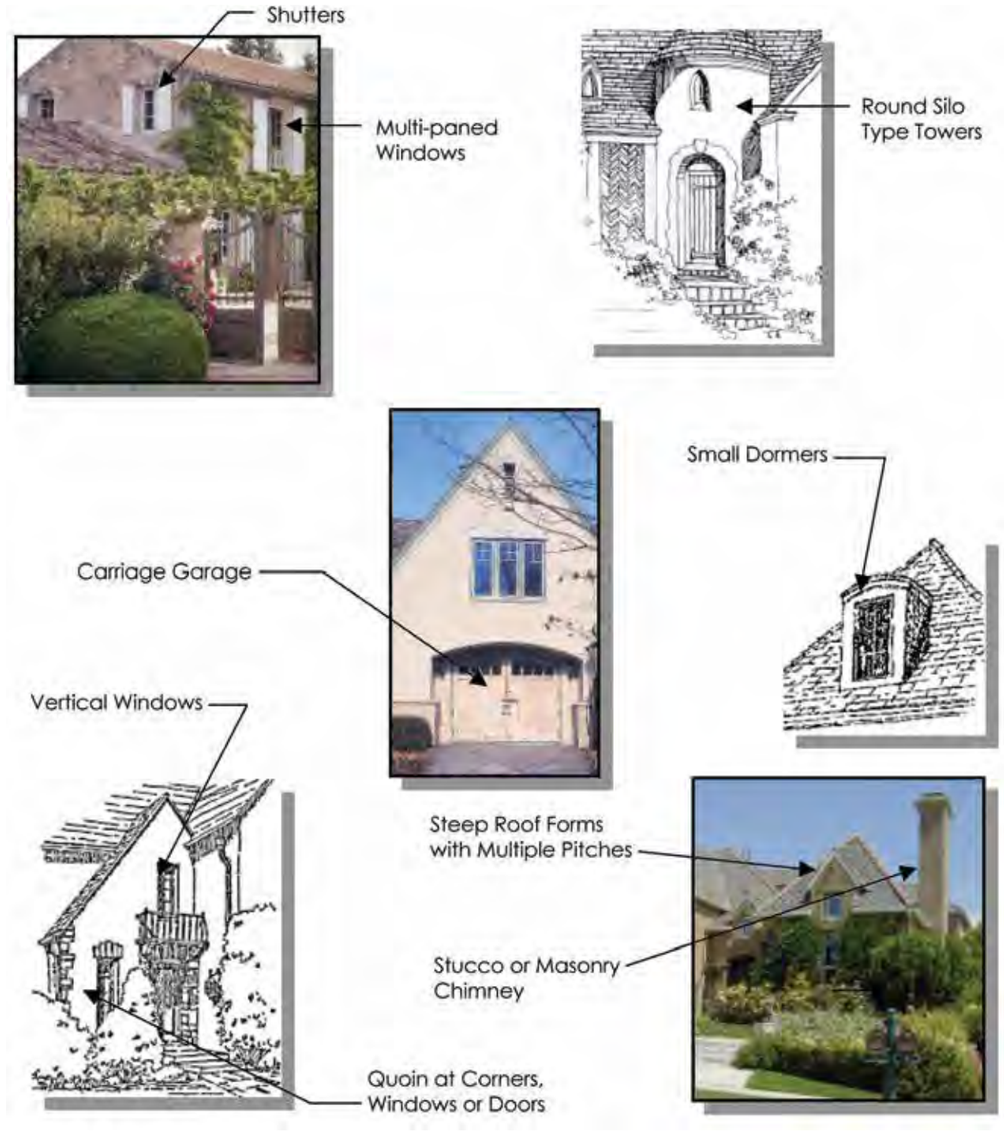
French Country architectural style is based upon early American interpretations of French Medieval architecture that made their way across the United States from the Mississippi regions around the turn of the century. Usually taking the form of larger manor homes and estates, this architectural style was adapted to fit smaller rural homes. The French Country style conveys a romantic and picturesque architecture. American interpretations include houses with simple forms with steeply-pitched roofs.

Massing:

- Simple massing with asymmetrical forms and gable roofs.

General Materials:

- Stucco finished walls.
- Deep recessed accents.
- Vertical windows.
- Simple detailing.
- Stucco or masonry chimneys.
- Decorative chimney caps.
- Carriage garage doors or roll-up doors with a variety of panel patterns to reflect architectural style.



Country French

Roof Materials and Forms:

- Small dormers.
- Steep roof forms with multiple pitches.
- Gable roof forms, accented with flared roof treatments.
- Large, simple roof planes. • Gable end venting in various styles.
- Rooflines may extend below window.
- Extended roof overhangs.
- Flat concrete tile to simulate slate materials.
- Round silo type towers.

Detail Elements:

- Decorative shutters.
- Wood balcony railings.
- Deep recessed windows.
- Multi-paned windows.
- Quoin at corners, windows or doors.

8.3.2.2 Tuscany

History and Character:

Tuscan-inspired homes began appearing at the turn of the 20th Century in Southern California as an interpretation of the picturesque movement in art where the architecture was less formalized and more responsive to the natural environs. Arranged building forms of predominantly stucco and stone with tile roofs reflecting the architectural styles of Northern Italy took root in informal plan arrangements and massing.

Massing:

- Simple massing with assembled forms and varied roof forms.

General Materials:

- Stucco finished walls and columns.
- Large, simple roof planes.
- Extended roof overhangs.
- Wood posts or masonry columns.
- Simple stucco chimneys.
- Decorative columns accents.
- Simple wrought iron, metal railings and details.
- Shutters as occasional accent.
- Deep recessed openings.
- Covered patios /porches.

Roof Materials and Forms:

- Tile hipped roofs.
- Low-pitched roofs.
- Stucco eave details or wood corbeled rafter tails.
- Gable end roof vents with decorative stucco accents.
- Gables and appropriate hip roofs.
- Shallow sloped, concrete 'S' tile roofs.

Detail Elements:

- Barrel/S-Tile roof.
- Varied stucco finish.
- Shallow pitch roof.
- Exposed rafter tails.
- Arched openings.
- Recessed windows.
- Wrought iron accents below windows.
- Vertical proportioned or arched windows.
- Balconies opened or roofed.
- Decorative brackets below roof overhangs.

Tuscany

8.3.2.3 Monterey

History and Character:

The Monterey style is a combination of Spanish construction methods and the basic two-story Eastern Colonial house. The wooden second story enabled single story Spanish Adobe homes to be developed as two story homes. Cantilevered balcony elements defined the front of the house which originally used adobe wall construction. Exposed rafters, gable or hipped roof, simple wood posts and side chimneys that anchor one end of the house, accompany the balcony as Monterey design elements.

Massing:

- Simple, straightforward rectangular or "L" shaped building forms.
- Cantilevered balcony and covered colonnades.

General Materials:

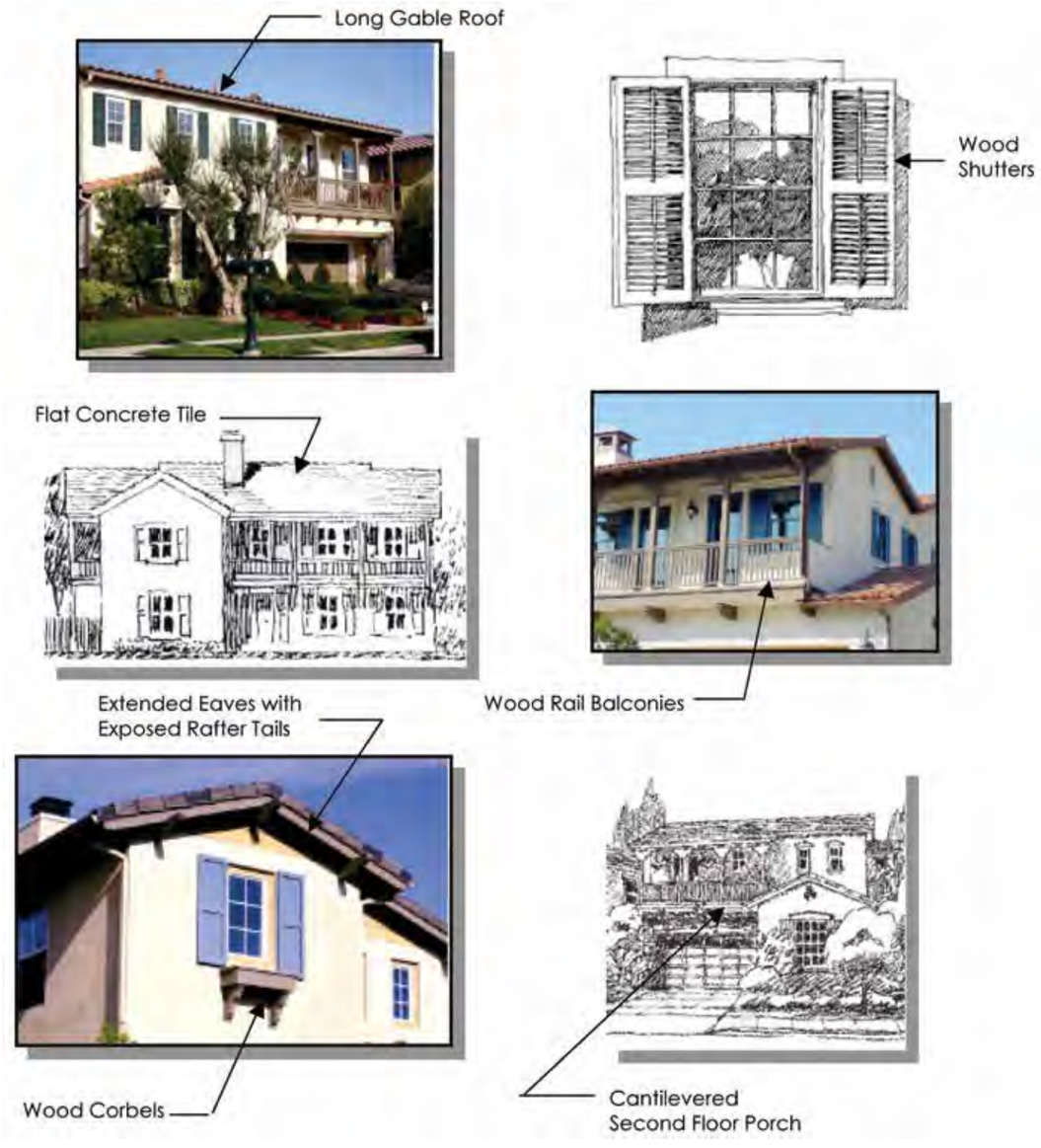
- Stucco on first level.
- Siding on second floor.
- Use of brick or stone on first level.
- Shutter accents.
- Wood or stucco trim.
- Brick and siding used to accent stucco forms.

Roof Materials and Forms:

- Flat concrete tile.
- Simple forms with low pitch.
- Gable forms are predominant. (Long gable roof)
- Tight rake ends.
- Extended eaves with exposed rafter tails.

Detail Elements:

- Wood balcony railing.
- Recessed windows, single hung.
- Wood corbels.
- Accent shutters.
- Cantilevered second floor porch.



Monterey

8.3.2.4 Spanish Colonial

History and Character:

Spanish Colonial homes are an adaptation of the Mission Revival style, reflecting features such as strong form and mass, plain wall surfaces, and tile roofs. The Spanish Colonial style is often characterized by a semi-formal plan arrangement such as a courtyard design.

Massing:

- Simple massing and forms and varied roof forms.

General Materials:

- Stucco finished walls.
- Wood / stucco columns.
- Decorative stucco chimneys.
- Round arches.
- Decorative columns and trim.
- Ornate wrought iron railing and accents.
- Wood shutter accents.
- Thick walls.
- Deep recessed openings.
- Stucco or tile details at gable ends.

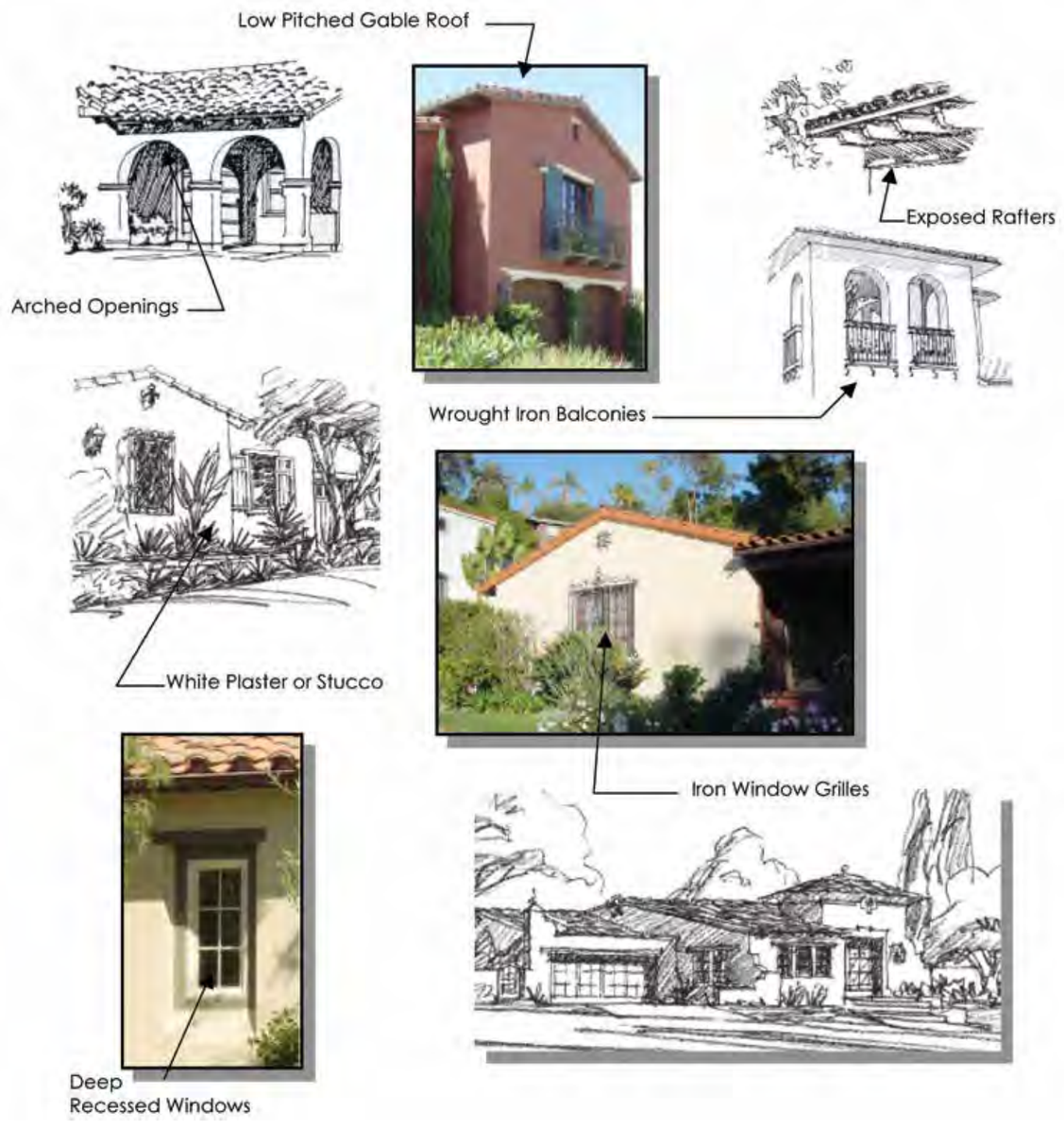
Roof Materials and Forms:

- Low-pitched roofs, with minimal overhang.
- Tight rake ends.
- Extended eaves with exposed rafter tails.
- Gables and hip roofs typical.
- Shallow sloped, concrete 'S' tile roofs.

Detail Elements:

- S-Tile roof.
- Arched window/door openings.
- Recessed window.
- Ornamental wrought iron details.
- Vertical proportioned windows.
- Wrought iron window. Grilles on windows.

Section 8. DESIGN GUIDELINES



Spanish Colonial

8.3.2.5 Craftsman

History and Character:

The Craftsman style home evolved from the late 19th century American Arts and Crafts movement. These moderately detailed buildings are characterized by the use of handcrafted architectural elements and details. Broad open porches, low sloping roofs, deep overhangs, multiple gables, trellis features, oversized first floor windows, expressive trim, rafters, brackets, and wood columns with masonry bases characterize the Craftsman style.

Massing:

- Horizontal proportions simple massing often asymmetrical at the second level.

General Materials:

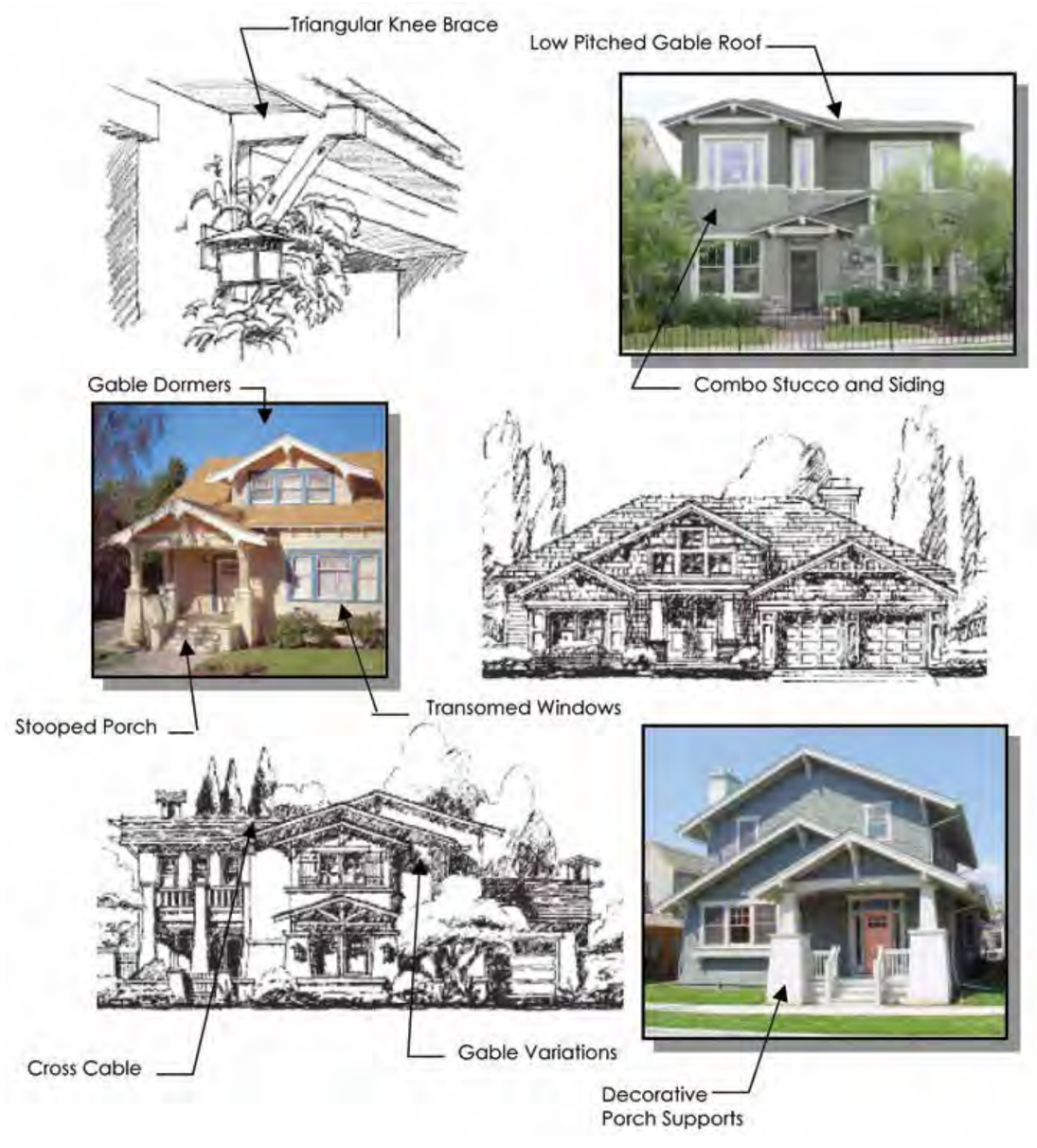
- Simple roof lines with wide projecting gables.
- Covered entry and roofed porches.
- Deep, broad porch elements.
- Expressive structural elements such as rafters, posts, and columns.
- Use of wood, stone or brick at porch columns typical.
- A mixture of materials such as stucco, stone, brick and shingle siding.
- Asymmetrical window and door compositions.

Roof Materials and Forms:

- Predominantly low-pitched gabled roofs, occasional hipped or shed roofs.
- Shallow-pitched roofs with deep overhangs.
- Roof dormers.
- Flat concrete tile or architectural grade asphalt shingle.
- Variation of the gable roof (i.e.: cross gable).

Detail Elements:

- Large gables
- Low pitch roofs with flat concrete tile.
- Windows with accent mullions.
- Exposed rafters and outlookers, triangular knee brace.
- Decorative gable vent detail.
- Decorative porch supports and railings.
- Transomed Windows.



Craftsman

Section 8. DESIGN GUIDELINES

8.3.2.6 Traditional

History and Character:

The Traditional style is based on classical design principles established the American Colonial period and interpreted or blended with the Prairie and Bungalow regional styles. Massing is horizontal in appearance with vertical proportioned windows and door surrounds. Front porches are common. The houses are composed of simple forms with centered entry elements over the front door.

Massing:

- Simple, symmetrical massing.
- Typical two story rectangular masses with added one-story elements such as porches forming more complex building configurations.

General Materials:

- Symmetrical and asymmetrical composition of doors and windows are common.
- Simple classical details such as columns.
- Siding or stucco with brick veneer accents.
- Front porches with wood columns and railings.
- Porches that extend length of the front elevation.
- Stone and brick veneer.

Roof Materials and Forms:

- Medium roof pitch with pitched roof dormer.
- Shallow roof pitch used over the porch.
- Flat concrete roof tile.
- Dormers reinforce symmetrical elevations.
- Bay windows and shed roofed elements added to simple building forms.
- Cupolas, weather vanes and other decorative roof ornamentations.

Detail Elements:

- Symmetrical or centered entry feature.
- Shutters accented with color.
- Columns at entries and porches.
- Roof dormers.
- Stooped porches.

Traditional

8.3.2.7 Western Ranch

History and Character:

The Western Ranch style is reminiscent of the early ranchers and farmers of Southern California. The Ranch Style evolved regionally in response to available building materials and environmental considerations. The distinctive porch covered terrace elements are a natural response to the temperate Southern California climate. Ranch style homes utilized simplified architectural details inspired by Spanish Colonial, Colonial and Monterey architecture.

Massing:

- Simple horizontal massing and rectilinear forms.

General Materials:

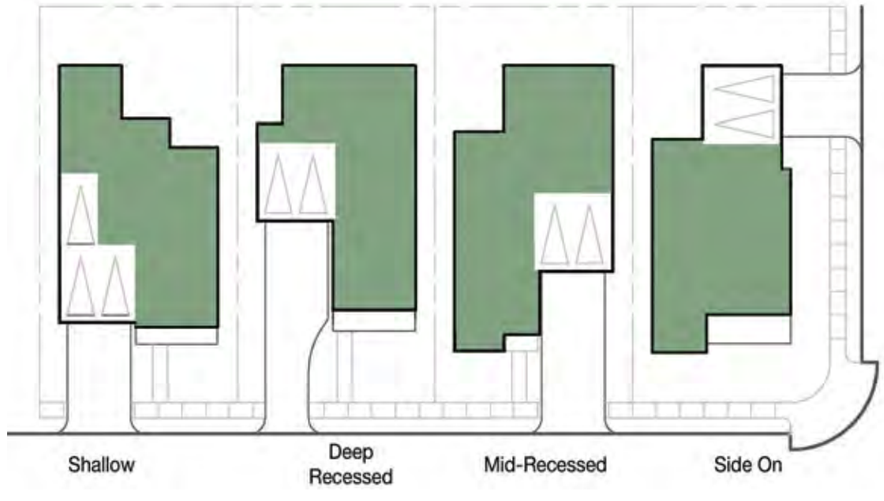
- Stucco, board and batten, and horizontal siding.
- Porches along front and rear elevations with a shallow roof break.
- Decorative shutters at windows.
- Wood window trim surrounds.
- Simple column and railing detailing.
- Substantial (8" x 8" min.) wood columns.

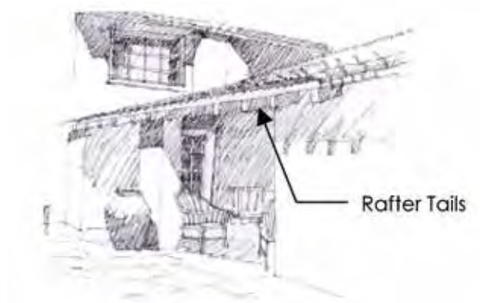
Roof Materials and Forms:

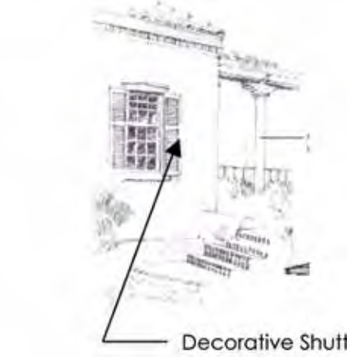
- Horizontal gable roofs with medium pitch and deep overhangs.
- Porches with shallow roof pitch.
- Gabled dormers.

Detail Elements:

- Corbeled wood columns.
- Heavy rafter elements.
- Simple accent shutters.
- Minimum 8" x 8" wood posts.







Western Ranch

8.4 Massing Principles

This section provides suggestions for creating neighborhoods and street scenes that have a variety of building forms that are proportionate to a human-scale and inviting to the pedestrian.

General Elements:

The general elements of building massing include:

- Front Articulation.
- Rear Articulation.
- Garage Placement.
- Roof Form.
- Balconies and Projections.
- Building Offsets/Variable Setbacks.

Objectives:

- Incorporate single-story elements.
- Avoid large flat two-story walls.
- Minimize two-story dominance on street scene, sidewalks and open spaces.
- Vary building setbacks along the street.
- Minimize visual impact of garages.

8.4.1 Front Articulation

Intent:

The front elevation of the home is an important element in creating a quality community at Esperanza. Close attention will be placed on the elevations and how they address the streetscene. Emphasis on location and entry designs, living areas and garages will provide a special street appeal. Emphasis on a variety of building massing will create a diverse street scene.

Guidelines:

- Building massing should reflect the architectural style.
- Massing elements should project enough to avoid elevations that appear to be "tacked on."
- Building details such as doors and windows should be in proportion to the overall massing.
- Building form is encouraged to reflect the interior uses of the home.
- Front elevations for two-story homes should incorporate a single-story element.
- Recessed two-story elements should create human-scale buildings.
- All homes should have at least two plane variations (excluding the garage) in front elevation massing.

8.4.2 Rear Articulation

Intent:

Special attention shall be given to the design of those dwellings adjacent to, or in close proximity of, major community roadways, common areas, open spaces, or entry features. Whether viewed from distant or close range, massing requirements will be implemented to ensure positive community character in these conditions. Generally, repetitious elements such as similar building profiles and continuous gable ends are to be avoided.

Guidelines:

- Architectural massing and articulation should be consistent with the style of the home.
- Plans shall incorporate projections and/or offsets that extend from the main wall lane.
- Vertical and horizontal plane breaks are encouraged.
- Homes directly adjacent to arterial roadways, collector roads, entry drives, common areas, and open spaces should be given particular attention in their rear articulation, contributing positively to these edges.

8.5 Garage Placement

Intent:

The configuration, location and orientation of the garage on the lot are integral design elements, both for the composition of the home and its contribution to the streetscene. Deemphasizing the garage is important in order to maintain the overall community design. Emphasizing the living areas of the home as they address the street will achieve this goal.

Placing living areas forward promotes social interaction and facilitates 'eyes on the street' for neighborhood security, while at the same time establishing neighborhood orientation to the pedestrian instead of the automobile.

Guidelines:

- Garage door patterns should vary among elevation types and reinforce the architectural theme of the home.
- Standard 3-car garage configurations are discouraged.

8.5.1 Garage Treatments

The home and the yard rather than the garage must be the primary emphasis of the elevation as seen from the street. Each plan shall incorporate one of the garage design techniques listed below and each parcel shall include at least two of these techniques to reduce the emphasis on the garage; and therefore, enhance the variable massing of the streetscene.

8.5.1.1 Shallow Recessed Garages

Setting the garage back a minimum of three feet in relationship to the front of the house/ or porch is intended to reduce the overall visual mass of the garage. The number of homes with shallow recess garage configurations shall be limited to 25% of the total number of units in each builder package.

8.5.1.2 Mid or Deep Recessed Garages

Setting the garage back to the middle or rear of the lot. This design treatment is intended to expose more living space areas toward the street, further reducing the visual impact of the garage along the street.

8.5.1.3 Alley Loaded

The use of the alleyways locates garages off a main loop road and creates a more traditional streetscene, with the fronts of the houses facing the street.

8.5.1.4 Split Garage

This treatment de-emphasizes the garage by reducing the length of the continuous door. Typically a one car garage and a one or two car garage are split to provide a variation in the appearance of the home. The single car garage elements in this split condition may option into living space that further enhances the streetscene by replacing the garage door with windows.

8.5.1.5 Tandem Garage

This garage layout de-emphasizes the third garage by concealing it behind a standard two-car garage condition. The tandem space is located so that it may option into living space. The two car garage is typically either shallow or deeply recessed into the lot and incorporated into the architecture of the home.

8.5.1.6 Setbacks

A varied setback is encouraged along the street frontage. Refrain from strict compliance to the minimum garage setback so as not to contribute to a repetitious and monotonous appearance along the street.

Where garages are adjacent to one another at common property lines, a two-foot minimum difference in setbacks shall occur.

8.6 Accessory Structures

Intent:

Accessory structures should be designed to reinforce the architectural style of the primary residence.

Guidelines:

- Detached structures, such as casitas, pool cabanas and guest quarters associated with the single-family lot shall be designed to match the style, detail, roof material/pitch and massing criteria of the primary home.
- Detached garages, storage buildings and outdoor sheds should incorporate design features, materials and colors compatible with the primary home.

8.7 Roof Form/Pitch

Intent:

- Roof form is another important design element as it relates to the character of the community, observed from both the external edges and inside the neighborhood.
- Variety of roof form along streets creates a positive visual edge.
- Appropriate massing of roof forms helps to create human scale architecture to the street.

Guidelines:

- Roof forms/pitch should reinforce the architectural style of the homes.
- Roofs shall be composed of a series of simple roof forms.
- Primary roof forms should be gable or hip designs.
- Roofs shall vary in massing along street scene and open spaces.
- Changes in the primary roof (ridge) orientation are encouraged.
- Flat roof elements should be minimized and incorporated only if appropriate to the architectural style.

8.8 Balconies And Projections

Intent:

As part of the overall design of a two-story dwelling, balconies and projections provide relief and interest at the second story. Balcony projections shall be consistent with the architectural character of the home. Additionally, these elements create ideal outdoor spaces.

8.9 Building Offsets/ Variable Setbacks

Intent:

Quality neighborhood design orients the 'living' areas of the home towards the street. To encourage this orientation, alternative setbacks are allowed for living areas as measured from the back of walk.

The development standards for each planning area/home type including building setbacks are established by the Esperanza Specific Plan. Additionally, building offsets or variable setbacks for both living and garages are encouraged to create variety in street scenes.

Guidelines:

- Setbacks shall be appropriate and proportionate to the housing type and lot size.
- Front setback should be varied along the street. A front offset of a minimum of two feet (2') is encouraged between the front walls of adjacent homes.
- Edge conditions such as homes backing to collector roads and back-to-back homes should incorporate variable rear setbacks to create variety.

8.10 Materials and Details

Architectural materials and detailing are central elements to creating quality communities. Appropriate focus should be given to the architectural details and the design of the details and architectural elements of the home.

General Elements:

The general elements comprising the materials and details of a building are:

- Wall Materials/Finishes.
- Doors and Windows.
- Roofing Materials and Slope.
- Fascias, Eaves and Rakes.
- Accent Materials.
- Exterior Colors.

8.10.1 Wall Materials/Finishes

Approved Materials:

- Board and batten siding.
- Cement plank siding.
- Stucco.
- Exposed masonry walls (brick, slump block, etc.)
- Stone, brick, brick veneers (accent materials).

Approved Finishes:

- Stucco finishes appropriate to the architectural style of the home.
- Smooth or sand finishes are encouraged. Heavy or Spanish Lace stucco finishes are prohibited.

Guidelines:

- Building materials should reflect the architectural style of the home.
- Siding materials should be wrapped beyond front elevations and should terminate at an inside corner or extend to the location of the lateral fence.
- Masonry elements and accents should reflect building forms and not appear as an applied veneer.
- Footings shall be exposed no higher than six inches (6") above finished grade.

8.10.2 Accent Materials

Accent materials promote individuality in each home and ensure diverse character within the neighborhood. Accents can be used to reinforce the architectural theme of the home.

Guidelines:

- Accent materials should complement the overall color and style of the home.
- Accent materials shall terminate at inside corners and be wrapped to coincide with an architectural element.
- Accent materials may terminate at location of the lateral fence or at logical end.
- Architectural trim applied to all elevations should be consistent with front elevation of the home.

8.10.3 Doors and Windows

The design and detail of the doors and windows on a home reinforce the architectural style and are key elements in the composition of the exterior elevation of the home.

Guidelines:

- Door designs shall be consistent with the architectural style of the home.
- Doors should be protected by porch elements or recessed entries.
- Garage and entry door design shall be appropriate to the style of the home.
- Maximum garage door height shall be eight feet (8').
- Garage doors should be recessed a minimum of twelve inches (12") from building plane.
- Alignment and proportions of windows shall be appropriate to the architectural style of the home.
- All windows (including garage door windows) are to be consistent with the architectural style of the home.
- Divided light windows are encouraged in keeping with the architectural style.
- Highly reflective glazing is not permitted.
- Window details such as shutters, trim surrounds, window boxes and window recesses are encouraged in keeping with the architectural style.

8.10.4 Roofing Materials and Details

Roofing materials as well as roof forms, pitch and design details are integral elements that reinforce the intended architectural style of the home.

Proposed roofs should be reflective of the architectural style of the home.

Attention should be given to address the context of the roof of each home relative to the adjacent homes along the street.

Approved Roofing Materials:

(Subject to compatibility with the intended architectural style)

- Concrete tile (flat or curved profile)
- Clay tile
- Slate
- High profile composition shingle (3-Dimensional)

Prohibited Roof Materials:

- Wood Shake
- Wood Shingle
- Low Profile Asphalt Composition
- Corrugated Metal

Guidelines:

- Roof materials and roof pitches need to be selected to reinforce the architectural style.
- Standing seam metal roofs painted in non-reflective neutral colors are allowed in appropriate architectural styles.
- Avoid repetition in continuous gable-ends and similar ridge heights.
- Skylights are not allowed on the sloped roofs of the front elevations of the building.

8.10.5 Roof Options

8.10.5.1 Eaves, Fascias and Rakes

Guidelines:

- Eave, fascia and rake proportions are to be appropriate to the architectural style.
- Larger eave overhangs provide opportunities for shading and should be used in appropriate architectural styles.
- Exposed rafter tails shall be a minimum of four inches (4") in thickness.
- Wood fascias and rafters shall be painted or stained to reinforce the style of the home.
- Attention shall be given to rake return detail.

8.10.5.2 Color

Intent:

Home colors are important to establishing a blended community at Esperanza, yet they should give the impression that each home was designed on its own.

Appropriate color selections make each home unique, but still look natural and in place in the neighborhood context.

Guidelines:

- Diversity of color is encouraged.
- Color shall contribute to distinguishing the overall architectural style of the home.
- Colors should reflect the natural hues found in Southern California.
- Color and hue variation in adjacent homes shall be provided to create neighborhood diversity.

8.10.6 Additional Design Elements

Intent:

Design elements that are utilitarian in nature should be designed as integral features that support the intended architectural style.

Guidelines:

- Exposed gutters and downspouts shall match roof or wall color.
- Faux copper patina is acceptable.
- Rooftop mechanical equipment is prohibited.
- Air conditioning/heating equipment shall be screened from the street and neighboring views and shall be ground mounted.
- Pool, spa, and water softening equipment shall be screened from neighboring views.
- Meters shall be screened from public view to the extent possible.

8.11 HOME TYPES

A variety of housing types, utilizing an architectural program composed of detached and attached housing, are offered at Esperanza. This diversity ensures a range of choices and a mix of homes within each neighborhood. Residences ranging from attached row townhomes and motorcourt townhome/condominiums to alley loaded and traditional single family homes along with innovative home types such as "two-pack" homes and courtyard homes, shall be articulated in traditional architectural styles. Providing a variety of housing programs allows homeowners the opportunity to move-up within the community as their lifestyles and needs change over time.

All project sites shall be designed to meet all the Integrated Waste Department's requirements, including the requirements for Sizing of Storage, Locations of Collection Area, Accessibility for Collection Vehicles and Collection of Sorted/ Diverted Waste Types.

The following pages provide graphic and written information that describes the general appearance of each anticipated home type. Future homebuilders within Esperanza should use these descriptive pages as a guide when designing the home type designated for the appropriate planning area.

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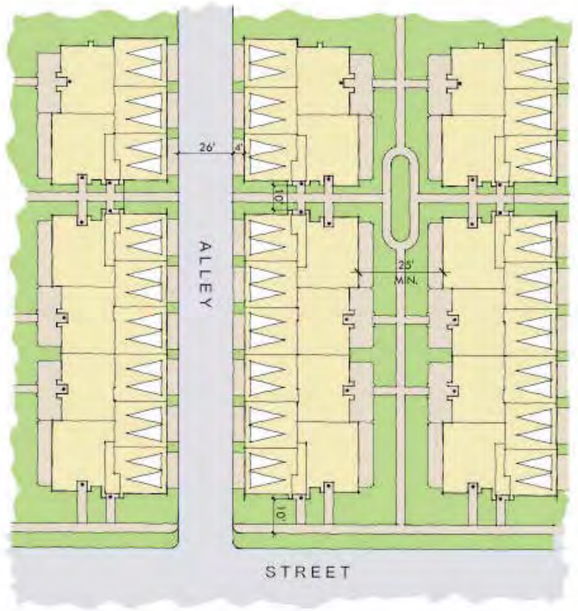
8.11.1 Row Townhomes

ROW TOWNHOMES

- Neo-traditional design places garages onto alleys, hidden from streets.
- Grid street pattern reinforces traditional neighborhood pattern.
- Front doors and porches face onto streets and/or greenbelts.
- Neighborhood open space provides a focal point of the neighborhood.



ROW TOWNHOMES

Patios / Balconies enhance social interaction

Front Doors face open space greenbelts

Street architecture creates traditional front door character

Garage doors oriented away from neighborhood streets

Building setbacks per Ontario Esperanza Specific Plan

CONCEPTUAL FRONT ELEVATIONS

CONCEPTUAL REAR ELEVATIONS

* Images suggest concept

Row Townhomes (2-Story)

Building setbacks per Ontario Esperanza Specific Plan

ROW TOWNHOMES

Patios / Balconies enhance social interaction

Front Doors face open space greenbelts

Street architecture creates traditional front door character

Garage doors oriented away from neighborhood streets

CONCEPTUAL FRONT ELEVATIONS

CONCEPTUAL REAR ELEVATIONS

* Images suggest concept

Row Townhomes (3-Story)

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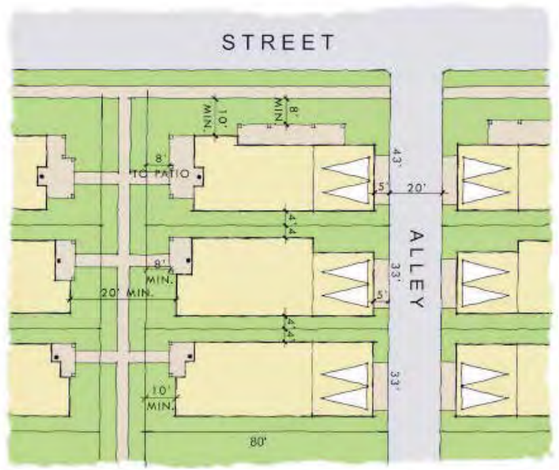
8.11.2 Cottage Single Family Homes

COTTAGE SINGLE FAMILY HOMES

- Neo-traditional design places garages onto alleys, hidden from streets.
- Grid street pattern reinforces traditional neighborhood pattern.
- Front doors and porches typically face onto streets.
- Alternative front door orientation onto greenbelts provide compatible neighborhood edge conditions.
- Public park provides a focal point of the neighborhood.



Building setbacks per Ontario Esperanza Specific Plan

COTTAGE SINGLE FAMILY HOMES

Porches enhance social interaction
Front Doors can face open space greenbelts
Garage doors oriented away from neighborhood streets
Neotraditional street scene places front doors and porches facing neighborhood streets

CONCEPTUAL FRONT ELEVATIONS

CONCEPTUAL STREET SCENE

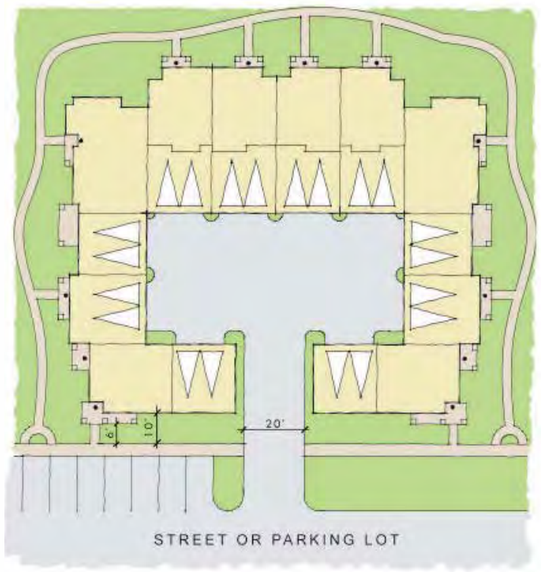
* Images suggest concept

Cottage Single Family Homes

8.11.3 Motorcourt Homes

MOTORCOURT TOWNHOMES

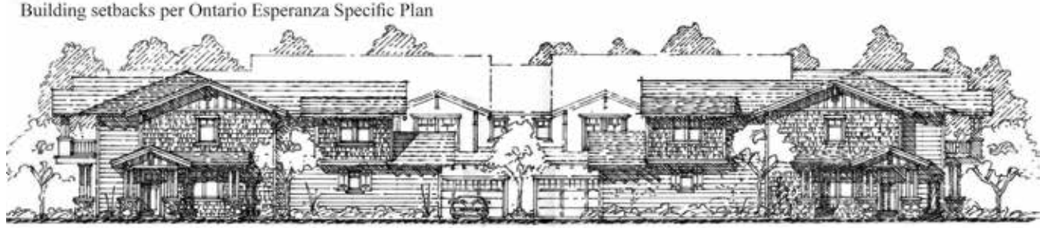
- Motorcourt building design minimizes garage orientation along streets and common drives.
- Grid circulation pattern reinforces traditional neighborhood pattern.
- Orientation of front doors, porches and patios onto streets and/or greenbelts is encouraged.
- Neighborhood open space provides a focal point of the neighborhood.



MOTORCOURT TOWNHOMES

- Garage doors are oriented around a motorcourt hidden from residential streets
- Front doors face onto open space greenbelts

Building setbacks per Ontario Esperanza Specific Plan



CONCEPTUAL FRONT ELEVATION

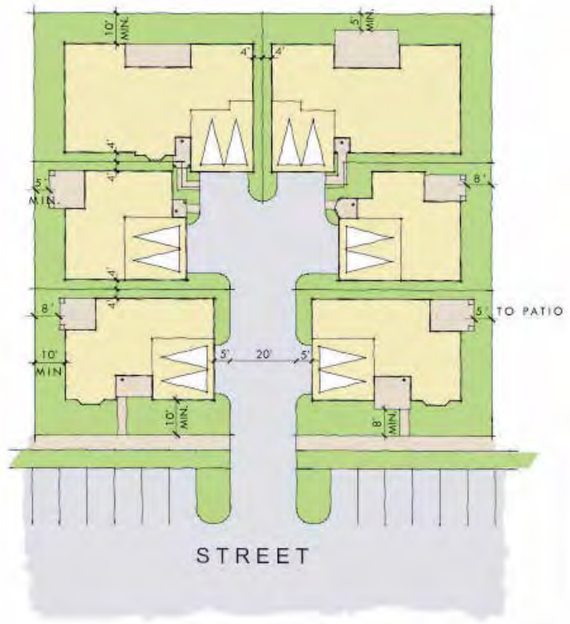
CONCEPTUAL REAR ELEVATION

Motorcourt Townhomes

8.11.4 6-Pack Courtyard Single Family Homes

6-PACK COURTYARD SINGLE FAMILY HOMES

- Courtyard design minimizes garage orientation along streets.
- Grid circulation pattern reinforces traditional neighborhood pattern.
- Conventional building design places front doors, porches and patios onto private motorcourts.
- Neighborhood open space provides a focal point of the neighborhood.



Building setbacks per Ontario Esperanza Specific Plan

6-PACK COURTYARD SINGLE FAMILY HOMES

CONCEPTUAL FRONT ELEVATIONS

CONCEPTUAL PEDESTRIAN COURT VIEW

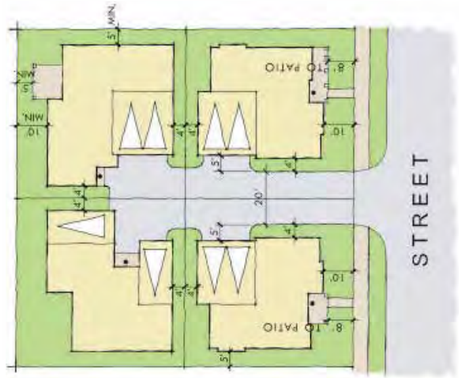
* Images suggest concept

6-Pack Courtyard
Single Family Homes

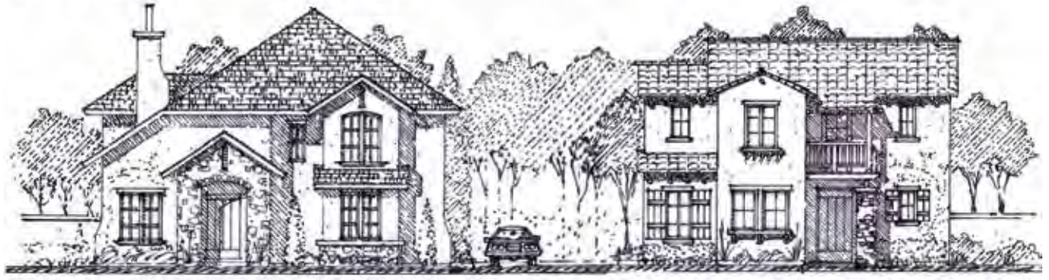
8.11.5 4-Pack Courtyard Single Family Homes

4-PACK COURTYARD SINGLE FAMILY HOMES

- Courtyard design minimizes garage orientation along streets.
- Modified grid street pattern reinforces traditional neighborhood pattern.
- Front doors and porches face onto streets and/or greenbelts.
- Central pocket park provides a focal point of the neighborhood.



Building setbacks per Ontario Esperanza Specific Plan



CONCEPTUAL STREETSCENE

CONCEPTUAL PEDESTRIAN COURT VIEW

* Images suggest concept

4-Pack Courtyard
Single Family Homes

8.11.6 50 Foot Wide Lots (40' Wide Homes)

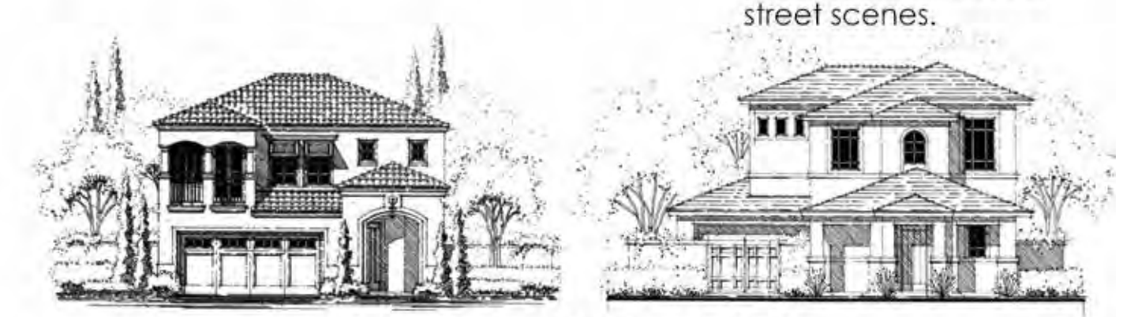
50 FOOT WIDE LOTS
(40' WIDE HOMES)

- Architecture forward design places living space and porches closer to the street than garages to reinforce pedestrian scale along streets.
- Alternative garage configurations provide further visual relief from the garage along streets.
- Grid street pattern reinforces traditional neighborhood pattern.
- Central pocket park/school provides a focal point of the neighborhood.

Building setbacks per Ontario Esperanza Specific Plan

50 FOOT WIDE LOTS
(40' WIDE HOMES)

- Architectural elements minimize garage door presence along neighborhood streets
- Front porches and entries are placed forward of the garage
- Alternate garage configurations create pededstrian oriented street scenes.



CONCEPTUAL FRONT ELEVATIONS

CONCEPTUAL STREET SCENE

* Images suggest concept

50 Foot Wide Lots
(40' Wide Homes)

8.11.7 55 Foot Wide Lots (45' Wide Homes)

55 FOOT WIDE LOTS
(45' WIDE HOMES)

- Architecture forward design places living space and porches closer to the street than garages to reinforce pedestrian scale along streets.
- Alternative garage configurations provide further visual relief from the garage along streets.
- Grid street pattern reinforces traditional neighborhood pattern.
- Central pocket park provides a focal point of the neighborhood.

Building setbacks per Ontario Esperanza Specific Plan

55 FOOT WIDE LOTS
(45' WIDE HOMES)

- Architectural elements minimize garage door presence along neighborhood streets.
- Front porches and entries are placed forward of the garage.
- Alternate garage configurations create pedestrian oriented streetscenes.

CONCEPTUAL FRONT ELEVATIONS

CONCEPTUAL STREETSCENE

* Images suggest concept

55 Foot Wide Lots
(45' Wide Homes)

8.11.8 2-Pack Single Family Homes

2-PACK SINGLE FAMILY HOMES

- Innovative design provides alternating recessed and deeply recessed garages along streets.
- Grid street pattern reinforces traditional neighborhood pattern.
- Architecture forward design places living space and porches closer to the street than garages to reinforce pedestrian scale along streets.
- Front doors and porches face onto streets.
- Neighborhood open space provides a focal point of the neighborhood.

2-PACK SINGLE FAMILY HOMES

- Deep recessed garages are hidden by adjacent home
- Deep recessed garages minimizes visible garages from neighborhood streets
- "Architecture forward" plan design places living area and porches in front of garages

Building setbacks per Ontario Esperanza Specific Plan

CONCEPTUAL FRONT ELEVATIONS

CONCEPTUAL STREET SCENE

* Images suggest concept

2-Pack
Single Family Homes

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8.12 DESIGN GUIDELINES FOR LANDSCAPE ARCHITECTURAL CHARACTER

Careful consideration has been given to the design of the community landscape architectural character for the Ontario Esperanza Specific Plan. The following design guidelines are organized to help define the basic landscape design principles for the Ontario Esperanza Specific Plan. Observing these guidelines will help to assure the "design vision" and integrity of this planned community.

All landscape plans, streetscape plans, and graphic designs with regard to community identity, neighborhood identity, or entry monumentation shall conform to the guidelines as set forth herein, and shall be subject to review and approval by the City of Ontario.

The "Conceptual Landscape Master Plan," Exhibit 30 on the next page shows the perimeter streetscape design, Community entries and monumentation, neighborhood park and mini parks, pedestrian greenbelts, and general landscape features of the Ontario Esperanza Specific Plan area.

8.12.1 Perimeter Streetscape Design

Streetscape design guidelines establish a hierarchy for the landscape development along the surrounding roadways, as well as establishing a framework for consistency of design. Three major arterial roadways surround the Ontario Esperanza Specific Plan area: Hamner Avenue to the West, Bellegrave Avenue to the North, and Mill Creek Avenue to the East. Landscape easements associated with these roadways have been defined, as noted in the City of Ontario Ontario Ranch General Plan.

Landscape development surrounding this community will help to set the character, while maintaining consistency with the City of Ontario's pedestrian pathway system illustrated in the Trails and Bikeways section of the Ontario Ranch General Plan. The following section discusses the streetscapes for the Esperanza Specific Plan area. Exhibit 31, "Streetscapes Legend" provides a guide to the location of the streetscapes discussed below.

8.12.2 Hamner Avenue

Hamner Avenue streetscape shall include the following:

- A landscaped parkway (15' wide min.) with a row of street trees (24" Box min.) along both sides of the street.
- A 5' wide sidewalk along west side of the street.
- A 14' wide landscaped median with a single row of street trees.
- A landscape easement (neighborhood edge) of 45' taken from face of curb to perimeter wall.
- Background trees and shrub masses planted in series of layers (foreground, midground, background) to help define borders and plant groupings while combining interesting foliage textures and color.
- Monumentation as shown in Exhibit 30, "Conceptual Landscape Master Plan."
- Refer to Exhibit 32, "Hamner Avenue" section for streetscape illustration."

Exhibit 30
Conceptual Landscape Master Plan

Exhibit 31
Streetscapes Legend

8.12.3 Bellegrave Avenue

Bellegrave Avenue streetscape shall include the following:

- A 5 foot wide lineal sidewalk and a 7 foot wide landscaped parkway along north side of the street.
- A landscape easement (neighborhood edge) of 35' taken from face of curb to perimeter wall on both sides of the street.
- Background trees and shrub masses planted in series of layers (foreground, midground, background) to help define borders and plant groupings while combining interesting foliage textures and color.
- Monumentation as shown in the Conceptual Landscape Master Plan, Exhibit 30, "Conceptual Landscape Master Plan."
- Refer to Exhibit 33, "Bellegrave Avenue" section below for streetscape illustration.
- Additional landscaping requirements for well sites along Bellegrave Avenue may include: landscape screening, earth berming or combination of both to screen undesirable views from public.

8.12.4 Mill Creek Avenue

Mill Creek Avenue streetscape shall include the following:

- A 12 foot wide landscaped parkway on the west with an additional 23' landscape easement include a single row of street trees (24" Box min.) along both sides of the street. The east side of Mill Creek Avenue includes a 12 foot wide landscaped parkway with an additional 50' Southern California Edison (SCE) easement taken from back of improved street right-of-way.
- Provide drought tolerant large shrub (max. 15') and drought tolerant landscaping within the SCE easement.
- Background trees and shrub masses planted in series of layers (foreground, midground, background) to help define borders and plant groupings while combining interesting foliage textures and color.
- Monumentation as shown in Exhibit 30, "Conceptual Landscape Master Plan."
- Refer to Exhibit 34, "Mill Creek Avenue" and Exhibit 35 "Mill Creek Avenue at the SCE Corridor" for streetscape illustration."

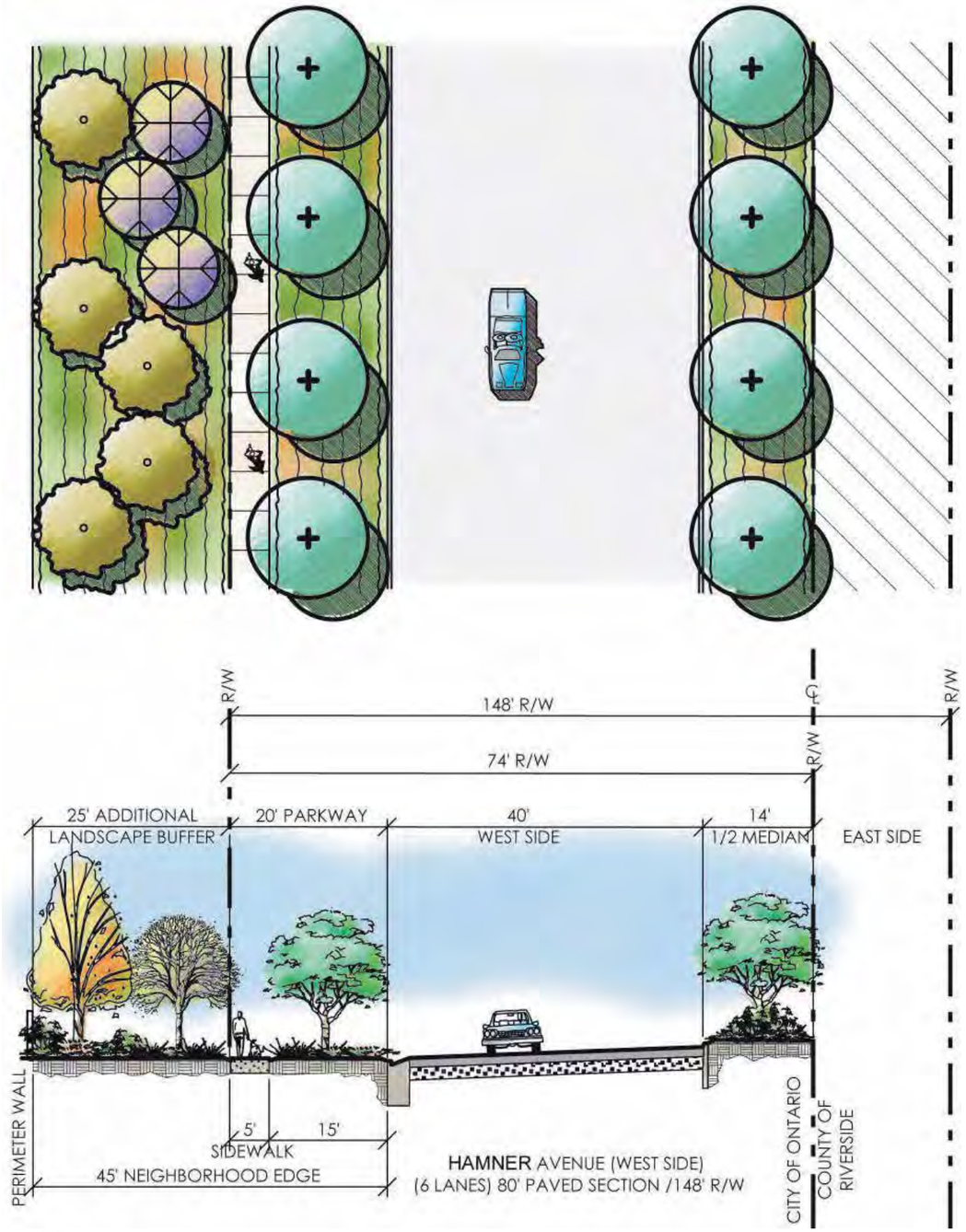


EXHIBIT 32
~~Milliken~~ Hamner Avenue

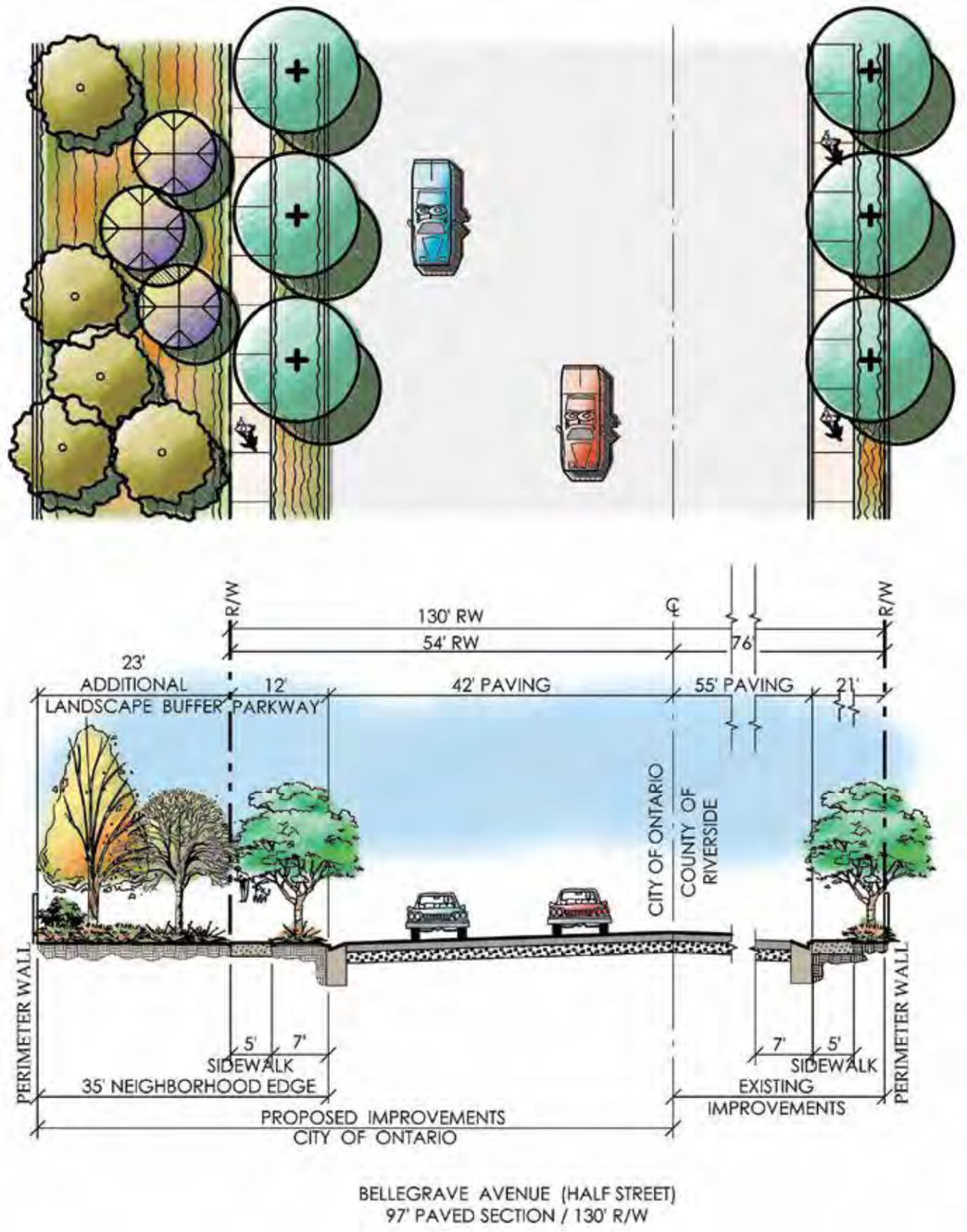


Exhibit 33
Bellegrave Avenue

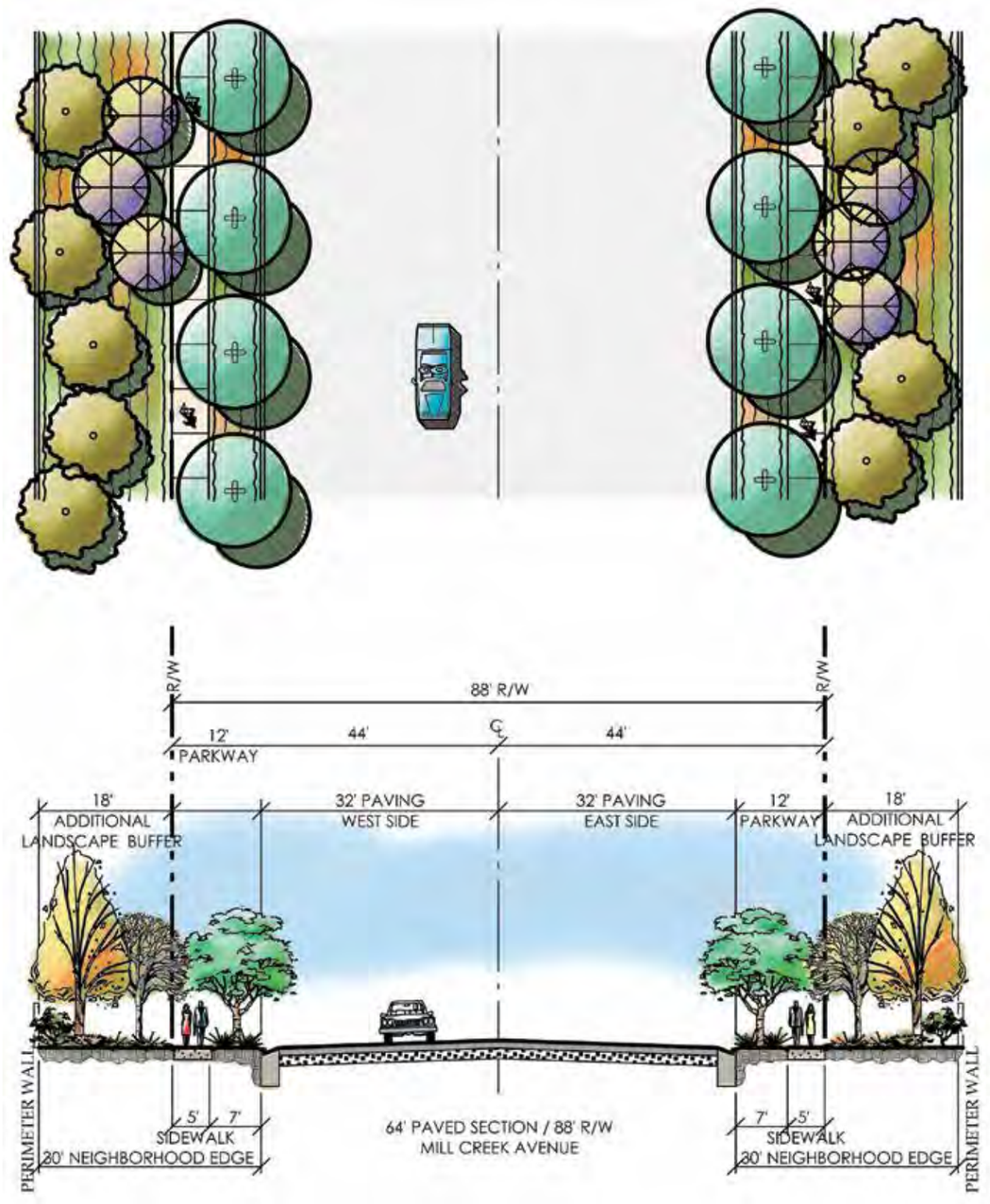
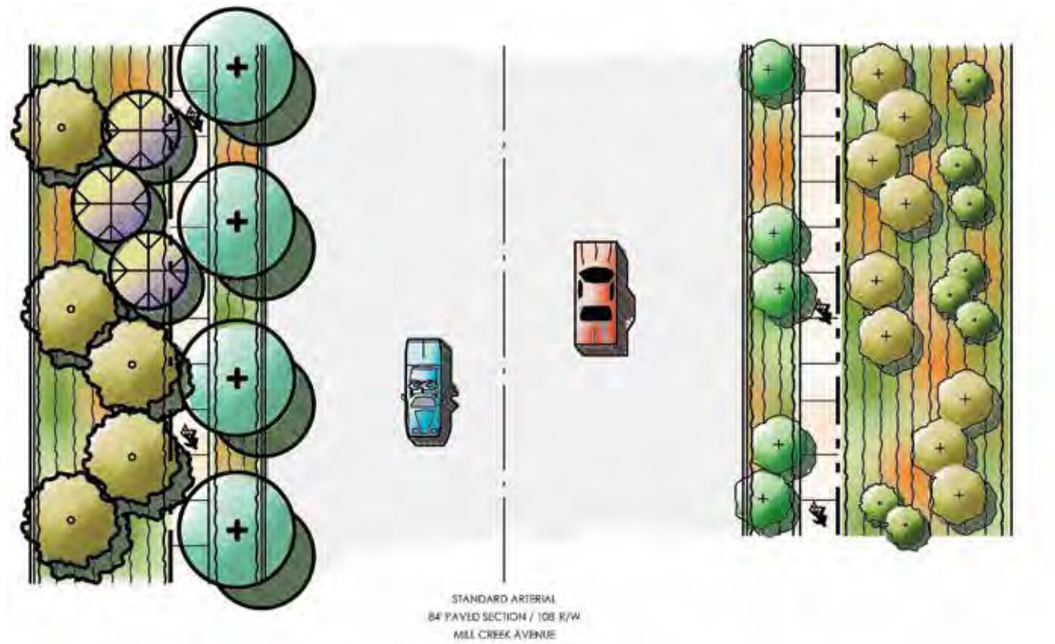


Exhibit 34
Mill Creek Avenue



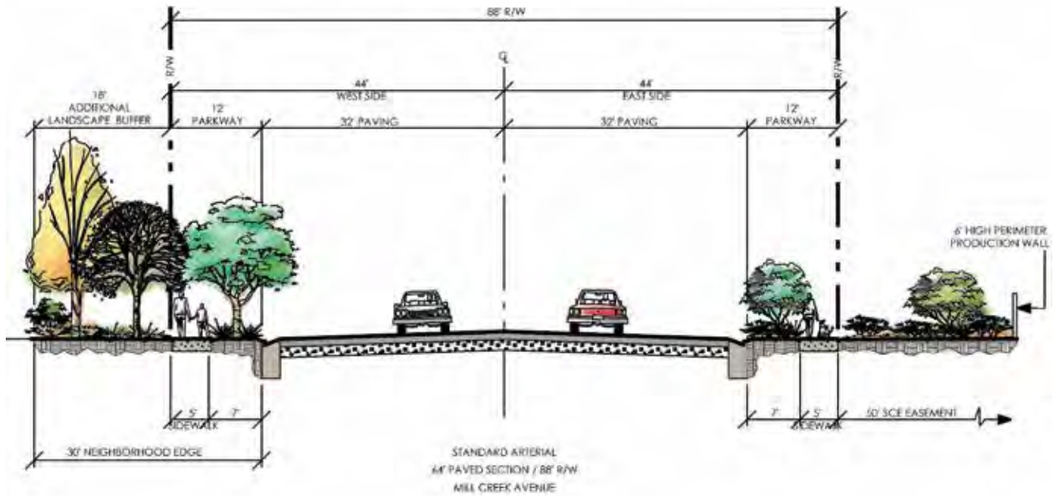


Exhibit 35
Mill Creek Avenue at the SCE Corridor

8.12.5 Interior Streetscape Design

Streetscape design within the interior of the Ontario Esperanza Specific Plan community shall be consistent in character with the perimeter streetscapes and should help to promote pedestrian circulation into the "Community Core."

Where interior streetscapes interface with neighborhood/mini parks and open space, special consideration should be taken to integrate pedestrian circulation into these areas via a streetside pedestrian system that links city sidewalks to active walking trails and open space uses. This is especially important within the multi-family/high density residential planning areas.

Two interior roadways bring residents into the "Community Core," Eucalyptus Avenue, running East/West, and "Street A" that intersects with Eucalyptus Avenue, running North/South.

8.12.6 Eucalyptus Avenue

Eucalyptus Avenue streetscape shall include the following:

- A 7 foot wide landscaped parkway with a single row of street trees (24" Box min.) along both sides of the street.
- A 5' wide concrete sidewalk with a 7' wide decomposed granite multi-purpose trail.
- A 7 foot wide Class II striped on-street bicycle trail within the right of way on both sides of the street.
- A landscape easement (neighborhood edge) of 35' taken from face of curb to perimeter wall on both sides of the street.
- Background trees and shrub masses planted in series of layers (foreground, midground, background) to help define borders and plant groupings while combining interesting foliage textures and color.
- Monumentation as shown in Exhibit 30, "Conceptual Landscape Master Plan."
- Refer to Exhibit 36, "Eucalyptus Avenue" section for streetscape illustration.

8.12.7 "A" Street

"A" Street streetscape shall include the following:

- A landscaped parkway (7' wide minimum) with a single row of street trees (24" box minimum) along both sides of the street.
- A 5' sidewalk separated from the street by a 7 foot wide landscaped parkway on both sides of the street.
- A landscaped buffer of 6' to 10' taken from the back of sidewalk to the perimeter wall on both sides of the street.
- Background trees and shrub masses planted in a series of layers (foreground, midground and background) to help define borders and plant groupings while combining interesting textures and colors.
- Monumentation as shown in Exhibit 30, "Conceptual Landscape Master Plan."
- Refer to Exhibit 37, "A Street" section for streetscape illustration.

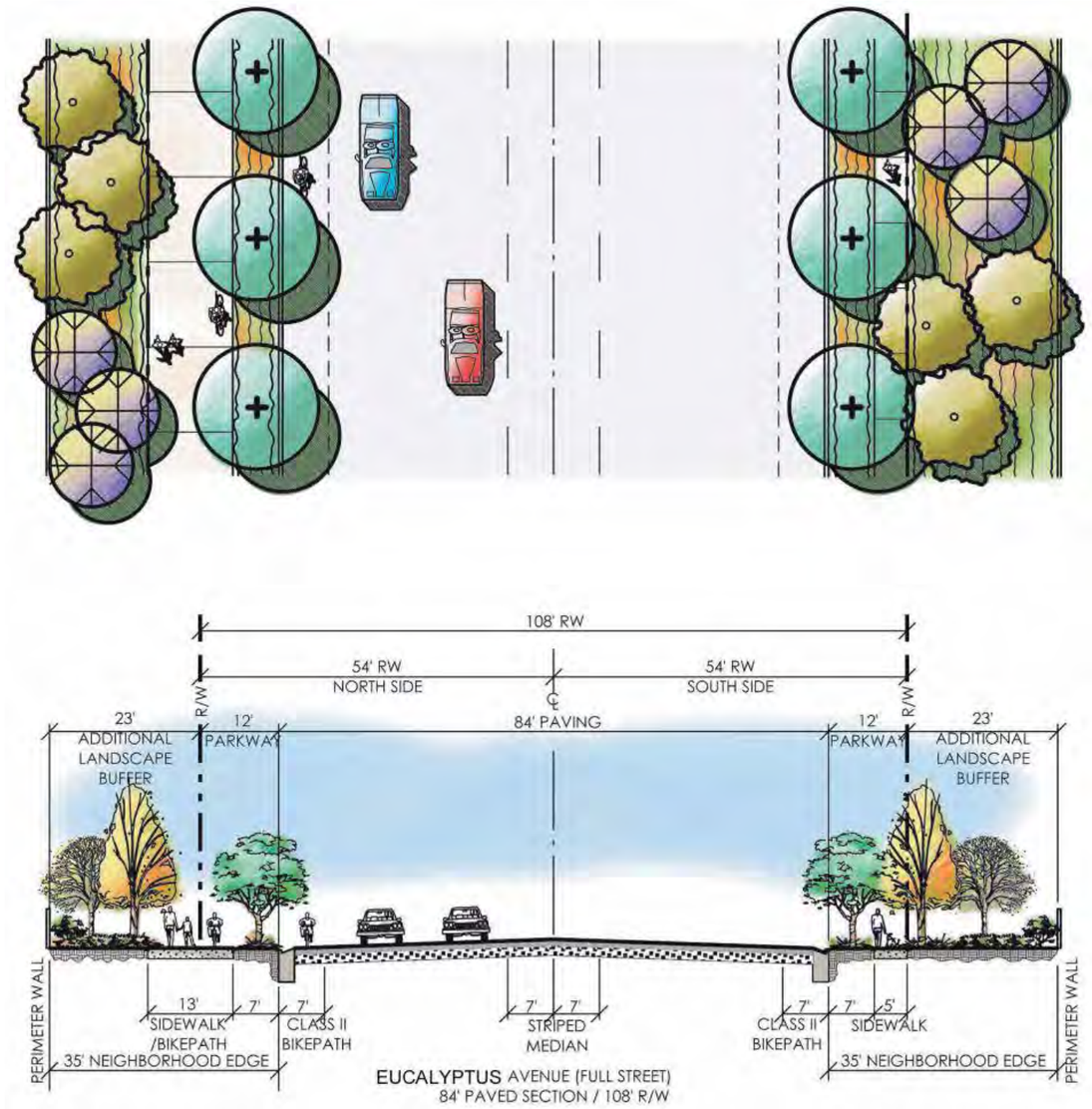


Exhibit 36
Eucalyptus Avenue

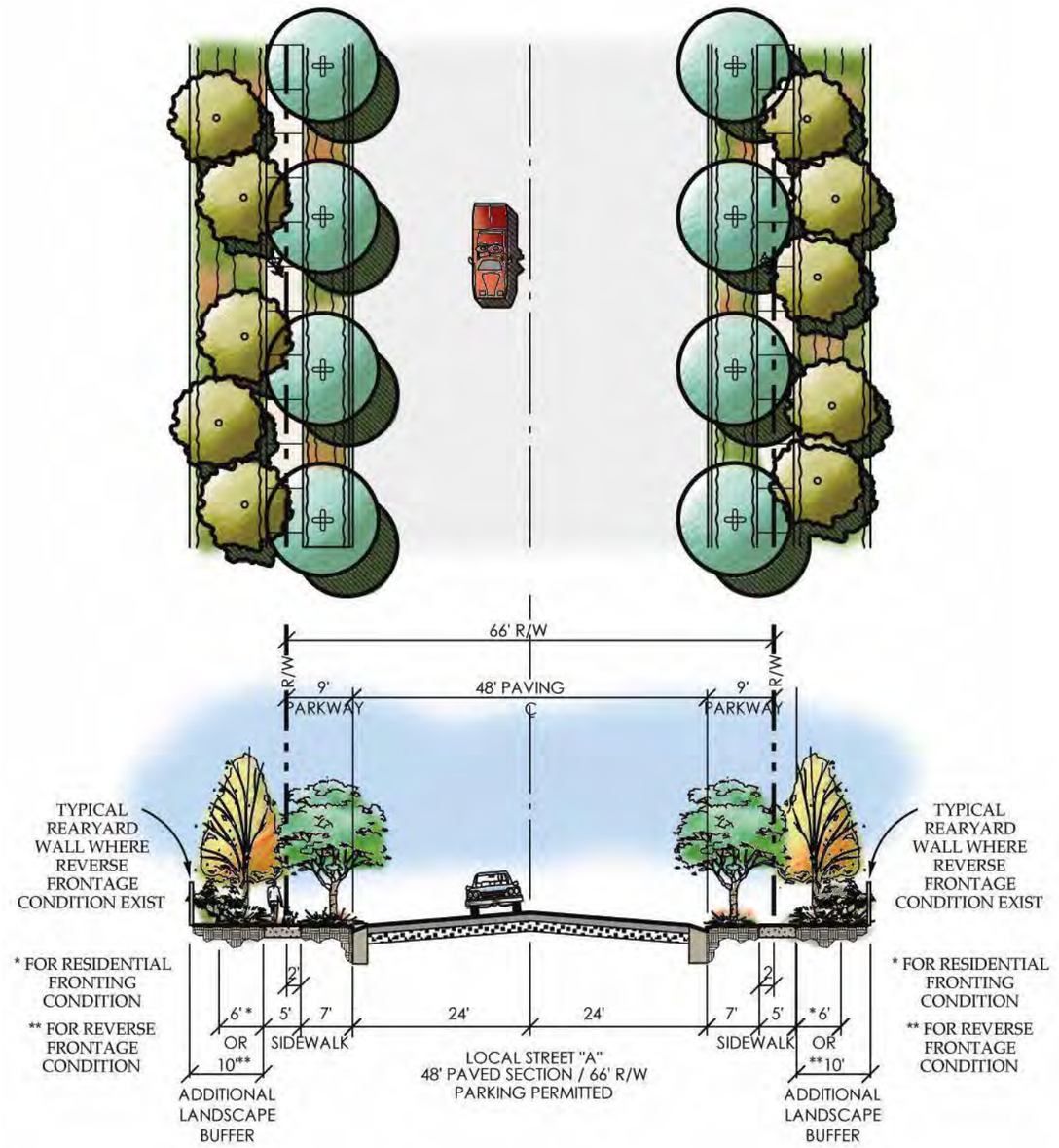


Exhibit 37
"A" Street

8.12.8 Local Streets, Private Alleys, and Private Neighborhood Streets

Local Streets

Local Street streetscapes shall include the following:

- A landscaped parkway (7' wide minimum) with a single row of street trees, 24" box minimum, along both sides of the street.
- A 5' wide sidewalk on both sides of the street.
- A 5' wide minimum planter area from sideyard wall to back of sidewalk along reverse frontage conditions.
- Refer to Exhibit 38, "Local Street and Cul-de-Sac" for streetscape illustration.

Private Neighborhood Streets

Private Neighborhood streets shall include the following:

- A landscaped parkway (7' wide minimum) with a single row of street trees, 24" box minimum, along both sides of the street.
- A 4' wide sidewalk on both sides of the street.
- A 7' wide minimum planter area from sideyard wall to back of sidewalk along reverse frontage conditions.
- Refer to Exhibit 39, "Private Neighborhood Street Section" for streetscape illustration.

Private Alleys

Private Alleys shall include a 5' wide landscaped area on both sides of the alley when the paved area is a maximum of 20' in width. Landscaping will be provided as appropriate in areas of less than 5' in width depending upon the final design of the private alley. Refer to Exhibit 40, "Private Alleys" for illustration.

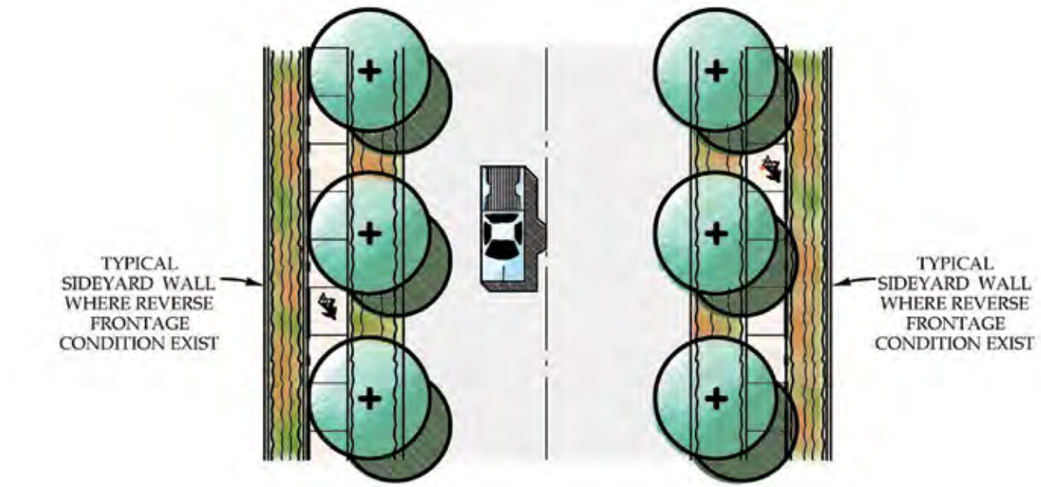


EXHIBIT 38
Local Street and Cul-de-Sac

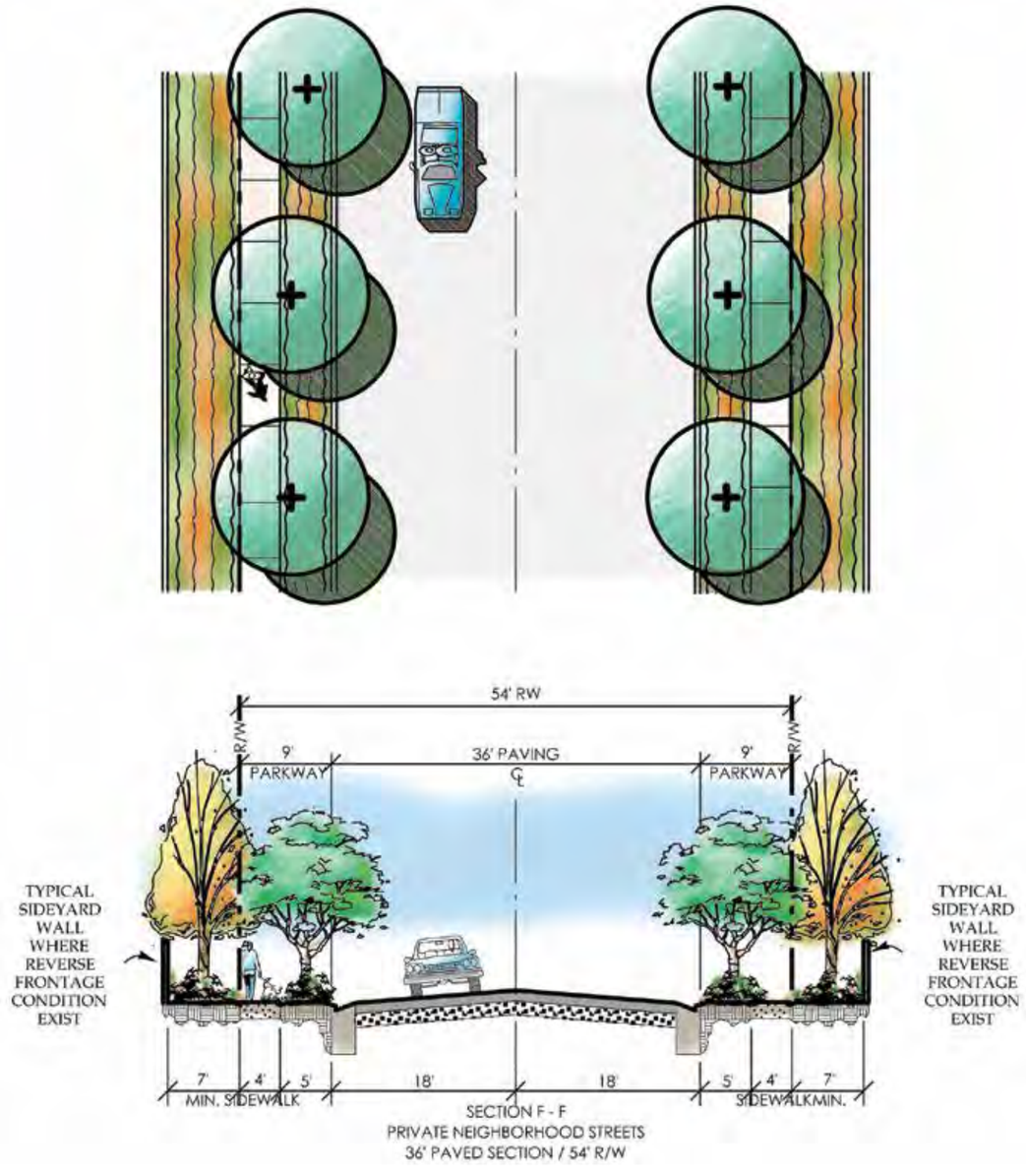


Exhibit 39
Private Neighborhood Street Section

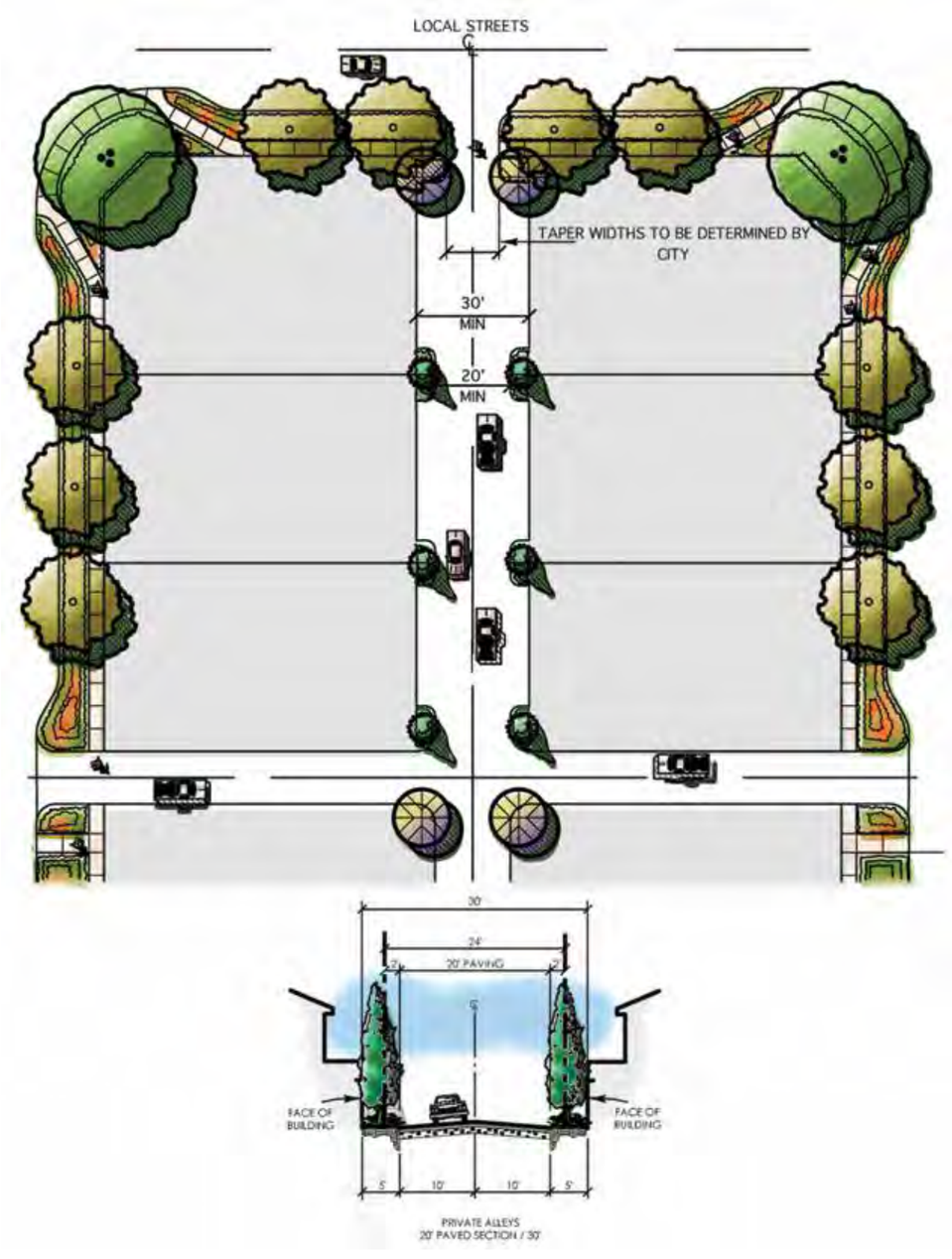


Exhibit 40
Private Alleys

8.13 City of Ontario "Gateway" Monument

At the corner of Hamner Avenue and Bellegrave Avenue, a city "Gateway" monument will be located. Special consideration should be made to integrate the perimeter landscaping along Hamner and Bellegrave Avenue into the final monument design and landscape character. The City of Ontario is currently developing the "Gateway" monument program for the Ontario Ranch. Additional coordination with the City of Ontario will be needed prior to developing this area.

8.14 Entries and Monumentation

Monumentation occurs throughout the Ontario Esperanza Specific Plan community and is designed to establish a basic hierarchy for entering each area of the community. Along the perimeter edges there are several entry points into the community. At key entries a landscape and monumentation program will be utilized to help identify the community as well as convey a "welcoming" feeling for both vehicular and pedestrian traffic. Inspired by the local historical village of "Guasti," home of the Italian Vineyard Company, the project monuments for Ontario Esperanza embody some of the character of this Ontario icon, through the use of similar materials, architectural styles/detailing and landscaping.

Three basic monument treatments are used to set the hierarchy of the entries and monumentation: the Primary Community Entry and Monumentation, the Secondary Community Entry and Monumentation, and the Neighborhood Entry and Monumentation.

8.14.1 Primary Community Entry and Monumentation

The Primary Community Entry and Monumentation shall include the following:

- Freestanding curved monument walls at each corner with highlighted pedestrian portal.
- Identification field for potential sign lettering placement.
- Architectural concrete caps, trim, and bases to help delineate architectural detailing and veneer material used.
- Use of "real" veneer materials instead faux concrete veneers.
- Use of large specimen native trees to anchor each side of entry drive at site entry.
- Seasonal perennial flowering to allow for seasonal flowering interest throughout the year.
- Enhanced pedestrian paving at street crossing and at monument location as approved by the City Engineer.
- Accent trees and shrub masses planted in series of layers (foreground, midground, background) to help define borders and plant groupings while combining interesting foliage textures and color.
- Accent lighting of landscape/monumentation.
- Handicapped ramps designed to City standards.
- Refer to Exhibit 30, "Conceptual Landscape Master Plan" and Exhibits 41-43, "Primary Community Entry and Monumentation" and, "Primary Community Entry and Monumentation – Hamner Avenue, and, "Primary Community Entry and Monumentation – Mill Creek Avenue" for detailed conceptual illustration.

8.14.2 Secondary Community Entry and Monumentation

The Secondary Community Entry and Monumentation shall include the following:

- Freestanding curved walls at each corner with anchoring entry pilaster.
- Identification field for potential sign lettering placement on enhanced perimeter corner cut wall.
- Architectural concrete caps, trim, and bases to help delineate architectural detailing and veneer material used
- Enhancement of corner cut wall and use of accent pilasters to balance each side.
- Use of "real" veneer materials instead faux concrete veneers.
- Use of large specimen native trees to anchor each side of entry drive at site entry.
- Seasonal perennial flowering to allow for seasonal flowering interest throughout the year.
- Enhanced pedestrian paving at street crossing and at monument location as approved by the City Engineer.
- Accent trees and shrub masses planted in series of layers (foreground, midground, background) to help define borders and plant groupings while combining interesting foliage textures and color.
- Accent lighting of landscape/monumentation.
- Handicapped ramps designed to City standards.
- Refer to Exhibit 30, "Conceptual Landscape Master Plan" and Exhibit 44, "Secondary Community Entry and Monumentation Elevation/Plan" for detailed conceptual illustration.

8.14.3 Neighborhood Entry and Monumentation

Neighborhood entries and monumentation should occur on interior corner entries within the Ontario Esperanza Specific Plan Community. These entries should be used to help continue the landscape character theme to the "core" of the community. Each neighborhood built within the project will have the opportunity to identify their individual project character while providing the basic design features of the other monuments. Refer to The Neighborhood Entry and Monumentation shall include the following:

- Freestanding large entry pilaster set within the landscaped parkway. This pilaster should embody the same character as that of the Primary Community Entry Monument portal, but is reduced in scale to create a "pedestrian gateway" into each neighborhood. Project identification plaque or icon can be located at this pilaster
- Identification field for potential sign lettering placement on enhanced perimeter corner cut wall.
- Architectural concrete caps, trim, and bases to help delineate architectural detailing and veneer material used.
- Enhancement of corner cut wall and use of accent pilasters to anchor each side.
- Use of "real" veneer materials instead faux concrete veneers.
- Seasonal perennial flowering to allow for seasonal flowering interest throughout the year.
- Enhanced pedestrian paving at street crossing and at monument location as approved by the City Engineer.
- Accent trees and shrub masses planted in series of layers (foreground, midground, background) to help define borders and plant groupings while combining interesting foliage textures and color.
- Accent lighting of landscape/monumentation.
- Handicapped ramps designed to City standards.
- Refer to Exhibit 30, "Conceptual Landscape Master Plan" and Exhibit 45, "Neighborhood Entry and Monumentation" for detailed conceptual illustration.

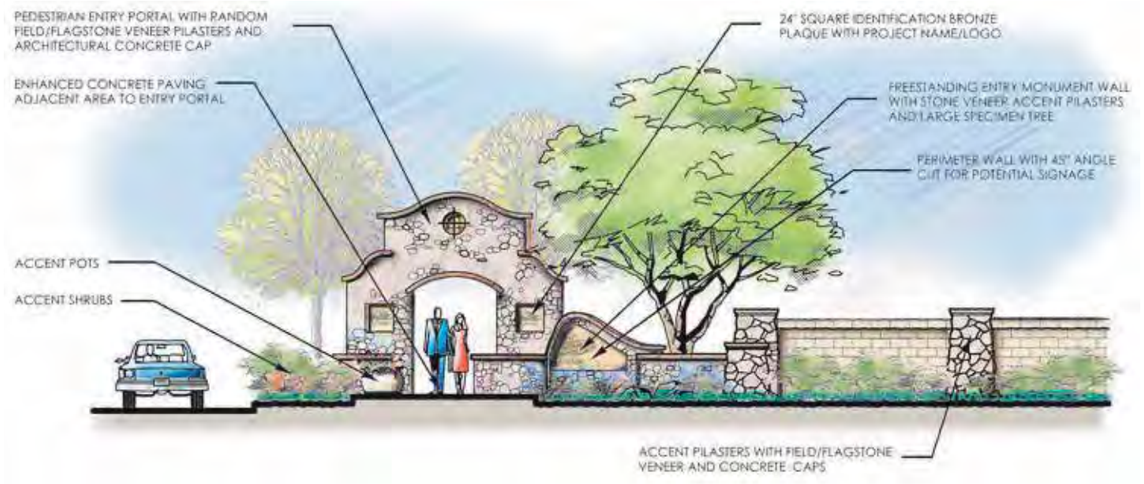
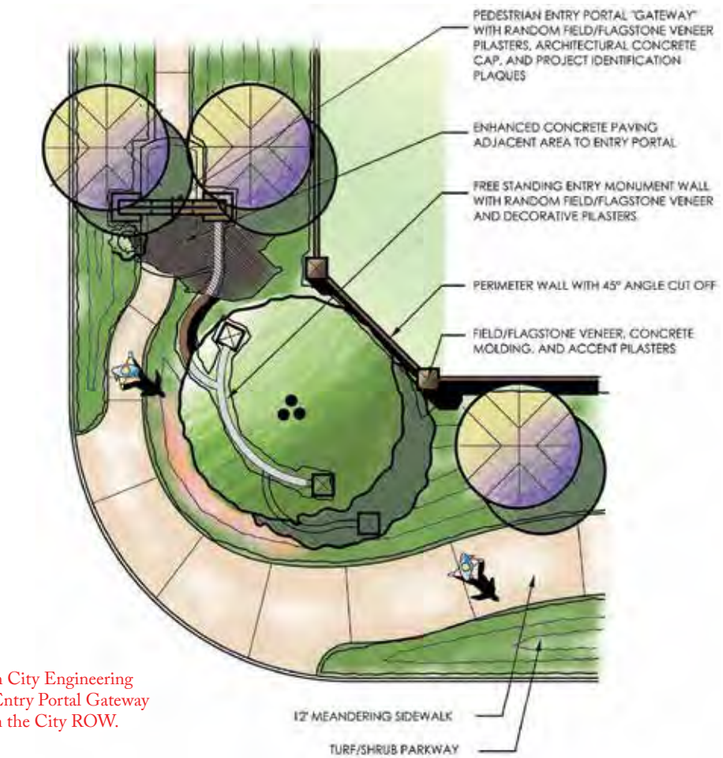


EXHIBIT 41

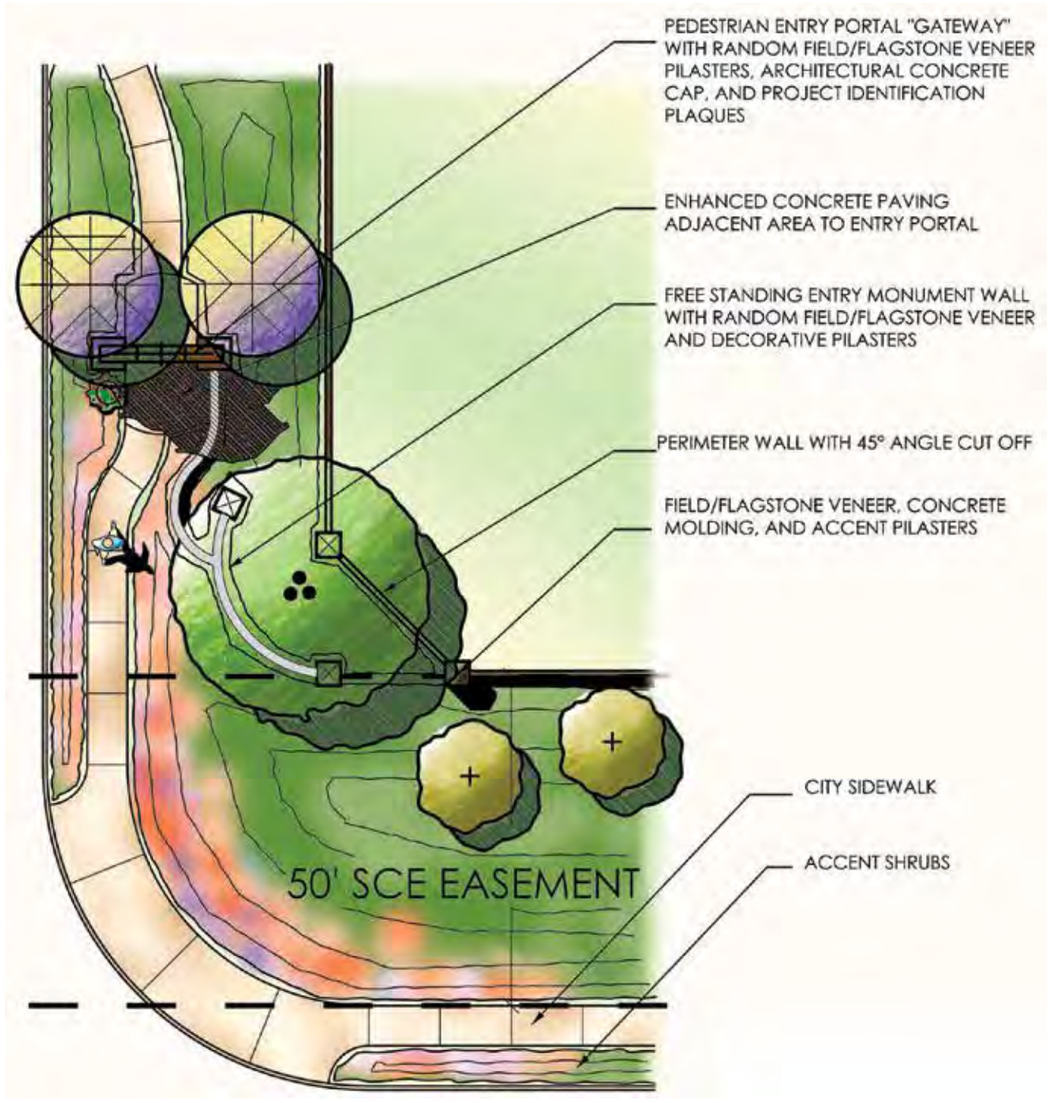
Primary Community Entry and Monumentation



Developer to verify with City Engineering Development that the Entry Portal Gateway will be permitted within the City ROW.

EXHIBIT 42

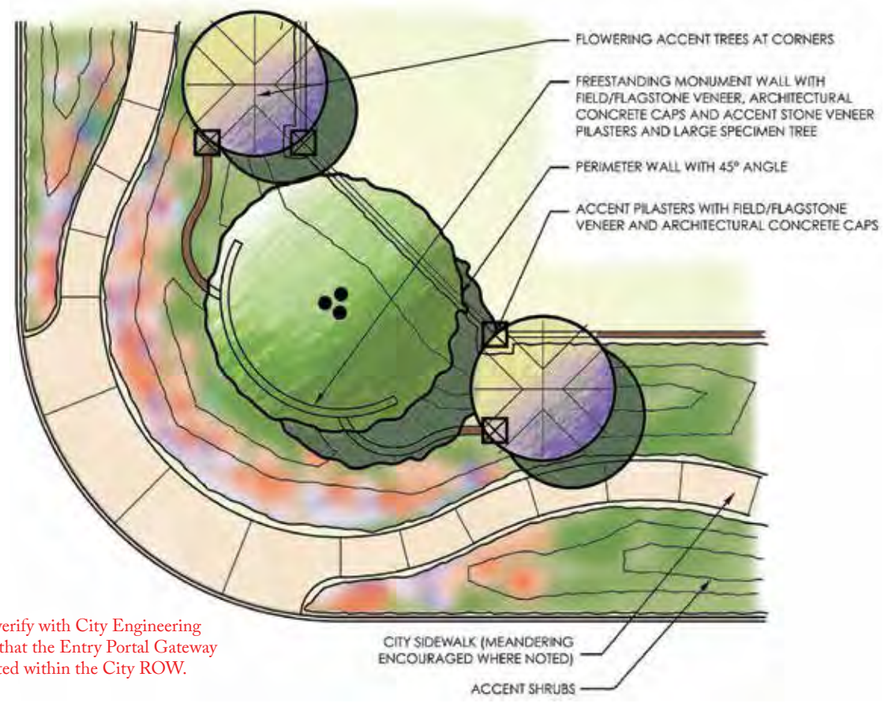
Primary Community Entry and Monumentation – Hamner Avenue



Developer to verify with City Engineering Development that the Entry Portal Gateway will be permitted within the City ROW.

Exhibit 43

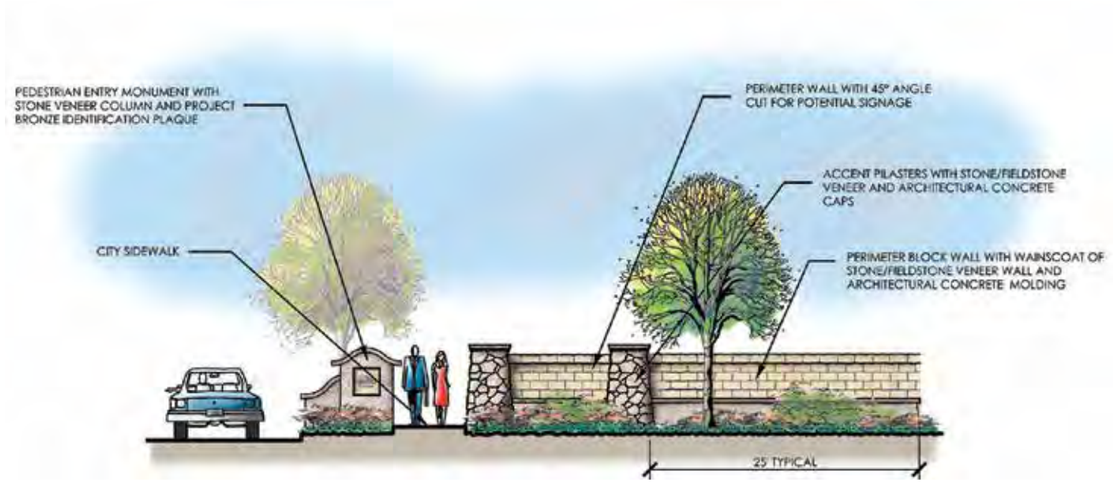
Primary Community Entry and Monumentation – Mill Creek Avenue

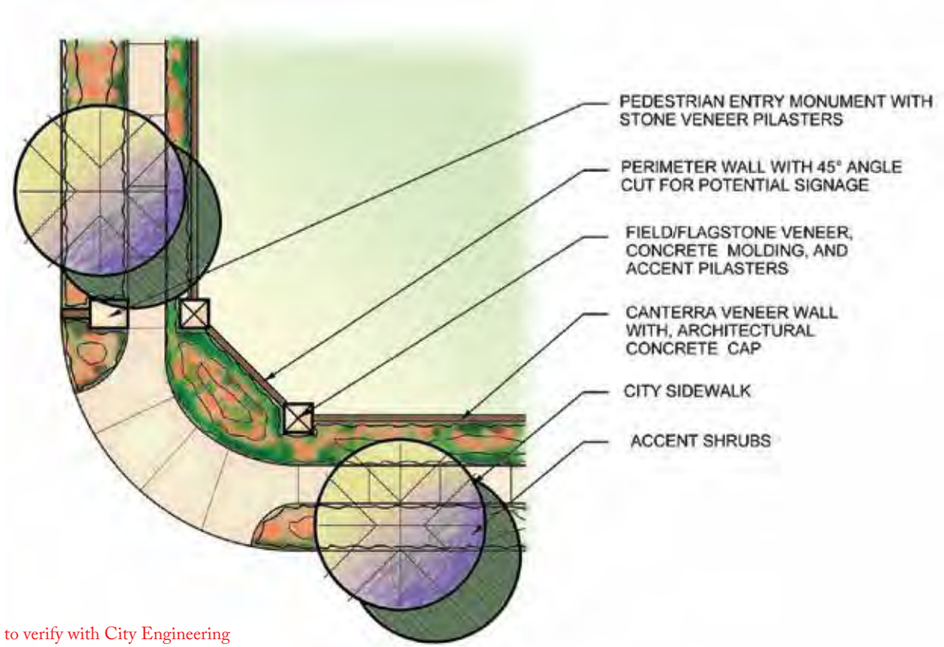


Developer to verify with City Engineering Development that the Entry Portal Gateway will be permitted within the City ROW.

Exhibit 44

Secondary Community Entry and Monumentation Elevation/Plan





Developer to verify with City Engineering Development that the Entry Portal Gateway will be permitted within the City ROW.

Exhibit 45

Neighborhood Entry and Monumentation Elevation/Plan

8.15 Parks and Open Space

The Ontario Esperanza Specific Plan Community will have a central "Community Core" that centers on the Neighborhood Park and the School. Exterior walkways and trails should lead to this centralized area. Exhibit 46, "Pedestrian Circulation Plan" illustrates the pedestrian accessibility and connectivity throughout the Esperanza Specific Plan area. Exhibits 47 through 50 illustrate the planning concepts for the Neighborhood Park and Mini-Parks planned for the Esperanza Specific Plan area.

- All project sites shall be designed to meet all the Integrated Waste Department's requirements, including the requirements for Sizing of Storage, Location of Collection Area, Accessibility for Collection Vehicles, and Collection of Sorted/Diverted Waste Types.

8.15.1 The Neighborhood Park

Park 1, the Neighborhood Park, consists of the following:

- Parking - Parking shall be adequate to accommodate daily use of the park, and should be screened from public view using a combination of berming and landscaping. In addition, the parking configuration should take into consideration alignment with proposed neighborhood streets and provide a minimum of (15) fifteen to (20) twenty parking stalls (including one van accessible handicap stall/unloading area).
- Children's Tot Lot Play Area - A Tot Lot will be located within close proximity to the parking lot and Restroom Building. Play structures and equipment should be staged to allow for separated use based on age (2-5 yr. and 5-12 yr.). The Tot Lot should also follow ADA guidelines and provide access based off of equipment selected. Play areas and fall zones shall be constructed with synthetic surfacing per ADA standards with wood fiber ("Fibar") being available as an alternative in non-fall zone areas. Seating areas shall be located near the Tot Lot to provide areas for parental supervision.
- Open turf area/Barbecue Picnic Facilities - The Neighborhood Park should provide an open turf area and barbecue picnic facilities scattered throughout a looped concrete walkway system. Barbecue facilities (minimum of 50%) should be located adjacent to the walkway system for ADA accessibility; the remaining percentage set in open turf areas. Each barbecue picnic facility shall provide a picnic table, freestanding barbecue, and trash receptacle. These barbecue facilities can be placed on concrete or any other ADA acceptable surfacing. The design of the Neighborhood Park open space should take into account pedestrian circulation and the linkage to the two adjacent roads as well as the surrounding community.
- Sports Fields for unorganized play – The open space turf area should be arranged to accommodate two baseball/softball fields and a soccer field overlay. Sports lighting should be discouraged at the park. Wherever feasible a minimum distance of 20 feet should be provided between streets and play areas. Sports fields will be improved in accordance with the City's Parks and Maintenance Department requirements.
- Landscaping – Landscaping within the Neighborhood Park shall harmonize with the surrounding streetscapes. Large specimen trees should be used within the open turf areas to help provide shade and screening of unwanted views. Accent trees should also be used at pedestrian entries and around the Tot Lot for color and seasonal interest. The park shall be irrigated with reclaimed water by an automated system per the City Standard Specifications for irrigation systems.
- Lighting – Security walkway lighting shall be provided in accordance with City requirements and the design guidelines contained herein.

- Restroom Building – A restroom building shall be located adjacent to the tot lot in clear view of the public streets surrounding the park. The building should be designed to provide separate restroom facilities for both sexes and shall conform to ADA design guidelines. Additional provisions for a storage room for the City of Ontario maintenance personnel shall also be designed (all designs shall be submitted to the City of Ontario and County Health Department for approval).
- Park monumentation/signage and a lockable trash enclosure area.
- Refer to Exhibit 47, "Neighborhood Park" for detailed conceptual illustrations.

8.15.2 Mini Parks and Pedestrian Trails

Pedestrian circulation is highly encouraged within the Ontario Esperanza Specific Plan Community. Landscape easements are provided along major roadways and are encouraged within the neighborhood communities.

- Interior walkways should be designed to provide connections to adjacent neighborhoods as well as linking the Neighborhood Park and School to dedicated neighborhood edge treatments and enhanced landscaped areas.
- Exhibit 47, shows a Neighborhood Park example (5 Acre)."
- Enhanced paving at pedestrian connections where pedestrian circulation crosses roadways.
- Paseos should provide strong connections to "Community Core" (~~school~~/5 AC neighborhood park).
- Connection of neighborhood pocket parks to community. The pocket parks are intended to provide minimal amenities, and should designed with strong neighborhood "eyes-on" approach. Pocket Parks should range between 3/4 – 1 acre in size.

Mini parks for children's play areas may contain the following amenities:

- Paseo walkway (meandering encouraged/ ADA accessible).
- Landscaping - Landscaping shall harmonize with the surrounding streetscapes and utilize trees, shrubs, and groundcovers identified in the plant matrix.
- Lighting – Pole mounted fixtures spaced at appropriate intervals for safety and security.
- Open turf play area

The Mini Parks might contain one or more of the following amenities:

- Barbecue Picnic Facilities
- Basketball/Volleyball Courts
- Tot Lots
- Rose Garden
- Covered Picnic Structures
- Seatwalls/benches
- Community Garden
- Refer to Exhibits 48 through 51 for detailed conceptual illustrations.

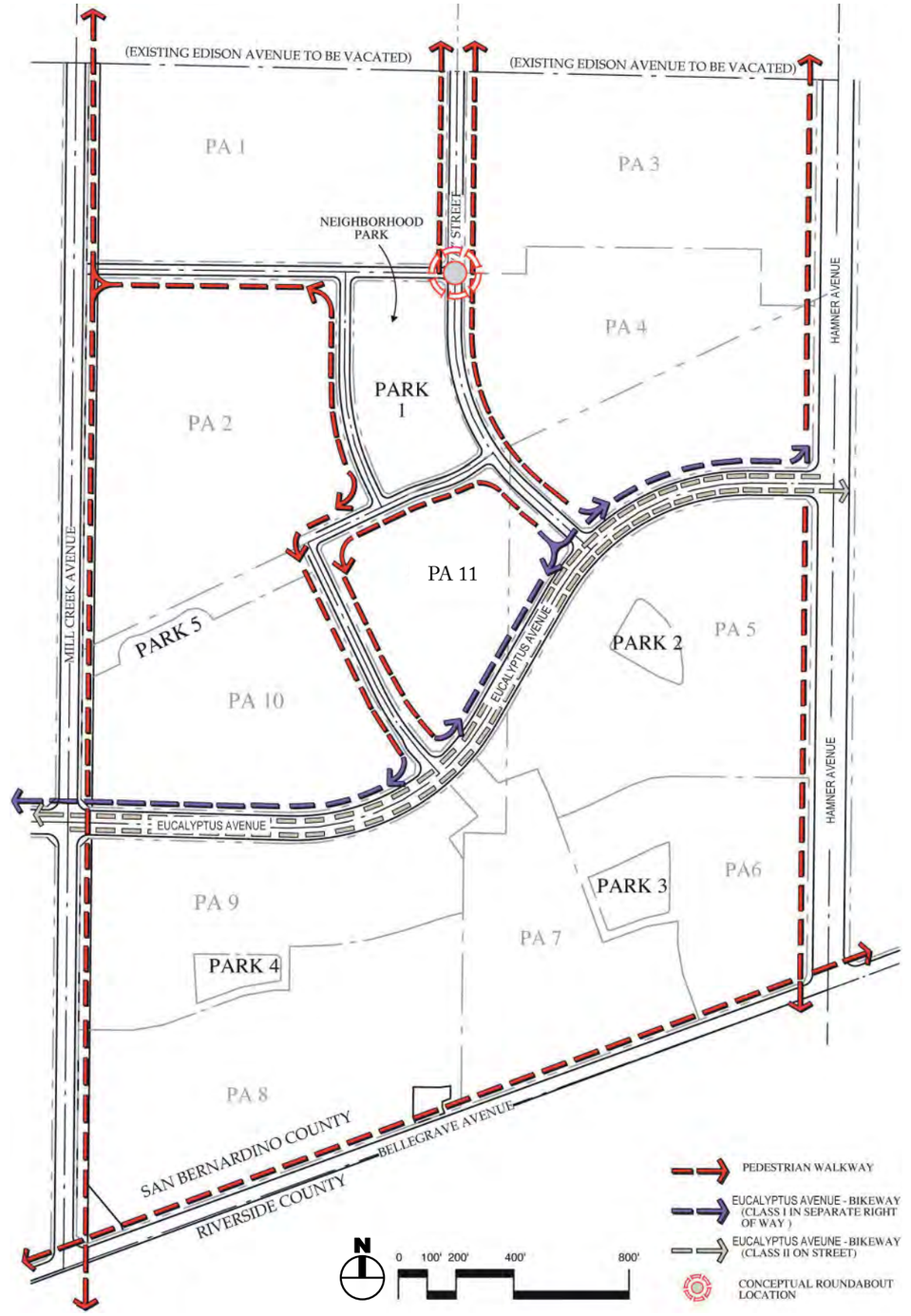


Exhibit 46
Pedestrian Circulation Plan

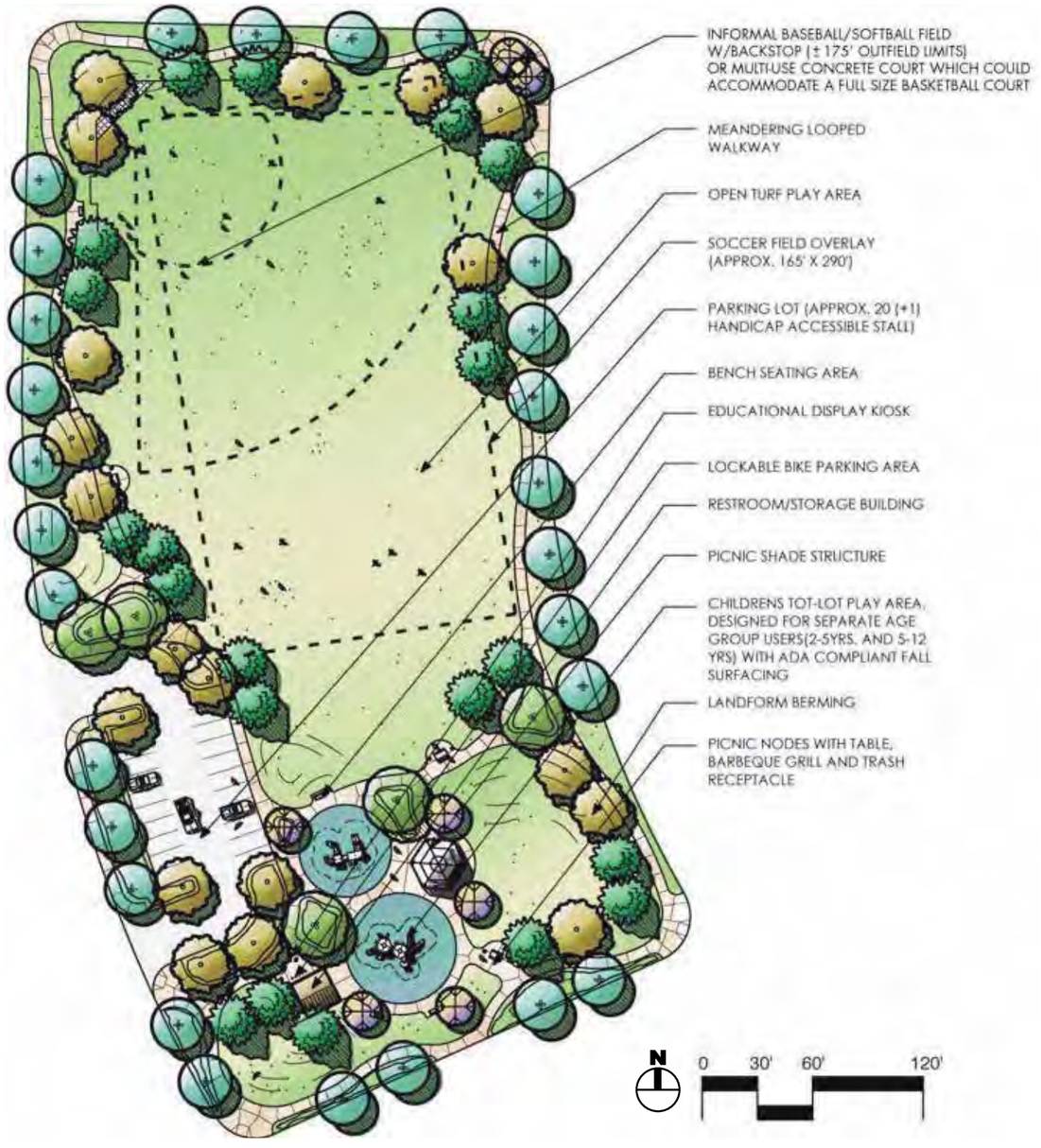


Exhibit 47
Neighborhood Park

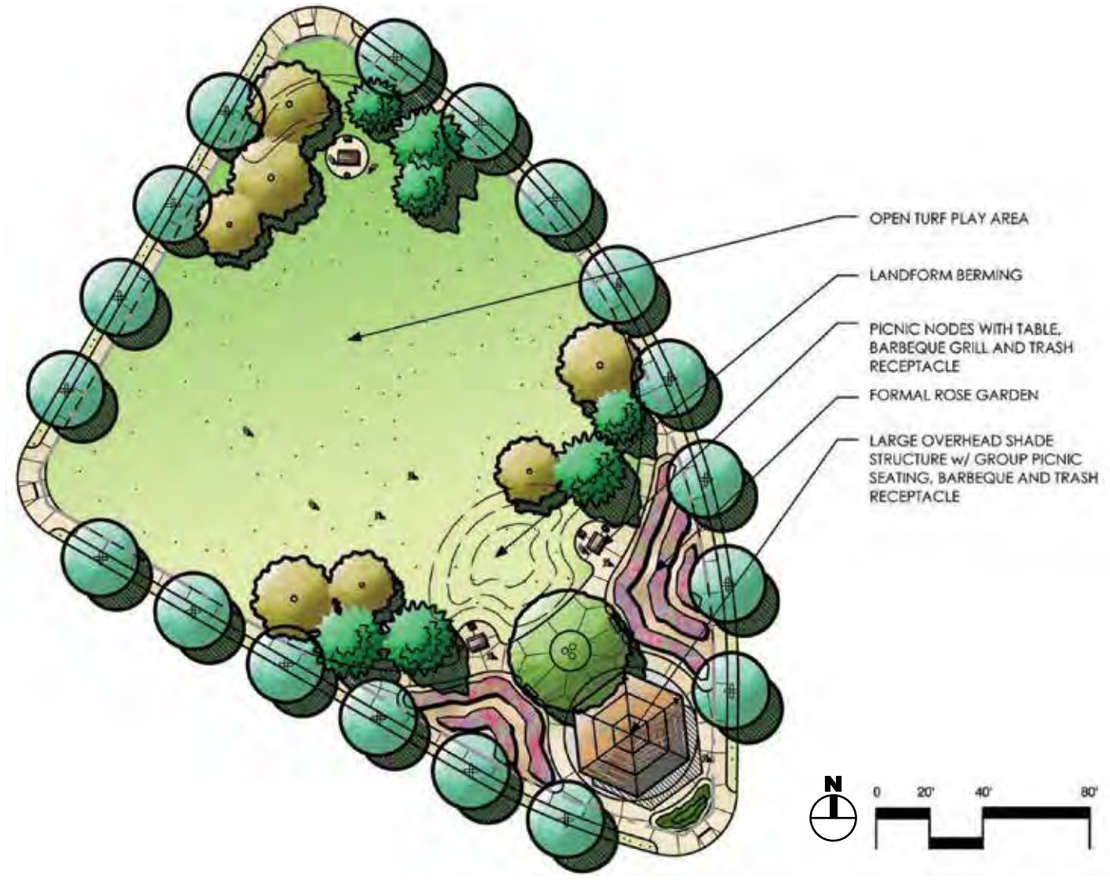


Exhibit 48
Mini Park Example (Park 2)

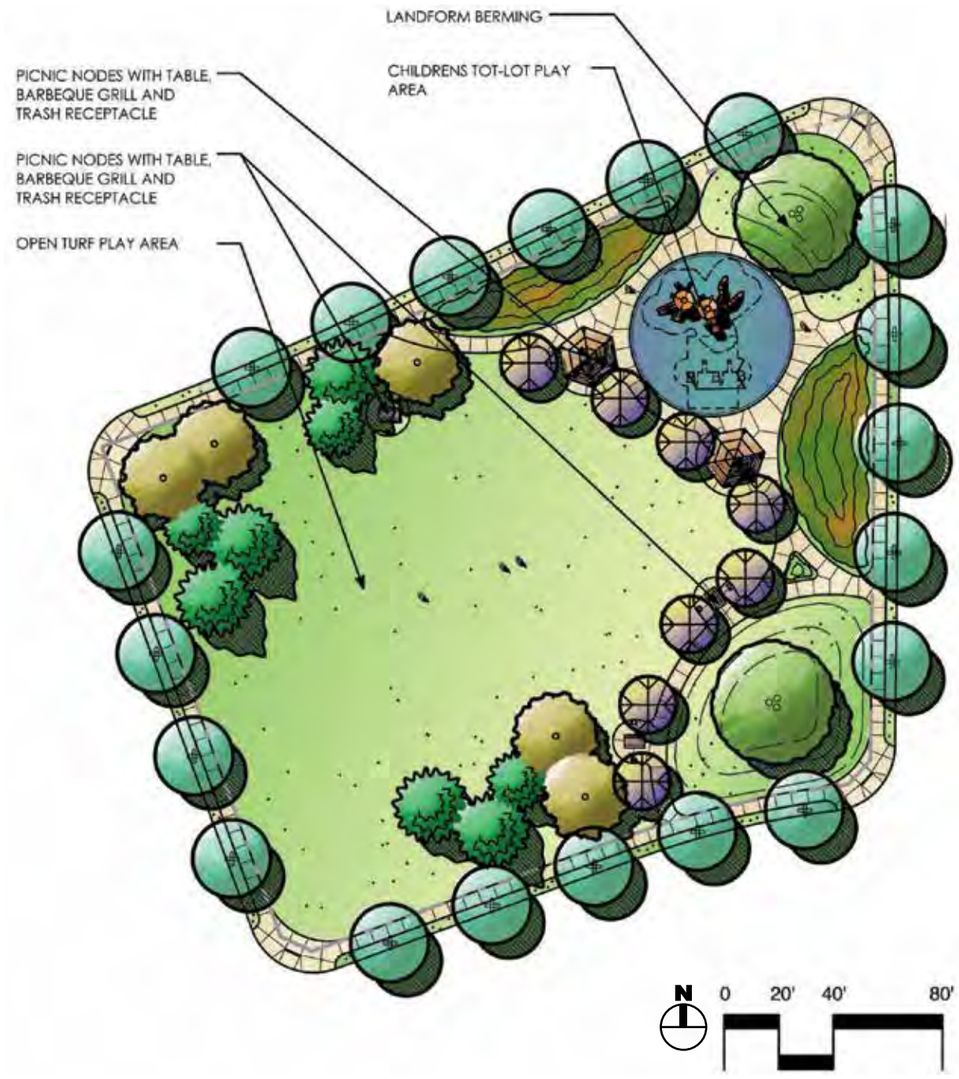


Exhibit 49
Mini Park Example (Park 3)

Section 8. **Design Guidelines**

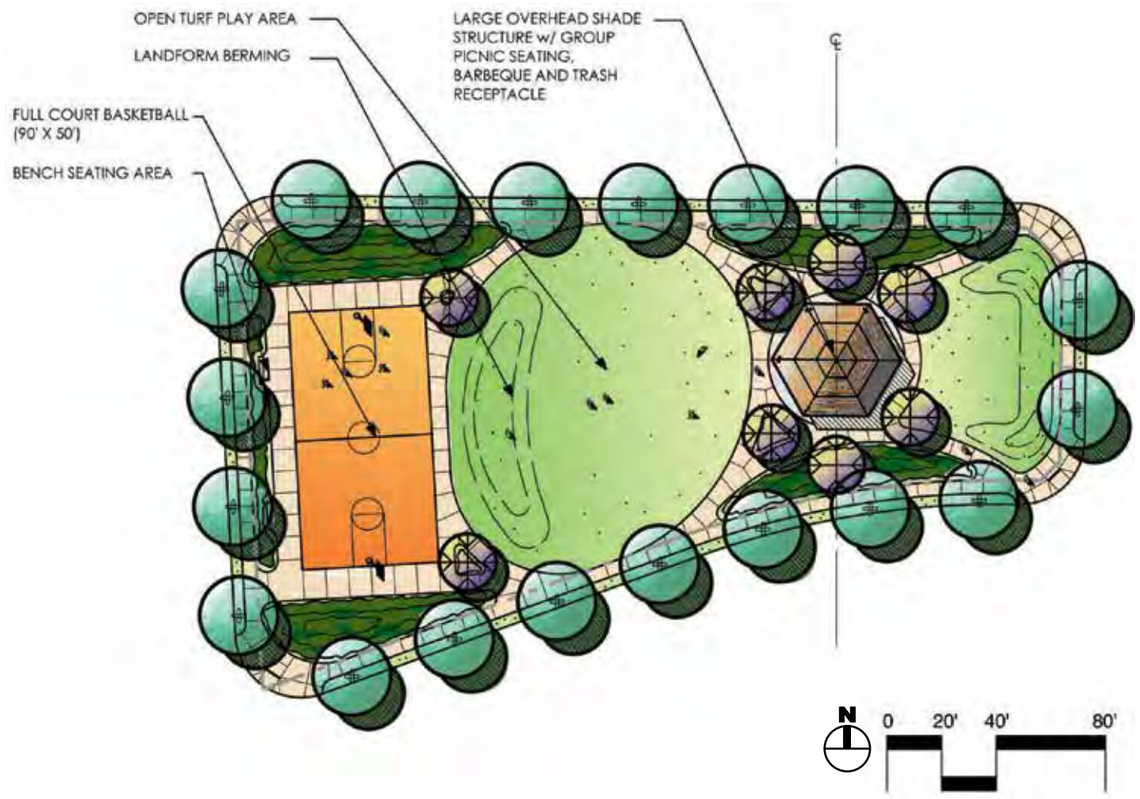


Exhibit 50
Mini Park Example (Park 4)

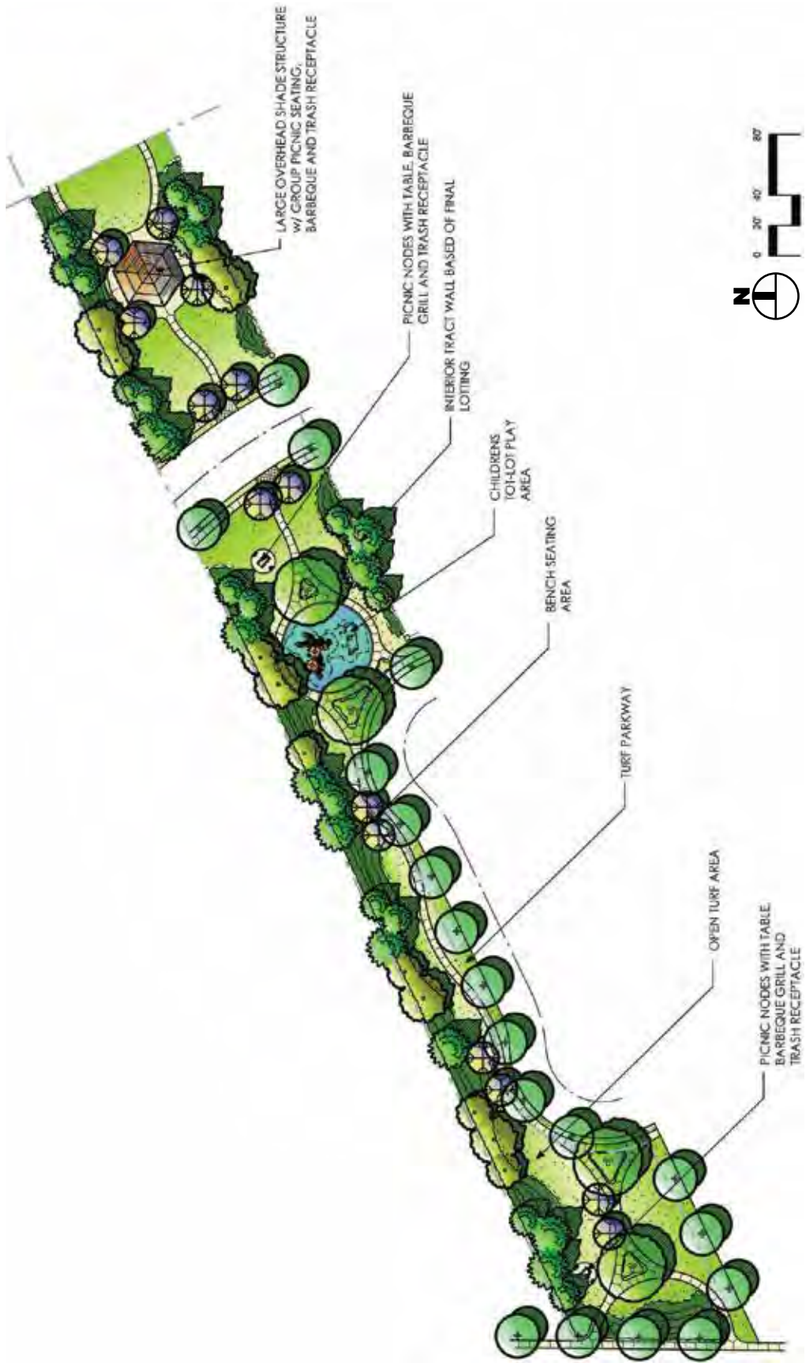


Exhibit 51
Mini Park Example (Park 5)

8.16 Community Walls and Fencing

Walls are a major component in achieving an overall community theme within the Ontario Esperanza Specific Plan. A strong cohesive appearance is achieved through the use of "community walls" and general overall wall guidelines as illustrated in Exhibit 52, "Master Walls and Fence Plan" and Exhibit 53, "Wall and Fence Details."

All walls that adjoin community street scenes (major streetscapes identified under Perimeter/ Interior Streetscapes) shall be deemed "community walls." All wall and fencing designs and layout shall be approved by the City of Ontario prior to construction.

8.16.1 Community Walls

Community walls shall be decorative in nature. Community walls shall incorporate the use of pilasters of a design consistent with the materials of the community walls. The location and spacing of pilasters shall be subject to Planning Department review and approval.

8.16.2 Solid Walls and Fencing

Solid walls shall be decorative. The use of vinyl fencing and wood fencing is prohibited. Reverse frontage walls and any wall return that is visible from public view, shall be constructed of split-face block or precision block that is veneered, burnished (using color other than common gray), plastered or stuccoed, and should complement color scheme dictated in Ontario Esperanza Specific Plan color palette. Decorative caps and the use of pilasters to help enhance the perimeter appeal of the walls are encouraged. Walls visible from the community streets may not be made of exposed or painted precision block or slumped block.

8.16.3 View Fencing

If applicable, view fences should be located in the rear yards of those properties abutting large slope areas where the adjacent property is a minimum of 15' above/below the house pad. These fences allow open views but not physical access; they shall be 5'-6" high and made of tubular steel or lexan glass panel construction. Areas where view fencing occurs will be subject to review by the City of Ontario. The use of tubular steel view fencing shall incorporate pilasters utilizing materials consistent with adjacent walls.

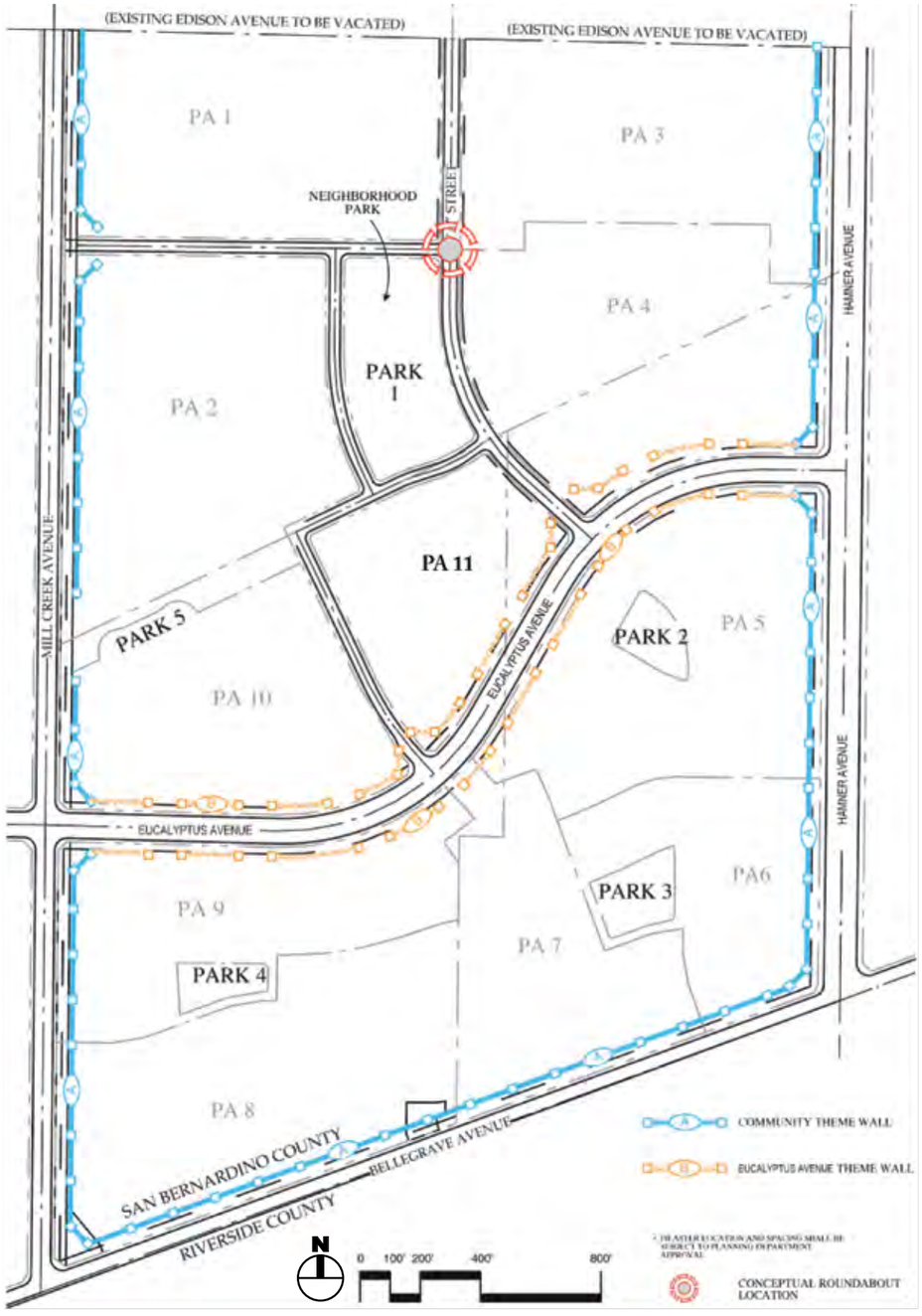


Exhibit 52
Master Walls and Fence Plan

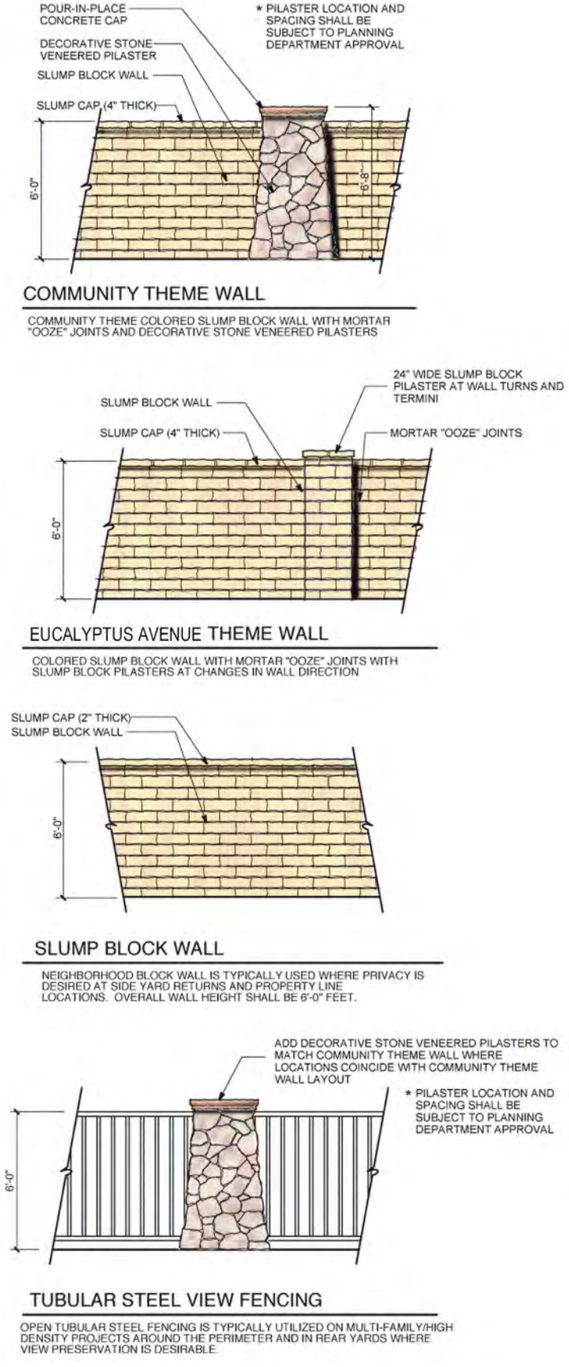


Exhibit 53
Wall and Fence Details

8.17 OUTDOOR LIGHTING

Lighting standards within the Ontario Esperanza community shall be consistent in style, color, and materials in order to maintain uniformity throughout. Lighting should be subtle, providing a soft wash of light over illuminated objects such as monumentation. Hierarchy shall be established by using a variety of lighting fixtures and illumination levels based off of lighting design intent. Lighting styles shall tie into architectural styles and provide sufficient illumination for the safety and well being of the community. Preservation of "Night-Sky" should be considered in lighting design layout and fixture selection. Use of "cutoff" or louvered lamps to preserve ambiance of "Night-Sky" is highly encouraged. Fixture locations should be designed so that light source is not visible by pedestrian or vehicular traffic. Frosted, louvered, or prismatic lens should be considered where decorative lighting fixtures are visible and part of the aesthetic lighting program. Accent lighting of landscape and monumentation shall be incorporated into the following areas:

8.17.1 Entry Monument Lighting:

Avoid intensely bright or "hot" lighting of monuments; rather, each should be lit to provide a soft wash of light across the monument signage. Specimen trees should be up-lit with several fixtures into the canopy to avoid creating dark sides of the trees.

8.17.2 Neighborhood Park/ Mini Parks/ Walkway Lighting

Lighting of the walkways, tot lots, restroom facility, and parking areas within the Parks should be considered for safety and security. All planned parking areas shall have a minimum maintained lighting level of one-foot candle (1 F.C.) or greater. The lighting shall be from sunset to sunrise and be operated by a photocell. The site plan shall be provided to the Police Department. It shall show all buildings, parking areas, walkways, detailed landscape areas and point-by-point photometry calculation of required light levels. Utilization of a traditional Globe/Acorn Post mounted light fixture should be considered for both the park open space areas as well as interior street lighting fixtures. Keeping with the character of traditional materials, (like those found in the "Model Colony" in Downtown Ontario) this will help to create a better sense of scale to the pedestrian. Fixtures shall be vandal resistant, not less than (8) eight feet from ground level. Luminaries of not less than (42") may be utilized to illuminate a walkway if adjacent landscaping is of a variety which does not mature higher than (2) two feet.

8.18 LANDSCAPE DESIGN

8.18.1 Public Landscapes

- Landscape plantings in public areas should reflect a commitment to both developing a "sense of place" and maintaining harmony with the Ontario Ranch.
- Community Facilities District (CFD) areas shall be separated with a 6" by 6" concrete mow strip when adjacent to private property.
- A landscape architect licensed in California shall be retained to prepare planting and irrigation plans for all public areas. Arrangement of plants should incorporate the concepts of mass planting; plants should be placed to allow them to grow to their natural sizes and forms, and sheared hedges should be kept to a minimum.

The plant matrix at the end of this section offers a suggested plant palette for Ontario Esperanza; while it is by no means all-inclusive, plantings in public areas should draw primarily from this palette for visual community continuity.

8.18.2 Front Yard Landscapes

Plantings in front yards may vary substantially from the Ontario Esperanza palette, but should retain some of the character and style of the public plantings. ~~No more than 25% of the total square footage of any front yard shall be lawn~~ Turf shall not exceed 25% of the landscape area in residential front yards; the balance shall be composed of shrubs and groundcovers, with an emphasis on drought tolerant plant species. No more than ~~55%~~ 45% of the front yard area shall be hardscape. Turf areas shall be sized and shaped to optimize irrigation efficiency. If turf is used in isolated areas such as driveway strips, subsurface irrigation or microspray heads shall be required to avoid overspraying of these areas. Irregular shapes that cannot be irrigated should be avoided.

- Each single-family lot shall be provided with front yard landscaping and a permanent automatic irrigation system. At a minimum, a seeded turf lawn, appropriate shrubs and trees shall be provided as landscaping materials. A variety of typical landscape designs shall be provided for use on each lot within the subdivision.
- Multiple family residential product areas shall be provided with full landscape improvements throughout the development. At a minimum, a seeded turf lawn, appropriate shrubs and trees, and a permanent irrigation system shall be provided.
- Landscape and irrigation drawings for each development shall be submitted in conjunction with house construction plans. The plans shall be approved by the Planning Department and the Landscape Planning Division prior to the issuance of building permits.
- Areas of a lot or site which are not used for drive entries, parking, or approved outdoor uses shall be fully landscaped; all unpaved areas shall be landscaped; and all future development phase areas shall be hydroseeded.

8.18.3 Soil Testing

Soil samples shall be taken from several locations after the completion of rough grading operations, and a reputable soil-testing laboratory shall perform an agronomic soils test. The test shall assess soil fertility needs for water-wise California native and Mediterranean plant types. No planting shall take place until the soil has been properly prepared based on the recommendations of the soils testing laboratory. Organic soils amendments shall be incorporated as necessary to achieve a recommended percolation rate of one inch per hour.

8.18.4 Slope Landscaping

All manufactured and cut/fill slopes which exceed 3' in height shall be planted with an effective mixture of groundcover, shrubs, trees, and include jute matting. Such slopes shall also be irrigated as necessary to ensure germination and establishment. Landscape slopes shall not exceed 3:1 or greater and shall include the installation of jute matting. Where 2:1 landscape slopes are unavoidable, erosion blankets shall be installed with a 3-year durability.

8.18.5 Interior Slopes: Residential Interior

- Interior slopes may be more ornamental in character than exterior slopes. They may have a somewhat broader range of plant materials than exterior slopes, but should still be chosen primarily from the Ontario Esperanza plant palette and are subject to the same fuel modification restrictions.
- All manufactured and cut/fill slopes which exceed 3' in height shall be planted with an effective mixture of groundcover, shrubs, and trees. Such slopes shall also be irrigated as necessary to ensure germination and establishment.

8.18.6 Streetscape Landscaping

Streetscape Development Standards

- Turf grass ~~shall only be used in areas with street side parking and shall be located adjacent to the sidewalk or curb line.~~ is only permitted within streetscapes where streetside parking is identified and recycled water is available.
- All new plantings within the Ontario Esperanza planned community shall draw substantially from the Ontario Esperanza Plant List included in this document.
- All streetscape landscaping within the Ontario Esperanza planned community will be implemented by the Developer in accordance with this Specific Plan.
- The Developer shall install all primary and secondary improvements concurrently with the construction of the roadway on which they front. Neighborhood intersections shall be constructed as each neighborhood street is built.
- The Developer shall provide site inspection of all construction and installation of entries and intersections in accordance the City of Ontario requirements.

8.18.7 Irrigation Design

Irrigation for both public and private landscapes should be designed to be as water-efficient as possible. All irrigation systems shall have automatic controllers designed to properly water plant materials given the site's soil conditions, and irrigation systems for all public landscapes shall have automatic rain shut-off devices. Drip irrigation is not permitted with CFD landscape areas. Spray systems shall have low volume (gpm) matched-precipitation heads. All CFD areas are to be controlled with a central control irrigation system and all trees are to be irrigated utilizing a flush grade bubbler system on a separate valve. All CFD areas shall be designed to City Standard Specifications.

All irrigation products specified shall achieve an irrigation operational distribution uniformity of ~~70%~~ 65% or greater in all turf areas and ~~80%~~ in all other landscaped areas. Turf areas shall be irrigated with equipment that has a precipitation rate of one inch or less per hour as specified by the manufacturer. Stream rotator heads or low volume spray heads are acceptable for turf areas. Use of standard spray heads shall be avoided. Non turf shrub areas shall be irrigated with low volume micro spray or point application devices, where manufacturer's specification indicates output measured and expressed in gallons per hour.

Botanical Name	Common Name	Eucalyptus Avenue (Per Ontario Ranch Streetscape Master Plan	Bellgrave Avenue (Per Ontario Ranch Streetscape Master Plan)	Mill Creek Avenue (Per Ontario Ranch Streetscape Master Plan)	Hamner Avenue (Per Ontario Ranch Streetscape Master Plan)	SCE Easement (Mill Creek Avenue)	Primary Community Entries	Secondary Community Entries	Neighborhood Entries	Neighborhood Park Open Space	Mini Parks	Alleys
~~*Arbutus unedo*~~	~~Strawberry Tree~~					•						•
Acacia cultriformis	Knife Acacia					•						
Brachychiton populneus	Bottle Tree									•	•	•
Callistemon viminalis	Weeping Bottlebrush											•
Cedrus deodara	Deodar Cedar									•		
Chionanthus retusus	Chinese Fringe Tree									•	•	
Cupressus sempervirens	Italian Cypress						•	•	•			
Dodonaea vicosa	Hopseed Bush					•						•
Cercis canadensis	Eastern Redubd					•						•
Juniperus chinensis 'Torulosa'	Hollywood Juniper											•
Lagerstroemia indica hybrids	Crape Myrtle								•	•	•	
~~*Liquidambar styraciflua*~~	~~American Sweet Gum~~									•		
Olea europea	Olive										•	
Olea europea	Olive									•	•	•
Melalueca linariifolia	Falxleaf Paperbark									•		
Melalueca nesophila	Pink Melalueca					•						•
Melalueca quinquinervia	Cajeput Tree									•		
Pinus canarensis	Canary Island Pine									•	•	
Platanus acerifolia	London Plane Tree									•	•	
Platanus racemosa	Western Sycamore						•			•		
Podocarpus gracilior	Yew Pine								•		•	
Tristania conferta	Brisbane Box									•	•	
Fraxinus uhdei	Ash								•		•	•
Quercus agrifolia	Coast Live Oak						•	•		•		
Quercus ilex	Holly Oak									•		
Rhus lancea	African Sumac											•
Schinus molle	California Pepper						•	•		•		
Tristania laurina	Water Gum											•

TABLE 6
Plant Matrix - Trees

Botanical Name	Common Name	Eucalyptus Avenue	Bellgrave Avenue	Mill Creek Avenue	Hamner Avenue	SCE Easement (Mill Creek Avenue)	Primary Community Entries	Secondary Community Entries	Neighborhood Entries	Community Park Open Space	Linear Park	Paseo Trail System	Alleys
Agapanthus species	Lily of the Nile											•	•
Anigozanthos species	Kangaroo Paws												
~~*Arbutus unedo 'Compacta'*~~	~~Compact Strawberry Tree~~					•							
Arctostaphylos d. 'Howard McMinn'	McMinn Manzanita					•				•	•		
Asparagus densiflorus 'Myers'	Myers Asparagus											•	•
Bergenia cordifolia	Bergenia					•							
Buxus japonica	Japanese Boxwood						•	•	•				
Calliandra haematocephala	Pink Powder Puff							•					•
Callistemon 'Little John'	Dwarf Callistemon					•						•	
Camellia species	Camellia												
Campanula poschcharskyana	Serbian Bellflower												
Carex tumulicola	Berkeley Sedge						•	•	•				
Cercis occidentalis	Western Redbud						•	•	•				
Salvia	Sage		•		•	•						•	
Salvia	Sage					•	•	•	•			•	
Correa pulchella 'Mission Bells'	Australian Fuchsia					•	•	•	•			•	•
Cotoneaster lacteus	Cotoneaster						•	•	•				
Deschampsia cespitosa	Hair Grass		•		•		•	•	•				
Dietes iridioides	Fortnight Lily	•		•						•	•	•	•
Dodonaea vicosa	Hopseed-Bush												
Echium fastuosum	Pride of Madiera	•				•							
Festuca mairei	*Atlas Fescue*		•		•		•	•	•				
Geranium incanum	Carpet Geranium												•
Geranium 'Johnson's Blue'	Johnson's Blue Geranium		•		•								
~~*Helictotrichon*~~	~~Oat Grass~~		•		•								
~~*Helictotrichon*~~	~~Oat Grass~~		•		•								
Helictotrichon sempervirens	Blue Oat Grass									•	•	•	•
Hemerocallis hybrids (evergreen)	Daylily - mixed colors		•		•		•	•	•	•	•	•	•
Heuchera sanguinea	Coral Bells						•	•	•				
Juniperus species	Juniper												
Kniphofia uvaria	Red Hot Poker											•	•
Lantana species	Lantana												
Lavatera maritima	Tree Mallow												
Leptospermum scoparium	New Zealand Tea Tree		•		•								
Ligustrum japonicum 'Texanum'	Japanese Privet	•											•
Mahonia aquifolium	Oregon Grape						•	•	•				
Mimulus species	Monkey Flower												
Muhlenbergia rigens	Deer Grass	•				•							
Myoporum parvifolium	Trailing Myoporum					•							
Myrtus communis 'Compacta'	Dwarf Myrtle												
Nandina domestica	Heavenly Bamboo			•			•	•	•	•	•	•	•
Nephrolepis cordifolia	Southern Sword Fern												
~~*Nessella tenuissima*~~	~~Mexican Feather Grass~~								•			•	
Penstemon species	Beard Tongue						•	•	•				
~~*Phormium hybrids*~~	~~Hybrid New Zealand Flax~~	•											
~~*Photinia x fraseri*~~	~~Photinia~~												
Plumbago auriculata	Cape Plumbago												
Prunus c. 'Bright 'n Tight'	Carolina Laurel Cherry												
Rosa species	Rose		•		•					•	•		
Rosmarinus officianalis and hybrids	Rosemary	•				•							
Salvia greggii and cultivars	Autumn Sage						•	•	•				
Sedum 'Autumn Joy'	Autumn Joy Stonecrop		•		•								
Tecomaria capensis	Cape Honeysuckle												
Teucrium x lucidrys	Bush Germander		•		•								
Xylosma congestum	Shiny Leaf Xylosma												
Viburnum tinus 'Spring Boquet'	Spring Boquet Laurustinus		•		•					•	•		

Table 7
Plant Matrix - Shrubs

Section 9. General Plan Consistency

California Government Code (Title 7, Division 1, Section 3, Article 8, Section 65440- 65457) permits the adoption and administration of Specific Plans as an implementation tool for elements contained within a jurisdiction's local General Plan. Specific plans must demonstrate consistency in regulations, guidelines, and programs with the goals and policies set forth in the general plan.

The Esperanza Specific Plan has been prepared in conformance with the goals and policies of the City of Ontario General Plan. The "~~City of Ontario New Model Colony~~ Ontario Ranch Specific Plan Policy Matrix" which follows, describes the manner in which the Specific Plan complies with the General Plan.

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The Ontario Plan 2050
Specific Plan Policy Matrix

Following are policies from the Ontario Plan 2050. The Ontario Plan establishes the direction and vision for the City of Ontario and provides a single comprehensive document to shape its future. The Ontario Plan provides for policies to accommodate change over its 30 year lifespan. The Ontario Plan consists of a six (6) part Component Framework: ***1) Vision, 2) Governance Manual, 3) Policy Plan, 4) City Council Priorities, 5) Implementation, and 6) Tracking and Feedback****. The following matrix is intended to determine the adequacy of the proposed Specific Plan in meeting the polices of the Ontario Plan. The checklist shall be completed and submitted with the Specific Plan application. Check if the Specific Plan fully complies or partially complies with each respective policy, or if not applicable.*

Policy		Fully Complies	Partially Complies	SP Sec. No.	N/A
LAND USE ELEMENT					
LU-1 Balance					
Goal	**A community that has a spectrum of housing types and price ranges that match the jobs in the City and that make it possible for people to live and work in Ontario and maintain a quality of life.**				
LU-1.1	**Strategic Growth.** We concentrate growth in strategic locations that help create place and identity, maximize available and planned infrastructure, foster the development of transit, and support the expansion of the active and multimodal transportation networks throughout the City.	X		4 and 7	
Comments:					
LU-1.2	**Sustainable Community Strategy.** We integrate state, regional, and local Sustainable Community/Smart Growth principles into the development and entitlement process.	X		7	
Comments:					
LU-1.3	**Adequate Capacity.** We require adequate infrastructure and services for all development.	X		5	
Comments:					

Policy		Fully Complies	Partially Complies	SP Sec. No.	N/A
LU-1.4	**Multimodal Mobility.** We require development and urban design, where appropriate, that reduces reliance on the automobile and capitalizes on active transportation, transit, electric vehicles, and multimodal transportation opportunities.	X		5	
Comments:					
LU-1.5	**Jobs-Housing Balance.** We coordinate land use, infrastructure, and transportation planning and analysis with regional, county, and other local agencies to further regional and subregional goals for jobs-housing balance.	X		4 and 7	
Comments:					
LU-1.6	**Complete Community.** We incorporate a variety of land uses and building types in our land use planning efforts that result in a complete community where residents at all stages of life, employers, workers, and visitors have a wide spectrum of choices of where they can live, work, shop and recreate within Ontario.	X		4 and 7	
Comments:					
LU-1.7	**Revenues and Costs.** We require future amendments to our Land Use Plan to be accompanied by analyses of fiscal impacts.	X		7	
Comments:					
LU-2 Compatibility					
Goal	**Compatibility between a wide range of uses and resultant urban patterns and forms.**				
LU-2.1	**Land Use Decisions.** We minimize adverse impacts on adjacent properties when considering land use and zoning requests.	X		3 and 4	
Comments:					
LU-2.2	**Buffers.** We require new uses to provide mitigation or buffers between existing uses where potential adverse impacts could occur. Additional mitigation is required when new uses could negatively impact environmental justice areas.	X		4 and 5	
Comments:					
LU-2.3	**Hazardous Uses.** We regulate the development of industrial and similar uses that use, store, produce, or transport toxic substances, air emissions, other pollutants, or hazardous materials.				X
Comments:	*The General Plan does not designate the Esperanza Specific Plan for industrial land uses.*				

Policy		Fully Complies	Partially Complies	SP Sec. No.	N/A
LU-2.4	**Regulation of Nuisances.** We regulate the location, concentration, and operation of potential nuisances.	X		4	
Comments:					
LU-2.5	**Regulation of Uses.** We regulate the location, concentration, and operation of uses that have impacts on surrounding land uses.	X		4	
Comments:					
LU-2.6	**Infrastructure Compatibility.** We require infrastructure to be aesthetically pleasing and in context with the community character.	X		4, 5 and 8	
Comments:					
LU-2.7	**Inter-jurisdictional Coordination.** We maintain an ongoing liaison with ONT, Caltrans, Public Utilities Commission, the railroads, and other agencies to help minimize impacts and improve the operations and aesthetics of their facilities.	X		7	
Comments:					
LU-2.8	**Transitional Areas.** We require development in transitional areas to protect the quality of life of current residents.	X		4	
Comments:					
LU-2.9	**Methane Gas Sites.** We require sensitive land uses and new uses on former dairy farms or other methane-producing sites be designed to minimize health risks.	X		4 and 7	
Comments:					
LU-2.10	**Sensitive Uses.** We monitor and share information with the community about stationary and non-stationary emission sources. We encourage siting and design of facilities to minimize health and safety risks on existing and proposed sensitive uses, especially in environmental justice areas.	X		7	
Comments:					
LU-2.11	**Context-Aware Transitions and Connections.** We require new development projects and land-planning efforts to provide context-aware and appropriate transitions and connections between existing and planned neighborhoods, blocks, sites, and buildings.	X		4	
Comments:					

Policy		Fully Complies	Partially Complies	SP Sec. No.	N/A
LU-3 Flexibility					
Goal	**Staff, regulations and processes that support and allow flexible response to conditions and circumstances in order to achieve the Vision.**				
LU-3.1	**Development Standards.** We maintain clear development standards which allow flexibility to achieve our Vision and provide objective standards that ensure predictability and deliver the intended physical outcomes.	X		6 and 7	
Comments:					
LU-3.2	**Design Incentives.** We offer design incentives to help projects achieve the Vision.	X		6, 7 and 8	
Comments:					
LU-3.3	**Land Use Flexibility.** We consider uses not typically permitted within a land use category if doing so improves livability, reduces vehicular trips, creates community gathering places and activity nodes, and helps create identity.	X		6 and 8	
Comments:					
LU-4 Phased Growth					
Goal	**Development that provides short-term value only when the opportunity to achieve our Vision can be preserved.**				
LU-4.1	**Commitment to Vision.** We are committed to achieving our Vision but realize that it may take time and several interim steps to get there.	X		4 and 7	
Comments:					
LU-4.2	**Interim Development.** We allow development in urban, mixed use, and transit-oriented Place Types that is not immediately reflective of our ultimate Vision for the Place Type, provided it can be modified or replaced when circumstances are right to support development aligned with the Place Type Vision. We will not allow development that impedes, precludes, or compromises our ability to achieve our Vision.				X
Comments:	*The plan does not include the development of urban, mixed use, or transit-oriented Place Types.*				

Policy		Fully Complies	Partially Complies	SP Sec. No.	N/A
LU-4.3	**Infrastructure Timing.** We require that the necessary infrastructure and services be in place prior to or concurrently with development.	X		4 and 5	
Comments:					
LU-4.4	**Shared Infrastructure.** We encourage and facilitate the use of shared infrastructure (including shared or managed parking) in urban, mixed use, and transit-oriented Place Types.	X		4 and 5	
Comments:					
LU-5 Airport Planning					
Goal	**Integrated airport systems and facilities that minimize negative impacts to the community and maximize economic benefits.**				
LU-5.1	**Coordination with Airport Authorities.** We collaborate with FAA, Caltrans Division of Aeronautics, airport owners, neighboring jurisdictions, and other shareholders in the preparation, update, and maintenance of airport-related plans.				X
Comments:	*The plan is not within the airport impact zone.*				
LU-5.2	**Airport Planning Consistency.** We coordinate with airport authorities to ensure The Ontario Plan is consistent with state law, federal regulations, and/or adopted master plans, and airport land use compatibility plans for ONT and Chino Airport.				X
Comments:	*The plan is not within the airport impact zone.*				
LU-5.3	**Airport Impacts.** We work with agencies to maximize resources to mitigate the impacts and hazards related to airport operations – their homes.				X
Comments:	*The plan is not within the airport impact zone.*				
LU-5.4	**ONT Growth Forecast.** We support and promote an ONT that accommodates 30 million annual passengers and 1.6 million tons of cargo per year, as long as the impacts associated with that level of operations are planned for and mitigated.				X
Comments:	*The plan is not within the airport impact zone.*				
LU-5.5	**Airport Compatibility Planning for ONT.** We create and maintain the Airport Land Use Compatibility Plan for ONT.				X
Comments:	*The plan is not within the airport impact zone.*				

Policy		Fully Complies	Partially Complies	SP Sec. No.	N/A
LU-5.6	**Alternative Process.** We fulfill our responsibilities and comply with state law with regard to the Alternative Process for proper airport land use compatibility planning.				X
Comments:	*The plan is not within the airport impact zone.*				
LU-5.7	**ALUCP Consistency with Land Use Regulations.** We comply with state law that requires general plans, specific plans, and all new development to be consistent with the policies and criteria set forth within an Airport Land Use Compatibility Plan for any public-use airport.				X
Comments:	*The plan is not within the airport impact zone.*				
LU-5.8	**Chino Airport.** We will support the creation and implementation of the Airport Land Use Compatibility Plan for Chino Airport.				X
Comments:	*The plan is not within the airport impact zone.*				
HOUSING ELEMENT					
H-1 Neighborhoods & Housing					
Goal	**Stable neighborhoods of quality housing, ample community services and public facilities, well-maintained infrastructure, and public safety that foster a positive sense of identity.**				
H-1.1	**Housing Rehabilitation.** We support the rehabilitation, maintenance, and improvement of single-family, multiple-family, and mobile homes through code compliance, removal of blight where necessary, and provision of rehabilitation assistance where feasible.	X		4 and 8	
Comments:					
H-1.2	**Neighborhood Conditions.** We direct efforts to improve the long-term sustainability of neighborhoods through comprehensive planning, provision of neighborhood amenities, rehabilitation and maintenance of housing, and community building efforts.	X		4 and 8	
Comments:					
H-1.3	**Community Amenities.** We shall provide adequate public services, infrastructure, open space, parking and traffic management, pedestrian, bicycle, and equestrian routes and public safety for neighborhoods consistent with City master plans and neighborhood plans.	X		4 and 8	
Comments:					

Policy		Fully Complies	Partially Complies	SP Sec. No.	N/A
H-1.4	**Historical Preservation.** We support the preservation and enhancement of residential structures, properties, street designs, lot configurations, and other reminders of Ontario's past that are considered to be local historical or cultural resources.	X		3	
Comments:					
H-1.5	**Neighborhood Identity.** We strengthen neighborhood identity through creating parks and recreational outlets, sponsoring neighborhood events, and encouraging resident participation in the planning and improvement of their neighborhoods.	X		4 and 8	
Comments:					
H-2 Housing Supply & Diversity					
Goal	**Diversity of types of quality housing that are affordable to a range of household income levels, accommodate changing demographics, and support and reinforce the economic sustainability of Ontario.**				
H-2.1	**Corridor Housing.** We revitalize transportation corridors by encouraging the production of higher density residential and mixed-uses that are architecturally, functionally, and aesthetically suited to corridors.	X		3 and 4	
Comments:					
H-2.2	**Historic Downtown.** We foster a vibrant historic downtown through facilitating a wide range of housing types and affordability levels for households of all ages, housing preferences, and income levels.				X
Comments:	*The plan does not include the development of a historic downtown.*				
H-2.3	**Ontario Airport Metro Center.** We foster a vibrant, urban, intense, and highly amenitized community in the Ontario Airport Metro Center Area through a mix of residential, entertainment, retail, and office-oriented uses.				X
Comments:	*The plan does not include the development of a Ontario airport metro center.*				
H-2.4	**Ontario Ranch.** We support a premier lifestyle community in the Ontario Ranch, distinguished by diverse housing, highest design quality, and cohesive and highly amenitized neighborhoods.	X		4 and 8	
Comments:					

Policy		Fully Complies	Partially Complies	SP Sec. No.	N/A
H-2.5	**Housing Design.** We require architectural excellence through adherence to City design guidelines, thoughtful site planning, environmentally sustainable practices, and other best practices.	X		6 and 8	
Comments:					
H-2.6	**Infill Development.** We support the revitalization of neighborhoods through the construction of higher-density residential developments on underutilized residential and commercial sites.	X		3 and 4	
Comments:					
H-3 Governmental Regulations					
Goal	**A City regulatory environment that balances the need for creativity and excellence in residential design, flexibility and predictability in the project approval process, and the provision of an adequate supply and prices of housing.**				
H-3.1	**Incentives.** We maintain incentive programs that can be offered to projects that provide benefits to the community such as exceptional design quality, economic advantages, environmental sustainability, or other benefits that would otherwise be unrealized.	X		7	
Comments:					
H-3.2	**Flexible Standards.** We allow flexibility in the application of residential and mixed-use development standards in order to gain benefits such as exceptional design quality, economic advantages, sustainability, or other benefits that would otherwise be unrealized.	X		6 and 8	
Comments:					
H-3.3	**Development Review.** We maintain a residential development review process that provides certainty and transparency for project stakeholders and the public, yet allows for the appropriate review to facilitate quality housing development.	X		4 and 7	
Comments:					
H-3.4	**Financial Incentives.** We consider financial incentives to facilitate and encourage the production, rehabilitation or improvement of housing, or provision of services where such activity furthers housing and community-wide goals.	X		7	
Comments:					

Policy		Fully Complies	Partially Complies	SP Sec. No.	N/A
H-4 Housing Assistance					
Goal	**Increased opportunities for low- and moderate-income households and families to afford and maintain quality ownership and rental housing opportunities, including move-up opportunities. Inclusive communities, racial equity, fair housing choice, and access to opportunity.**				
H-4.1	**Preservation of Affordable Apartments.** We strive to facilitate the preservation of the affordability of publicly assisted apartments for lower-income households through financial assistance, technical assistance, rehabilitation, and collaborative partnerships.				X
Comments:					
H-4.2	**Homeownership Opportunities.** We increase and expand homeownership rates for lower- and moderate-income households by offering financial assistance, low-interest loans, and educational resources, and by working in collaboration with partnerships.		X	4 and 7	
Comments:	*The plan provides a variety of homeowner ownership opportunities but does not include any affordable housing units.*				
H-4.3	**Rental Assistance.** We support the provision of rental assistance for individuals and families earning extremely low, very low, and low income with funding from the state and federal government.	X		7	
Comments:					
H-4.4	**Mixed-income Housing.** We encourage the integration of affordable housing in the Ontario Ranch, Ontario Airport Metro Center Area, and existing neighborhoods.	X		4 and 7	
Comments:					
H-4.5	**Collaborative Partnerships.** We support collaborative partnerships of nonprofit organizations, affordable housing developers, major employers, and for-profit developers to produce affordable housing.	X		7	
Comments:					
H-4.6	**Fair Housing.** We further fair housing by prohibiting discrimination in the housing market, lifting barriers that restrict access to housing, and providing education, support, and enforcement services to address discriminatory practices.	X		4 and 7	
Comments:					

Policy		Fully Complies	Partially Complies	SP Sec. No.	N/A
H-5 Special Needs					
Goal	**A full range of housing types and community services that meet the special housing needs for all individuals and families in Ontario, regardless of income level, age, or other status.**				
H-5.1	**Senior Housing.** We support the development of accessible and affordable senior housing and provide financial assistance for seniors to maintain and improve their homes.	X		4 and 7	
Comments:	*The plan does not include the development of senior housing.*				
H-5.2	**Family Housing.** We support the development of larger rental apartments that are appropriate for families with children, including, as feasible, the provision of services, recreation, and other amenities.				X
Comments:					
H-5.3	**Disabled People.** We increase the supply of permanent, affordable, and accessible housing for people with disabilities, and provide assistance to allow them to maintain and improve their homes.				X
Comments:	*The plan meets all current ADA requirements but does not include any affordable housing units.*				
H-5.4	**Homeless People.** We partner with nonprofit partners to provide emergency shelters, transitional housing, permanent supportive housing, and supportive services for people who are homeless.				X
Comments:	*The plan does not include any emergency or homeless shelters.*				
H-5.5	**Supportive Services.** We financially support organizations, as feasible, that provide support services that meet the needs of those with special needs and further the greatest level of independence.				X
Comments:					
H-5.6	**Partnerships.** We collaborate with nonprofit organizations, private developers, employers, government agencies, and other interested parties to develop affordable housing and provide support services.				X
Comments:					

Policy		Fully Complies	Partially Complies	SP Sec. No.	N/A
PARKS & RECREATION ELEMENT					
PR-1 Planning & Design					
Goal	**A system of safe and accessible parks that meets the needs of the community.**				
PR-1.1	**Access to Parks.** In all new residential development areas, we strive to provide a park and/or recreational facility within walking distance (¼ mile) of every residence and prioritize the establishment of parks in environmental justice areas that do not have adequate access to parks.	X		4 and 8	
Comments:					
PR-1.2	**Adjacency to Schools.** We examine locating parks adjacent to school sites to promote joint-use opportunities.				X
Comments:	*The plan no longer includes plans to develop a school site.*				
PR-1.3	**Funding.** We shall seek outside, one-time sources of funding for capital improvements and reserve ongoing City funds primarily for operations and maintenance.	X		7	
Comments:					
PR-1.4	**Joint-use Opportunities.** In areas where there is a need but no City recreational facility, we explore joint-use opportunities. (e.g., school sites).	X		7	
Comments:					
PR-1.5	**Acreage Standard.** We strive to provide 5 acres of parkland (public and private) per 1,000 residents.	X		4 and 7	
Comments:					
PR-1.6	**Private Parks.** We expect development to provide a minimum of 2 acres of developed private park space per 1,000 residents.	X		4 and 7	
Comments:	*The Project developers will participate in the development impact fee program a s required for park fees.*				
PR-1.7	**Special Needs/Universal Design.** We attempt to provide recreational opportunities at parks for people of all ages and abilities.	X		7 and 8	
Comments:					
PR-1.8	**Renovation.** We examine renovating existing facilities prior to building replacement facilities.	X		7	
Comments:					

Policy		Fully Complies	Partially Complies	SP Sec. No.	N/A
PR-1.9	**Phased Development. We require parks be built in new communities before a significant proportion of residents move in.**	X		4 and 7	
Comments:					
PR-1.10	**Master Plans for Individual Park Facilities.** We require an individual park master plan for parks in excess of 10 acres.				X
Comments:	*The plan does not include any parks in excess of 10 acres. The City of Ontario is the entity responsible for updating the Parks & Recreational Facilities Master Plan.*				
PR-1.11	**Environmental Function of Parks.** We require new parks to meet environmental management objectives.	X		4 and 7	
Comments:					
PR-1.12	**Trails.** We promote connections between parks and local trails including those managed by other public agencies.	X		4 and 7	
Comments:	*The plan includes parks and trails that connect to Citywide planned trails.*				
PR-1.13	**Equestrian Trails.** We require the design, construction, and maintenance of equestrian trails in Rural Residential designated areas.				X
Comments:	*The plan does not include any equestrian trails.*				
PR-1.14	**Multi-family Residential Developments.** We require that new multi-family residential developments of five or more units provide recreational facilities or open space, in addition to paying adopted impact fees.				X
Comments:	*The project developers will participate in the development impact fee program as required for park fees.*				
PR-1.15	**Trail Connectivity.** We strengthen and improve equestrian, bike, and multipurpose trail connections within the City and work to improve trail connections into adjacent jurisdictions.	X		4 and 7	
Comments:	*The plan includes multipurpose trails that connect to Citywide planned trails.*				
PR-1.16	**Equestrian Master Plan.** We use Homer Briggs Park as the primary focal point for the development of a Master Plan of Equestrian Trails in the Rural Residential area.				X
Comments:	*The plan does not include any equestrian trails.*				

Policy		Fully Complies	Partially Complies	SP Sec. No.	N/A
PR-2 Programming					
Goal	**A range of recreational programs provided by public, private, and nonprofit organizations that meet the needs of the community's varied interests, age groups, and abilities.**				
PR-2.1	**Participation.** We program park facilities to maximize utilization and participation, while considering park size, location, and population served.	X		4 and 8	
Comments:					
PR-2.2	**Needs Assessment.** We track the needs and priorities for recreational programming and look for ways to meet demand.	X		7	
Comments:					
PR-2.3	**Community Involvement.** We involve the local community in planning programs for neighborhood and community park facilities.	X		7	
Comments:					
PR-2.4	**Access to Programs.** We provide a range of recreational and physical exercise programs that are accessible to residents of all income levels throughout the community and prioritize establishing and maintaining equitable access for residents in environmental justice areas.	X		7	
Comments:					
PR-2.5	**Partnerships.** We partner with local and regional agencies, nonprofit organizations, and the private sector to provide a comprehensive range of recreational programs.	X		7	
Comments:					
PR-2.6	**Crime Deterrents.** We promote and participate in recreational programming as part of our crime prevention effort.	X		7	
Comments:					

Policy		Fully Complies	Partially Complies	SP Sec. No.	N/A
ENVIRONMENTAL RESOURCES ELEMENT					
ER-1 Water & Wasterwater					
Goal	**A reliable and cost-effective system that permits the City to manage its diverse water resources and needs.**				
ER-1.1	**Local Water Supply.** We increase local water supplies to reduce our dependence on imported water. New and redevelopment projects are aligned with our available water supply and/or to enhance our available water supply.	X		3 and 5	
Comments:	*The plan incorporates the City's Master Plan for water.*				
ER-1.2	**Matching Supply to Use.** We match water supply and quality to the appropriate use.	X		3 and 5	
Comments:					
ER-1.3	**Conservation and Sustainable Water Supply.** We work with regional water providers and users to conserve water and ensure sustainable local water supplies as more frequent droughts reduce long term local and regional water availability	X		3 and 5	
Comments:	*The plan incorporates the City's Master Plan for water.*				
ER-1.4	**Supply-Demand Balance.** We require that available water supply and demands be balanced.	X		3 and 5	
Comments:	*The plan incorporates the City's Master Plan for water.*				
ER-1.5	**Water Resource Management.** Environmental justice areas are prioritized as we coordinate with local agencies to protect water quality, prevent pollution, address existing contamination, and remediate contaminated surface water and groundwater.	X		3 and 5	
Comments:	*The plan incorporates the City's Master Plan for water.*				
ER-1.6	**Urban Run-off Quantity.** We encourage the use of low impact development strategies, including green infrastructure, to intercept run-off, slow the discharge rate, increase infiltration, and ultimately reduce discharge volumes to traditional storm drain systems.	X		3 and 5	
Comments:					
ER-1.7	**Urban Run-off Quality.** We require the control and management of urban run-off, consistent with Regional Water Quality Control Board regulations.	X		3 and 5	
Comments:	*The plan will comply with the City's Master Plan requirements for Wastewater management.*				

Policy		Fully Complies	Partially Complies	SP Sec. No.	N/A
ER-1.8	**Wastewater Management.** We require the management of wastewater discharge and collection consistent with waste discharge requirements adopted by the Regional Water Quality Control Board.	X		3 and 5	
Comments:	*The plan will comply with the City's Master Plan requirements for Wastewater management.*				
ER-2 Solid Waste & Recycling					
Goal	**A cost effective, integrated waste management system that meets or exceeds state and federal recycling and waste diversion mandates.**				
ER-2.1	**Waste Diversion.** We shall meet or exceed AB 939 requirements.	X		3 and 5	
Comments:					
ER-2.2	**Hazardous and Electronic Wastes.** We prohibit the disposal of hazardous and electronic waste into the municipal waste stream pursuant to state law.	X		3 and 5	
Comments:					
ER-2.3	**Purchase Products Made from Recycled Materials.** We purchase recycled-content products where it is cost effective.	X		3 and 5	
Comments:					
ER-3 Energy					
Goal	**Cost-effective and reliable energy system sustained through a combination of low impact buildings, site and neighborhood energy conservation, and diverse sources of energy generation that collectively helps to minimize the region's carbon footprint.**				
ER-3.1	**Conservation Strategy.** We require conservation as the first strategy to be employed to meet applicable energy-saving standards.	X		3 and 5	
Comments:					

Policy		Fully Complies	Partially Complies	SP Sec. No.	N/A
ER-3.2	**Green Development– Communities.** We encourage the use of the LEED Neighborhood Development rating system, or similar mechanism, to guide the planning and development of all new communities.	X		3 and 5	
Comments:					
ER-3.3	**Building and Site Design.** We require new construction to incorporate energy efficient building and site design strategies, which could include appropriate solar orientation, maximum use of natural daylight, passive solar, and natural ventilation.	X		3 and 5	
Comments:					
ER-3.4	**Green Development– Public Buildings.** We require all new and substantially renovated City buildings in excess of 10,000 square feet achieve a LEED Silver Certification standard, as determined by the U.S. Green Building Council.	X		3 and 5	
Comments:					
ER-3.5	**Fuel-Efficient and Alternative Energy Vehicles and Equipment.** We require purchase and use vehicles and equipment that are fuel efficient and meet or surpass state emissions requirements and/or use renewable sources of energy.	X		3 and 5	
Comments:					
ER-3.6	**Generation- Renewable Sources.** We promote the use of renewable energy sources (e.g., solar, wind, biomass) in public and private sector development.	X		3 and 5	
Comments:					
ER-4 Air Quality					
Goal	**Improved indoor and outdoor air quality and reduced locally generated pollutant emissions.**				
ER-4.1	**Land Use.** We reduce GHG and other local pollutant emissions through compact, mixed use, and transit-oriented development and development that improves the regional jobs-housing balance.	X		3 and 5	
Comments:					
ER-4.2	**Sensitive Land Uses.** We prohibit the future siting of sensitive land uses within the distances defined by the California Air Resources Board for specific source categories, without sufficient mitigation.	X		3 and 5	
Comments:					

Policy		Fully Complies	Partially Complies	SP Sec. No.	N/A
ER-4.3	**Greenhouse Gases (GHG) Emissions Reductions.** We will reduce GHG emissions in accordance with regional, state, and federal regulations.	X		3 and 5	
Comments:					
ER-4.4	**Indoor Air Quality.** We will comply with State Green Building Codes relative to indoor air quality. We seek funding to improve indoor air quality for households with poor indoor air quality, with priority for lower income households in environmental justice areas.	X		3 and 5	
Comments:					
ER-4.5	**Transportation.** We promote mass transit and non-motorized mobility options (walking, biking) to reduce air pollutant emissions.	X		3 and 5	
Comments:					
ER-4.6	**Particulate Matter.** We support efforts to reduce particulate matter to meet State and Federal Clean Air Standards.	X		3 and 5	
Comments:					
ER-4.7	**Other Agency Collaboration.** We collaborate with other agencies within the South Coast Air Basin to improve regional air quality at the emission source, with a particular focus on sources that affect environmental justice areas in Ontario.	X		3 and 5	
Comments:					
ER-4.8	**Tree Planting.** We protect healthy trees within the City and plant new trees to increase carbon sequestration and help the regional/local air quality. We expand the tree canopy in environmental justice areas to enhance air quality and reduce the "heat island" effect.	X		3 and 5	
Comments:					

Policy		Fully Complies	Partially Complies	SP Sec. No.	N/A
ER-4.9	**New Localized Air Pollution Sources Near Existing Sensitive Receptors.** We require new developments to conduct a Health Risk Assessment for land uses that generate more than 100 trucks per day or 40 trucks per day by trucks operating transportation refrigeration units (TRU's) within 1,000 feet from sensitive land uses (California Health and Safety Code § 42705.5(a)(5)). If the health risk assessment determines the new development poses health hazards that increase the incremental cancer risk above the threshold established by the South Coast Air Quality Management District (AQMD), we will only approve permits upon the condition that adequate mitigation measures are proposed and implemented for potential impacts on the sensitive uses around the site and along the route within Ontario taken by the trucks to and from freeways. We require new developments that must perform a health risk assessment to conduct additional public outreach by sending notifications in multiple languages to all residents living within 500 feet, and encourage hosting a public meeting.	X		3 and 5	
Comments:					
ER-5 Biological, Mineral & Agricultural Resources					
Goal	**Protected high value habitat and farming and mineral resource extraction activities that are compatible with adjacent development.**				
ER-5.1	**Habitat Conservation Areas.** We support the protection of biological resources through the establishment, restoration, and conservation of high-quality habitat areas.				X
Comments:	*The Plan area is not within or near any habitat conservation areas.*				
ER-5.2	**Entitlement and Permitting Process.** We comply with state and federal regulations regarding protected species.	X		3 and 5	
Comments:					
ER-5.3	**Right to Farm.** We support the right of existing farms to continue their operations within the Ontario Ranch.				X
Comments:					
ER-5.4	**Transition of Farms.** We protect both existing farms and sensitive uses around them as agricultural areas transition to urban uses.	X		3, 4, 5, 6 and 7	
Comments:					

Policy		Fully Complies	Partially Complies	SP Sec. No.	N/A
ER-5.5	**Mining Operations.** We prohibit future mining operations where the resource extraction activities are incompatible with existing or proposed adjacent land uses.	X		3 and 5	
Comments:					
COMMUNITY ECONOMICS ELEMENT					
CE-1 Complete Community					
Goal	**A complete community that provides for all incomes and stages of life.**				
CE-1.1	**Jobs-Housing Balance.** We pursue improvement to the Inland Empire's balance between jobs and housing by promoting job growth that reduces the regional economy's reliance on out-commuting.				X
Comments:					
CE-1.2	**Jobs and Workforce Skills.** We use our economic development resources to: 1. Attract jobs suited for the skills and education of current and future City residents; 2. Work with regional partners to provide opportunities for the labor force to improve its skills and education; and 3. Attract businesses that increase Ontario's stake and participation in growing sectors of the regional and global economy.				X
Comments:					
CE-1.3	**Regional Approach to Workforce Development.** We work with our partners to provide workforce training and development services throughout the region, recognizing that Ontario employers rely on workers living outside of the City.				X
Comments:					
CE-1.4	**Business Retention and Expansion.** We continuously improve two-way communication with the Ontario business community and emphasize customer service to existing businesses as part of our competitive advantage.				X
Comments:					

Policy		Fully Complies	Partially Complies	SP Sec. No.	N/A
CE-1.5	**Business Attraction.** We proactively attract new and expanding businesses to Ontario in order to increase the City's share of growing sectors of the regional and global economy.				X
Comments:					
CE-1.6	**Diversity of Housing.** We collaborate with residents, housing providers, and the development community to provide housing opportunities for every stage of life; we plan for a variety of housing types and price points to encourage the development of housing supportive of our efforts to attract business in growing sectors of the community while being respectful of existing viable uses.	X		4 and 7	
Comments:					
CE-1.7	**Retail Goods and Services.** We seek to ensure a mix of retail businesses that provide the full continuum of goods and services for the community.				X
Comments:					
CE-1.8	**Regional Attraction.** We encourage the development and programming of regional, cultural, and entertainment destinations in Ontario.				X
Comments:					
CE-1.9	**Regional Leadership.** We provide leadership for public, quasi-public, and private-sector partners that help Ontario and its residents and businesses realize our goals and achieve our Vision.				X
Comments:					
CE-1.10	**Life-Long Education.** We work with our partners who provide life-long learning to ensure that our residents and workforce have access to education at all stages of life.				X
Comments:					
CE-1.11	**Socioeconomic Trends.** We continuously monitor, plan for, and respond to changing socioeconomic trends.				X
Comments:					
CE-1.12	**Circulation.** We continuously plan and improve public transit and non-vehicular circulation for the mobility of all, including those with limited or no access to private automobiles.	X		4 and 7	
Comments:					

Policy		Fully Complies	Partially Complies	SP Sec. No.	N/A
CE-1.13	**Safety and Security.** We invest in public safety and communicate our successes because the perception and reality of safety and security are necessary prerequisites for private investment and economic growth.				X
Comments:					
CE-2 Placemaking					
Goal	**A City of distinctive neighborhoods, districts, corridors, and centers where people choose to be.**				
CE-2.1	**Development Projects.** We require new development and redevelopment to create unique, high-quality places that add value to the community.	X		6 and 8	
Comments:					
CE-2.2	**Development Review.** We require those proposing new development and redevelopment to demonstrate how their projects will create appropriately unique, functional, and sustainable places that will compete well with their competition within the region.	X		6 and 8	
Comments:					
CE-2.3	**Interim Development.** We require interim development that does not reflect the long-term Vision, be limited in scale of development so that the investment can be sufficiently amortized to make Vision-compatible redevelopment financially feasible.				X
Comments:					
CE-2.4	**Protection of Investment.** We require that new development and redevelopment protect existing investment by providing architecture and urban design of equal or greater quality.	X		6 and 8	
Comments:					
CE-2.5	**Private Maintenance.** We require adequate maintenance, upkeep, and investment in private property because proper maintenance on private property protects property values.	X		7	
Comments:					

Policy		Fully Complies	Partially Complies	SP Sec. No.	N/A
CE-2.5	**Public Maintenance.** We require the establishment and operation of maintenance districts or other vehicles to fund the long-term operation and maintenance of the public realm whether on private land, in rights-of-way, or on publicly-owned property.	X		7	
Comments:					
CE-3 Fiscal Decision-making					
Goal	**Decision-making deliberations that incorporate the full short-term and long-term economic and fiscal implications of proposed City Council actions.**				
CE-3.1	**Fiscal Impact Disclosure.** We require requests for City Council action to disclose the full fiscal impacts, including direct and indirect costs.				X
Comments:					
CE-3.2	**General Plan Amendments.** We require those proposing General Plan amendments to disclose reasonably foreseeable impacts through a fiscal analysis.				X
Comments:					
CE-3.3	**Long-Term Funding Disclosure.** We require those requesting City support or funding for projects or programs to disclose if and how they can be continued without further City support.				X
Comments:					
CE-3.4	**Improving Fiscal Decision-Making.** We periodically assess the accuracy of projections for staff time and City resources and use the assessment results to improve our fiscal decision-making process.				X
Comments:					
CE-3.5	**Sustainable Development.** We recognize impacts to municipal finances as an element of sustainability, and we require claims of sustainability to assess fiscal impacts.				X
Comments:					
CE-3.6	**Fully Funded Liability.** We require long-term liabilities, such as retiree medical benefits, employee accrued leave balances, and self-insured liability claims to be fully funded to ensure sound, long-term fiscal health.				X
Comments:					

Policy		Fully Complies	Partially Complies	SP Sec. No.	N/A
CE-3.7	**Programmatically Balanced Budget.** We require that the annual budget include appropriations allocated in a manner to meet the goal of the programmatically balanced budget.			7	X
Comments:					
CE-3.8	**Budget Margins.** We require that the adopted budget for revenue and expenditures reflect sufficient budget margins to minimize negative impacts to City services due to economic uncertainties.			7	X
Comments:					
SAFETY ELEMENT					
S-1 Seismic & Geologic Hazards					
Goal	**Minimized risk of injury, loss of life, property damage, and economic and social disruption caused by earthquake-induced and other geologic hazards.**				
S-1.1	**Implementation of Regulations and Standards.** We require that all new habitable structures be designed in accordance with the most recent California Building Code adopted by the City, including provisions regarding lateral forces and grading.	X		6 and 8	
Comments:					
S-1.2	**Entitlement and Permitting Process.** We follow state guidelines and the California Building Code to determine when development proposals must conduct geotechnical and geological investigations.	X		7	
Comments:					
S-1.3	**Continual Update of Technical Information.** We maintain up-to-date California Geological Survey seismic hazard maps.				X
Comments:					
S-1.4	**Seismically Vulnerable Structures.** We conform to state law regarding unreinforced masonry structures and coordinate with not-for-profits to facilitate seismic retrofits in environmental justice areas and for low-income households.				X
Comments:					

Policy		Fully Complies	Partially Complies	SP Sec. No.	N/A
S-2 Flood Hazards					
Goal	**Minimized risk of injury, loss of life, property damage and economic and social disruption caused by flooding and inundation hazards.**				
S-2.1	**Entitlement and Permitting Process.** We require hydrological studies prepared by a state-certified engineer when new development is located in a 100-year or 500-year floodplain to assess the impact that the new development will have on the flooding potential of existing development down-gradient.	X		7	
Comments:	*Per project EIR.*				
S-2.2	**Floodplain Mapping.** We require any new development partially or entirely in 100-year flood zones to provide detailed floodplain mapping for 100- and 200-year storm events as part of the development approval process.	X		7	
Comments:					
S-2.3	**Facilities that Use Hazardous Materials.** We comply with state and federal law and do not permit facilities using, storing, or otherwise involved with substantial quantities of onsite hazardous materials to be located in the 100-year flood zone or 500-year flood zone unless all standards of elevation, floodproofing, and storage have been implemented to the satisfaction of the Building Department.				X
Comments:					
S-2.4	**Prohibited Land Uses.** We prohibit the development of new essential and critical facilities in the 100-year floodplain and discourage the development of new essential and critical facilities in the 500-year floodplain unless all standards of elevation and flood proofing demonstrate that a facility can be safe and operational during a flood event, implemented to the satisfaction of the Building Department.				X
Comments:					
S-2.5	**Stormwater Management.** We maintain the storm drain system to convey a 100-year storm, when feasible, and encourage environmental site design practices to minimize flooding and increase groundwater recharge, including natural drainage, green infrastructure, and permeable ground surfaces.	X		5 and 7	
Comments:					

Policy		Fully Complies	Partially Complies	SP Sec. No.	N/A
S-2.6	**Use of Flood Control Facilities.** We encourage joint use of flood control facilities as open space or other types of recreational facilities.				X
Comments:					
S-2.7	**Collaboration Between Agencies.** Collaborate with the San Bernardino County Flood Control District and other state and federal agencies to maintain flood-control infrastructure to minimize flood damage.				X
Comments:					
S-3 Fire & Rescue Hazards					
Goal	**Reduced risk of death, injury, property damage and economic loss due to fires, accidents and normal everyday occurrences through prompt and capable emergency response.**				
S-3.1	**Prevention Services.** We proactively mitigate or reduce the negative effects of fire, hazardous materials release, and structural collapse by implementing the regularly adopted California Fire Code and California Building Code.	X		7	
Comments:					
S-3.2	**Community Outreach.** We provide education to local schools and community groups to promote personal and public safety.				X
Comments:					
S-3.3	**Fire and Emergency Medical Services.** We maintain sufficient fire stations, equipment and staffing to respond effectively to emergencies and meet the needs of the community and state requirements.				X
Comments:					
S-3.4	**Special Team Services.** We maintain effective special rescue services.				X
Comments:	*The City of Ontario is the entity responsible for maintaining effective special rescue services.*				
S-3.5	**Emergency Notifications.** We maintain a public alert notification system that efficiently conveys information about imminent, developing, ongoing, and concluding emergency events to residents and visitors, working with network providers that translate information into other languages.				X
Comments:					

Policy		Fully Complies	Partially Complies	SP Sec. No.	N/A
S-3.6	**Interagency Cooperation.** In order to back up and supplement our capabilities to respond to emergencies, we participate in the California Fire Rescue and Mutual Aid Plan.				X
Comments:					
S-3.7	**Water Supply and System Redundancy.** We monitor our water system to manage and ensure adequate firefighting water supplies.				X
Comments:					
S-3.8	**Fire Prevention through Environmental Design.** We require new development to incorporate fire prevention consideration in the design of streetscapes, sites, open spaces, and buildings.	X		4, 5, 6, 7 and 8	
Comments:					
S-3.9	**Resource Allocation.** We analyze fire data to evaluate the effectiveness of our fire prevention and reduction strategies and allocate resources accordingly.				X
Comments:					
S-4 Noise Hazards					
Goal	**An environment where noise does not adversely affect the public's health, safety, and welfare.**				
S-4.1	**Noise Mitigation.** We utilize the City's Noise Ordinance, building codes, and subdivision and development codes to mitigate noise impacts.	X		6, 7 and 8	
Comments:	*Per project EIR noise study.*				
S-4.2	**Coordination with Transportation Authorities.** We collaborate with airport owners, FAA, Caltrans, SBCTA, SCAG, neighboring jurisdictions, and other transportation providers in the preparation and maintenance of, and updates to transportation-related plans to minimize noise impacts and provide appropriate mitigation measures.				X
Comments:					
S-4.3	**Airport Noise Mitigation.** We aggressively pursue funding and utilize programs to reduce effects of aircraft noise in impacted areas of our community.				X
Comments:	*The plan is not within the airport impact zone.*				

Policy		Fully Complies	Partially Complies	SP Sec. No.	N/A
S-4.4	**Truck Traffic.** We manage truck traffic to minimize noise impacts on sensitive land uses.	X		3, 5 and 6	
Comments:					
S-4.5	**Roadway Design.** We design streets and highways to minimize noise impacts.	X		3, 5 and 6	
Comments:					
S-4.6	**Airport Noise Compatibility.** We utilize information from Airport Land Use Compatibility Plans to prevent the construction of new noise-sensitive land uses within airport noise impact zones.				X
Comments:	*The plan is not within the airport impact zone.*				
S-4.7	**Rail Noise Mitigation.** We require residential and mixed use development of vibration-sensitive uses in areas within 200 feet of rail to evaluate for indoor vibration levels and mitigate any exceedances of the Federal Transit Administration vibration-annoyance criteria.				X
Comments:	*The plan is not within 200 feet of any rail system.*				
S-5 Wind-Related Hazards					
Goal	**Minimize the risk of injury, property damage, and economic loss resulting from windstorms and wind-related hazards.**				
S-5.1	**Dust Control Measures.** We require the implementation of Best Management Practices for dust control at all excavation and grading projects.	X		7	
Comments:					
S-5.2	**Grading in High Winds.** We prohibit excavation and grading during strong wind conditions, as defined by the Building Code.	X		7	
Comments:					
S-5.3	**Public Safety Power Shutoffs.** We coordinate with utility companies to minimize service interruptions, such as Public Safety Power Shutoffs, before, during, and after windstorms and wind-related hazards.				X
Comments:					

Policy		Fully Complies	Partially Complies	SP Sec. No.	N/A
S-6 Hazardous Materials & Waste					
Goal	**Reduced potential for hazardous materials exposure and contamination.**				
S-6.1	**Disclosure and Notification.** We enforce disclosure laws that require all users, producers, and transporters of hazardous materials and wastes to clearly identify the materials that they store, use, or transport.				X
Comments:					
S-6.2	**Response to Hazardous Materials Releases.** We respond to hazardous materials incidents and coordinate these services with other jurisdictions.				X
Comments:					
S-6.3	**Safer Alternatives.** We minimize our use of pesticides and other hazardous materials by choosing non-toxic alternatives that do not pose a threat to the environment, especially when it could affect public park facilities and open spaces.	X		7	
Comments:					
S-6.4	**Safe Storage and Maintenance Practices.** We require that the users of hazardous materials be adequately prepared to prevent and mitigate hazardous materials releases.				X
Comments:					
S-6.5	**Location of Hazardous Material Facilities.** We regulate facilities that will be involved in the production, use, storage, or disposal of hazardous materials, pursuant to federal, state, county, and local regulations, so that impacts to the environment and sensitive land uses are mitigated. We prohibit new hazardous waste facilities in close proximity to sensitive land uses and environmental justice areas.				X
Comments:					
S-6.6	**Location of Sensitive Land Uses.** We prohibit new sensitive land uses from locating within airport safety zones and near existing sites that use, store, or generate large quantities of hazardous materials.				X
Comments:	*The plan does not have any sensitive land uses.*				
S-6.7	**Household Hazardous Waste.** We support the proper disposal of household hazardous substances.	X		7	
Comments:					

Policy		Fully Complies	Partially Complies	SP Sec. No.	N/A
S-6.8	**Mitigation and Remediation of Groundwater Contamination.** We actively participate in local and regional efforts directed at both mitigating environmental exposure to contaminated groundwater and taking action to clean up contaminated groundwater once exposure occurs.	X		7	
Comments:					
S-6.9	**Remediation of Methane.** We require development to assess and mitigate the presence of methane, per regulatory standards and guidelines.	X		7	
Comments:					
S-7 Law Enforcement					
Goal	**Residential neighborhoods, commercial areas, and industrial districts that are kept safe through a multi-faceted approach of prevention, suppression, and community involvement in public safety.**				
S-7.1	**Police Unit Response.** We respond to calls for service in a timely manner.				X
Comments:					
S-7.2	**Community Oriented Problem Solving (C.O.P.S.).** We support and maintain the mission of COPS to identify and resolve community problems.				X
Comments:					
S-7.3	**Prevention Services.** We provide crime prevention programs targeted to youth, parents, seniors, businesses, and neighborhoods.				X
Comments:	*The City of Ontario is the entity responsible for providing crime prevention programs.*				
S-7.4	**Crime Prevention through Environmental Design (CPTED).** We require new development to incorporate CPTED in the design of streetscapes, sites, open spaces, and buildings.	X		4, 6 and 8	
Comments:					
S-7.5	**Interdepartmental Coordination.** We utilize all City departments to help reduce crime and promote public safety.				X
Comments:					

Policy		Fully Complies	Partially Complies	SP Sec. No.	N/A
S-7.6	**Partnerships.** We partner with other local, state, and federal law enforcement agencies and private security providers to enhance public safety services in Ontario.				X
Comments:					
S-7.7	**Resource Allocation.** We analyze crime data to evaluate the effectiveness of crime prevention and reduction strategies and allocate resources accordingly.				X
Comments:					
S-7.8	**Social Services.** We support behavioral health and social services as part of the public safety solution.				X
Comments:					
S-8 Emergency Management					
Goal	**Disaster resilient, prepared community through effective emergency/disaster preparedness, response, mitigation, and recovery.**				
S-8.1	**State and Federal Mandates.** We maintain emergency management programs that meet the requirements of the State of California Standardized Emergency Management System (SEMS) and the National Incident Management System (NIMS).				X
Comments:					
S-8.2	**Emergency Management Plans.** We maintain, update, and adopt the Emergency Operations Plan (EOP) and incorporate, by reference the City's Hazard Mitigation Plan (HMP).				X
Comments:					
S-8.3	**Emergency/Disaster Training Exercises.** We conduct training and exercises to prepare for and evaluate emergency/disaster response and recovery procedures.				X
Comments:					
S-8.4	**Interagency Collaboration.** We maintain partnerships, including automatic aid agreements, with fire protection, police and sheriff departments, and emergency management agencies in San Bernardino and Riverside County to strengthen emergency response.				X
Comments:					

Policy		Fully Complies	Partially Complies	SP Sec. No.	N/A
S-8.5	**Interdepartmental Coordination.** We utilize all City departments to help support emergency/disaster preparedness, response, mitigation, and recovery.				X
Comments:	*The City of Ontario is the entity responsible for interdepartmental coordination to support emergency/disaster situations.*				
S-8.6	**Community Outreach.** We provide education to the community to promote personal, family, and community emergency preparedness to both natural and human-generated hazards.				X
Comments:	*The City of Ontario is the entity responsible for providing education to the community.*				
S-8.7	**Extreme Heat and Air Quality.** We work to ensure that all community members are informed about and have access to community cooling centers and clean air centers during extreme heat events or wildfires, with a focus on serving environmental justice communities. We support the development of extreme heat emergency response policies and practices to address these critical health risks in the community.				X
Comments:	*The City of Ontario is the entity responsible for providing the community with information and access to situations of extreme heat and air quality conditions.*				
S-8.8	**Regional Partnerships for Climate Adaptation.** We partner with local governments in San Bernardino County, Riverside County, and Inland Southern California Climate Collaborative to develop regional climate change adaptation strategies and programs.				X
Comments:	*The City of Ontario is the entity responsible for local and regional partnerships for climate change adaptation strategies and programs.*				
S-8.9	**Backup Power in Critical Facilities.** We require backup power be maintained in critical facilities. We encourage backup power solutions that include renewable energy components.				X
Comments:	*The City of Ontario is the entity responsible for maintaining/providing backup power in critical facilities.*				
S-9 Energy Resiliency					
Goal	**Incorporate energy efficient practices and renewable energy systems to improve air quality, comfort, and energy reliability during temporary power outages.**				
S-9.1	**Solar Energy.** We support and may incentivize the installation of residential and commercial solar panels and battery storage systems that can provide electricity during power outages.	X		7	
Comments:	*The City of Ontario is the entity responsible for supporting and incentivizing the installation and use of solar energy.*				

Policy		Fully Complies	Partially Complies	SP Sec. No.	N/A
S-9.2	**Renewable Energy.** Renovate existing city-owned facilities and plan future facilities to include renewable energy generation capacity and battery storage as part of an effort to make public facilities and services greener and more resilient to power outages.				X
Comments:					
S-9.3	**Energy Efficiency Retrofits.** We support and may incentivize retrofits to residential and commercial buildings that improve energy efficiency and insulation from extreme temperatures, giving priority towards low-income applicants.				X
Comments:					
MOBILITY ELEMENT					
M-1 Roadway System					
Goal	**A system of roadways that meets the mobility needs of a dynamic and prosperous Ontario.**				
M-1.1	**Roadway Design and Maintenance.** We require our roadways to: 1. Comply with federal, state, and local design and safety standards; 2. Meet the needs of multiple transportation modes and users; 3. Handle the capacity envisioned in the City of Ontario Master Plan of Streets and Highways; 4. Be maintained in accordance with best practices; 5. Be compatible with the streetscape and surrounding land uses; and 6. Promote the efficient flow of all modes of traffic through the implementation of intelligent transportation systems and travel demand management strategies.	X		5, 7 and 8	
Comments:	*Per project EIR traffic study.*				
M-1.2	**Mitigation of Impacts.** We require development to mitigate its traffic impacts.	X		5	
Comments:					

Policy		Fully Complies	Partially Complies	SP Sec. No.	N/A
M-1.3	**Agency Coordination on Roadway Improvements.** We work with Caltrans, SBCTA, and others to identify, fund, and implement needed improvements to roadways when necessary. We work with neighboring jurisdictions to promote regional connectivity, access, and meet operational level of service standards at the City limits.				X
Comments:					
M-1.4	**Complete Streets.** We work to provide a complete, balanced, context-aware, multimodal transportation network that meets the needs of all users of streets, roads, and highways, including motorists, pedestrians, bicyclists, children, persons with disabilities, seniors, movers of commercial goods, and users of public transportation. We prioritize implementation of complete streets improvements in environmental justice areas to facilitate opportunities for residents to use active transportation systems.	X		5 and 8	
Comments:					
M-1.5	**Level of Service.** Maintain a peak hour Level of Service (LOS) E or better at all intersections. Maintain Level of Service D or better on arterial streets in the City. Develop and maintain a list of locations where LOS E or LOS F are considered acceptable and would be exempt from this level of service policy. Considerations for LOS exemption include being restricted by environmental constraints, lacking available right-of-way, deterring an increase in VMT, or degrading other modes of travel (such as bicycle or pedestrian infrastructure).				X
Comments:					
M-1.6	**Reduce Vehicle Miles Traveled.** We will strive to reduce VMT through a combination of land use, transportation projects, travel demand management strategies, and other trip reduction measures in coordination with development projects and public capital improvement projects.				X
Comments:					

Policy		Fully Complies	Partially Complies	SP Sec. No.	N/A
M-2 Active Transportation					
Goal	A system of trails and corridors that facilitate and encourage active modes of transportation.				
M-2.1	**Active Transportation.** We maintain our Active Transportation Master Plan to create a comprehensive system of on- and off-street bikeways and pedestrian facilities that are safe, comfortable, and accessible and connect residential areas, businesses, schools, parks, and other key destination points.	X		5 and 8	
Comments:					
M-2.2	**Bicycle System.** We provide off-street multipurpose trails and Class II bikeways as our preferred paths of travel and use the Class III for connectivity in constrained circumstances. When truck routes and bicycle facilities share a right-of-way, we prefer Class I or Class IV bicycle facilities. We require new development to include bicycle facilities, such as bicycle parking and secure storage areas.	X		5 and 8	
Comments:					
M-2.3	**Pedestrian Walkways.** We require streets to include sidewalks and visible crosswalks at major intersections where necessary to promote safe and comfortable mobility between residential areas, businesses, schools, parks, recreation areas, and other key destination points.	X		5 and 8	
Comments:					
M-2.4	**Network Opportunities.** We use public rights-of-way and easements such as, utility easements, levees, drainage corridors, road rights-of-way, medians, and other potential options to maintain and expand our bicycle and pedestrian network. In urban, mixed- use, and transit-oriented Place Types, we encourage the use of underutilized public and private spaces to expand our public realm and improve pedestrian and bicycle connectivity.	X		5 and 8	
Comments:					

Policy		Fully Complies	Partially Complies	SP Sec. No.	N/A
M-3 Public Transit					
Goal	**A public transit system that is a viable alternative to automobile travel and meets basic transportation needs of the transit-dependent.**				
M-3.1	**Transit Partners.** We maintain a proactive working partnership with transit providers to ensure that adequate public transit service is available, cost-efficient, and convenient, particularly for residents in environmental justice areas.				X
Comments:					
M-3.2	**Alternative Transit Facilities at New Development.** We require new development adjacent to an existing or planned transit stop to contribute to the creation of transit facilities, such as bus shelters, transit bays and turnouts, and bicycle facilities, such as secure storage areas.				X
Comments:					
M-3.3	**Transit-Oriented Development.** We may provide additional development-related incentives to those inherent in the Land Use Plan for projects that promote transit use and reduce vehicle miles traveled.	X		4, 5, and 8	
Comments:					
M-3.4	**Bus Rapid Transit (BRT) Corridors.** We work with regional transit agencies to implement BRT service and reduce vehicle miles traveled by targeting destinations and corridors with the highest number of potential riders.				X
Comments:					
M-3.5	**Light Rail.** We support extension of the Metro Rail Gold Line to Ontario, and will work to secure station locations at the proposed multimodal transit center.				X
Comments:	*The plan is not within proximity of a light rail station location.*				
M-3.6	**Metrolink Expansion.** We advocate expansion of Metrolink service to include the Downtown and the multimodal transit center.				X
Comments:	*The plan is not within proximity of a multimodal transit center or Downtown.*				
M-3.7	**High Speed Rail.** We encourage the development of high-speed rail systems that would enhance regional mobility in Southern California and serve the City of Ontario.				X
Comments:	*The plan is not within proximity of the high speed rail system.*				

Policy		Fully Complies	Partially Complies	SP Sec. No.	N/A
M-3.8	**Feeder Systems.** We work with regional transit agencies to secure convenient feeder service from the Metrolink station and the proposed multimodal transit center to employment centers in Ontario.				X
Comments:					
M-3.9	**Ontario Airport Metro Center Circulator.** We will explore development of a convenient mobility system, including but not limited to shuttle service, people mover, and shared car system, for the Ontario Airport Metro Center.				X
Comments:	*The plan is not within proximity of the Ontario Airport.*				
M-3.10	**Multimodal Transportation Center.** We intend to ensure the development of a multimodal transportation center near ONT airport to serve as a transit hub with amenities for transit riders, pedestrians, and bicyclists transitioning to local buses, BRT, the Gold Line, high-speed rail, the proposed Ontario Airport Metro Center Circulator, and other future transit modes. We support locations for the multimodal transportation center that are north of ONT airport, between Vineyard Avenue and Interstate 15.				X
Comments:	*The plan is not within proximity of the ONT airport.*				
M-3.11	**Transit and Community Facilities.** We require the future development of community-wide serving facilities to be sited in transit-ready areas that can be served and made accessible by public transit. Conversely, we plan (and coordinate with other transit agencies to plan) future transit routes to serve existing community facilities.				X
Comments:					
M-4 Goods Movement					
Goal	**An efficient flow of goods through the City that maximizes economic benefits and minimizes negative impacts.**				
M-4.1	**Truck Routes.** We designate and maintain a network of City truck routes that provide for the safe and efficient transport of goods while minimizing negative impacts on local circulation and noise-sensitive land uses, as shown on Exhibit M-04, Truck Routes. We will minimize conflicts on truck routes through the design and implementation of buffers between travel lanes and pedestrian and bicycle facilities on designated truck routes.				X
Comments:					

Policy		Fully Complies	Partially Complies	SP Sec. No.	N/A
M-4.2	**Regional Participation.** We work with regional and subregional transportation agencies and adjacent cities to plan and implement goods movement strategies, including regional truck routes, plans and projects that improve mobility, support the efficient movement of goods, and minimize negative environmental impacts.				X
Comments:					
M-4.3	**Railroad Grade Separations.** We eliminate at-grade rail crossings identified on Exhibit M-01, Roadway Classifications.				X
Comments:	*The plan is not within proximity of a railroad.*				
M-4.4	**Environmental Considerations.** We support both local and regional efforts to reduce/eliminate the negative environmental impacts of goods movement through the planning and implementation of truck routing and the development of a plan to evaluate the future needs of clean fueling/recharging and electrified truck parking.	X		5 and 7	
Comments:					
M-4.5	**Air Cargo.** We support and promote a ONT airport that accommodates 1.6 million tons of cargo per year, as long as the impacts associated with that level of operations are planned for and mitigated.				X
Comments:	*The plan is not within proximity of the ONT airport.*				
M-5 Regional Transportation					
Goal	**A proactive leadership role in helping identify and facilitate implementation of strategies that address regional transportation challenges.**				
M-5.1	**Regional Leadership.** We maintain a leadership role to help identify and implement potential solutions to long-term regional transportation problems.				X
Comments:					
M-5.2	**Land Use Compatibility with Regional Transportation Facilities.** We work with ONT, railroads, Caltrans, SBCTA, and other transportation agencies to minimize impacts.				X
Comments:					

Policy		Fully Complies	Partially Complies	SP Sec. No.	N/A
COMMUNITY DESIGN ELEMENT					
CD-1 Image & Identity					
Goal	**A dynamic, progressive city containing distinct and complete places that foster a positive sense of identity and belonging among residents, visitors, and businesses.**				
CD-1.1	**City Identity.** We take actions that are consistent with the City being a leading urban center in Southern California while recognizing, enhancing, and preserving the character of our existing viable neighborhoods.	X		7	
Comments:					
CD-1.2	**Place Types.** We establish Place Types in urban, mixed use, and transit-oriented areas to foster the City's identity as a premier community and require new development within each Place Type to incorporate prescribed urban patterns, forms, and placemaking priorities.				X
Comments:					
CD-1.3	**Existing Neighborhoods.** We require the existing character of viable residential and non-residential neighborhoods be preserved, protected, and enhanced.				X
Comments:					
CD-1.4	**Transportation Corridors.** We will enhance our major transportation corridors within the City through landscape, hardscape, signage and lighting. The extent of enhancement should be appropriate to the use, type, and context of each corridor.	X		7	
Comments:					
CD-1.5	**View Corridors.** We require all major north-south streets be designed and redeveloped to feature views of the San Gabriel Mountains, which are part of the City's visual identity and a key to geographic orientation. Such views should be free of visual clutter, including billboards and may be enhanced by framing with trees.				X
Comments:					

Policy		Fully Complies	Partially Complies	SP Sec. No.	N/A
CD-2 Design Quality					
Goal	**A high level of design quality resulting in neighborhoods, commercial areas, public spaces, parks, and streetscapes that are attractive, safe, functional, human- scale, and distinct.**				
CD-2.1	**Quality Building Design and Architecture.** We encourage all development projects to convey visual interest and character through: 1. Building volume, massing, and height to provide context-appropriate scale and proportion; 2. A true architectural style which is carried out in plan, section, and elevation through all aspects of the building and site design and appropriate for its setting; and 3. Exterior building materials that are articulated, high quality, durable, and appropriate for the architectural style.	X		6 and 8	
Comments:					
CD-2.2	**Neighborhood Design.** We create distinct residential neighborhoods that promote a sense of community and identity by emphasizing access, connectivity, livability, and social interaction through such elements as: 1. A pattern of smaller, walkable blocks that promote activity, safety, and access to nearby amenities and services; 2. Varied parcel sizes and lot configurations to accommodate a diversity of housing types; 3. Traffic calming measures to slow traffic and promote walkability while maintaining acceptable traffic flows and emergency evacuation access; 4. Floor plans that encourage views onto the street and de-emphasize the visual and physical dominance of garages (introducing the front porch as the "outdoor living room"), as appropriate; and 5. Landscaped parkways, with sidewalks separated from the curb and designed to maximize safety, comfort, and aesthetics for all users.	X		6 and 8	
Comments:					
CD-2.3	**Commercial Areas.** We desire commercial areas and centers to be distinctive, pedestrian friendly, functional, and vibrant with a range of businesses, places to gather, and connectivity to the neighborhoods they serve.				X
Comments:					

Policy		Fully Complies	Partially Complies	SP Sec. No.	N/A
CD-2.4	**Urban, Mixed Use, and Transit-oriented Areas.** We establish Place Types to require mixed use, urban, and transit-oriented areas to be designed and developed as pedestrian oriented areas that are integrated with adjacent neighborhoods and promote a vibrant, comfortable, and functional environment, as defined for each Place Type.				X
Comments:					
CD-2.5	**Streetscapes.** We design new and, when necessary, retrofit existing streets to improve walkability, bicycling and transit integration, strengthen connectivity, and enhance community identity through improvements to the public right-of-way such as sidewalks, street trees, parkways, curbs, street lighting and street furniture.	X		6 and 8	
Comments:					
CD-2.6	**Connectivity.** We promote development of local street patterns, multimodal networks, and connected public spaces that create and unify neighborhoods, rather than divide them, and create cohesive and continuous corridors, rather than independent "islands" through the following means: 1. Local street networks that provide access both between subdivisions and within neighborhoods and discourage through traffic; 2. A local street system that is logical and understandable for the user. A grid system is preferred to avoid circuitous and confusing travel paths between internal neighborhood areas and adjacent arterials and to provide adequate emergency and evacuation access; and 3. Pedestrian and bicycle networks that provide convenient access to neighborhoods and nearby destinations, such as schools, parks, other public spaces, commercial areas, and transit stops.	X		6 and 8	
Comments:					
CD-2.7	**Sustainability.** We collaborate with the development community to design and build neighborhoods, streetscapes, sites, outdoor spaces, landscaping, and buildings to reduce energy demand through solar orientation, maximum use of natural daylight, passive solar and natural ventilation, building form, mechanical and structural systems, building materials, and construction techniques.	X		6 and 8	
Comments:					

Policy		Fully Complies	Partially Complies	SP Sec. No.	N/A
CD-2.8	**Safe Design.** We incorporate defensible space design into new and existing developments to ensure the maximum safe travel and visibility on pathways, corridors, and open space and at building entrances and parking areas by avoiding physically and visually isolated spaces, maintaining visibility and accessibility, and using lighting.	X		6 and 8	
Comments:					
CD-2.9	**Landscape Design.** We encourage durable, sustainable, and drought-tolerant landscaping materials and designs that enhance the aesthetics of structures, create and define public and private spaces, and provide shade and environmental benefits.	X		6 and 8	
Comments:					
CD-2.10	**Parking Areas.** We require all development, including single-family residential, to minimize the visual impact of surface, structured, and garage parking areas visible from the public realm in an aesthetically pleasing, safe and environmentally sensitive manner. Examples include: 1. Surface parking: Shade trees, pervious surfaces, urban run-off capture and infiltration, and pedestrian paths to guide users through the parking field. 2. Structured parking: facade articulation, screening, appropriate lighting, and landscaping. 3. Garage parking: providing access to single-family residential garages through alley access, recessing garages from the frontage to emphasize front doors or active living spaces.	X		6 and 8	
Comments:					
CD-2.11	**Entry Statements.** We encourage the inclusion of amenities, signage, and landscaping at the entry to neighborhoods, commercial centers, mixed use areas, industrial developments, and public places that reinforce them as uniquely identifiable places.	X		6 and 8	
Comments:					
CD-2.12	**Site and Building Signage.** We encourage the use of sign programs that utilize complementary materials, colors, and themes. Project signage should be designed to effectively communicate and direct users to various aspects of the development and complement the character of the structures.	X		6 and 8	
Comments:					
CD-2.13	**Entitlement Process.** We work collaboratively with all stakeholders to ensure a high degree of certainty in the efficient review and timely processing of all development plans and permits.				X
Comments:					

Policy		Fully Complies	Partially Complies	SP Sec. No.	N/A
CD-2.14	**Availability of Information.** We provide easy access to information for developers, builders and the public about design quality, construction quality, and sustainable building practices.				X
Comments:					
CD-2.15	**Leverage Professional and Trade Organizations.** We support excellence in design and construction quality through collaboration with trade and professional organizations that provide expertise, resources and programs for developers, builders, and the public.				X
Comments:					
CD-2.16	**Transit Stops.** We require transit stops be conveniently located, well lit, safe, and clearly accessible to pedestrians, bicyclists, and people of all abilities.				X
Comments:					
CD-3 Urban, Mixed Use, and Transit-Oriented Place Types					
Goal	**Vibrant urban environments that are organized around intense buildings, pedestrian and transit areas, public plazas, and linkages between and within developments that are conveniently located, visually appealing and safe during all hours.**				
CD-3.1	**Unique Identity.** We promote development that heightens the unique character and identity of each Place Type by requiring compatible land uses and land planning, site design, and building design that promotes an active public realm.				X
Comments:					
CD-3.2	**Comfortable, Human-Scale Public Realm.** We require that public spaces, including streets, parks, and plazas on both public and private property be designed to maximize safety, comfort and aesthetics and connect to the citywide pedestrian, vehicular, and bicycle networks.				X
Comments:					

Policy		Fully Complies	Partially Complies	SP Sec. No.	N/A
CD-3.3	**Complete and Connected Network.** We require that pedestrian, vehicular, and bicycle circulation on both public and private property be coordinated to provide connections internally and externally to adjacent neighborhoods and properties (existing and planned) through a system of local roads and trails that promote walking and biking to nearby destinations (including existing and planned parks, commercial areas, and transit stops) and are designed to maximize safety, comfort, and aesthetics.	X		6 and 8	
Comments:					
CD-3.4	**Context-Aware and Appropriate Design.** We require appropriate building and site design that complements existing development, respects the intent and identity of the Place Type, and provides appropriate transitions and connections between adjacent uses to ensure compatibility of scale, maintain an appropriate level of privacy for each use, and minimize potential conflicts.	X		6 and 8	
Comments:					
CD-3.5	**Active Frontages.** We create lively pedestrian streetscapes by requiring primary building, business, and residential entrances, outdoor dining, and storefronts be located on ground floors adjacent to sidewalks or public spaces and designed to maximize safety, comfort, aesthetics, and the intended functionality (as defined by the Place Type).	X		6 and 8	
Comments:					
CD-3.6	**Managed Infrastructure.** We collaborate with developers and property owners to facilitate development that realizes the envisioned character and functionality of the Place Type through the use of green and shared infrastructure within each Place Type.	X		6 and 8	
Comments:					
CD-4 Historic Preservation					
Goal	**Historic buildings, streets, landscapes, and neighborhoods, as well as the story of Ontario's people, businesses, and social and community organizations, have been preserved and serve as a focal point for civic pride and identity.**				
CD-4.1	**Cultural Resource Management.** We update and maintain an inventory of historic sites and buildings, professional collections, artifacts, manuscripts, photographs, documents, maps, and other archives.				X
Comments:					

Policy		Fully Complies	Partially Complies	SP Sec. No.	N/A
CD-4.2	**Collaboration with Property Owners and Developers.** We educate and collaborate with property owners and developers to implement strategies and best practices that preserve the character of our historic buildings, streetscapes, and unique neighborhoods.				X
Comments:					
CD-4.3	**Collaboration with Outside Agencies.** We pursue opportunities to team with other agencies, local organizations, and nonprofits in order to preserve and promote Ontario's heritage.				X
Comments:					
CD-4.4	**Incentives.** We use the Mills Act and other federal, state, regional and local programs to assist property owners with the preservation of select properties and structures.				X
Comments:					
CD-4.5	**Adaptive Reuse.** We actively promote and support the adaptive reuse of historic sites and buildings to preserve and maintain their viability.				X
Comments:					
CD-4.6	**Promotion of Public Involvement in Preservation.** We engage in programs to publicize and promote the City's and the public's involvement in preservation efforts.				X
Comments:					
CD-4.7	**Public Outreach.** We provide opportunities for our residents to research and learn about the history of Ontario through the Planning Department, the Ontario Museum of History and Art, and the Robert E. Ellingwood Model Colony History Room.				X
Comments:					
CD-5 Protection of Investment					
Goal	**A sustained level of maintenance and improvement of properties, buildings, and infrastructure that protects the property values and encourages additional public and private investments.**				
CD-5.1	**Maintenance of Buildings and Property.** We require all public and privately-owned buildings and property (including trails and easements) to be properly and consistently maintained.				X
Comments:					

Policy		Fully Complies	Partially Complies	SP Sec. No.	N/A
CD-5.2	**Maintenance of Infrastructure.** We require the continual maintenance of infrastructure.				X
Comments:					
CD-5.3	**Improvements to Property & Infrastructure.** We provide programs to improve property and infrastructure.				X
Comments:					
CD-5.4	**Neighborhood Involvement.** We encourage active community involvement to implement programs aimed at the beautification and improvement of neighborhoods.				X
Comments:					
SOCIAL RESOURCES ELEMENT					
SR-1 Health					
Goal	**Residents have access to information, services and goods that improve their health and wellbeing.**				
SR-1.1	**Partnering for Healthcare.** We work with healthcare providers, and local, regional, state, and federal agencies to attract and retain a diversity of affordable, quality healthcare and facilities for the entire community.				X
Comments:					
SR-1.2	**Nutrition Choices.** We support the promotion of equitable access to affordable healthy food choices in the community, including community gardens, farmers markets, and cooking classes.				X
Comments:					
SR-1.3	**Health Education.** We promote equitable access to health education, including disease prevention, mental health, nutrition, and physical fitness.				X
Comments:					
SR-1.4	**Physical Activity.** We encourage activities and community design that improve the physical fitness of our community members, with an emphasis on the provision of activities and facilities in environmental justice areas.				X
Comments:					

Policy		Fully Complies	Partially Complies	SP Sec. No.	N/A
SR-2 Education					
Goal	**A range of educational and training opportunities for residents and workers of all ages and abilities that improves their life choices and provides a skilled workforce for our businesses.**				
SR-2.1	**Educational Partners.** We partner with educational institutions throughout the region in order to expand the range and quality of educational offerings available to the community.				X
Comments:					
SR-2.2	**Workforce Training.** We will work with industrial organizations, businesses, and educational institutions to create opportunities for workforce training.				X
Comments:					
SR-2.3	**Joint Use of Facilities.** We partner with public and private educational institutions to jointly use facilities for both City and educational purposes.				X
Comments:					
SR-2.4	**Access to Schools.** We work with local and regional partners to improve the safety in and around schools and to improve access for citizens of all ages and abilities to schools and community services, such as after school and other programs.				X
Comments:					
SR-2.5	**School Facilities.** We plan and coordinate with school districts for designing and locating school facilities to meet the City's goals, such as for health, walkability, and safety and to minimize impacts to existing neighborhoods.				X
Comments:					
SR-2.6	**Language.** We promote broad outreach in languages used by the community for proposed projects that could negatively affect environmental justice areas.				X
Comments:					
SR-2.7	**Community Engagement.** We promote targeted outreach and education to historically underrepresented groups to encourage meaningful participation in decision-making process for projects whose outcomes will affect land use in environmental justice areas.				X
Comments:					

Policy		Fully Complies	Partially Complies	SP Sec. No.	N/A
SR-3 Community & Leisure Activities					
Goal	**A range of community and leisure programs and activities provided by public, private, and nonprofit organizations that meet the needs of the community's varied interests, age groups and abilities.**				
SR-3.1	**Partnerships.** We partner with local and regional agencies, nonprofit organizations, and the private sector to provide a comprehensive range of community activities and events to citizens.				X
Comments:					
SR-3.2	**Needs Assessment.** We track the needs and priorities for community services and look for ways to meet demands and avoid duplication of offerings.				X
Comments:					
SR-3.3	**Program Outreach.** We promote information about leisure activities, classes, special events, and other services and activities to our community.				X
Comments:					
SR-3.4	**Community Events.** We plan and actively participate in regularly scheduled community events and seasonal or yearly citywide events.				X
Comments:					
SR-3.5	**Community Activities as Crime Deterrents.** We promote and participate in community activities as part of our crime prevention efforts.				X
Comments:					
SR-4 Library					
Goal	**City libraries that connect community members of all ages and abilities to a broad range of programs, communication, and informational resources.**				
SR-4.1	**Community Needs.** We identify and monitor community needs for library services, technology, and facilities, and tailor them to effectively meet those needs.				X
Comments:					

Policy		Fully Complies	Partially Complies	SP Sec. No.	N/A
SR-4.2	**Interagency Coordination.** We leverage relationships with outside agencies, educational institutions, and neighboring jurisdictions to share library resources to the benefit of Ontario residents.				X
Comments:					
SR-4.3	**Library Outreach.** We outreach to the community to increase the patronage of the library.				X
Comments:					
SR-4.4	**Coordination with Other Community Services.** We coordinate library programs with other recreational and community programs and facilities.				X
Comments:					
SR-4.5	**Focal Points of the Community.** We design and program Ontario's libraries as focal points of community engagement, including public outreach and community events.				X
Comments:					
SR-4.6	**Robert E. Ellingwood Model Colony History Room.** We work with the Ontario Museum of History and Art in order to collect, preserve, and display artifacts and images from Ontario's heritage and connect the City's past to the present through the History Room.				X
Comments:					
SR-5 Entertainment & Culture					
Goal	**Local heritage, entertainment, and cultural experiences that enrich the lives of Ontario's residents, workers, and visitors and serve to attract residents and businesses to the City.**				
SR-5.1	**Provision of Entertainment and Culture.** We support equitable access to a range of entertainment and cultural experiences such as public art, exhibitions, and performances.				X
Comments:					
SR-5.2	**Local Heritage Education.** We partner with educational providers to promote culture and heritage.				X
Comments:					

Policy		Fully Complies	Partially Complies	SP Sec. No.	N/A
SR-5.3	**Public Art.** We encourage public art in buildings, parks, open spaces, and other public and private spaces.				X
Comments:					
SR-5.4	**Private-Public Sector Events.** We partner with private and nonprofit sectors to provide and promote participation in cultural activities including fairs, festivals, and other events geared to neighborhoods, the City as a whole, and the region.				X
Comments:					
SR-5.5	**Promotion of Ontario Artists and Musicians.** We promote awareness of entertainment and culture produced in Ontario.				X
Comments:					

MEMORANDUM

TO: Robert Morales, Associate Planner
City of Ontario
FROM: Amy Flores

DATE: April 24, 2025

RE: Esperanza PA-11 SPA Project

The following matrix presents all mitigation required within the Esperanza Specific Plan EIR and provides an applicability determination for the Esperanza PA-11 SPA Project (File Nos.: PPA24-0139, PGPA24-004, PSPA24-004, PDEV24-017, PMTT24-008, PDA25-003). Measures that are not applicable are noted in ~~strikeout~~ format.

Esperanza Measure	Project Applicability
Aesthetics	
None.	-
Agriculture and Forest Resources	
~~MM Ag 1: In order to minimize conflicts between urban and agricultural land uses, each Specific Plan developed for properties within the NMC must comply with the Agricultural Overlay District requirements for urban development in proximity to existing agricultural operations. The proposed project shall establish a minimum 100-foot separation between active agricultural operations and new, non-agricultural development, or an equivalent easement that is approved by the City of Ontario~~.	**Not Applicable.** Ag 1 was developed as part of the NMC General Plan Amendment. The Esperanza Specific Plan was developed pursuant to Ag 1. Additionally, there are no active agricultural operations adjacent to the Project site.
~~MM Ag 2: In order to minimize conflicts between urban and agricultural land uses, all residential units in the Subarea 29 Specific Plan shall be provided with a deed disclosure, or similar notice, approved by the City Attorney regarding the proximity and nature, including odors, of neighboring agricultural uses.~~	**Not Applicable.** The Project site is not located within Subarea 29, as referenced in Ag 2.
Air Quality	
~~MM Air 1: During all construction activities, construction contractors shall use low emission mobile construction~~	**Not Applicable.** Project construction would not exceed SCAQMD thresholds; further mitigation is not required.

Esperanza Measure	Project Applicability
~~equipment where feasible to reduce the release of undesirable emissions.~~	
~~MM Air 2: During all construction activities, construction contractors shall encourage rideshare and transit programs for project construction personnel to reduce automobile emissions.~~	**Not Applicable.** Project construction would not exceed SCAQMD thresholds; further mitigation is not required.
~~MM Air 3: During all grading and site disturbance activities, construction contractors shall water active grading sites at least twice a day, and clean construction equipment in the morning and/or evening to reduce particulate emissions and fugitive dust.~~	**Not Applicable.** Project construction would not exceed SCAQMD thresholds; further mitigation is not required.
~~MM Air 4: During all construction activities, construction contractors shall, as necessary, wash truck tires leaving the site to reduce the amount of particulate matter transferred to paved streets as required by SCAQMD Rule 403.~~	**Not Applicable.** Project construction would not exceed SCAQMD thresholds; further mitigation is not required.
~~MM Air 5: During all construction activities, construction contractors shall sweep on and off site streets (recommend water sweepers with reclaimed water) if visible soil is carried over to adjacent public thoroughfares, as determined by the City Engineer to reduce the amount of particulate matter on public streets.~~	**Not Applicable.** Project construction would not exceed SCAQMD thresholds; further mitigation is not required.
~~MM Air 6: During all construction activities, construction contractors shall limit traffic speeds on all unpaved road surfaces to 15 miles per hour or less to reduce fugitive dust.~~	**Not Applicable.** Project construction would not exceed SCAQMD thresholds; further mitigation is not required.
~~MM Air 7: During grading and all site disturbances activities, construction contractors shall suspend all grading operations during first and second stage smog alerts to reduce fugitive dust and combustion related emissions.~~	**Not Applicable.** Project construction would not exceed SCAQMD thresholds; further mitigation is not required.
~~MM Air 8: During grading and all site disturbances activities, construction contractors shall suspend all grading operations when wind speeds (including instantaneous gusts) exceed 25 miles per hour to reduce fugitive dust.~~	**Not Applicable.** Project construction would not exceed SCAQMD thresholds; further mitigation is not required.
~~MM Air 9: During all construction activities, the construction contractors shall maintain construction~~	**Not Applicable.** Project construction would not exceed SCAQMD thresholds; further mitigation is not required.

Esperanza Measure	Project Applicability
~~equipment engines by keeping them tuned according to manufacturers' specifications.~~	
~~MM Air 10: During construction, mobile construction equipment will be properly maintained at an off-site location, which includes proper tuning and timing of engines. Equipment maintenance records and equipment design specification data sheets shall be kept on-site during construction.~~	**Not Applicable.** Project construction would not exceed SCAQMD thresholds; further mitigation is not required.
~~MM Air 11: During construction, all contractors will be advised to prohibit all vehicles from idling in excess of five minutes, both on-site and off-site.~~	**Not Applicable.** Project construction would not exceed SCAQMD thresholds; further mitigation is not required.
~~MM Air 12: Configure construction parking to minimize traffic interference.~~	**Not Applicable.** Project construction would not exceed SCAQMD thresholds; further mitigation is not required.
~~MM Air 13: Contractors shall use high-pressure-low-volume (HPLV) paint applicators with a minimum transfer efficiency of at least 50% or other application techniques with equivalent or higher transfer efficiency, where feasible.~~	**Not Applicable.** Project construction would not exceed SCAQMD thresholds; further mitigation is not required.
~~MM Air 14: Use architectural coatings with a VOC content lower than required under Rule 1113, where feasible.~~	**Not Applicable.** Project construction would not exceed SCAQMD thresholds; further mitigation is not required.
~~MM Air 15: Construct/build with materials that do not require painting, where feasible.~~	**Not Applicable.** Project construction would not exceed SCAQMD thresholds; further mitigation is not required.
~~MM Air 16: Use pre-painted construction materials, where feasible.~~	**Not Applicable.** Project construction would not exceed SCAQMD thresholds; further mitigation is not required.
~~MM Air 17: The contractor shall provide truck drivers with materials showing where sensitive receptors, such as schools, are located, and when congestion can be expected so that the drivers can avoid these routes and/or times of day.~~	**Not Applicable.** Project construction would not exceed SCAQMD thresholds; further mitigation is not required.
~~MM Air 18: Require construction equipment that meet or exceed Tier 2 standards; use emulsified diesel fuels; and equip construction equipment with oxidation catalysts, particulate traps, or other verified/certified retrofit technologies, etc., where feasible.~~	**Not Applicable.** Project construction would not exceed SCAQMD thresholds; further mitigation is not required.
~~MM Air 19: Local transit agencies shall be contacted to determine bus routing in the project area that can accommodate bus stops at the project access points and the project shall provide bus passenger benches and shelters at these project access points.~~	**Not Applicable.** The Project area is already served by transit services; Omnitrans Route 87 serves the area, with a stop located at the corner of Eucalyptus Avenue and Hamner Avenue, less than 1,000 feet from the Project site. The Project would provide internal

Esperanza Measure	Project Applicability
	driveways and pedestrian paths that connect to the existing street and sidewalk network surrounding the Project site.
Biological Resources	
MM Bio 1: There is a possibility of owl colonization within the project site prior to site grading. To ensure that no direct loss of individuals occurs, mitigation will be carried prior to initiation of on-site grading activities for each development phase. A pre-construction survey for resident burrowing owls shall be conducted by a qualified biologist. The survey shall be conducted 30 days prior to construction activities. If ground-disturbing activities are delayed or suspended for more than 30 days after the preconstruction survey, the site shall be resurveyed for owls. If owls are determined to be present within the construction footprint, they shall be captured and relocated. If non-breeding owls must be moved away from the disturbance area, passive relocation techniques will be used. The pre-construction survey and any relocation activity shall be conducted in accordance with the CDFG Report on Burrowing Owl Mitigation, 1995. According to CDFG guidelines, mitigation actions will be conducted from September 1 to January 31, which is prior to the nesting season. However, burrowing owl nesting activity is variable, and as such the time frame will be adjusted accordingly. Should eggs or fledglings be discovered in any owl burrow, the burrow cannot be disturbed (pursuant to CDFG guidelines) until the young have hatched and fledged (matured to a stage that they can leave the nest on their own). Occupied burrows shall not be disturbed during the nesting season (February 1 through August 31) unless a qualified biologist approved by the Department of Fish and Game verifies through non-invasive methods that either: a) the adult birds have not begun egg-laying and incubation; or b) the juveniles from the occupied	**Applicable.** The Project would conduct a pre-construction survey for resident burrowing owls, and follow the protocol set forth in this measure.

Esperanza Measure	Project Applicability
burrows are foraging independently and are capable of independent survival. If a biologist is unable to verify one of the above conditions, then no disturbance shall occur within 300 feet of the burrowing owl's nest during the breeding season to avoid abandonment of the young. Passive relocation can be used to exclude owls from their burrows (outside the breeding season or once the young are able to leave the nest and fly) by installing one-way doors in burrow entrances. These one-way doors allow the owl to exit the burrow, but not enter it. These doors should be left in place 48 hours to ensure owls have left the burrow. Artificial burrows should be provided nearby. The project area should be monitored daily for one week to confirm owl use of burrows before excavating burrows in the impact area. Burrows should be excavated using hand tools and refilled to prevent reoccupation. Sections of flexible pipe should be inserted into the tunnels during excavation to maintain an escape route for any animals inside the burrow.	
MM Bio 2: The project proponent shall be required to pay City of Ontario open space mitigation fees. Fees collected will be used "to acquire and restore mitigation lands to offset impacts to species now living in the New Model Community and impacts to existing open space", according to the City of Ontario Development Impacts Fee Calculation Report and the Settlement and general Release Agreement.	**Applicable.** The Project would pay City of Ontario open space mitigation fees.
~~MM Bio 3: Construction and/or removal of windrow trees will occur outside of the nesting season (February 1 through August 31). If tree removal activities must occur during the breeding season, the mitigation measure in MM Bio 4 shall be implemented.~~	**Not Applicable.** The Project site has been graded, no windrow trees exist on the site.
~~MM Bio 4: If project construction activities involving heavy equipment and/or windrow tree removal are to occur during the nesting/breeding season (between February 1st and August 31st) of potentially occurring sensitive bird species, a pre-construction field survey shall be conducted by a qualified biologist to determine~~	**Not Applicable.** The Project site has been graded, no windrow trees exist of the site.

Esperanza Measure	Project Applicability
~~if active nests of species protected by MBTA or CDFG are present in the construction zone or within a buffer of 500 feet. Pre-construction nesting/breeding surveys shall be conducted in all CDFG jurisdictional areas and within windrow trees. If no active nests are found during the survey, construction activities may proceed.~~ ~~If active nests are located during the pre-construction surveys, no grading, heavy equipment, or tree removal activities shall take place within at least 500 feet of an active listed species or raptor nest, 300 feet of other sensitive bird nests (non-listed), and 100 feet of most common songbird nests.~~	
Cultural Resources	
MM Cul 1: Should any cultural and/or archaeological resources be accidentally discovered during construction, construction activities shall be moved to other parts of the project site and a qualified archaeologist shall be contacted to determine the significance of these resources. If the find is determined to be a historical or unique archaeological resource, as defined in Section 15064.5 of the CEQA Guidelines, then procedures outlined in Section 15064.5 of the CEQA Guidelines shall be followed. Additionally, Ontario's Local CEQA Guidelines provide that curation may be an appropriate mitigation measure for an artifact that must be removed during project excavation or testing. (Local CEQA Guidelines, Section 5.13.)	**Applicable.** Although the site-specific Cultural Resources Study determined that no further archaeological study or mitigation would be required, this measure is directed at resources that may be inadvertantly found during Project construction. The Project would implement this measure.
MM Cul 2: If human remains are uncovered at any time, all activities in the area of the find shall be halted by the developer or its contractor and the County Coroner shall be notified immediately pursuant to CA Health & Safety Code Section 7050.5 and CA PRC Section 5097.98. If the Coroner determines that the remains are of Native American origin, the Coroner shall proceed as directed in Section 15064.5(e) of the CEQA Guidelines.	**Applicable.** The Project would be required to comply with all existing regulations, including the California Public Resources Code Section 5097.98, which would provide protection for any human remains discovered during development activities.
Energy	
None. (This topic was added to the CEQA Guidelines after the certification of the Esperanza Specific Plan DEIR.)	-

Esperanza Measure	Project Applicability
Geology and Soils	
MM Geo 1: To address potential wind erosion effects, prior to construction, all grading and other construction activities will apply for and adhere to the permit given by the City of Ontario and enforced by the Building Official found in Title 6, Chapter 12, sections 6-12.01 – 6-12.07. The permit lasts for one (1) year, therefore, all construction lasting for a period of more than one calendar year from the date of issue will reapply for the permit and pay the current annual fee. At a minimum, the permit prohibits the disturbance of the surface or subsurface of more than one (1) acre of land without meeting permit requirements which can include such things as the application of soil stabilizers and limitations on grading activities during wind events.	**Applicable.** The Project would obtain all required permits prior to any construction activities.
~~MM Geo 2: To assure soils suitable for construction, site materials should be tested for organics and excavated to a minimum of 4 feet where soils generally become denser. Actual removal depths will be determined during grading when subsurface conditions are exposed. GeoSoils, Inc (10/12/01) also recommends that soft and compressible colluvial and alluvial soils be removed prior to grading.~~ ~~Per recommendations of GeoSoils Inc. in the Updated Geotechnical Study, partial to complete removal of manure will be required, as soils with high concentrations of cow manure are generally unsuitable to be used as fill. On-site soils may be used for fill if the organic matter content is diluted to less than 2 percent using underlying soils with no more than 1 percent of the organic content being from manure.~~	**Not Applicable.** As part of the site-specific Geotechnical Evaluation, soil samples throughout the site were tested to determine their organic content. The majority of samples ranged from approximately 1.2 percent to 2.7 percent, indicating relatively low organics. Two areas of the site indicated higher levels (8.8 percent and 4.8 percent). The Geotechnical Evaluation provides remedial grading recommendations in those areas with a higher percentage of organic content. Mandatory compliance with the recommendations of the site-specific Geotechnical Evaluation negates the need for this mitigation measure.
~~MM Geo 3: Any soil to be used as fill, whether currently on-site or imported, should be approved by the soil engineer or his/her representative prior to their placement. To properly assess and address the suitability of on-site soils to be used as fill, a geotechnical evaluation shall be performed by a qualified professional prior to the approval of the Tentative Tract map or site plan for a given phase of~~	**Not Applicable.** On-site soils were evaluated for suitability as part of the site-specific Geotechnical Evaluation. Mandatory compliance with the recommendations of the site-specific Geotechnical Evaluation negates the need for this mitigation measure.

Esperanza Measure	Project Applicability
~~development. This evaluation will include an analysis of the organic matter content of soils on the site. If the organic matter content of the soils is greater than 2 percent when mixed with subsurface soils and/or imported fill, then manure will be removed from the site prior to grading operations.~~	
~~MM Geo 4: To reduce the risk of ground cracking, manure shall be removed from the site, such that the organic matter content of on-site soils shall not exceed 2 percent (a 2 percent total organic content is allowed, of which no more than 1 percent can be manure) in the building foundation areas when mixed with underlying clean soils and imported fill. On-site soils that will be used as on-site fill that contain organic contents will be diluted by mixing with underlying clean soils. The mix will be continuously sampled and tested during grading so that the fill does not exceed the recommended limit of 2 per cent of organics per total volume of fill. The soil engineer will observe the placement of all fill and take sufficient tests to monitor the moisture content and the uniformity and degree of compaction obtained.~~	**Not Applicable.** As part of the site-specific Geotechnical Evaluation, soil samples throughout the site were tested to determine their organic content. The majority of samples ranged from approximately 1.2 percent to 2.7 percent, indicating relatively low organics. Two areas of the site indicated higher levels (8.8 percent and 4.8 percent). The Geotechnical Evaluation provides remedial grading recommendations in those areas with a higher percentage of organic content. Mandatory compliance with the recommendations of the site-specific Geotechnical Evaluation negates the need for this mitigation measure.
~~MM Cul 3: Since grading plans have not yet been prepared to establish how deep excavation is needed, prior to the issuance of grading permits, and as recommended in the Phase I Cultural and Paleontological Resources Assessment for this site, a qualified paleontologist shall be retained to prepare a Paleontological Resources Survey of the project site, for approval by the City. Following City approval of the PRMTP, grading and construction activities may proceed in compliance with the provisions of the approved PRMTP.~~ ~~The PRMTP shall include the following measures:~~ ~~a. Identification of those locations within the project site where paleontological resources are likely to be uncovered during grading.~~ ~~b. A monitoring program specifying the procedures for the monitoring of grading activities by a qualified paleontologist or qualified designee.~~	**Not Applicable**. Consistent with the recommendations of the Project-specific Paleontological Resources Assessment, new Mitigation Measure 7-1 shall be implemented in place of MM Cul 3. Measure 7-1 requires the preparation of a PRIMP, as well as full-time paleontological monitoring starting at a depth of four feet below the surface during earth disturbance activities.

Esperanza Measure	Project Applicability
~~c. If fossil remains large enough to be seen are uncovered by earth-moving activities, a qualified paleontologist or qualified designee shall temporarily divert earth-moving activities around the fossil site until the remains have been evaluated for significance and, if appropriate, have been recovered; and the paleontologist or qualified designee allows earth-moving activities to proceed through the site. If potentially significant resources are encountered, a letter of notification shall be provided in a timely manner to the City, in addition to the report (described below) that is filed at completion of grading.~~ ~~d. If a qualified paleontologist or qualified designee is not present when fossil remains are uncovered by earth-moving activities, these activities shall be stopped and a qualified paleontologist or qualified designee shall be called to the site immediately to evaluate the significance of the fossil remains.~~ ~~e. At a qualified paleontologist or qualified designee's discretion and to reduce any construction delay, a construction worker shall assist in removing fossiliferous rock samples to an adjacent location for temporary stockpiling pending eventual transport to a laboratory facility for processing.~~ ~~f. A qualified paleontologist or qualified designee shall collect all significant identifiable fossil remains. All fossil sites shall be plotted on a topographic map of the project site.~~ ~~g. If the qualified paleontologist or qualified designee determines that insufficient fossil remains have been found after fifty percent of earthmoving activities have been completed, monitoring can be reduced or discontinued.~~ ~~h. Any significant fossil remains recovered in the field as a result of monitoring or by processing rock samples shall be prepared, identified, catalogued, curated, and accessioned into the fossil collections of the San Bernardino County Museum, or another museum repository complying with the Society of Vertebrate Paleontology standard guidelines. Accompanying~~	

Esperanza Measure	Project Applicability
~~specimen and site data, notes, maps, and photographs also shall be archived at the repository.~~ ~~i. Within 6 months following completion of the above tasks, a qualified paleontologist or qualified designee shall prepare a final report summarizing the results of the mitigation program and presenting an inventory and describing the scientific significance of any fossil remains accessioned into the museum repository. The report shall be submitted to the City Planning Department and the museum repository. The report shall comply with the Society of Vertebrate Paleontology standard guidelines for assessing and mitigating impacts on paleontological resources.~~	
Greenhouse Gases	
None. (This topic was added to the CEQA Guidelines after the certification of the Esperanza Specific Plan DEIR.)	-
Hazards and Hazardous Materials	
~~MM Haz 1: To the extent not previously prepared and to properly assess and address potential hazardous materials, including pesticide residues, within the specific plan area, a Phase I Environmental Site Assessment (ESA) shall be performed by a registered environmental assessor (REA) prior to the approval of a site plan for a given phase of development. Pursuant to mitigation measure HM-1 in the GPA for the NMC Final EIR, page 5.10-6, the Phase I ESA shall, at a minimum, meet with the requirements and current standards of investigation established by the American Society of Testing and Materials (ASTM Standard E 1527). If potential hazardous materials or conditions are identified in the Phase I report, an in-depth evaluation shall be performed including surficial sampling and chemical analysis within agricultural areas or where soil staining was observed. The Phase I ESA shall be provided to the City of Ontario and shall be included in any CEQA analysis prepared in connection with the consideration of the discretionary approval for development. All identified hazardous materials will be removed or remedial action taken prior to grading operations~~	**Not Applicable.** A Phase I ESA has been prepared for the Project site to evaluate the potential for on-site hazards. The Phase I determined that that no evidence of contamination or hazardous waste is located on the Project site. No further investigation was recommended.

Esperanza Measure	Project Applicability
~~pursuant to the recommendations of the Phase I ESA and appropriate City, county, state and federal laws and guidelines under the oversight of the San Bernardino County Fire Department's Hazardous materials Division Site Remediation/Local Oversight Program.~~	
~~MM Haz 2: Much of the site located south of Eucalyptus Avenue has been covered by undocumented fill and used as a dump site by the local community. To address possible contamination and remove appropriately all previously identified and unidentified types of hazardous waste on site, clearing and grading activities in this area shall be monitored by a Registered Environmental Assessor (REA), or other professional personnel approved by the City, and any known items of concern and those not previously identified which are uncovered can be removed or remediated per the appropriate regulations (see MM Haz 3 and 4, below).~~	**Not Applicable.** See above.
~~MM Haz 3: If, while performing any excavation as part of project construction, material that is believed to be hazardous waste is discovered, as defined in Section 25117 of the California Health & Safety Code, the developer shall contact the City of Ontario Fire Department and the County of San Bernardino Fire Department Hazardous Materials Division. Excavation shall be stopped or redirected to another location on site until the material has been tested and the presence of hazardous waste has been confirmed. If no hazardous waste is present, excavation may continue. If hazardous waste is determined to be present, the California Department of Toxic Substances Control shall be contacted and the material shall be removed and disposed of pursuant to applicable provisions of California law under the oversight of the San Bernardino County Fire Department's Hazardous materials Division Site Remediation/Local Oversight Program. Fill material imported from other areas shall be tested prior to placement on-site to assess that it is suitable to be used as fill, including testing for unsafe levels of hazardous materials.~~	**Not Applicable.** See above.

Esperanza Measure	Project Applicability
~~MM Haz 4: The biologically active materials, such as animal carcasses, should be removed and legally disposed of prior to any clearing and grubbing.~~	**Not Applicable.** The recent site visit conducted as part of the Phase I verified that no biologically active materials, such as animal carcasses, are present on the Project site.
~~MM Haz 5: All on-site buildings and remaining foundations that were built before 1979 shall be tested for the presence of asbestos, mercury and lead-based paint and those materials shall be removed according to the applicable regulations and guidelines established by the South Coast Management District, Department of Toxic Substances Control, and the United States Environmental Protection Agency. As per HM-2 in the GPA for the NMC Final EIR, page 5.10-6, the developer shall submit documentation to the City Building Department that asbestos, mercury and lead based paint are not present on their site, or that the above removal process has occurred.~~	**Not Applicable.** The recent site visit conducted as part of the Phase I verified that no buildings or foundations are present on the Project site.
~~MM Haz 6: All septic tanks on the project site will be properly removed and disposed of, per City and State procedures, prior to site development. All water wells on the project site will be properly destroyed in accordance with MM Util 8 in Section 12, Utilities, of this EIR. These activities will occur subject to City of Ontario Building Safety requirements.~~	**Not Applicable.** No septic tanks were identified onsite as part of the Phase I ESA conducted for the Project.
~~MM Haz 7: Pursuant to the City of Ontario Municipal Code Section 9-2.0435 (L), "a methane gas assessment shall be prepared by a licensed professional with expertise in soil gas assessments for subdivisions proposed on former dairies, poultry ranches, hog ranches, livestock feed operations and similar facilities to determine the presence of methane gas within the project boundary. The methane gas assessment shall identify monitoring and mitigation strategies and approaches. All mitigation measures/plans and specifications shall be reviewed and approved by the City of Ontario."~~ ~~Such an "assessment" may take two steps. A preliminary assessment should be done prior to grading to determine exactly where dairies have existed in the past~~	**Not Applicable.** Due to the extensive soil stockpiling, grading, and blending that has taken place on the Project site as part of surrounding development, the Phase I determined that no further investigation is warranted.

Esperanza Measure	Project Applicability
~~so that the post grading assessment/mitigation measures can be focused on the portions of the specific plan area that have included dairies. The second step may include actual testing of graded pads no sooner than 30 days after construction to determine if methane is detected above 5,000 ppm. If so, the types of mitigation measures described below, or those approved by the City, shall be implemented in the areas exceeding this limit. If the developer chooses not to do the post grading assessment, then mitigation as described below shall be required on all lots within former dairy areas of the specific plan.~~ ~~Mitigation shall include: 1) install a minimum 60-mil high density polyethylene (HDPE) membrane barrier (or equivalent), 2) install a subslab passive venting system, 3) seal utility or other penetrations through the membrane, 4) seal utility conduits where they enter a structure, and 4) construct a utility "dam" at the point where a "dry" utility trench approaches a structure. Liquid Boot, applied to a minimum 60-mil dry thickness per manufacturer's recommendations, may be substituted for the HDPE membrane.~~	
Hydrology and Water Quality	
~~MM Hydro 1: In order to ensure that construction activities associated with the Subarea 25 Esperanza Specific Plan will not cause a violation of any water quality standard or waste discharge requirements and to assure no substantial degradation of water quality occurs, and to implement the intent of mitigation measures included in the Final Environmental Impact Report for the NMC, the development within the project area shall comply with all applicable provisions of the State's General Permit for Construction Activities (Order No. 99-08-DWQ, or most recent version) during all phases of construction. A copy of evidence of the receipt of a Waste Discharge Identification Number from the State Regional Water Quality Control Board shall be filed with the City Engineer along with a copy of the Storm Water Pollution Prevention Plan (SWPPP) maps and~~	**Not Applicable.** The Esperanza Specific Plan EIR stated that measures Hydro 1 through 7 should be implemented, unless the Regional Water Quality Treatment Facility is complete and operational prior to project construction (p. III-7-21). The Regional Water Quality Facility referenced in the Esperanza SP DEIR (Regional Plant No. 5) was constructed in 2004. As such, these measures are not applicable to the Project.

Esperanza Measure	Project Applicability
~~BMPs. According to Title 6, Chapter 6, Section 6 of the City's code, the City Engineer shall review and approve the provisions of the SWPPP prior to implementation of any SWPPP provision or starting any construction activity.~~	
~~MM Hydro 2: In order to ensure the development within the Subarea 25 Esperanza Specific Plan will not cause or contribute to violations of any water quality standard or waste discharge requirements, and to assure no substantial degradation of water quality occurs, the project will complete a Water Quality Management Plan (WQMP) pursuant to the MS4 permit (Order No. 2002-0012) under which the City of Ontario is a permitee. The City adopted storm water management code Section 6-6.101 et seq. to implement the provisions of the permit. The project shall incorporate Site Design BMPs and Source Control BMPs, and potentially Treatment Control BMPs. The following table (III-7-F) provides guidelines and possible BMPs that may be incorporated into the project design (on construction drawings) and/or project specifications. Prior to acceptance of the WQMP, the City shall assure that maintenance responsibilities of BMPs approved for the project are identified and enforceable. Table III-7-G correlates each BMP to the pollutants of concern which it removes/reduces and/or meets the design objectives for the BMP.~~	**Not Applicable.** See above.
~~MM Hydro 5: In order to conserve water and to mitigate for any potential unforeseen adverse impacts to a reduction in ground water recharge, the following measure has been recommended by the Chino Basin Water Conservation District: Landscaping within individual development projects will retain and percolate both applied irrigation water and storm water in vegetated areas of parking lots and other areas, where appropriate; "depressed" planted areas bordered by shrubbery screens will be implemented rather than "mounded" grass and shrubbery planted screens. Neighborhood Edges and parks will be irrigated via reclaimed water.~~	**Not Applicable.** See above.

Esperanza Measure	Project Applicability
~~MM Hydro 3: In order to reduce the risk of flooding and to implement mitigation measures included in the Final Environmental Impact Report for the NMC prior to the issuance of a grading permit, the development within the Specific Plan, a final drainage plan for the proposed project shall be submitted for review and approval by the City Engineer and shall construct all necessary storm drain facilities internal to the development which are designed to connect with the City's master planned drainage system.~~	**Not Applicable.** See above.
~~MM Hydro 4: In order to reduce the risk of flooding and to implement mitigation measures included in the GPA for the NMC Final EIR, prior to issuance of grading permits, the City of Ontario shall coordinate with the San Bernardino County Flood Control District to ensure that the project meets County Flood Control requirements such as those established for encroachment permits.~~	**Not Applicable.** See above.
~~MM Hydro 6: In order to reduce pollutants in post construction run-off and to implement mitigation measures included in the Final Environmental Impact Report for the NMC, the individual project owners and operators (e.g., homeowner associations, parks department, etc.) shall ensure that all pest control, herbicide, insecticide and other similar substances used as part of maintenance of project features are handled, stored, applied and disposed of by those conducting facility maintenance in a manner consistent with all applicable federal, state and local regulations. According to Title 6, Chapter 6, Section 6 of the City's code, the City Engineer shall monitor and enforce this provision.~~	**Not Applicable.** See above.
~~MM Hydro: 7: To mitigate possible temporary run-off from undeveloped properties located north (up-gradient) of all or a portion of the project site, drainage from properties north of the developed portions of the project site shall be conveyed to appropriate drainage facilities, as approved by the City Engineer.~~	**Not Applicable.** See above.
Mineral Resources	
None.	-

Esperanza Measure	Project Applicability
Noise	
MM Noi 1: The construction activities of the proposed project shall comply with the City of Ontario Noise Ordinance that prohibits construction activities on Sundays, federal holidays, and other days between the hours of 7:00 p.m. and 7:00 a.m.	**Applicable.** The Project would comply with the permitted hours of construction, as set forth in the City of Ontario Noise Ordinance.
MM Noi 2: Construction staging areas shall not be located within 150 feet of existing sensitive receptors and construction equipment shall be fitted with properly operating and maintained mufflers.	**Applicable.** The Project would ensure that construction staging areas would not be located within 150 feet of existing sensitive receptors. Additionally, all construction equipment would be fitted with properly operating and maintained mufflers.
~~MM Noi 3: A sound wall at least 6 feet high shall be constructed along perimeter lots adjacent to Hamner/Milliken Avenue. If any residential structures are two stories high, then windows facing Hamner/Milliken Avenue would need upgraded sound-rated glazing products and the rooms would need supplemental ventilation. A final acoustical report shall be submitted to address wall heights based on final grading and site plans. The report shall be reviewed and approved by the Planning Department prior to building permit issuance to ensure that City standards are maintained (45 dB CNEL interior and 65 dB CNEL exterior).~~	**Not Applicable.** The Project site is not located adjacent to Hamner/Milliken Avenue.
~~MM Noi 4: A sound wall at least 6 feet high shall be constructed along perimeter lots adjacent to Bellegrave Avenue. If any residential structures are two stories high, then windows facing Bellegrave Avenue would need upgraded sound-rated glazing products and the rooms would need supplemental ventilation. A final acoustical report shall be submitted to address wall heights based on final grading and site plans. The report shall be reviewed and approved by the Planning Department prior to building permit issuance to ensure that City standards are maintained (45 dB CNEL interior and 65 dB CNEL exterior).~~	**Not Applicable.** The Project site is not located adjacent to Bellegrave Avenue.
~~MM Noi 5: A sound wall at least 6 feet high shall be constructed along perimeter lots adjacent to Merrill Avenue. If any residential structures are two stories high, then windows facing Merrill Avenue would need~~	**Not Applicable.** The Project site is not located adjacent to Merrill Avenue.

Esperanza Measure	Project Applicability
~~upgraded sound-rated glazing products and the rooms would need supplemental ventilation. A final acoustical report shall be submitted to address wall heights based on final grading and site plans. The report shall be reviewed and approved by the Planning Department prior to building permit issuance to ensure that City standards are maintained (45 dB CNEL interior and 65 dB CNEL exterior).~~	
MM Noi 6: Architectural plans shall be submitted to the City of Ontario for an acoustical plan check prior to the issuance of building permits to assure that second story windows are upgraded for sound reduction and proper ventilation systems are incorporated. Plans shall include a final acoustical report to be reviewed and approved by the Planning Department prior to building permit issuance to ensure that City standards are maintained (45 dB CNEL interior and 65 dB CNEL exterior).	**Applicable.** The Project Noise Impact Analysis verifies that City standards would be maintained. The Project would submit architectural plans in this regard.
Public Services	
~~MM Serv 1: To reduce fire hazards, wood-shingled and shake-shingled roofs are prohibited.~~	**Not Applicable.** No wood-shingled or shake-shingled roofs are proposed.
MM Serv 2: To reduce fire hazards, adequate fire hydrant locations and water main sizes shall meet standards established by the City of Ontario Fire Department and reviewed and implemented by the Engineering Department.	**Applicable.** All fire water lines and hydrants would meet the standards established by the City of Ontario Fire Department, and reviewed and approved by the Engineering Department.
MM Serv 3: To reduce fire hazards, adequate fire flow pressure shall be provided for residential areas and non-residential projects in accordance with currently adopted City standards.	**Applicable.** Adequate fire flow pressure would be provided in accordance with currently adopted City standards.
MM Serv 4: To reduce fire hazards, adequate water supply shall be provided as approved by the Fire Department prior to the framing stages of construction.	**Applicable.** Adequate water supply would be provided, as approved by the Fire Department.
MM Serv 5: To reduce fire hazards, houses located on cul-de-sacs longer than 300 feet shall be constructed with residential fire sprinklers.	**Applicable.** Residential fire sprinklers would be installed, as appropriate.
MM Serv 6: To reduce fire hazards, access roadways designed in accordance with Fire Department standards to within 150' of all structures, shall be provided prior to the framing stages of construction. This access is to be	**Applicable.** Fire access roadways would be provided prior to framing, and remain unobstructed throughout construction.

Esperanza Measure	Project Applicability
maintained in an unobstructed manner throughout construction.	
MM Serv 7: To mitigate for potential impacts to library, police, and fire departments, the developer shall pay library, police, and fire service development impacts fees.	**Applicable.** The Project Applicant would pay all required development impact fees.
~~MM Serv 8: To reduce the risks associated with inadequate fire service, one of the two fire stations described above (Edison/Archibald or Edison/Mill Creek) shall be in operation prior to the issuance of the first certificate of occupancy within the Esperanza Specific Plan area. The details of where and how this will be accomplished shall be included in the development agreement between the City and the developer. Potential impacts associated with the construction of these stations is evaluated in the EIRs prepared for their respective GPA Subareas.~~	**Not Applicable.** This measure has already been implemented.
MM Serv 9: The developer shall pay school fees or otherwise meet project obligations to schools, as approved by Mountain View School and Chaffey Joint Union High School Districts.	**Applicable.** The Project would pay all required school fees, as directed by the City.
MM Serv 10: To adequately address the need for recreation within the City, park development impact fees, Quimby fees, and/or developed parkland shall be provided to the City commensurate with the requirements of the General Plan equivalent to 24 acres total. The park fees shall be paid on a pro-rata share as building permits are issued in accordance with the negotiated DIF agreement. (Note: parkland shall be provided to the City commensurate with the requirements of the General Plan equivalent to 25 acres, if 46 additional homes are built in lieu of the school.)	**Applicable.** The Project would pay all required park fees, as directed by the City.
~~MM Serv 11: To ensure adequate parks are built commensurate with development, the pocket park located within Planning Area 9 of the Esperanza Specific Plan shall be constructed no later than the issuance of certificates of occupancy for 50 percent of the units within Planning Areas 8, 9 and 10 combined; the pocket park located within Planning Area 7 of the Esperanza Specific Plan shall be constructed no later than the~~	**Not Applicable.** The Project site is located within Planning Area 11, which is not reflected in this measure.

Esperanza Measure	Project Applicability
~~issuance of certificates of occupancy for 50 percent of the units within Planning Areas 6 and 7 combined; the pocket park located within Planning Area 5 of the Esperanza Specific Plan shall be constructed no later than the issuance of certificates of occupancy for 50 percent of the units within Planning Areas 4b and 5 combined; the 5-acre Neighborhood Park shall be constructed no later than the issue of the certificates of occupancy for 50 percent of the units within Planning Areas 1, 2, 3, and 4a combined.~~	
Recreation	
See MM Serv 10 and 11, above.	See MM Serv 10 and 11, above.
Transportation/Traffic	
MM Trans 1: Install traffic signal at the intersection of Mill Creek Avenue/Merrill Avenue with the following geometrics: Northbound: One left-turn lane. One shared through and right-turn lane. Southbound: One left-turn lane. One shared through and right-turn lane. Eastbound: One left-turn lane. One shared through and right-turn lane. (These developments to be constructed by development located west of the Specific Plan.) Westbound: One left-turn lane. One shared through and right-turn lane.	**Applicable.** The Project would pay fair share fees towards the improvements listed in the Esperanza SP DEIR and requisite City Development Impact Fees, as determined by the City.
MM Trans 2: Install traffic signal at the intersection of Project Street (W)/Merrill Avenue with the following geometrics: Northbound: One shared left, through and right-turn lane. Southbound: One shared left, through and right-turn lane. Eastbound: One left-turn lane. One shared through and right-turn lane. Westbound: One left-turn lane. One shared through and right-turn lane.	**Applicable.** The Project would pay fair share fees towards the improvements listed in the Esperanza SP DEIR and requisite City Development Impact Fees, as determined by the City.
MM Trans 3: Install traffic signal at the intersection of Project Street (E)/Merrill Avenue with the following geometrics:	**Applicable.** The Project would pay fair share fees towards the improvements listed in the Esperanza SP DEIR and requisite City Development Impact Fees, as determined by the City.

Esperanza Measure	Project Applicability
Northbound: One shared left, through and right-turn lane. Southbound: One shared left, through and right-turn lane. Eastbound: One left-turn lane. One through lane. One shared through and right-turn lane. Westbound: One left-turn lane. One through lane. One shared through and right-turn lane.	
MM Trans 4: Install traffic signal at the intersection of Milliken/Hamner Avenue/Merrill Avenue with the following geometrics: Northbound: One left-turn lane. Two through lanes. One shared through and right-turn lane. Southbound: One left-turn lane. Three through lanes. One right-turn lane. Eastbound: Two left-turn lanes. One shared through and right-turn lane. Westbound: (This leg of the intersection to be constructed by development in Riverside County.) One left-turn lane. One shared through and right-turn lane.	**Applicable.** The Project would pay fair share fees towards the improvements listed in the Esperanza SP DEIR and requisite City Development Impact Fees, as determined by the City.
MM Trans 5: Install traffic signal at the intersection of Mill Creek Avenue/Bellegrave Avenue with the following geometrics (Note: Riverside County encroachment permits required for some improvements.): Northbound: One shared left, through and right-turn lane. Southbound: One shared left, through and right-turn lane. Eastbound: One left-turn lane. One shared through and right-turn lane. Westbound: Two left-turn lanes. One shared through and right-turn lane.	**Applicable.** The Project would pay fair share fees towards the improvements listed in the Esperanza SP DEIR and requisite City Development Impact Fees, as determined by the City.
MM Trans 6: Modify the intersection of Milliken/Hamner Avenue/Bellegrave Avenue to include the following geometrics (Note: Riverside County encroachment permits required for some improvements.): Northbound: One left-turn lane. Two through lanes. One shared through and right-turn lane.	**Applicable.** The Project would pay fair share fees towards the improvements listed in the Esperanza SP DEIR and requisite City Development Impact Fees, as determined by the City.

Esperanza Measure	Project Applicability
Southbound: Two left-turn lanes. Two through lanes. One shared through and right-turn lane. Eastbound: One left-turn lane. Two through lanes. One right-turn lane. Westbound: Two left-turn lanes. Two through lanes. One right-turn lane.	
MM Trans 7: Sight distance at the project entrance roadways should be reviewed with respect to the City of Ontario Standard Drawing for Sight Distance in effect at the time of preparation of final grading, landscape and street improvement plans.	**Applicable.** All proposed sight distances would be reviewed and approved by the City, consistent with current City of Ontario Standard Drawing for Sight Distance.
MM Trans 8: Signing/striping should be implemented in conjunction with detailed construction plans for the project site.	**Applicable.** All proposed signing and striping plans would be reviewed and approved by the City in conjunction with construction plans.
MM Trans 9: Intersection, median opening and traffic signal spacing shall be in accordance with the City of Ontario New Model Colony Access Guidelines.	**Applicable.** All roadway improvements would be implemented consistent with applicable City standards.
MM Trans 10: Construction of full width of internal roadways and part width of the following roadways shall comply with City of Ontario Standards: • Construct partial width improvements on the easterly side of Mill Creek Avenue at its ultimate cross-section as a collector street (88' right-of-way) adjacent to project boundary line. • Construct partial width improvements on the westerly of Milliken/Hamner Avenue at its ultimate cross-section as a divided arterial parkway 1 (140' or more right-of-way) adjacent to project boundary line. • Construct partial width improvements on the northerly side of Bellegrave Avenue at its ultimate cross-section as a standard arterial (100' right-of-way) adjacent to project boundary line.	**Applicable.** The Project would pay fair share fees towards the improvements listed in the Esperanza SP DEIR and requisite City Development Impact Fees, as determined by the City.
~~MM Trans 11: In order to provide alternative modes of transportation and reduce vehicle trips, the City shall work with Omnitrans to develop additional routes and service to the project area.~~	**Not Applicable.** Measure Trans 11 applies to City staff, not a specific project within the Specific Plan area.
~~MM Trans 12: In order to ease traffic flow, reduce trips, and implement GPA for the NMC Final EIR mitigation measures, the City shall establish a Transportation~~	**Not Applicable.** Measure Trans 12 applies to City staff, not a specific project within the Specific Plan area.

Esperanza Measure	Project Applicability
~~System Management (TSM) Program with the goal of reducing vehicle trips to and from land uses within the City, and particularly focusing on the reduction of drive-alone vehicle use in work commuting.~~	
MM Trans 13: The project will participate in the cost of off-site improvements through fairshare payment of the Development Impact fee as established by the City of Ontario. These fees should be collected and utilized by the City to construct the improvements necessary to maintain the required level of service.	**Applicable.** The Project would pay fair share fees towards the improvements listed in the Esperanza SP DEIR and requisite City Development Impact Fees, as determined by the City.
MM Trans 14: Reconfigure Milliken Avenue/SR 60 WB Ramps to include the following geometrics: Northbound: Two left turn lanes and two through lanes. Southbound: Two through lanes and one right-turn lane. Eastbound: NA Westbound: One left-turn lane. One shared left and through lane. One right-turn lane.	**Applicable.** The Project would pay fair share fees towards the improvements listed in the Esperanza SP DEIR and requisite City Development Impact Fees, as determined by the City.
MM Trans 15: Reconfigure Milliken Avenue/SR 60 EB Ramps to include the following geometrics: Northbound: Three through lanes. One right-turn lane. Southbound: One left turn lane. Three through lanes. Eastbound: One shared left and through lane. One through lane. Two right-turn lanes. Westbound: NA	**Applicable.** The Project would pay fair share fees towards the improvements listed in the Esperanza SP DEIR and requisite City Development Impact Fees, as determined by the City.
MM Trans 16: Reconfigure Milliken/Hamner Avenue/Riverside Avenue intersection to include the following geometrics: Northbound: One left-turn lane. Three through lanes. One shared right-turn and through lane. Southbound: Two left-turn lanes. Four through lanes. One right-turn lane. Eastbound: Two left-turn lanes. Two through lanes. One shared through and right-turn lane. Westbound: One left-turn lane. Two through lanes. One right-turn lane.	**Applicable.** The Project would pay fair share fees towards the improvements listed in the Esperanza SP DEIR and requisite City Development Impact Fees, as determined by the City.
MM Trans 17: Reconfigure Milliken/Hamner Avenue/Chino Avenue intersection to include the following geometrics: Northbound: Two left-turn lanes. Two through lanes. One shared right-turn and through lane.	**Applicable.** The Project would pay fair share fees towards the improvements listed in the Esperanza SP DEIR and requisite City Development Impact Fees, as determined by the City.

Esperanza Measure	Project Applicability
Southbound: One left-turn lane. Two through lanes. One shared through and right-turn lane. Eastbound: One left-turn lane. One through lane. One shared through and right-turn lane. Westbound: One left-turn lane. One through lane. One shared through and right-turn lane.	
MM Trans 18: Install traffic signal at the intersection of Archibald Avenue/Schaefer Avenue and configure with the following geometrics: Northbound: One left-turn lane. Two through lanes. One shared through and right-turn lane. Southbound: One left-turn lane. Two through lanes. One shared through and right-turn lane. Eastbound: One shared through and left-turn lane. One through lane. One shared through and right-turn lane. Westbound: One shared through and left-turn lane. One through lane. One shared through and right-turn lane.	**Applicable.** The Project would pay fair share fees towards the improvements listed in the Esperanza SP DEIR and requisite City Development Impact Fees, as determined by the City.
MM Trans 19: Reconfigure Archibald Avenue/Edison Avenue intersection to include the following geometrics: Northbound: Two left-turn lanes. Four through lanes. One right-turn lane. Southbound: Two left-turn lanes. Four through lanes. One right-turn lane. Eastbound: Two left-turn lanes. Three through lanes. Two shared right-turn/shared lanes. Westbound: Two left-turn lanes. Three through lanes. One right-turn lane.	**Applicable.** The Project would pay fair share fees towards the improvements listed in the Esperanza SP DEIR and requisite City Development Impact Fees, as determined by the City.
MM Trans 20: Install traffic signal at the intersection of Schaefer Avenue/Edison Avenue and reconfigure with the following geometrics: Northbound: NA Southbound: One shared left and right-turn lane. Eastbound: One left-turn lane. One through lane. Westbound: One through lane. One shared through and right-turn lane.	**Applicable.** The Project would pay fair share fees towards the improvements listed in the Esperanza SP DEIR and requisite City Development Impact Fees, as determined by the City.
MM Trans 21: Install traffic signal at the intersection of Haven Avenue/Edison Avenue and reconfigure with the following geometrics:	**Applicable.** The Project would pay fair share fees towards the improvements listed in the Esperanza SP DEIR and requisite City Development Impact Fees, as determined by the City.

Esperanza Measure	Project Applicability
Northbound: One left-turn lane. One through lane. One shared through and right-turn lane. Southbound: One left-turn lane. One through lane. One right-turn lane. Eastbound: Two left-turn lanes. One through lane. One shared through and right-turn lane. Westbound: One left-turn lane. One through lane. One shared through and right-turn lane.	
MM Trans 22: Install traffic signal at the intersection of Archibald Avenue/Merrill Avenue and reconfigure with the following geometrics: Northbound: One left-turn lane. Three through lanes. One shared through and right-turn lane. Southbound: Two left-turn lanes. Three through lanes. One shared through and right-turn lane. Eastbound: One left-turn lane. One through lane. One shared through and right-turn lane. Westbound: Two left-turn lanes. One through lane. One shared through and right-turn lane.	**Applicable.** The Project would pay fair share fees towards the improvements listed in the Esperanza SP DEIR and requisite City Development Impact Fees, as determined by the City.
MM Trans 23: Install traffic signal at the intersection of Haven Avenue/Merrill Avenue and reconfigure with the following geometrics: Northbound: One left-turn lane. One through lane. One shared through and right-turn lane. Southbound: One left-turn lane. One through lane. One shared through and right-turn lane. Eastbound: One left-turn lane. Two through lanes. One shared through and right-turn lane. Westbound: One left-turn lane. Two through lanes. One shared through and right-turn lane.	**Applicable.** The Project would pay fair share fees towards the improvements listed in the Esperanza SP DEIR and requisite City Development Impact Fees, as determined by the City.
MM Trans 24: Install traffic signal at the intersection of Mill Creek (Cleveland) Avenue/Merrill Avenue and reconfigure with the following geometrics: Northbound: One left-turn lane. One through lane. One shared through and right-turn lane. Southbound: One left-turn lane. One through lane. One shared through and right-turn lane. Eastbound: One left-turn lane. One through lane. One shared through and right-turn lane.	**Applicable.** The Project would pay fair share fees towards the improvements listed in the Esperanza SP DEIR and requisite City Development Impact Fees, as determined by the City.

Esperanza Measure	Project Applicability
Westbound: One left-turn lane. One through lane. One shared through and right-turn lane.	
MM Trans 25: Install traffic signal at the intersection of Project Street West/Merrill Avenue and reconfigure with the following geometrics: Northbound: One shared through and left-turn lane. One through lane. One shared through and right-turn lane. Southbound: One shared through and left-turn lane. One through lane. One shared through and right-turn lane. Eastbound: One left-turn lane. One through lane. One shared through and right-turn lane. Westbound: One left-turn lane. One through lane. One shared through and right-turn lane	**Applicable.** The Project would pay fair share fees towards the improvements listed in the Esperanza SP DEIR and requisite City Development Impact Fees, as determined by the City.
MM Trans 26: Install traffic signal at the intersection of Project Street East/Merrill Avenue and reconfigure with the following geometrics: Northbound: One shared through and left-turn lane. One through lane. One shared through and right-turn lane. Southbound: One left-turn lane. One through lane. One shared through and right-turn lane. Eastbound: One left-turn lane. One through lane. One shared through and right-turn lane. Westbound: One left-turn lane. One through lane. One shared through and right-turn lane.	**Applicable.** The Project would pay fair share fees towards the improvements listed in the Esperanza SP DEIR and requisite City Development Impact Fees, as determined by the City.
MM Trans 27: Install traffic signal at the intersection of Milliken/Hamner Avenue/Merrill Avenue and reconfigure with the following geometrics: Northbound: One left-turn lane. Three through lanes. One shared through and right-turn lane. Southbound: One left-turn lane. Three through lanes. One right-turn lane. Eastbound: Two left-turn lanes. One through lane. One shared through and right-turn lane. Westbound: One left-turn lane. One through lane. One shared through and right-turn lane.	**Applicable.** The Project would pay fair share fees towards the improvements listed in the Esperanza SP DEIR and requisite City Development Impact Fees, as determined by the City.

Esperanza Measure	Project Applicability
MM Trans 28: Install traffic signal at the intersection of Mill Creek (Cleveland) Avenue/Bellegrave Avenue and reconfigure with the following geometrics: Northbound: One shared left-turn lane. One through lane. One shared through and right-turn lane. Southbound: One shared through and left-turn lane. One through lane. One shared through and right-turn lane. Eastbound: One left-turn lane. One through lane. One shared through and right-turn lane. Westbound: Two left-turn lanes. One through lane. One shared through and right-turn lane.	**Applicable.** The Project would pay fair share fees towards the improvements listed in the Esperanza SP DEIR and requisite City Development Impact Fees, as determined by the City.
MM Trans 29: Reconfigure Milliken/Hamner Avenue/Bellegrave Avenue intersection to include the following geometrics: Northbound: One left-turn lane. Three through lanes. One shared through and right-turn lane. Southbound: Two left-turn lanes. Three through lanes. One shared through and right-turn lane. Eastbound: One left-turn lane. Two through lanes. One right-turn lane. Westbound: Two left-turn lanes. Two through lanes. One right-turn lane.	**Applicable.** The Project would pay fair share fees towards the improvements listed in the Esperanza SP DEIR and requisite City Development Impact Fees, as determined by the City.
MM Trans 30: Reconfigure Hamner Avenue/Limonite Avenue intersection to include the following geometrics: Northbound: Two left-turn lanes. Three through lanes. One right-turn lane. Southbound: Two left-turn lanes. Three through lanes. One right-turn lane. Eastbound: Two left-turn lanes. Three through lanes. One right-turn lane. Westbound: Two left-turn lanes. Three through lanes. One right-turn lane.	**Applicable.** The Project would pay fair share fees towards the improvements listed in the Esperanza SP DEIR and requisite City Development Impact Fees, as determined by the City.
MM Trans 31: Reconfigure I-15/Limonite SB Ramps to include the following geometrics: Northbound: NA Southbound: One left-turn lane. One shared left, through, and right-turn lane. One right-turn lane. Eastbound: Three through lanes. One right-turn lane.	**Applicable.** The Project would pay fair share fees towards the improvements listed in the Esperanza SP DEIR and requisite City Development Impact Fees, as determined by the City.

Esperanza Measure	Project Applicability
Westbound: Three through lanes. One free-right-turn lane.	
MM Trans 32: Reconfigure I-15/Limonite NB Ramps to include the following geometrics: Northbound: One left-turn lane. One shared left, through, and right-turn lane. One right-turn lane. Southbound: NA. Eastbound: Three through lanes. One free right-turn lane. Westbound: Three through lanes. One right-turn lane.	**Applicable.** The Project would pay fair share fees towards the improvements listed in the Esperanza SP DEIR and requisite City Development Impact Fees, as determined by the City.
Tribal Cultural Resources	
None.	-
Utilities & Service Systems	
MM Util 1: To provide adequate water and sewer service, all water and sewer pipelines within and adjacent to the project boundaries, as required and conditioned to serve the associated Tentative Tract Maps, shall be constructed by the developer based on the NMC Infrastructure Master Plans phased by tract and to the satisfaction of the City.	**Applicable.** All water and sewer improvements proposed by the Project would be reviewed and approved by the City, and implemented pursuant to current City infrastructure plans.
MM Util 2: To ensure that adequate sewer facilities are in place to serve the proposed project, the Archibald trunk sewer line off-site connection to the IEUA Kimbal Avenue interceptor shall be completed by IEUA and operational prior to the City of Ontario's issuance of the first certificates of occupancy. The applicant shall participate on a fair share basis in the development of the necessary sewer facilities.	**Applicable.** The Project would pay fair share fees towards the improvements listed in the Esperanza SP DEIR and requisite City Development Impact Fees, as determined by the City.
MM Util 3: To ensure adequate water service to the project, off-site water lines, tanks, interconnectors and other facilities required in the Water Master Plan for the Francis loop to provide water to the site shall be constructed by the City and be in place and operational prior to the City of Ontario's issuance of the first certificate of occupancy. The applicant shall participate on a fair share basis in the development of these off-site facilities.	**Applicable.** The Project would pay fair share fees towards the improvements listed in the Esperanza SP DEIR and requisite City Development Impact Fees, as determined by the City.
MM Util 4: To mitigate for possible conflicts with existing utilities, prior to obtaining grading permit(s), the project proponent shall coordinate with the applicable natural	**Applicable.** The Project Applicant would coordinate with affected purveyers to prevent potential impacts to existing utility facilities.

Esperanza Measure	Project Applicability
gas, electrical, and telephone utility providers for the project site to ensure that all existing underground and overhead lines are not damaged during project construction.	
MM Util 5: To reduce the quantity of energy used and to conserve water resources, the project developer and City of Ontario should work to include sustainable systems for use of water and energy within the project design. One source of assistance in this regard is Southern California Gas Company Commercial/ Industrial Support Center at 1-800-GAS-2000, which should be contacted at the time of development of the commercial center located within the project.	**Applicable.** As detailed within the Project Description, the Project includes design features aimed at reducing energy and water usage, such as water efficient fixtures and irrigation methods, and a lack of natural gas infrastructure.
~~MM Util 6: To reduce the need for potable water and ensure adequate water supply, the project applicant shall plan and construct a dual pipe system to supply recycled water when available in the future (GP Policy 5.1.4). An Engineer's Report approved by the City and the Department of Health Services is required prior to the use of recycled water.~~	**Not Applicable.** This measure has already been implemented/completed.
~~MM Util 7: To reduce risks associated with improperly abandoned wells and the potential need for temporary water supplies, all existing agricultural wells on the project site will be destroyed/ abandoned per the California Department of Water Resources Standards (Bulletin 74-90). A well use/destruction plan and schedule for all existing agricultural wells on the project site shall be prepared and submitted for approval, prior to the issuance of grading permits. This plan shall also include a temporary water supply plan, as applicable, in order to avoid potential significant temporary impacts resulting from the disruption of current water supply through the abandonment of on-site wells. Construction of any temporary pipes or facilities needed to provide water to the existing uses which are to temporarily remain shall be installed per City requirements at the developer's expense.~~	**Not Applicable.** No wells are located on the Project site.
Wildfire	
None. (This topic was added to the CEQA Guidelines after the certification of the Esperanza Specific Plan DEIR.)	-

MEMORANDUM

URBAN CROSSROADS

DATE: March 28, 2025
TO: Dave Waters, Genstar Development Company/GDCI-13
FROM: Haseeb Qureshi, Shannon Wong
JOB NO: 15662-05 AQ Assessment

ESPERANZA SPECIFIC PLAN AMENDMENT OPERATIONAL AIR QUALITY ASSESSMENT

Dave Waters,

Urban Crossroads, Inc. is pleased to submit the following Operational Air Quality Assessment for Esperanza Specific Plan Amendment development (referred to as **Project**) to support the proposed Specific Plan Amendment (**SPA**), which is located on the northeast corner of Eucalyptus Avenue and Amherst Avenue in the City of Ontario. The purpose of this work effort is to determine if the Project would result in new or substantially different Air Quality Impacts than those considered and addressed in the Esperanza Specific Plan (**Approved Specific Plan**) Environmental Impact Report (EIR) and The Ontario Plan 2050 Supplemental EIR (SEIR).

As required by *The Ontario Plan 2050 Final Supplemental Environmental Impact Report* (SCH No. 2021070364) (TOP Final SEIR) mitigation measure MM AQ-1, Urban Crossroads, Inc. is pleased to provide the following Operational Air Quality Assessment for the Esperanza Specific Plan Amendment (**Project**), located in the City of Ontario.

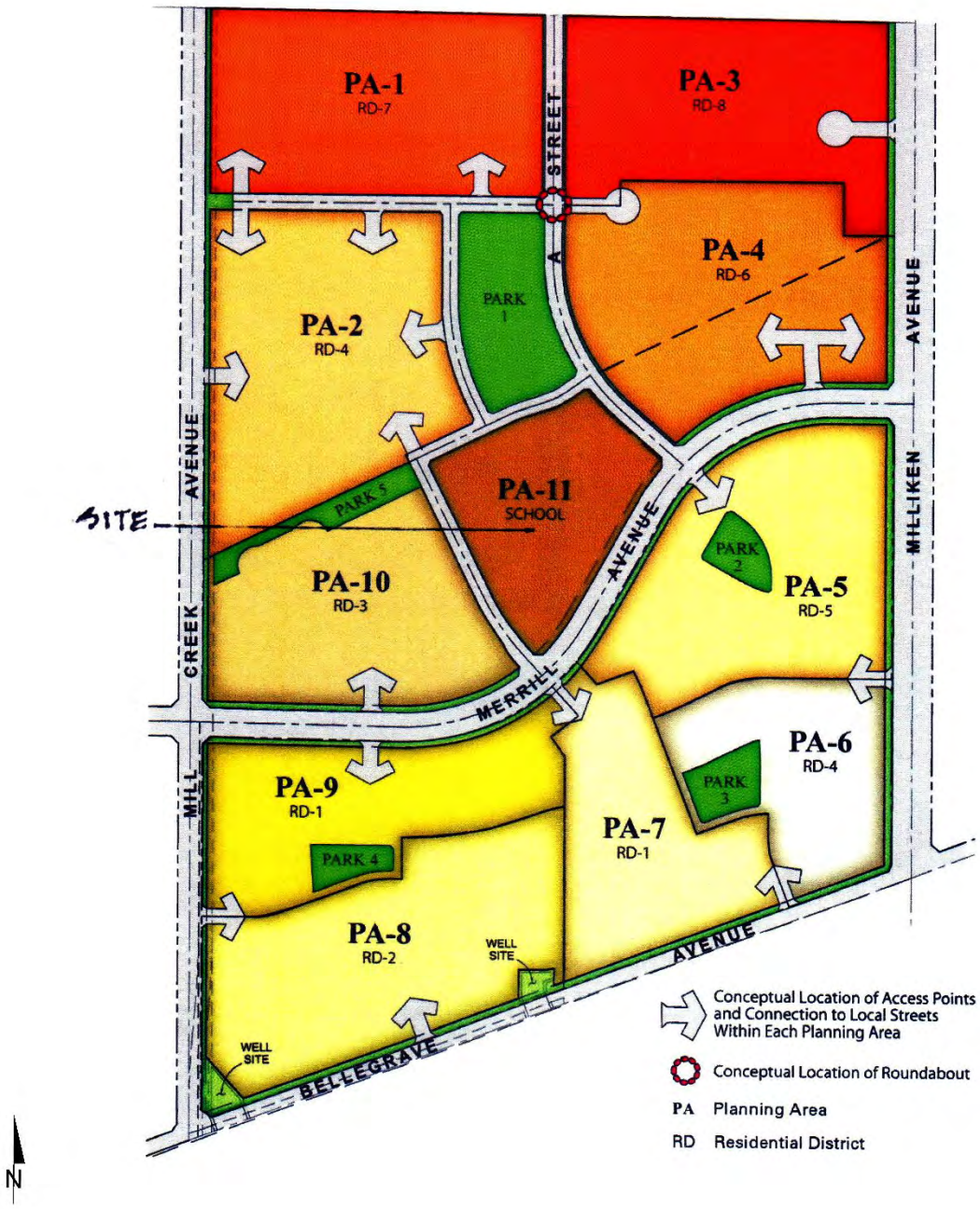
PROPOSED PROJECT

It is our understanding that the proposed Project is to consist of 161 multifamily residential dwelling units (with a density of approximately 16.1 dwelling units per net acre). The Project is located within the Esperanza Specific Plan. The original Specific Plan that was approved contemplated a 736-student elementary school within Planning Area 11. The land use will be updated from "School" to "MDR Medium Density Residential" consistent with the adjacent land use to the northeast. The Project is anticipated to be constructed in a single phase by the year 2029.

Exhibit 1 shows the preliminary site plan. For comparison purposes, Exhibit 2 shows the currently approved land use plan identifying Planning Area 11 with a school.

EXHIBIT 1: PRELIMINARY SITE PLAN

EXHIBIT 2: CURRENTLY APPROVED LAND USE PLAN



PROJECT AIR QUALITY EMISSIONS

METHODOLOGY

The California Air Pollution Control Officers Association (CAPCOA) in conjunction with other California air districts, including SCAQMD, released CalEEMod 2022 in May 2022. CalEEMod periodically releases updates, as such the latest version available at the time of this report has been utilized in this analysis. The purpose of this model is to calculate construction-source and operational-source criteria pollutant (VOCs, NO_X, SO_X, CO, PM_{10}, and $PM_{2.5}$) and GHG emissions from direct and indirect sources; and quantify applicable air quality and GHG reductions achieved from mitigation measures (1). Accordingly, the latest version of CalEEMod has been used for this Project to determine operational air quality emissions.

AIR QUALITY REGIONAL EMISSIONS THRESHOLDS

The SCAQMD has developed regional operational significance thresholds for criteria pollutants, as summarized at Table 1 (2). The SCAQMD's CEQA Air Quality Significance Thresholds (March 2023) indicate that any projects in the South Coast Air Basin (SCAB) with daily emissions that exceed any of the indicated thresholds should be considered as having an individually and cumulatively significant air quality impact.

TABLE 1: MAXIMUM DAILY REGIONAL EMISSIONS THRESHOLDS

Pollutant	Operations
NO_X	55 lbs/day
VOC	55 lbs/day
PM_{10}	150 lbs/day
$PM_{2.5}$	55 lbs/day
SO_X	150 lbs/day
CO	550 lbs/day

lbs/day – Pounds Per Day

AIR QUALITY LOCALIZED EMISSIONS THRESHOLDS

Sensitive Receptor Locations

Some people are especially sensitive to air pollution and are given special consideration when evaluating air quality impacts from projects. These groups of people include children, the elderly, and individuals with pre-existing respiratory or cardiovascular illness. Structures that house these persons or places where they gather are defined as "sensitive receptors". These structures typically include uses such as residences, hotels, and hospitals where an individual can remain for 24 hours. Consistent with the LST Methodology, the nearest land use where an individual could remain for 24 hours to the Project site has been used to determine construction and operational air quality impacts for emissions of PM_{10} and $PM_{2.5}$, since PM_{10} and $PM_{2.5}$ thresholds are based on a 24-hour averaging time.

Receptors in the Project study area are described below. All distances are measured from the Project site boundary to the outdoor living areas (e.g., backyards) or at the building façade, whichever is closer to the Project site. Receptors in the Project study area are shown on Exhibit 2 under the Localized Construction Emissions section later in the report.

- Receptor R1 represents the future residential area east of Clifton Avenue, approximately 83 feet east of the Project site.
- Receptor R2 represents the future residential area northeast of the intersection of Clifton Avenue and Chatham Street, approximately 106 feet northeast of the Project site.
- Receptor R3 represents the future park north of Chatham Street, approximately 66 feet north of the Project site.
- Receptor R4 represents the existing residence at 4508 S. Amherst Avenue, approximately 130 feet west of the Project site.
- Receptor R5 represents the 095 E. Amigos Privado, approximately 202 feet south of the Project site.
- Receptor R6 represents the existing residence at 4556 S. Afton Privado, approximately 143 feet southeast of the Project site.

For this Project, the appropriate SRA for the LST analysis is the SCAQMD Southwest San Bernardino Valley monitoring station (SRA 33). LSTs apply to CO, NO_2, PM_{10}, and $PM_{2.5}$. The SCAQMD produced look-up tables for projects less than or equal to 5 acres in size. The SCAQMD's screening look-up tables are utilized in determining localized impacts. It should be noted that since the look-up tables identify thresholds at only 1 acre, 2 acres, and 5 acres, linear regression has been utilized to determine localized significance thresholds. Consistent with SCAQMD guidance, the thresholds presented in Table 2 were calculated by interpolating the threshold values for the Project's disturbed acreage.

The acres disturbed is based on the equipment list and days in the site preparation and grading phase according to the anticipated maximum number of acres a given piece of equipment can pass over in an 8-hour workday. The equipment-specific grading rates are summarized in the CalEEMod user's guide, Appendix A: Calculation Details for CalEEMod (4). It should be noted that the disturbed area per day is representative of a piece of equipment making multiple passes over the same land area. In other words, one Rubber Tired Dozer can make multiple passes over the same land area totaling 0.5 acres in a given 8-hour day. Appendix A of the CalEEMod User Manual only identifies equipment-specific grading rates for Crawler Tractors, Graders, Rubber Tired Dozers, and Scrapers; therefore, Tractors/Loaders/Backhoes equipment that was included in the site preparation and grading phase was replaced with Crawler Tractors. For analytical purposes, emissions associated with peak site preparation and grading activities are considered for purposes of localized significance thresholds (LSTs) since this phase represents the maximum localized emissions that would occur. The Project's construction activities could disturb a maximum of approximately 3.5 acres per day for site preparation and 4 acres per day for grading activities. Any other construction phases of development would result in lesser emissions and consequently lesser impacts than what is disclosed herein. As such, Table 2 presents thresholds for localized construction and operational emissions.

TABLE 2: MAXIMUM DAILY LOCALIZED EMISSIONS THRESHOLDS

Source	Activity	Emissions (lbs/day)			
		VOC	NO_X	PM_{10}	$PM_{2.5}$
Construction	Site Preparation	220 lbs/day	1,713 lbs/day	11 lbs/day	7 lbs/day
	Grading	237 lbs/day	1,873 lbs/day	13 lbs/day	8 lbs/day

[1]Source of localized significance threshold (LSTs) is provided on page 7.

SENSITIVE RECEPTORS

The analysis uses the methodology included in the SCAQMD *Final Localized Significance Threshold Methodology* (LST Methodology) (6). The SCAQMD has established that impacts to air quality are significant if there is a potential to contribute or cause localized exceedances of the federal and/or state ambient air quality standards (NAAQS/CAAQS). Collectively, these are referred to as Localized Significance Thresholds (LSTs). The SCAQMD established LSTs in response to the SCAQMD Governing Board's Environmental Justice Initiative I-4[1]. LSTs represent the maximum emissions from a project that will not cause or contribute to an exceedance of the most stringent applicable federal or state ambient air quality standard at the sensitive receptor. The SCAQMD states that lead agencies can use the LSTs as another indicator of significance in its air quality impact analyses.

The SCAQMD recommends that the nearest sensitive receptor be considered when determining the Project's potential to cause an individual or cumulatively significant impact. The nearest land use where an individual could remain for 24 hours to the Project site has been used to determine localized construction and operational air quality impacts for emissions of PM_{10} and $PM_{2.5}$ (since PM_{10} and $PM_{2.5}$ thresholds are based on a 24-hour averaging time). The nearest receptor used for evaluation of localized impacts of PM_{10} and $PM_{2.5}$ is represented by the existing residence at 4516 Amherst Ave, approximately 52 feet (16 meters) west of the Project site.

As previously stated, and consistent with LST Methodology, the nearest industrial/commercial use to the Project site is used to determine construction and operational LST air impacts for emissions of NO_X and CO as the averaging periods for these pollutants are shorter (8 hours or less) and it is reasonable to assume that an individual could be present at these sites for periods of one to 8 hours. It should be noted that the existing residence is located at a closer distance than the nearest industrial/commercial use. As such, the same receptor will be used for evaluation of localized NO_x and CO.

It should be noted that the *LST Methodology* explicitly states that "*It is possible that a project may have receptors closer than 25 meters. Projects with boundaries located closer than 25 meters to the*

1 The purpose of SCAQMD's Environmental Justice program is to ensure that everyone has the right to equal protection from air pollution and fair access to the decision-making process that works to improve the quality of air within their communities. Further, the SCAQMD defines Environmental Justice as "…equitable environmental policymaking and enforcement to protect the health of all residents, regardless of age, culture, ethnicity, gender, race, socioeconomic status, or geographic location, from the health effects of air pollution."

nearest receptor should use the LSTs for receptors located at 25 meters (18)." As such, for evaluation of localized PM_{10}, $PM_{2.5}$, NO_X, and CO, a 25-meter distance will be used.

LOCALIZED CONSTRUCTION EMISSIONS

Table 3 identifies the localized impacts at the nearest receptor location in the vicinity of Project construction activities. Outputs from the model runs for construction LSTs are provided in Attachment A. For analytical purposes, emissions associated with peak site preparation and grading activities are considered for purposes of LSTs since these phases represent the maximum localized emissions that would occur. As shown in Table 3, emissions resulting from construction activity will not exceed the numerical thresholds of significance established by the SCAQMD for any criteria pollutant. Thus, a less than significant impact would occur for localized construction-source emissions and no mitigation is required.

TABLE 3: LOCALIZED CONSTRUCTION IMPACTS

On-Site Emissions	Emissions (lbs/day)			
	NO_X	CO	PM_{10}	$PM_{2.5}$
Site Preparation				
Maximum Daily Emissions	34.61	31.01	7.43	4.31
SCAQMD Localized Threshold	220	1,713	11	7
Threshold Exceeded?	NO	NO	NO	NO
Grading				
Maximum Daily Emissions	29.95	28.67	4.05	2.25
SCAQMD Localized Threshold	237	1,873	13	8
Threshold Exceeded?	NO	NO	NO	NO

REGIONAL CONSTRUCTION EMISSIONS

The proposed Project is to consist of 161 multifamily residential dwelling units (with a density of approximately 16.1 dwelling units per net acre) on 10.5 acres.

The estimated maximum daily construction emissions without mitigation are summarized in Table 4. Detailed construction model outputs are presented in Attachment A. Under the assumed scenarios, emissions resulting from the Project construction will not exceed thresholds established by the SCAQMD for emissions of any criteria pollutant.

TABLE 4: REGIONAL CONSTRUCTION EMISSIONS SUMMARY

Source	Emissions (lbs/day)					
	VOC	NO_X	CO	SO_X	PM_{10}	$PM_{2.5}$
Summer						
2026	3.91	34.72	32.28	0.06	23.78	12.01
2027	1.60	11.05	22.06	0.03	2.01	0.73
2028	1.54	10.51	21.48	0.03	1.98	0.69
Winter						
2026	3.47	30.11	29.79	0.06	11.93	5.11
2027	1.57	11.12	20.15	0.03	2.01	0.73
2028	1.51	10.54	19.70	0.03	1.98	0.69
2029	29.05	17.78	32.37	0.05	2.70	1.02
Maximum Daily Emissions	**29.05**	**34.72**	**32.37**	**0.06**	**23.78**	**12.01**
SCAQMD Regional Threshold	75	100	550	150	150	55
Threshold Exceeded?	NO	NO	NO	NO	NO	NO

REGIONAL OPERATIONAL EMISSIONS

Operational activities associated with the Project would result in emissions of CO, VOCs, NO_X, SO_X, PM_{10}, and $PM_{2.5}$. Operational related emissions are expected from the following primary sources: area source emissions, energy source emissions, and mobile source emissions.

The Project related operational air quality impacts derive primarily from vehicle trips generated by buildout associated with the net increase in residential units. Trip characteristics available from the *Esperanza Specific Plan Amendment Trip Generation* were utilized in this analysis (3).

The estimated operation-source emissions associated with the net increase of 161 multifamily residential dwelling units, and reduction in a 736-student elementary school are summarized on Table 5. Detailed operational model outputs are presented in Attachments A and B. As shown on Table 5, operational-source emissions would not exceed the applicable SCAQMD regional thresholds for emissions of any criteria pollutant and no mitigation is required.

TABLE 5: OPERATIONAL EMISSIONS COMPARISON

Source	Emissions (lbs/day)					
	VOC	NO_X	CO	SO_X	PM_{10}	$PM_{2.5}$
Summer						
Proposed Project: Multifamily Residential	8.44	7.52	53.35	0.14	11.69	3.22
Esperanza SP: Elementary School	6.21	5.76	55.04	0.13	11.43	2.99
Net Emissions	**2.24**	**1.76**	**-1.68**	**0.01**	**0.26**	**0.23**
SCAQMD Regional Threshold	55	55	550	150	150	55
Threshold Exceeded?	NO	NO	NO	NO	NO	NO
Winter						
Proposed Project: Multifamily Residential	7.45	7.74	36.28	0.14	11.68	3.22
Esperanza SP: Elementary School	5.48	6.15	42.64	0.13	11.42	2.98
Net Emissions	**1.97**	**1.59**	**-6.37**	**0.01**	**0.26**	**0.23**
SCAQMD Regional Threshold	55	55	550	150	150	55
Threshold Exceeded?	NO	NO	NO	NO	NO	NO

REFERENCES

1. **California Air Pollution Control Officers Association (CAPCOA).** California Emissions Estimator Model (CalEEMod). [Online] May 2022. www.caleemod.com.
2. **South Coast Air Quality Management District (SCAQMD).** SCAQMD Air Quality Significance Thresholds. [Online] https://www.aqmd.gov/docs/default-source/ceqa/handbook/south-coast-aqmd-air-quality-significance-thresholds.pdf.
3. **Urban Crossroads, Inc.** *Esperanza Specific Plan Amendment Trip Generation .* 2024.

ATTACHMENT A
CALEEMOD PROPOSED EMISSIONS MODEL OUTPUTS

15662 - Esperanza Specific Plan Amendment (Proposed) Detailed Report

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2. Emissions Summary

2.1. Construction Emissions Compared Against Thresholds

2.2. Construction Emissions by Year, Unmitigated

2.4. Operations Emissions Compared Against Thresholds

2.5. Operations Emissions by Sector, Unmitigated

3. Construction Emissions Details

3.1. Site Preparation (2026) - Unmitigated

3.3. Grading (2026) - Unmitigated

3.5. Building Construction (2026) - Unmitigated

3.7. Building Construction (2027) - Unmitigated

3.9. Building Construction (2028) - Unmitigated

3.11. Building Construction (2029) - Unmitigated

3.13. Paving (2029) - Unmitigated

3.15. Architectural Coating (2029) - Unmitigated

4. Operations Emissions Details

4.1. Mobile Emissions by Land Use

4.1.1. Unmitigated

4.2. Energy

4.2.1. Electricity Emissions By Land Use - Unmitigated

4.2.3. Natural Gas Emissions By Land Use - Unmitigated

4.3. Area Emissions by Source

4.3.1. Unmitigated

4.4. Water Emissions by Land Use

4.4.1. Unmitigated

4.5. Waste Emissions by Land Use

4.5.1. Unmitigated

4.6. Refrigerant Emissions by Land Use

4.6.1. Unmitigated

4.7. Offroad Emissions By Equipment Type

4.7.1. Unmitigated

4.8. Stationary Emissions By Equipment Type

4.8.1. Unmitigated

4.9. User Defined Emissions By Equipment Type

4.9.1. Unmitigated

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

4.10.2. Above and Belowground Carbon Accumulation by Land Use Type - Unmitigated

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

5. Activity Data

5.1. Construction Schedule

5.2. Off-Road Equipment

5.2.1. Unmitigated

5.3. Construction Vehicles

5.3.1. Unmitigated

5.4. Vehicles

5.4.1. Construction Vehicle Control Strategies

5.5. Architectural Coatings

5.6. Dust Mitigation

5.6.1. Construction Earthmoving Activities

5.6.2. Construction Earthmoving Control Strategies

5.7. Construction Paving

5.8. Construction Electricity Consumption and Emissions Factors

5.9. Operational Mobile Sources

5.9.1. Unmitigated

5.10. Operational Area Sources

5.10.1. Hearths

5.10.1.1. Unmitigated

5.10.2. Architectural Coatings

5.10.3. Landscape Equipment

5.11. Operational Energy Consumption

5.11.1. Unmitigated

5.12. Operational Water and Wastewater Consumption

5.12.1. Unmitigated

5.13. Operational Waste Generation

5.13.1. Unmitigated

5.14. Operational Refrigeration and Air Conditioning Equipment

5.14.1. Unmitigated

5.15. Operational Off-Road Equipment

5.15.1. Unmitigated

5.16. Stationary Sources

5.16.1. Emergency Generators and Fire Pumps

5.16.2. Process Boilers

5.17. User Defined

5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

5.18.2. Sequestration

5.18.2.1. Unmitigated

6. Climate Risk Detailed Report

6.1. Climate Risk Summary

6.2. Initial Climate Risk Scores

6.3. Adjusted Climate Risk Scores

6.4. Climate Risk Reduction Measures

7. Health and Equity Details

7.1. CalEnviroScreen 4.0 Scores

7.2. Healthy Places Index Scores

7.3. Overall Health & Equity Scores

7.4. Health & Equity Measures

7.5. Evaluation Scorecard

7.6. Health & Equity Custom Measures

8. User Changes to Default Data

1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	15662 - Esperanza Specific Plan Amendment (Proposed)
Construction Start Date	8/3/2026
Operational Year	2029
Lead Agency	—
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	2.60
Precipitation (days)	18.8
Location	33.992352, -117.563101
County	San Bernardino-South Coast
City	Ontario
Air District	South Coast AQMD
Air Basin	South Coast
TAZ	5260
EDFZ	10
Electric Utility	Southern California Edison
Gas Utility	Southern California Gas
App Version	2022.1.1.29

1.2. Land Use Types

Land Use Subtype	Size	Unit	Lot Acreage	Building Area (sq ft)	Landscape Area (sq ft)	Special Landscape Area (sq ft)	Population	Description
Apartments Low Rise	161	Dwelling Unit	10.5	170,660	98,516	—	533	—

1.3. User-Selected Emission Reduction Measures by Emissions Sector

No measures selected

2. Emissions Summary

2.1. Construction Emissions Compared Against Thresholds

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Un/Mit.	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	4.65	3.91	34.7	32.3	0.06	1.77	5.90	7.67	1.62	2.74	4.37	—	7,052	7,052	0.29	0.14	6.00	7,082
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	29.5	29.0	30.1	32.4	0.06	1.38	2.95	4.33	1.27	1.05	2.32	—	7,029	7,029	0.28	0.17	0.17	7,058
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	3.27	3.22	7.98	14.6	0.02	0.36	1.16	1.43	0.33	0.35	0.68	—	3,239	3,239	0.11	0.10	1.85	3,274
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.60	0.59	1.46	2.66	< 0.005	0.06	0.21	0.26	0.06	0.06	0.12	—	536	536	0.02	0.02	0.31	542

2.2. Construction Emissions by Year, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Year	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily - Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2026	4.65	3.91	34.7	32.3	0.06	1.77	5.90	7.67	1.62	2.74	4.37	—	7,052	7,052	0.29	0.07	1.10	7,082

2027	1.90	1.60	11.0	22.1	0.03	0.37	1.64	2.01	0.34	0.39	0.73	—	4,644	4,644	0.16	0.14	6.00	4,697
2028	1.79	1.54	10.5	21.5	0.03	0.33	1.64	1.98	0.30	0.39	0.69	—	4,604	4,604	0.15	0.14	5.37	4,656
Daily - Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2026	4.13	3.47	30.1	29.8	0.06	1.38	2.95	4.33	1.27	1.05	2.32	—	7,029	7,029	0.28	0.15	0.17	7,058
2027	1.87	1.57	11.1	20.1	0.03	0.37	1.64	2.01	0.34	0.39	0.73	—	4,515	4,515	0.16	0.14	0.16	4,561
2028	1.76	1.51	10.5	19.7	0.03	0.33	1.64	1.98	0.30	0.39	0.69	—	4,478	4,478	0.16	0.14	0.14	4,524
2029	29.5	29.0	17.8	32.4	0.05	0.56	2.14	2.70	0.51	0.51	1.02	—	6,585	6,585	0.23	0.17	0.16	6,642
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2026	1.08	0.91	7.75	8.26	0.02	0.36	0.93	1.29	0.33	0.35	0.68	—	1,822	1,822	0.07	0.03	0.32	1,832
2027	1.34	1.12	7.98	14.6	0.02	0.27	1.16	1.43	0.24	0.28	0.52	—	3,239	3,239	0.11	0.10	1.85	3,274
2028	1.26	1.08	7.58	14.3	0.02	0.24	1.16	1.40	0.22	0.28	0.49	—	3,221	3,221	0.11	0.10	1.66	3,256
2029	3.27	3.22	2.19	4.05	0.01	0.07	0.27	0.34	0.06	0.06	0.13	—	829	829	0.03	0.02	0.34	837
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2026	0.20	0.17	1.41	1.51	< 0.005	0.06	0.17	0.23	0.06	0.06	0.12	—	302	302	0.01	< 0.005	0.05	303
2027	0.24	0.20	1.46	2.66	< 0.005	0.05	0.21	0.26	0.04	0.05	0.09	—	536	536	0.02	0.02	0.31	542
2028	0.23	0.20	1.38	2.62	< 0.005	0.04	0.21	0.26	0.04	0.05	0.09	—	533	533	0.02	0.02	0.28	539
2029	0.60	0.59	0.40	0.74	< 0.005	0.01	0.05	0.06	0.01	0.01	0.02	—	137	137	< 0.005	< 0.005	0.06	139

2.4. Operations Emissions Compared Against Thresholds

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Un/Mit.	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	9.18	8.44	7.52	53.4	0.14	0.35	11.3	11.7	0.34	2.88	3.22	77.0	17,534	17,611	8.40	0.57	33.0	18,023
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

1085

Unmit.	8.14	7.45	7.74	36.3	0.14	0.34	11.3	11.7	0.34	2.88	3.22	77.0	16,726	16,803	8.41	0.58	1.92	17,189
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	8.09	7.56	5.03	40.0	0.11	0.14	10.3	10.4	0.14	2.62	2.75	77.0	12,752	12,829	8.31	0.54	13.7	13,211
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	1.48	1.38	0.92	7.29	0.02	0.03	1.88	1.90	0.02	0.48	0.50	12.8	2,111	2,124	1.38	0.09	2.28	2,187

2.5. Operations Emissions by Sector, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Sector	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	4.00	3.51	4.09	42.8	0.12	0.07	11.3	11.4	0.07	2.88	2.95	—	12,491	12,491	0.46	0.52	31.9	12,689
Area	5.09	4.89	2.76	10.3	0.02	0.22	—	0.22	0.22	—	0.22	0.00	3,414	3,414	0.06	0.01	—	3,418
Energy	0.08	0.04	0.68	0.29	< 0.005	0.05	—	0.05	0.05	—	0.05	—	1,575	1,575	0.14	0.01	—	1,582
Water	—	—	—	—	—	—	—	—	—	—	—	12.9	53.1	65.9	1.32	0.03	—	109
Waste	—	—	—	—	—	—	—	—	—	—	—	64.2	0.00	64.2	6.41	0.00	—	225
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1.09	1.09
Total	9.18	8.44	7.52	53.4	0.14	0.35	11.3	11.7	0.34	2.88	3.22	77.0	17,534	17,611	8.40	0.57	33.0	18,023
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	3.80	3.31	4.39	34.9	0.11	0.07	11.3	11.4	0.07	2.88	2.95	—	11,708	11,708	0.46	0.54	0.83	11,880
Area	4.26	4.10	2.67	1.14	0.02	0.22	—	0.22	0.22	—	0.22	0.00	3,390	3,390	0.06	0.01	—	3,393
Energy	0.08	0.04	0.68	0.29	< 0.005	0.05	—	0.05	0.05	—	0.05	—	1,575	1,575	0.14	0.01	—	1,582
Water	—	—	—	—	—	—	—	—	—	—	—	12.9	53.1	65.9	1.32	0.03	—	109
Waste	—	—	—	—	—	—	—	—	—	—	—	64.2	0.00	64.2	6.41	0.00	—	225
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1.09	1086

Total	8.14	7.45	7.74	36.3	0.14	0.34	11.3	11.7	0.34	2.88	3.22	77.0	16,726	16,803	8.41	0.58	1.92	17,189
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	3.47	3.02	4.11	33.3	0.11	0.07	10.3	10.4	0.06	2.62	2.68	—	10,875	10,875	0.43	0.50	12.6	11,046
Area	4.54	4.50	0.24	6.35	< 0.005	0.02	—	0.02	0.02	—	0.02	0.00	249	249	0.01	< 0.005	—	249
Energy	0.08	0.04	0.68	0.29	< 0.005	0.05	—	0.05	0.05	—	0.05	—	1,575	1,575	0.14	0.01	—	1,582
Water	—	—	—	—	—	—	—	—	—	—	—	12.9	53.1	65.9	1.32	0.03	—	109
Waste	—	—	—	—	—	—	—	—	—	—	—	64.2	0.00	64.2	6.41	0.00	—	225
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1.09	1.09
Total	8.09	7.56	5.03	40.0	0.11	0.14	10.3	10.4	0.14	2.62	2.75	77.0	12,752	12,829	8.31	0.54	13.7	13,211
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.63	0.55	0.75	6.08	0.02	0.01	1.88	1.89	0.01	0.48	0.49	—	1,800	1,800	0.07	0.08	2.09	1,829
Area	0.83	0.82	0.04	1.16	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	0.00	41.2	41.2	< 0.005	< 0.005	—	41.3
Energy	0.01	0.01	0.12	0.05	< 0.005	0.01	—	0.01	0.01	—	0.01	—	261	261	0.02	< 0.005	—	262
Water	—	—	—	—	—	—	—	—	—	—	—	2.13	8.78	10.9	0.22	0.01	—	18.0
Waste	—	—	—	—	—	—	—	—	—	—	—	10.6	0.00	10.6	1.06	0.00	—	37.2
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.18	0.18
Total	1.48	1.38	0.92	7.29	0.02	0.03	1.88	1.90	0.02	0.48	0.50	12.8	2,111	2,124	1.38	0.09	2.28	2,187

3. Construction Emissions Details

3.1. Site Preparation (2026) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road	4.56	3.83	34.6	31.0	0.05	1.77	—	1.77	1.62	—	1.62	—	5,532	5,532	0.22	0.04	—	5,551
Dust From Material Movement	—	—	—	—	—	—	5.66	5.66	—	2.69	2.69	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.25	0.21	1.90	1.70	< 0.005	0.10	—	0.10	0.09	—	0.09	—	303	303	0.01	< 0.005	—	304
Dust From Material Movement	—	—	—	—	—	—	0.31	0.31	—	0.15	0.15	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.05	0.04	0.35	0.31	< 0.005	0.02	—	0.02	0.02	—	0.02	—	50.2	50.2	< 0.005	< 0.005	—	50.4
Dust From Material Movement	—	—	—	—	—	—	0.06	0.06	—	0.03	0.03	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.08	0.08	0.07	1.26	0.00	0.00	0.23	0.23	0.00	0.05	0.05	—	242	242	0.01	0.01	0.83	245
Vendor	< 0.005	< 0.005	0.03	0.02	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	30.3	30.3	< 0.005	< 0.005	0.08	31.9
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.05	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	12.3	12.3	< 0.005	< 0.005	0.02	12.5
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	1.66	1.66	< 0.005	< 0.005	< 0.005	1.74
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	2.04	2.04	< 0.005	< 0.005	< 0.005	2.07
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.28	0.28	< 0.005	< 0.005	< 0.005	0.29
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.3. Grading (2026) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	4.03	3.39	30.0	28.7	0.06	1.38	—	1.38	1.27	—	1.27	—	6,715	6,715	0.27	0.05	—	6,738

Dust From Material Movement	—	—	—	—	—	—	2.67	2.67	—	0.98	0.98	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	4.03	3.39	30.0	28.7	0.06	1.38	—	1.38	1.27	—	1.27	—	6,715	6,715	0.27	0.05	—	6,738
Dust From Material Movement	—	—	—	—	—	—	2.67	2.67	—	0.98	0.98	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.66	0.56	4.92	4.71	0.01	0.23	—	0.23	0.21	—	0.21	—	1,104	1,104	0.04	0.01	—	1,108
Dust From Material Movement	—	—	—	—	—	—	0.44	0.44	—	0.16	0.16	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.12	0.10	0.90	0.86	< 0.005	0.04	—	0.04	0.04	—	0.04	—	183	183	0.01	< 0.005	—	183

Dust From Material Movement	—	—	—	—	—	—	0.08	0.08	—	0.03	0.03	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.10	0.09	0.08	1.44	0.00	0.00	0.26	0.26	0.00	0.06	0.06	—	276	276	0.01	0.01	0.94	280
Vendor	0.01	< 0.005	0.07	0.04	< 0.005	< 0.005	0.02	0.02	< 0.005	< 0.005	0.01	—	60.7	60.7	< 0.005	0.01	0.16	63.7
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.09	0.08	0.09	1.09	0.00	0.00	0.26	0.26	0.00	0.06	0.06	—	253	253	< 0.005	0.01	0.02	256
Vendor	0.01	< 0.005	0.07	0.04	< 0.005	< 0.005	0.02	0.02	< 0.005	< 0.005	0.01	—	60.7	60.7	< 0.005	0.01	< 0.005	63.6
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.02	0.19	0.00	0.00	0.04	0.04	0.00	0.01	0.01	—	42.2	42.2	< 0.005	< 0.005	0.07	42.8
Vendor	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	9.97	9.97	< 0.005	< 0.005	0.01	10.5
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.03	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	6.99	6.99	< 0.005	< 0.005	0.01	7.08
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	1.65	1.65	< 0.005	< 0.005	< 0.005	1.73
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.5. Building Construction (2026) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.38	1.16	10.7	14.1	0.03	0.41	—	0.41	0.38	—	0.38	—	2,630	2,630	0.11	0.02	—	2,639
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.11	0.09	0.81	1.07	< 0.005	0.03	—	0.03	0.03	—	0.03	—	201	201	0.01	< 0.005	—	201
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.02	0.15	0.20	< 0.005	0.01	—	0.01	0.01	—	0.01	—	33.2	33.2	< 0.005	< 0.005	—	33.3
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	0.53	0.47	0.51	6.30	0.00	0.00	1.52	1.52	0.00	0.36	0.36	—	1,467	1,467	0.02	0.06	0.14	1,485
Vendor	0.04	0.01	0.51	0.27	< 0.005	0.01	0.13	0.14	0.01	0.04	0.04	—	455	455	0.03	0.07	0.03	477
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.04	0.04	0.04	0.51	0.00	0.00	0.11	0.11	0.00	0.03	0.03	—	114	114	< 0.005	< 0.005	0.18	115
Vendor	< 0.005	< 0.005	0.04	0.02	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	34.7	34.7	< 0.005	0.01	0.04	36.4
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.09	0.00	0.00	0.02	0.02	0.00	< 0.005	< 0.005	—	18.8	18.8	< 0.005	< 0.005	0.03	19.1
Vendor	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	5.75	5.75	< 0.005	< 0.005	0.01	6.03
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.7. Building Construction (2027) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.33	1.11	10.2	14.0	0.03	0.36	—	0.36	0.34	—	0.34	—	2,630	2,630	0.11	0.02	—	2,639
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	1.33	1.11	10.2	14.0	0.03	0.36	—	0.36	0.34	—	0.34	—	2,630	2,630	0.11	0.02	—	2,639
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.95	0.79	7.27	10.0	0.02	0.26	—	0.26	0.24	—	0.24	—	1,878	1,878	0.08	0.02	—	1,885
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.17	0.14	1.33	1.83	< 0.005	0.05	—	0.05	0.04	—	0.04	—	311	311	0.01	< 0.005	—	312
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.53	0.48	0.41	7.77	0.00	0.00	1.52	1.52	0.00	0.36	0.36	—	1,568	1,568	0.02	0.05	4.93	1,590
Vendor	0.04	0.01	0.47	0.26	< 0.005	0.01	0.13	0.14	0.01	0.04	0.04	—	446	446	0.03	0.07	1.07	468
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.50	0.45	0.46	5.85	0.00	0.00	1.52	1.52	0.00	0.36	0.36	—	1,438	1,438	0.02	0.05	0.13	1,455
Vendor	0.04	0.01	0.49	0.26	< 0.005	0.01	0.13	0.14	0.01	0.04	0.04	—	447	447	0.03	0.07	0.03	467
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.36	0.32	0.36	4.38	0.00	0.00	1.07	1.07	0.00	0.25	0.25	—	1,042	1,042	0.01	0.04	1.52	1,055
Vendor	0.03	0.01	0.35	0.18	< 0.005	< 0.005	0.09	0.10	< 0.005	0.03	0.03	—	319	319	0.02	0.05	0.33	334
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.07	0.06	0.07	0.80	0.00	0.00	0.20	0.20	0.00	0.05	0.05	—	172	172	< 0.005	0.01	0.25	175
Vendor	0.01	< 0.005	0.06	0.03	< 0.005	< 0.005	0.02	0.02	< 0.005	< 0.005	0.01	—	52.8	52.8	< 0.005	0.01	0.05	55.3
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.9. Building Construction (2028) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.28	1.07	9.66	14.0	0.03	0.33	—	0.33	0.30	—	0.30	—	2,630	2,630	0.11	0.02	—	2,639
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.28	1.07	9.66	14.0	0.03	0.33	—	0.33	0.30	—	0.30	—	2,630	2,630	0.11	0.02	—	2,639
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.92	0.77	6.92	10.1	0.02	0.23	—	0.23	0.21	—	0.21	—	1,884	1,884	0.08	0.02	—	1,890
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.17	0.14	1.26	1.83	< 0.005	0.04	—	0.04	0.04	—	0.04	—	312	312	0.01	< 0.005	—	313
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.47	0.46	0.40	7.20	0.00	0.00	1.52	1.52	0.00	0.36	0.36	—	1,538	1,538	0.02	0.05	4.42	1,559
Vendor	0.04	0.01	0.45	0.25	< 0.005	0.01	0.13	0.14	< 0.005	0.04	0.04	—	436	436	0.03	0.07	0.95	458
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.44	0.43	0.41	5.41	0.00	0.00	1.52	1.52	0.00	0.36	0.36	—	1,411	1,411	0.02	0.05	0.11	1,428
Vendor	0.04	0.01	0.47	0.25	< 0.005	0.01	0.13	0.14	< 0.005	0.04	0.04	—	436	436	0.03	0.07	0.02	457
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.31	0.31	0.32	4.11	0.00	0.00	1.07	1.07	0.00	0.25	0.25	—	1,025	1,025	0.01	0.04	1.37	1,038
Vendor	0.03	0.01	0.34	0.18	< 0.005	< 0.005	0.09	0.10	< 0.005	0.03	0.03	—	313	313	0.02	0.05	0.29	328
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	0.06	0.06	0.06	0.75	0.00	0.00	0.20	0.20	0.00	0.05	0.05	—	170	170	< 0.005	0.01	0.23	172
Vendor	0.01	< 0.005	0.06	0.03	< 0.005	< 0.005	0.02	0.02	< 0.005	< 0.005	0.01	—	51.7	51.7	< 0.005	0.01	0.05	54.2
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.11. Building Construction (2029) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.25	1.04	9.28	14.0	0.03	0.30	—	0.30	0.28	—	0.28	—	2,629	2,629	0.11	0.02	—	2,638
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.17	0.14	1.24	1.86	< 0.005	0.04	—	0.04	0.04	—	0.04	—	350	350	0.01	< 0.005	—	351
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.03	0.03	0.23	0.34	< 0.005	0.01	—	0.01	0.01	—	0.01	—	57.9	57.9	< 0.005	< 0.005	—	58.1

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.42	0.36	0.40	5.07	0.00	0.00	1.52	1.52	0.00	0.36	0.36	—	1,386	1,386	0.02	0.05	0.10	1,403
Vendor	0.04	0.01	0.45	0.24	< 0.005	< 0.005	0.13	0.13	< 0.005	0.04	0.04	—	425	425	0.03	0.06	0.02	445
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.06	0.05	0.05	0.71	0.00	0.00	0.20	0.20	0.00	0.05	0.05	—	187	187	< 0.005	0.01	0.23	189
Vendor	< 0.005	< 0.005	0.06	0.03	< 0.005	< 0.005	0.02	0.02	< 0.005	< 0.005	0.01	—	56.5	56.5	< 0.005	0.01	0.05	59.2
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.13	0.00	0.00	0.04	0.04	0.00	0.01	0.01	—	31.0	31.0	< 0.005	< 0.005	0.04	31.4
Vendor	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	9.36	9.36	< 0.005	< 0.005	0.01	9.80
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.13. Paving (2029) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Roa Equipment	0.80	0.67	6.46	9.92	0.01	0.24	—	0.24	0.22	—	0.22	—	1,511	1,511	0.06	0.01	—	1,516
Paving	0.00	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Roa d Equipm ent	0.09	0.07	0.71	1.09	< 0.005	0.03	—	0.03	0.02	—	0.02	—	166	166	0.01	< 0.005	—	166
Paving	0.00	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Roa d Equipm ent	0.02	0.01	0.13	0.20	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	27.4	27.4	< 0.005	< 0.005	—	27.5
Paving	0.00	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05	0.05	0.05	0.66	0.00	0.00	0.20	0.20	0.00	0.05	0.05	—	179	179	< 0.005	0.01	0.01	182
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

1099

Worker	0.01	0.01	0.01	0.08	0.00	0.00	0.02	0.02	0.00	< 0.005	< 0.005	—	19.9	19.9	< 0.005	< 0.005	0.02	20.2
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	3.30	3.30	< 0.005	< 0.005	< 0.005	3.34
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.15. Architectural Coating (2029) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.17	0.14	1.06	1.48	< 0.005	0.02	—	0.02	0.02	—	0.02	—	178	178	0.01	< 0.005	—	179
Architectural Coatings	26.7	26.7	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.01	0.12	0.16	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	19.5	19.5	< 0.005	< 0.005	—	19.6

Architect Coatings	2.93	2.93	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.02	0.03	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	3.23	3.23	< 0.005	< 0.005	—	3.24
Architectural Coatings	0.53	0.53	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.08	0.07	0.08	1.01	0.00	0.00	0.30	0.30	0.00	0.07	0.07	—	277	277	< 0.005	0.01	0.02	281
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.12	0.00	0.00	0.03	0.03	0.00	0.01	0.01	—	30.8	30.8	< 0.005	< 0.005	0.04	31.2
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.02	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	5.10	5.10	< 0.005	< 0.005	0.01	5.17
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

4. Operations Emissions Details

4.1. Mobile Emissions by Land Use

4.1.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Low Rise	4.00	3.51	4.09	42.8	0.12	0.07	11.3	11.4	0.07	2.88	2.95	—	12,491	12,491	0.46	0.52	31.9	12,689
Total	4.00	3.51	4.09	42.8	0.12	0.07	11.3	11.4	0.07	2.88	2.95	—	12,491	12,491	0.46	0.52	31.9	12,689
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Low Rise	3.80	3.31	4.39	34.9	0.11	0.07	11.3	11.4	0.07	2.88	2.95	—	11,708	11,708	0.46	0.54	0.83	11,880
Total	3.80	3.31	4.39	34.9	0.11	0.07	11.3	11.4	0.07	2.88	2.95	—	11,708	11,708	0.46	0.54	0.83	11,880
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Low Rise	0.63	0.55	0.75	6.08	0.02	0.01	1.88	1.89	0.01	0.48	0.49	—	1,800	1,800	0.07	0.08	2.09	1,829
Total	0.63	0.55	0.75	6.08	0.02	0.01	1.88	1.89	0.01	0.48	0.49	—	1,800	1,800	0.07	0.08	2.09	1,829

4.2. Energy

4.2.1. Electricity Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Low Rise	—	—	—	—	—	—	—	—	—	—	—	—	716	716	0.07	0.01	—	720
Total	—	—	—	—	—	—	—	—	—	—	—	—	716	716	0.07	0.01	—	720
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Low Rise	—	—	—	—	—	—	—	—	—	—	—	—	716	716	0.07	0.01	—	720
Total	—	—	—	—	—	—	—	—	—	—	—	—	716	716	0.07	0.01	—	720
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Low Rise	—	—	—	—	—	—	—	—	—	—	—	—	118	118	0.01	< 0.005	—	119
Total	—	—	—	—	—	—	—	—	—	—	—	—	118	118	0.01	< 0.005	—	119

4.2.3. Natural Gas Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Low Rise	0.08	0.04	0.68	0.29	< 0.005	0.05	—	0.05	0.05	—	0.05	—	859	859	0.08	< 0.005	—	862
Total	0.08	0.04	0.68	0.29	< 0.005	0.05	—	0.05	0.05	—	0.05	—	859	859	0.08	< 0.005	—	862

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Low Rise	0.08	0.04	0.68	0.29	< 0.005	0.05	—	0.05	0.05	—	0.05	—	859	859	0.08	< 0.005	—	862
Total	0.08	0.04	0.68	0.29	< 0.005	0.05	—	0.05	0.05	—	0.05	—	859	859	0.08	< 0.005	—	862
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Low Rise	0.01	0.01	0.12	0.05	< 0.005	0.01	—	0.01	0.01	—	0.01	—	142	142	0.01	< 0.005	—	143
Total	0.01	0.01	0.12	0.05	< 0.005	0.01	—	0.01	0.01	—	0.01	—	142	142	0.01	< 0.005	—	143

4.3. Area Emissions by Source

4.3.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Source	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hearths	0.31	0.16	2.67	1.14	0.02	0.22	—	0.22	0.22	—	0.22	0.00	3,390	3,390	0.06	0.01	—	3,393
Consumer Products	3.65	3.65	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.29	0.29	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	0.84	0.79	0.09	9.16	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	24.4	24.4	< 0.005	< 0.005	—	24.5
Total	5.09	4.89	2.76	10.3	0.02	0.22	—	0.22	0.22	—	0.22	0.00	3,414	3,414	0.06	0.01	—	

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hearths	0.31	0.16	2.67	1.14	0.02	0.22	—	0.22	0.22	—	0.22	0.00	3,390	3,390	0.06	0.01	—	3,393
Consumer Products	3.65	3.65	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.29	0.29	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	4.26	4.10	2.67	1.14	0.02	0.22	—	0.22	0.22	—	0.22	0.00	3,390	3,390	0.06	0.01	—	3,393
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hearths	< 0.005	< 0.005	0.03	0.01	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	0.00	38.4	38.4	< 0.005	< 0.005	—	38.5
Consumer Products	0.67	0.67	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.05	0.05	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	0.10	0.10	0.01	1.14	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	2.77	2.77	< 0.005	< 0.005	—	2.78
Total	0.83	0.82	0.04	1.16	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	0.00	41.2	41.2	< 0.005	< 0.005	—	41.3

4.4. Water Emissions by Land Use

4.4.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Low Rise	—	—	—	—	—	—	—	—	—	—	—	12.9	53.1	65.9	1.32	0.03	—	109
Total	—	—	—	—	—	—	—	—	—	—	—	12.9	53.1	65.9	1.32	0.03	—	109
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Low Rise	—	—	—	—	—	—	—	—	—	—	—	12.9	53.1	65.9	1.32	0.03	—	109
Total	—	—	—	—	—	—	—	—	—	—	—	12.9	53.1	65.9	1.32	0.03	—	109
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Low Rise	—	—	—	—	—	—	—	—	—	—	—	2.13	8.78	10.9	0.22	0.01	—	18.0
Total	—	—	—	—	—	—	—	—	—	—	—	2.13	8.78	10.9	0.22	0.01	—	18.0

4.5. Waste Emissions by Land Use

4.5.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Low Rise	—	—	—	—	—	—	—	—	—	—	—	64.2	0.00	64.2	6.41	0.00	—	225
Total	—	—	—	—	—	—	—	—	—	—	—	64.2	0.00	64.2	6.41	0.00	—	225

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Low Rise	—	—	—	—	—	—	—	—	—	—	—	64.2	0.00	64.2	6.41	0.00	—	225
Total	—	—	—	—	—	—	—	—	—	—	—	64.2	0.00	64.2	6.41	0.00	—	225
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Low Rise	—	—	—	—	—	—	—	—	—	—	—	10.6	0.00	10.6	1.06	0.00	—	37.2
Total	—	—	—	—	—	—	—	—	—	—	—	10.6	0.00	10.6	1.06	0.00	—	37.2

4.6. Refrigerant Emissions by Land Use

4.6.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Low Rise	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1.09	1.09
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1.09	1.09
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Low Rise	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1.09	1.09
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1.09	1.09
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Apartme Low Rise	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.18	0.18
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.18	0.18

4.7. Offroad Emissions By Equipment Type

4.7.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.8. Stationary Emissions By Equipment Type

4.8.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.9. User Defined Emissions By Equipment Type

4.9.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Vegetation	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.2. Above and Belowground Carbon Accumulation by Land Use Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Species	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

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5. Activity Data

5.1. Construction Schedule

Phase Name	Phase Type	Start Date	End Date	Days Per Week	Work Days per Phase	Phase Description
Site Preparation	Site Preparation	8/3/2026	8/28/2026	5.00	20.0	10
Grading	Grading	8/31/2026	11/20/2026	5.00	60.0	30
Building Construction	Building Construction	11/23/2026	3/9/2029	5.00	600	300
Paving	Paving	1/15/2029	3/9/2029	5.00	40.0	20
Architectural Coating	Architectural Coating	1/15/2029	3/9/2029	5.00	40.0	20

5.2. Off-Road Equipment

5.2.1. Unmitigated

Phase Name	Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor
Site Preparation	Rubber Tired Dozers	Diesel	Average	3.00	8.00	367	0.40
Site Preparation	Crawler Tractors	Diesel	Average	4.00	8.00	87.0	0.43
Grading	Excavators	Diesel	Average	2.00	8.00	36.0	0.38
Grading	Graders	Diesel	Average	1.00	8.00	148	0.41
Grading	Rubber Tired Dozers	Diesel	Average	1.00	8.00	367	0.40
Grading	Scrapers	Diesel	Average	2.00	8.00	423	0.48
Grading	Crawler Tractors	Diesel	Average	2.00	8.00	87.0	0.43
Building Construction	Cranes	Diesel	Average	1.00	8.00	367	0.29
Building Construction	Forklifts	Diesel	Average	3.00	8.00	82.0	0.20
Building Construction	Generator Sets	Diesel	Average	1.00	8.00	14.0	0.74
Building Construction	Tractors/Loaders/Backhoes	Diesel	Average	3.00	8.00	84.0	0.37
Building Construction	Welders	Diesel	Average	1.00	8.00	46.0	0.45
Paving	Pavers	Diesel	Average	2.00	8.00	81.0	0.42

Paving	Paving Equipment	Diesel	Average	2.00	8.00	89.0	0.36
Paving	Rollers	Diesel	Average	2.00	8.00	36.0	0.38
Architectural Coating	Air Compressors	Diesel	Average	1.00	8.00	37.0	0.48

5.3. Construction Vehicles

5.3.1. Unmitigated

Phase Name	Trip Type	One-Way Trips per Day	Miles per Trip	Vehicle Mix
Site Preparation	—	—	—	—
Site Preparation	Worker	17.5	18.5	LDA,LDT1,LDT2
Site Preparation	Vendor	1.00	10.2	HHDT,MHDT
Site Preparation	Hauling	0.00	20.0	HHDT
Site Preparation	Onsite truck	—	—	HHDT
Grading	—	—	—	—
Grading	Worker	20.0	18.5	LDA,LDT1,LDT2
Grading	Vendor	2.00	10.2	HHDT,MHDT
Grading	Hauling	0.00	20.0	HHDT
Grading	Onsite truck	—	—	HHDT
Building Construction	—	—	—	—
Building Construction	Worker	116	18.5	LDA,LDT1,LDT2
Building Construction	Vendor	15.0	10.2	HHDT,MHDT
Building Construction	Hauling	0.00	20.0	HHDT
Building Construction	Onsite truck	—	—	HHDT
Paving	—	—	—	—
Paving	Worker	15.0	18.5	LDA,LDT1,LDT2
Paving	Vendor	—	10.2	HHDT,MHDT
Paving	Hauling	0.00	20.0	HHDT
Paving	Onsite truck	—	—	HHDT

Architectural Coating	—	—	—	—
Architectural Coating	Worker	23.2	18.5	LDA,LDT1,LDT2
Architectural Coating	Vendor	—	10.2	HHDT,MHDT
Architectural Coating	Hauling	0.00	20.0	HHDT
Architectural Coating	Onsite truck	—	—	HHDT

5.4. Vehicles

5.4.1. Construction Vehicle Control Strategies

Non-applicable. No control strategies activated by user.

5.5. Architectural Coatings

Phase Name	Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
Architectural Coating	345,587	115,196	0.00	0.00	—

5.6. Dust Mitigation

5.6.1. Construction Earthmoving Activities

Phase Name	Material Imported (cy)	Material Exported (cy)	Acres Graded (acres)	Material Demolished (sq. ft.)	Acres Paved (acres)
Site Preparation	—	—	70.0	0.00	—
Grading	—	—	240	0.00	—
Paving	0.00	0.00	0.00	0.00	—

5.6.2. Construction Earthmoving Control Strategies

Control Strategies Applied	Frequency (per day)	PM10 Reduction	PM2.5 Reduction
Water Exposed Area	3	74%	74%

5.7. Construction Paving

Land Use	Area Paved (acres)	% Asphalt
Apartments Low Rise	—	0%

5.8. Construction Electricity Consumption and Emissions Factors

kWh per Year and Emission Factor (lb/MWh)

Year	kWh per Year	CO2	CH4	N2O
2026	0.00	346	0.03	< 0.005
2027	0.00	346	0.03	< 0.005
2028	0.00	346	0.03	< 0.005
2029	0.00	346	0.03	< 0.005

5.9. Operational Mobile Sources

5.9.1. Unmitigated

Land Use Type	Trips/Weekday	Trips/Saturday	Trips/Sunday	Trips/Year	VMT/Weekday	VMT/Saturday	VMT/Sunday	VMT/Year
Apartments Low Rise	943	733	621	316,575	15,986	12,412	10,530	5,363,927

5.10. Operational Area Sources

5.10.1. Hearths

5.10.1.1. Unmitigated

Hearth Type	Unmitigated (number)
Apartments Low Rise	—
Wood Fireplaces	0
Gas Fireplaces	161

Propane Fireplaces	0
Electric Fireplaces	0
No Fireplaces	0

5.10.2. Architectural Coatings

Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
345586.5	115,196	0.00	0.00	—

5.10.3. Landscape Equipment

Season	Unit	Value
Snow Days	day/yr	0.00
Summer Days	day/yr	250

5.11. Operational Energy Consumption

5.11.1. Unmitigated

Electricity (kWh/yr) and CO2 and CH4 and N2O and Natural Gas (kBTU/yr)

Land Use	Electricity (kWh/yr)	CO2	CH4	N2O	Natural Gas (kBTU/yr)
Apartments Low Rise	754,406	346	0.0330	0.0040	2,681,706

5.12. Operational Water and Wastewater Consumption

5.12.1. Unmitigated

Land Use	Indoor Water (gal/year)	Outdoor Water (gal/year)
Apartments Low Rise	6,710,669	1,933,654

5.13. Operational Waste Generation

5.13.1. Unmitigated

Land Use	Waste (ton/year)	Cogeneration (kWh/year)
Apartments Low Rise	119	—

5.14. Operational Refrigeration and Air Conditioning Equipment

5.14.1. Unmitigated

Land Use Type	Equipment Type	Refrigerant	GWP	Quantity (kg)	Operations Leak Rate	Service Leak Rate	Times Serviced
Apartments Low Rise	Average room A/C & Other residential A/C and heat pumps	User Defined	750	< 0.005	2.50	2.50	10.0
Apartments Low Rise	Household refrigerators and/or freezers	R-134a	1,430	0.12	0.60	0.00	1.00

5.15. Operational Off-Road Equipment

5.15.1. Unmitigated

Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor

5.16. Stationary Sources

5.16.1. Emergency Generators and Fire Pumps

Equipment Type	Fuel Type	Number per Day	Hours per Day	Hours per Year	Horsepower	Load Factor

5.16.2. Process Boilers

Equipment Type	Fuel Type	Number	Boiler Rating (MMBtu/hr)	Daily Heat Input (MMBtu/day)	Annual Heat Input (MM

5.17. User Defined

Equipment Type	Fuel Type

5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres

5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

Biomass Cover Type	Initial Acres	Final Acres

5.18.2. Sequestration

5.18.2.1. Unmitigated

Tree Type	Number	Electricity Saved (kWh/year)	Natural Gas Saved (btu/year)

6. Climate Risk Detailed Report

6.1. Climate Risk Summary

Cal-Adapt midcentury 2040–2059 average projections for four hazards are reported below for your project location. These are under Representation Concentration Pathway (RCP) 8.5 which assumes GHG emissions will continue to rise strongly through 2050 and then plateau around 2100.

Climate Hazard	Result for Project Location	Unit
Temperature and Extreme Heat	19.8	annual days of extreme heat
Extreme Precipitation	3.10	annual days with precipitation above 20 mm

Sea Level Rise	—	meters of inundation depth
Wildfire	6.78	annual hectares burned

Temperature and Extreme Heat data are for grid cell in which your project are located. The projection is based on the 98th historical percentile of daily maximum/minimum temperatures from observed historical data (32 climate model ensemble from Cal-Adapt, 2040–2059 average under RCP 8.5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Extreme Precipitation data are for the grid cell in which your project are located. The threshold of 20 mm is equivalent to about ¾ an inch of rain, which would be light to moderate rainfall if received over a full day or heavy rain if received over a period of 2 to 4 hours. Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Sea Level Rise data are for the grid cell in which your project are located. The projections are from Radke et al. (2017), as reported in Cal-Adapt (Radke et al., 2017, CEC-500-2017-008), and consider inundation location and depth for the San Francisco Bay, the Sacramento-San Joaquin River Delta and California coast resulting different increments of sea level rise coupled with extreme storm events. Users may select from four scenarios to view the range in potential inundation depth for the grid cell. The four scenarios are: No rise, 0.5 meter, 1.0 meter, 1.41 meters
Wildfire data are for the grid cell in which your project are located. The projections are from UC Davis, as reported in Cal-Adapt (2040–2059 average under RCP 8.5), and consider historical data of climate, vegetation, population density, and large (> 400 ha) fire history. Users may select from four model simulations to view the range in potential wildfire probabilities for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warmer/drier (HadGEM2-ES), Cooler/wetter (CNRM-CM5), Average conditions (CanESM2), Range of different rainfall and temperature possibilities (MIROC5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

6.2. Initial Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	2	0	0	N/A
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	1	0	0	N/A
Wildfire	1	0	0	N/A
Flooding	N/A	N/A	N/A	N/A
Drought	N/A	N/A	N/A	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	0	0	0	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores do not include implementation of climate risk reduction measures.

6.3. Adjusted Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	2	1	1	3

Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	1	1	1	2
Wildfire	1	1	1	2
Flooding	N/A	N/A	N/A	N/A
Drought	N/A	N/A	N/A	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	1	1	1	2

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores include implementation of climate risk reduction measures.

6.4. Climate Risk Reduction Measures

7. Health and Equity Details

7.1. CalEnviroScreen 4.0 Scores

The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Exposure Indicators	—
AQ-Ozone	77.1
AQ-PM	93.4
AQ-DPM	57.1
Drinking Water	100.0
Lead Risk Housing	17.5
Pesticides	84.9
Toxic Releases	67.6
Traffic	18.1
Effect Indicators	—

CleanUp Sites	80.3
Groundwater	98.1
Haz Waste Facilities/Generators	86.6
Impaired Water Bodies	87.0
Solid Waste	98.9
Sensitive Population	—
Asthma	16.5
Cardio-vascular	29.1
Low Birth Weights	49.0
Socioeconomic Factor Indicators	—
Education	52.9
Housing	59.3
Linguistic	68.9
Poverty	35.4
Unemployment	36.4

7.2. Healthy Places Index Scores

The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Economic	—
Above Poverty	73.60451687
Employed	6.274862056
Median HI	76.55588349
Education	—
Bachelor's or higher	64.85307327
High school enrollment	100
Preschool enrollment	66.93186193
Transportation	—

Auto Access	63.41588605
Active commuting	24.5989991
Social	—
2-parent households	66.95752598
Voting	70.69164635
Neighborhood	—
Alcohol availability	97.0101373
Park access	52.77813422
Retail density	10.02181445
Supermarket access	6.557166688
Tree canopy	8.238162453
Housing	—
Homeownership	60.78532016
Housing habitability	61.41408957
Low-inc homeowner severe housing cost burden	71.53856025
Low-inc renter severe housing cost burden	18.38829719
Uncrowded housing	64.30129603
Health Outcomes	—
Insured adults	73.78416528
Arthritis	95.7
Asthma ER Admissions	84.6
High Blood Pressure	97.7
Cancer (excluding skin)	89.7
Asthma	34.7
Coronary Heart Disease	98.7
Chronic Obstructive Pulmonary Disease	94.6
Diagnosed Diabetes	96.0
Life Expectancy at Birth	75.7

1122

Cognitively Disabled	56.3
Physically Disabled	69.8
Heart Attack ER Admissions	68.4
Mental Health Not Good	54.9
Chronic Kidney Disease	97.1
Obesity	68.0
Pedestrian Injuries	19.6
Physical Health Not Good	86.2
Stroke	97.8
Health Risk Behaviors	—
Binge Drinking	28.2
Current Smoker	59.6
No Leisure Time for Physical Activity	76.7
Climate Change Exposures	—
Wildfire Risk	0.0
SLR Inundation Area	0.0
Children	9.0
Elderly	91.7
English Speaking	35.1
Foreign-born	48.1
Outdoor Workers	88.5
Climate Change Adaptive Capacity	—
Impervious Surface Cover	78.1
Traffic Density	21.6
Traffic Access	23.0
Other Indices	—
Hardship	45.2
Other Decision Support	—

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2016 Voting	74.7

7.3. Overall Health & Equity Scores

Metric	Result for Project Census Tract
CalEnviroScreen 4.0 Score for Project Location (a)	72.0
Healthy Places Index Score for Project Location (b)	55.0
Project Located in a Designated Disadvantaged Community (Senate Bill 535)	No
Project Located in a Low-Income Community (Assembly Bill 1550)	No
Project Located in a Community Air Protection Program Community (Assembly Bill 617)	No

a: The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.
b: The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

7.4. Health & Equity Measures

No Health & Equity Measures selected.

7.5. Evaluation Scorecard

Health & Equity Evaluation Scorecard not completed.

7.6. Health & Equity Custom Measures

No Health & Equity Custom Measures created.

8. User Changes to Default Data

Screen	Justification
Land Use	Taken from site plan
Operations: Vehicle Data	Trip characteristics based on information provided in the Traffic Analysis
Operations: Hearths	SCAQMD Rule 445 no wood burning devices. Wood burning devices added to gas devices.
Operations: Refrigerants	Beginning 1 January 2025, all new air conditioning equipment may not use refrigerants with a GWP of 750 or greater.

Construction: Construction Phases	Based on client provided data, construction schedule to begin Q3 2026 and completed Q1 2029 Building Construction, Paving, and Architectural Coating overlap to present a conservative analysis
Construction: Off-Road Equipment	T/L/B replaced with Crawler Tractor to accurately calculate disturbance for Site Preparation and Grading phases. Standard 8 hours work days
Construction: Trips and VMT	Vendor Trips adjusted based on CalEEMod defaults for Building Construction and number of days for Site Preparation, Grading, and Building Construction

ATTACHMENT B

CALEEMOD APPROVED EMISSIONS MODEL OUTPUTS

15662 - Esperanza Specific Plan Amendment (Approved) Detailed Report

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8. User Changes to Default Data

1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	15662 - Esperanza Specific Plan Amendment (Approved)
Operational Year	2025
Lead Agency	—
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	2.60
Precipitation (days)	18.8
Location	33.992322, -117.563353
County	San Bernardino-South Coast
City	Ontario
Air District	South Coast AQMD
Air Basin	South Coast
TAZ	5260
EDFZ	10
Electric Utility	Southern California Edison
Gas Utility	Southern California Gas
App Version	2022.1.1.20

1.2. Land Use Types

Land Use Subtype	Size	Unit	Lot Acreage	Building Area (sq ft)	Landscape Area (sq ft)	Special Landscape Area (sq ft)	Population	Description
Elementary School	736	Student	13.2	61,532	0.00	0.00	—	—

1.3. User-Selected Emission Reduction Measures by Emissions Sector

No measures selected

2. Emissions Summary

2.4. Operations Emissions Compared Against Thresholds

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Un/Mit.	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	5.47	6.21	5.76	55.0	0.13	0.12	11.3	11.4	0.12	2.87	2.99	75.8	14,363	14,438	8.21	0.59	50.6	14,869
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	4.70	5.48	6.15	42.6	0.13	0.12	11.3	11.4	0.11	2.87	2.98	75.8	13,496	13,572	8.22	0.61	1.36	13,960
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	3.68	4.60	4.60	33.6	0.09	0.10	7.98	8.07	0.09	2.03	2.12	75.8	9,991	10,066	8.06	0.44	15.6	10,415
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.67	0.84	0.84	6.14	0.02	0.02	1.46	1.47	0.02	0.37	0.39	12.6	1,654	1,667	1.33	0.07	2.59	1,724

2.5. Operations Emissions by Sector, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Sector	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Mobile	4.95	4.35	5.34	52.0	0.13	0.09	11.3	11.4	0.08	2.87	2.95	—	13,484	13,484	0.54	0.57	50.6	13,719
Area	0.48	1.83	0.02	2.68	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	11.0	11.0	< 0.005	< 0.005	—	11.0
Energy	0.04	0.02	0.40	0.33	< 0.005	0.03	—	0.03	0.03	—	0.03	—	856	856	0.08	0.01	—	859
Water	—	—	—	—	—	—	—	—	—	—	—	3.42	11.6	15.0	0.35	0.01	—	26.3
Waste	—	—	—	—	—	—	—	—	—	—	—	72.4	0.00	72.4	7.24	0.00	—	253
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.04	0.04
Total	5.47	6.21	5.76	55.0	0.13	0.12	11.3	11.4	0.12	2.87	2.99	75.8	14,363	14,438	8.21	0.59	50.6	14,869
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	4.66	4.06	5.75	42.3	0.12	0.09	11.3	11.4	0.08	2.87	2.95	—	12,629	12,629	0.55	0.59	1.31	12,820
Area	—	1.39	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Energy	0.04	0.02	0.40	0.33	< 0.005	0.03	—	0.03	0.03	—	0.03	—	856	856	0.08	0.01	—	859
Water	—	—	—	—	—	—	—	—	—	—	—	3.42	11.6	15.0	0.35	0.01	—	26.3
Waste	—	—	—	—	—	—	—	—	—	—	—	72.4	0.00	72.4	7.24	0.00	—	253
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.04	0.04
Total	4.70	5.48	6.15	42.6	0.13	0.12	11.3	11.4	0.11	2.87	2.98	75.8	13,496	13,572	8.22	0.61	1.36	13,960
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	3.31	2.88	4.19	31.5	0.09	0.06	7.98	8.04	0.06	2.03	2.09	—	9,116	9,116	0.40	0.43	15.6	9,268
Area	0.33	1.70	0.02	1.83	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	7.54	7.54	< 0.005	< 0.005	—	7.56
Energy	0.04	0.02	0.40	0.33	< 0.005	0.03	—	0.03	0.03	—	0.03	—	856	856	0.08	0.01	—	859
Water	—	—	—	—	—	—	—	—	—	—	—	3.42	11.6	15.0	0.35	0.01	—	26.3
Waste	—	—	—	—	—	—	—	—	—	—	—	72.4	0.00	72.4	7.24	0.00	—	253
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.04	0.04
Total	3.68	4.60	4.60	33.6	0.09	0.10	7.98	8.07	0.09	2.03	2.12	75.8	9,991	10,066	8.06	0.44	15.6	10,415
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.60	0.53	0.76	5.74	0.02	0.01	1.46	1.47	0.01	0.37	0.38	—	1,509	1,509	0.07	0.07	2.58	1,534
Area	0.06	0.31	< 0.005	0.33	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	1.25	1.25	< 0.005	< 0.005	—	1

Energy	0.01	< 0.005	0.07	0.06	< 0.005	0.01	—	0.01	0.01	—	0.01	—	142	142	0.01	< 0.005	—	142
Water	—	—	—	—	—	—	—	—	—	—	—	0.57	1.92	2.49	0.06	< 0.005	—	4.36
Waste	—	—	—	—	—	—	—	—	—	—	—	12.0	0.00	12.0	1.20	0.00	—	41.9
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.01	0.01
Total	0.67	0.84	0.84	6.14	0.02	0.02	1.46	1.47	0.02	0.37	0.39	12.6	1,654	1,667	1.33	0.07	2.59	1,724

4. Operations Emissions Details

4.1. Mobile Emissions by Land Use

4.1.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Elementary School	4.95	4.35	5.34	52.0	0.13	0.09	11.3	11.4	0.08	2.87	2.95	—	13,484	13,484	0.54	0.57	50.6	13,719
Total	4.95	4.35	5.34	52.0	0.13	0.09	11.3	11.4	0.08	2.87	2.95	—	13,484	13,484	0.54	0.57	50.6	13,719
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Elementary School	4.66	4.06	5.75	42.3	0.12	0.09	11.3	11.4	0.08	2.87	2.95	—	12,629	12,629	0.55	0.59	1.31	12,820
Total	4.66	4.06	5.75	42.3	0.12	0.09	11.3	11.4	0.08	2.87	2.95	—	12,629	12,629	0.55	0.59	1.31	12,820
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Elementary School	0.60	0.53	0.76	5.74	0.02	0.01	1.46	1.47	0.01	0.37	0.38	—	1,509	1,509	0.07	0.07	2.58	1,534

Total	0.60	0.53	0.76	5.74	0.02	0.01	1.46	1.47	0.01	0.37	0.38	—	1,509	1,509	0.07	0.07	2.58	1,534

4.2. Energy

4.2.1. Electricity Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Elementary School	—	—	—	—	—	—	—	—	—	—	—	—	381	381	0.04	< 0.005	—	383
Total	—	—	—	—	—	—	—	—	—	—	—	—	381	381	0.04	< 0.005	—	383
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Elementary School	—	—	—	—	—	—	—	—	—	—	—	—	381	381	0.04	< 0.005	—	383
Total	—	—	—	—	—	—	—	—	—	—	—	—	381	381	0.04	< 0.005	—	383
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Elementary School	—	—	—	—	—	—	—	—	—	—	—	—	63.1	63.1	0.01	< 0.005	—	63.5
Total	—	—	—	—	—	—	—	—	—	—	—	—	63.1	63.1	0.01	< 0.005	—	63.5

4.2.3. Natural Gas Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Elementary School	0.04	0.02	0.40	0.33	< 0.005	0.03	—	0.03	0.03	—	0.03	—	475	475	0.04	< 0.005	—	476
Total	0.04	0.02	0.40	0.33	< 0.005	0.03	—	0.03	0.03	—	0.03	—	475	475	0.04	< 0.005	—	476
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Elementary School	0.04	0.02	0.40	0.33	< 0.005	0.03	—	0.03	0.03	—	0.03	—	475	475	0.04	< 0.005	—	476
Total	0.04	0.02	0.40	0.33	< 0.005	0.03	—	0.03	0.03	—	0.03	—	475	475	0.04	< 0.005	—	476
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Elementary School	0.01	< 0.005	0.07	0.06	< 0.005	0.01	—	0.01	0.01	—	0.01	—	78.6	78.6	0.01	< 0.005	—	78.8
Total	0.01	< 0.005	0.07	0.06	< 0.005	0.01	—	0.01	0.01	—	0.01	—	78.6	78.6	0.01	< 0.005	—	78.8

4.3. Area Emissions by Source

4.3.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Source	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	—	1.32	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Architectural Coatings	—	0.08	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	0.48	0.44	0.02	2.68	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	11.0	11.0	< 0.005	< 0.005	—	11.0
Total	0.48	1.83	0.02	2.68	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	11.0	11.0	< 0.005	< 0.005	—	11.0
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	—	1.32	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	—	0.08	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	1.39	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	—	0.24	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	—	0.01	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	0.06	0.05	< 0.005	0.33	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	1.25	1.25	< 0.005	< 0.005	—	1.25
Total	0.06	0.31	< 0.005	0.33	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	1.25	1.25	< 0.005	< 0.005	—	1.25

4.4. Water Emissions by Land Use

4.4.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Elementary School	—	—	—	—	—	—	—	—	—	—	—	3.42	11.6	15.0	0.35	0.01	—	26.3
Total	—	—	—	—	—	—	—	—	—	—	—	3.42	11.6	15.0	0.35	0.01	—	26.3
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Elementary School	—	—	—	—	—	—	—	—	—	—	—	3.42	11.6	15.0	0.35	0.01	—	26.3
Total	—	—	—	—	—	—	—	—	—	—	—	3.42	11.6	15.0	0.35	0.01	—	26.3
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Elementary School	—	—	—	—	—	—	—	—	—	—	—	0.57	1.92	2.49	0.06	< 0.005	—	4.36
Total	—	—	—	—	—	—	—	—	—	—	—	0.57	1.92	2.49	0.06	< 0.005	—	4.36

4.5. Waste Emissions by Land Use

4.5.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Elementary	—	—	—	—	—	—	—	—	—	—	—	72.4	0.00	72.4	7.24	0.00	—	253
Total	—	—	—	—	—	—	—	—	—	—	—	72.4	0.00	72.4	7.24	0.00	—	253
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Elementary School	—	—	—	—	—	—	—	—	—	—	—	72.4	0.00	72.4	7.24	0.00	—	253
Total	—	—	—	—	—	—	—	—	—	—	—	72.4	0.00	72.4	7.24	0.00	—	253
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Elementary School	—	—	—	—	—	—	—	—	—	—	—	12.0	0.00	12.0	1.20	0.00	—	41.9
Total	—	—	—	—	—	—	—	—	—	—	—	12.0	0.00	12.0	1.20	0.00	—	41.9

4.6. Refrigerant Emissions by Land Use

4.6.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Elementary School	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.04	0.04
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.04	0.04
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Elementary	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.04	0.04
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.04	0.04
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Elementary School	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.01	0.01
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.01	0.01

4.7. Offroad Emissions By Equipment Type

4.7.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.8. Stationary Emissions By Equipment Type

4.8.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.9. User Defined Emissions By Equipment Type

4.9.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Vegetation	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.2. Above and Belowground Carbon Accumulation by Land Use Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Species	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Sequest	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

5. Activity Data

5.9. Operational Mobile Sources

5.9.1. Unmitigated

Land Use Type	Trips/Weekday	Trips/Saturday	Trips/Sunday	Trips/Year	VMT/Weekday	VMT/Saturday	VMT/Sunday	VMT/Year
Elementary School	949	0.00	0.00	247,533	15,936	0.00	0.00	4,154,618

5.10. Operational Area Sources

5.10.1. Hearths

5.10.1.1. Unmitigated

5.10.2. Architectural Coatings

Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
0	0.00	92,298	30,766	—

5.10.3. Landscape Equipment

Season	Unit	Value

Snow Days	day/yr	0.00
Summer Days	day/yr	250

5.11. Operational Energy Consumption

5.11.1. Unmitigated

Electricity (kWh/yr) and CO2 and CH4 and N2O and Natural Gas (kBTU/yr)

Land Use	Electricity (kWh/yr)	CO2	CH4	N2O	Natural Gas (kBTU/yr)
Elementary School	399,129	349	0.0330	0.0040	1,481,239

5.12. Operational Water and Wastewater Consumption

5.12.1. Unmitigated

Land Use	Indoor Water (gal/year)	Outdoor Water (gal/year)
Elementary School	1,784,241	0.00

5.13. Operational Waste Generation

5.13.1. Unmitigated

Land Use	Waste (ton/year)	Cogeneration (kWh/year)
Elementary School	134	—

5.14. Operational Refrigeration and Air Conditioning Equipment

5.14.1. Unmitigated

Land Use Type	Equipment Type	Refrigerant	GWP	Quantity (kg)	Operations Leak Rate	Service Leak Rate	Times Serviced

Elementary School	Household refrigerators and/or freezers	User Defined	150	0.02	0.60	0.00	1.00
Elementary School	Other commercial A/C and heat pumps	User Defined	750	< 0.005	4.00	4.00	18.0
Elementary School	Stand-alone retail refrigerators and freezers	User Defined	150	< 0.005	1.00	0.00	1.00
Elementary School	Walk-in refrigerators and freezers	User Defined	150	< 0.005	7.50	7.50	20.0

5.15. Operational Off-Road Equipment

5.15.1. Unmitigated

Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor

5.16. Stationary Sources

5.16.1. Emergency Generators and Fire Pumps

Equipment Type	Fuel Type	Number per Day	Hours per Day	Hours per Year	Horsepower	Load Factor

5.16.2. Process Boilers

Equipment Type	Fuel Type	Number	Boiler Rating (MMBtu/hr)	Daily Heat Input (MMBtu/day)	Annual Heat Input (MMBtu/yr)

5.17. User Defined

Equipment Type	Fuel Type

5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres

5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

Biomass Cover Type	Initial Acres	Final Acres

5.18.2. Sequestration

5.18.2.1. Unmitigated

Tree Type	Number	Electricity Saved (kWh/year)	Natural Gas Saved (btu/year)

6. Climate Risk Detailed Report

6.1. Climate Risk Summary

Cal-Adapt midcentury 2040–2059 average projections for four hazards are reported below for your project location. These are under Representation Concentration Pathway (RCP) 8.5 which assumes GHG emissions will continue to rise strongly through 2050 and then plateau around 2100.

Climate Hazard	Result for Project Location	Unit
Temperature and Extreme Heat	19.8	annual days of extreme heat
Extreme Precipitation	3.10	annual days with precipitation above 20 mm
Sea Level Rise	—	meters of inundation depth
Wildfire	6.78	annual hectares burned

Temperature and Extreme Heat data are for grid cell in which your project are located. The projection is based on the 98th historical percentile of daily maximum/minimum temperatures from observed historical data (32 climate model ensemble from Cal-Adapt, 2040–2059 average under RCP 8.5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

Extreme Precipitation data are for the grid cell in which your project are located. The threshold of 20 mm is equivalent to about ¾ an inch of rain, which would be light to moderate rainfall if received over a full day or heavy rain if received over a period of 2 to 4 hours. Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Sea Level Rise data are for the grid cell in which your project are located. The projections are from Radke et al. (2017), as reported in Cal-Adapt (Radke et al., 2017, CEC-500-2017-008), and consider inundation location and depth for the San Francisco Bay, the Sacramento-San Joaquin River Delta and California coast resulting different increments of sea level rise coupled with extreme storm events. Users may select from four scenarios to view the range in potential inundation depth for the grid cell. The four scenarios are: No rise, 0.5 meter, 1.0 meter, 1.41 meters
Wildfire data are for the grid cell in which your project are located. The projections are from UC Davis, as reported in Cal-Adapt (2040–2059 average under RCP 8.5), and consider historical data of climate, vegetation, population density, and large (> 400 ha) fire history. Users may select from four model simulations to view the range in potential wildfire probabilities for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warmer/drier (HadGEM2-ES), Cooler/wetter (CNRM-CM5), Average conditions (CanESM2), Range of different rainfall and temperature possibilities (MIROC5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

6.2. Initial Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	2	0	0	N/A
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	1	0	0	N/A
Wildfire	1	0	0	N/A
Flooding	N/A	N/A	N/A	N/A
Drought	N/A	N/A	N/A	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	0	0	0	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores do not include implementation of climate risk reduction measures.

6.3. Adjusted Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	2	1	1	3
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	1	1	1	2
Wildfire	1	1	1	2

Flooding	N/A	N/A	N/A	N/A
Drought	N/A	N/A	N/A	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	1	1	1	2

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores include implementation of climate risk reduction measures.

6.4. Climate Risk Reduction Measures

7. Health and Equity Details

7.1. CalEnviroScreen 4.0 Scores

The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Exposure Indicators	—
AQ-Ozone	77.1
AQ-PM	93.4
AQ-DPM	57.1
Drinking Water	100.0
Lead Risk Housing	17.5
Pesticides	84.9
Toxic Releases	67.6
Traffic	18.1
Effect Indicators	—
CleanUp Sites	80.3
Groundwater	98.1

Haz Waste Facilities/Generators	86.6
Impaired Water Bodies	87.0
Solid Waste	98.9
Sensitive Population	—
Asthma	16.5
Cardio-vascular	29.1
Low Birth Weights	49.0
Socioeconomic Factor Indicators	—
Education	52.9
Housing	59.3
Linguistic	68.9
Poverty	35.4
Unemployment	36.4

7.2. Healthy Places Index Scores

The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Economic	—
Above Poverty	73.60451687
Employed	6.274862056
Median HI	76.55588349
Education	—
Bachelor's or higher	64.85307327
High school enrollment	100
Preschool enrollment	66.93186193
Transportation	—
Auto Access	63.41588605

Active commuting	24.5989991
Social	—
2-parent households	66.95752598
Voting	70.69164635
Neighborhood	—
Alcohol availability	97.0101373
Park access	52.77813422
Retail density	10.02181445
Supermarket access	6.557166688
Tree canopy	8.238162453
Housing	—
Homeownership	60.78532016
Housing habitability	61.41408957
Low-inc homeowner severe housing cost burden	71.53856025
Low-inc renter severe housing cost burden	18.38829719
Uncrowded housing	64.30129603
Health Outcomes	—
Insured adults	73.78416528
Arthritis	95.7
Asthma ER Admissions	84.6
High Blood Pressure	97.7
Cancer (excluding skin)	89.7
Asthma	34.7
Coronary Heart Disease	98.7
Chronic Obstructive Pulmonary Disease	94.6
Diagnosed Diabetes	96.0
Life Expectancy at Birth	75.7

1152

Cognitively Disabled	56.3
Physically Disabled	69.8
Heart Attack ER Admissions	68.4
Mental Health Not Good	54.9
Chronic Kidney Disease	97.1
Obesity	68.0
Pedestrian Injuries	19.6
Physical Health Not Good	86.2
Stroke	97.8
Health Risk Behaviors	—
Binge Drinking	28.2
Current Smoker	59.6
No Leisure Time for Physical Activity	76.7
Climate Change Exposures	—
Wildfire Risk	0.0
SLR Inundation Area	0.0
Children	9.0
Elderly	91.7
English Speaking	35.1
Foreign-born	48.1
Outdoor Workers	88.5
Climate Change Adaptive Capacity	—
Impervious Surface Cover	78.1
Traffic Density	21.6
Traffic Access	23.0
Other Indices	—
Hardship	45.2

1153

Other Decision Support	—
2016 Voting	74.7

7.3. Overall Health & Equity Scores

Metric	Result for Project Census Tract
CalEnviroScreen 4.0 Score for Project Location (a)	72.0
Healthy Places Index Score for Project Location (b)	55.0
Project Located in a Designated Disadvantaged Community (Senate Bill 535)	No
Project Located in a Low-Income Community (Assembly Bill 1550)	No
Project Located in a Community Air Protection Program Community (Assembly Bill 617)	No

a: The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.
b: The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

7.4. Health & Equity Measures

No Health & Equity Measures selected.

7.5. Evaluation Scorecard

Health & Equity Evaluation Scorecard not completed.

7.6. Health & Equity Custom Measures

No Health & Equity Custom Measures created.

8. User Changes to Default Data

Screen	Justification
Land Use	Taken from site plan
Operations: Vehicle Data	Trip characteristics based on information provided in the Traffic Analysis
Operations: Architectural Coatings	SCAQMD Rule 1113

Operations: Refrigerants	As of 1 January 2022, new commercial refrigeration equipment may not use refrigerants with a GWP of 150 or greater. Further, R-404A (the CalEEMod default) is unacceptable for new supermarket and cold storage systems as of 1 January 2019 and 2023, respectively. Beginning 1 January 2025, all new air conditioning equipment may not use refrigerants with a GWP of 750 or greater.

CULTURAL RESOURCES STUDY FOR THE EUCALYPTUS AND AMHERST AVENUES PROJECT

CITY OF ONTARIO, SAN BERNARDINO COUNTY, CALIFORNIA

APN 1073-101-05

Lead Agency:

City of Ontario
303 East B Street
Ontario, California 91764

Preparer:

BFSA Environmental Services,
a Perennial Company
14010 Poway Road, Suite A
Poway, California 92064

Project Proponent:

Moser Ventures, Inc.
45478 Blackfoot Way
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April 1, 2025

BFSA Environmental Services
A Perennial Company

Archaeological Database Information

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Client/Project Proponent:	Moser Ventures, Inc. 45478 Blackfoot Way Indian Wells, California 92210
Report Date:	April 1, 2025
Report Title:	Cultural Resources Study for the Eucalyptus and Amherst Avenue Project, City of Ontario, San Bernardino County, California
Type of Study:	Phase I Cultural Resources Survey
USGS Quadrangle:	Section 13, Township 2 South, Range 7 West of the *Corona North* (7.5-minute) USGS Quadrangle
Acreage:	10.02 acres
Key Words:	Survey; no cultural resources identified; *Corona North, California* USGS topographic quadrangle; no further archaeological study recommended.

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MANAGEMENT SUMMARY/ABSTRACT

In response to a request from the project applicant, a cultural resources study was conducted by BFSA Environmental Services, a Perennial Company (BFSA), for the proposed Eucalyptus and Amherst Avenues Project bound by Chatham Street, Clifton Avenue, South Amherst Avenue, and East Eucalyptus Avenue, within the city of Ontario, in San Bernardino County, California. The 10.02-acre property (Assessor's Parcel Number 1073-101-05) is situated within Section 13, Township 2 South, Range 7 West of the San Bernardino Baseline and Meridian on the United States Geological Survey (USGS) (7.5-minute) *Corona North* topographic quadrangle maps. As designed, the applicant proposes to clear the property for the construction of a multi-family residential development with associated landscape, hardscape, and infrastructure.

The purpose of this investigation was to locate and record cultural resources present within the project and subsequently evaluate any resources that will be impacted by the development as part of the City of Ontario's environmental review process conducted in compliance with California Environmental Quality Act (CEQA). The cultural resources investigation included the review of an archaeological records search conducted at the South Central Coastal Information Center (SCCIC) at California State University, Fullerton (CSU Fullerton), in order to assess previous archaeological studies and identify any recorded archaeological sites within the project. The records search identified 11 resources within one mile of the proposed project, none of which are located within the subject property. The records search also identified 38 previous studies conducted within one mile of the project, one of which overlaps the subject property (Dice 2002). A review of historic maps and aerial photographs illustrate that the subject property was utilized for agricultural purposes as early as 1938. Additionally, the property was entirely graded in 2018 resulting in the development of a water catchment basin and a graded pad. A Sacred Lands File (SLF) search was requested from the Native American Heritage Commission (NAHC). The SLF search results were negative for recorded Native American sacred sites or locations of religious or ceremonial importance within the project vicinity.

BFSA archaeologist Parker Sheriff conducted the archaeological survey of the project on February 27, 2025. The cultural resources survey did not identify any cultural resources within the project. Due to the previous ground-disturbing activities and the absence of identified cultural resources within the project boundaries, the potential for any significant resources to be present or impacted by the proposed project is minimal. Given that no archaeological sites, features, or artifacts have been identified within or directly adjacent to the project, no potential impacts to cultural resources associated with the proposed development are anticipated. Based upon the results of this study, no further archaeological study or mitigation measures are recommended.

A copy of this report will be permanently filed with the SCCIC at CSU Fullerton. All notes, photographs, and other materials related to this project will be curated at the BFSA archaeological laboratory in Poway, California.

1.0 INTRODUCTION

1.1 Project Description

The archaeological survey program for the proposed Eucalyptus and Amherst Avenues Project was conducted in order to comply with CEQA regulatory requirements and City of Ontario environmental requirements. The proposed project is bound by Chatham Street, Clifton Avenue, South Amherst Avenue, and East Eucalyptus Avenue, within the city of Ontario, in San Bernardino County, California (Figure 1.1–1). The 10.02-acre property (APN 1073-101-05) is located within Section 13, Township 2 South, Range 7 West as shown on the USGS 1:24,000-scale (7.5-minute) *Corona North* topographic quadrangle maps (Figure 1.1–2). As designed, the applicant proposes to clear the property for the construction of a multi-family residential development with associated landscape, hardscape, and infrastructure (Figures 1.1–3).

The decision to request this investigation was based upon the cultural resource sensitivity of the locality as suggested by known site density and predictive modeling. Sensitivity for prehistoric cultural resources in a given area is usually indicated by known settlement patterns, which, in southwestern San Bernardino County, were focused around freshwater resources and a food supply. Within the city of Ontario, historic resources tend to be associated with the historic agricultural, industrial, or residential development of the region.

1.2 Environmental Setting

The Eucalyptus and Amherst Avenues Project is situated in the Peninsular Ranges Geologic Province of southern California. The Peninsular Ranges are a series of northwest- to southeast-trending mountain ranges separated by similarly trending valleys, which make up the southernmost segment of a chain of North American Mesozoic batholiths that extend from Alaska to the southern tip of Baja California. Geologically, the project is mapped as Holocene and late Pleistocene-aged young eolian deposits (Morton et al. 2002). These surficial sediments are described as "chiefly unconsolidated, moderately well sorted, fine- to medium-grained sand" (Morton et al. 2002). The specific soil types found within the project are mapped as Delhi fine sand (Db) and Hilmar loamy fine sand (NRCS 2023). The average elevation within the project is approximately 700 feet above mean sea level.

The proposed project is situated approximately three miles north of the Santa Ana River. Historically, the property was utilized for agriculture. In 2018, the property was completely graded. The vegetation found within the property consists of non-native weeds and grasses.

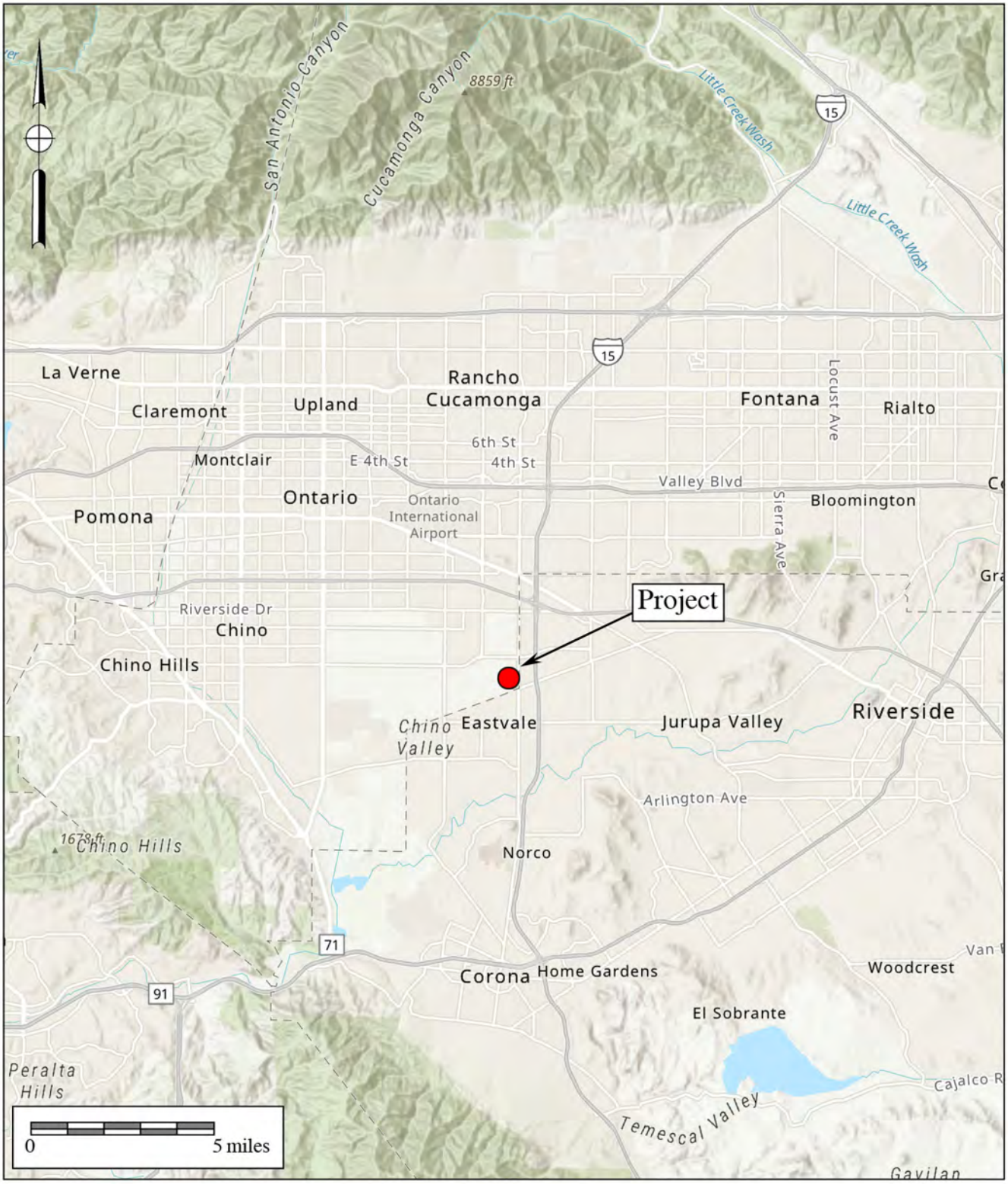

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Figure 1.1–1
General Location Map
The Eucalyptus and Amherst Avenues Project
Esri (1:250,000 series)

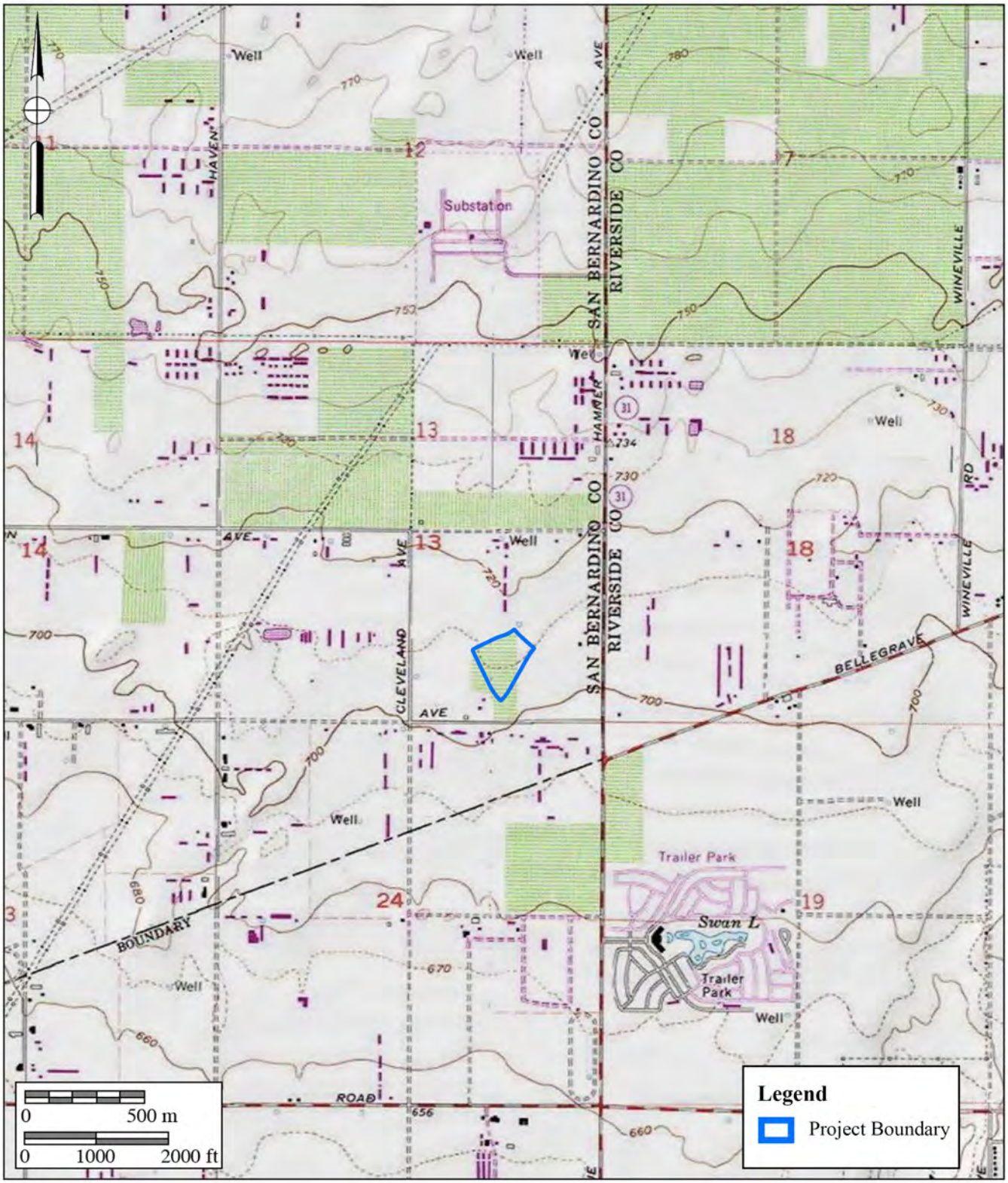

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Figure 1.1–2
Project Location Map
The Eucalyptus and Amhert Avenues Project
USGS *Corona North* Quadrangle (7.5-minute series)

1.0-4

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Figure 3
Project Development Map
The Eucalytpus and Amherst Avenues Project

1.3 Cultural Setting

1.3.1 Prehistoric Period

Paleo Indian, Archaic Period Milling Stone Horizon, and the Late Prehistoric Shoshonean groups are the three general cultural periods represented in San Bernardino County. The following discussion of the cultural history of San Bernardino County references the San Dieguito Complex, the Encinitas Tradition, the Milling Stone Horizon, the La Jolla Complex, the Pauma Complex, and the San Luis Rey Complex, since these culture sequences have been used to describe archaeological manifestations in the region. The Late Prehistoric component in the southwestern area of San Bernardino County was represented by the Gabrielino and Serrano Indians. According to Kroeber (1976), the Serrano probably owned a stretch of the Sierra Madre from Cucamonga east to above Mentone and halfway up to San Timoteo Canyon, including the San Bernardino Valley and just missing Riverside County. However, Kroeber (1976) also states that this area has been assigned to the Gabrielino, "which would be a more natural division of topography, since it would leave the Serrano pure mountaineers."

Absolute chronological information, where possible, will be incorporated into this discussion to examine the effectiveness of continuing to use these terms interchangeably. Reference will be made to the geologic framework that divides the culture chronology of the area into four segments: late Pleistocene (20,000 to 10,000 years before the present [YBP]), early Holocene (10,000 to 6,650 YBP), middle Holocene (6,650 to 3,350 YBP), and late Holocene (3,350 to 200 YBP).

Paleo Indian Period (Late Pleistocene: 11,500 to circa 9,000 YBP)

The Paleo Indian Period is associated with the terminus of the late Pleistocene (12,000 to 10,000 YBP). The environment during the late Pleistocene was cool and moist, which allowed for glaciation in the mountains and the formation of deep, pluvial lakes in the deserts and basin lands (Moratto 1984). However, by the terminus of the late Pleistocene, the climate became warmer, which caused glaciers to melt, sea levels to rise, greater coastal erosion, large lakes to recede and evaporate, extinction of Pleistocene megafauna, and major vegetation changes (Moratto 1984; Martin 1967, 1973; Fagan 1991). The coastal shoreline at 10,000 YBP, depending upon the particular area of the coast, was near the 30-meter isobath, or two to six kilometers further west than its present location (Masters 1983).

Paleo Indians were likely attracted to multiple habitat types, including mountains, marshlands, estuaries, and lakeshores. These people likely subsisted using a more generalized hunting, gathering, and collecting adaptation, utilizing a variety of resources including birds, mollusks, and both large and small mammals (Erlandson and Colten 1991; Moratto 1984; Moss and Erlandson 1995).

Archaic Period (Early and Middle Holocene: circa 9000 to 1300 YBP)

The Archaic Period of prehistory began with the onset of the Holocene around 9,000 YBP. The transition from the Pleistocene to the Holocene was a period of major environmental change

throughout North America (Antevs 1953; Van Devender and Spaulding 1979). The general warming trend caused sea levels to rise, lakes to evaporate, and drainage patterns to change. In southern California, the general climate at the beginning of the early Holocene was marked by cool/moist periods and an increase in warm/dry periods and sea levels. The coastal shoreline at 8,000 YBP, depending upon the particular area of the coast, was near the 20-meter isobath, or one to four kilometers further west than its present location (Masters 1983).

The rising sea level during the early Holocene created rocky shorelines and bays along the coast by flooding valley floors and eroding the coastline (Curray 1965; Inman 1983). Shorelines were primarily rocky with small littoral cells, as sediments were deposited at bay edges but rarely discharged into the ocean (Reddy 2000). These bays eventually evolved into lagoons and estuaries, which provided a rich habitat for mollusks and fish. The warming trend and rising sea levels generally continued until the late Holocene (4,000 to 3,500 YBP).

At the beginning of the late Holocene, sea levels stabilized, rocky shores declined, lagoons filled with sediment, and sandy beaches became established (Gallegos 1985; Inman 1983; Masters 1994; Miller 1966; Warren and Pavesic 1963). Many former lagoons became saltwater marshes surrounded by coastal sage scrub by the late Holocene (Gallegos 2002). The sedimentation of the lagoons was significant in that it had profound effects upon the types of resources available to prehistoric peoples. Habitat was lost for certain large mollusks, namely *Chione* and *Argopecten,* but habitat was gained for other small mollusks, particularly *Donax* (Gallegos 1985; Reddy 2000). The changing lagoon habitats resulted in the decline of larger shellfish, the loss of drinking water, and the loss of Torrey Pine nuts, causing a major depopulation of the coast as people shifted inland to reliable freshwater sources and intensified their exploitation of terrestrial small game and plants, including acorns (originally proposed by Rogers 1929; Gallegos 2002).

The Archaic Period in southern California is associated with a number of different cultures, complexes, traditions, and horizons, including San Dieguito, La Jolla, Encinitas, Milling Stone, and Pauma, as well as the Intermediate Period.

Late Prehistoric Period (Late Holocene: 1,300 YBP to 1790)

Approximately 1,350 YBP, a Shoshonean-speaking group from the Great Basin region moved into San Bernardino County, marking the transition to the Late Prehistoric Period. This period has been characterized by higher population densities and elaborations in social, political, and technological systems. Economic systems diversified and intensified during this period, with the continued elaboration of trade networks, the use of shell-bead currency, and the appearance of more labor-intensive, yet effective, technological innovations. Technological developments during this period included the introduction of the bow and arrow between A.D. 400 and 600 and the introduction of ceramics. Atlatl darts were replaced by smaller arrow darts, including the Cottonwood series points. Other hallmarks of the Late Prehistoric Period include extensive trade networks as far reaching as the Colorado River Basin and cremation of the dead.

Protohistoric Period (Late Holocene: 1790 to Present)

Gabrielino

At the time of Spanish contact, the territory of the Gabrielino, also known ethnographically as the Tongva, covered much of present-day Los Angeles and Orange counties. The southern extent of this culture area is bounded by Aliso Creek, the eastern extent is located east of present-day San Bernardino along the Santa Ana River, the northern extent includes the San Fernando Valley, and the western extent includes portions of the Santa Monica Mountains. The Gabrielino also occupied several Channel Islands including Santa Barbara Island, Santa Catalina Island, San Nicholas Island, and San Clemente Island. Because of their access to certain resources, including a steatite source from Santa Catalina Island, this group was among the wealthiest and most populous aboriginal groups in all of southern California. Trade of materials and resources controlled by the Gabrielino extended as far north as the San Joaquin Valley, as far east as the Colorado River, and as far south as Baja California (Bean and Smith 1978a; Kroeber 1976).

The Gabrielino lived in permanent villages and smaller resource gathering camps occupied at various times of the year depending upon the seasonality of the resource. Larger villages were comprised of several families or clans, while smaller, seasonal camps typically housed smaller family units. The coastal area between San Pedro and Topanga Canyon was the location of primary subsistence villages, while secondary sites were located near inland sage stands, oak groves, and pine forests. Permanent villages were located along rivers and streams, as well as in sheltered areas along the coast. As previously mentioned, the Channel Islands were also the locations of relatively large settlements (Bean and Smith 1978a; Kroeber 1976).

Resources procured along the coast and on the islands were primarily marine in nature and included tuna, swordfish, ray, shark, California sea lion, Stellar sea lion, harbor seal, northern elephant seal, sea otter, dolphin, porpoise, various waterfowl species, numerous fish species, purple sea urchin, and mollusks such as rock scallop, California mussel, and limpet. Inland resources included oak acorn, pine nut, Mohave yucca, cacti, sage, grass nut, deer, rabbit, hare, rodent, quail, duck, and a variety of reptiles such as western pond turtle and several different species of snakes (Bean and Smith 1978a; Kroeber 1976).

Little is known about the social structure of the Gabrielino; however, there appears to have been at least three social classes: 1) the elite, which included the rich, chiefs, and their immediate family; 2) a middle class, which included people of relatively high economic status or long-established lineages; and 3) a class of people that included most other individuals in the society. Villages were politically autonomous units comprised of several lineages. During times of the year when certain seasonal resources were available, the village would divide into lineage groups and move out to exploit them, returning to the village between forays (Bean and Smith 1978a; Kroeber 1976).

Each lineage had its own leader, with the village chief coming from the dominant lineage. Several villages might be allied under a paramount chief. Chiefly positions were of an ascribed status, most often passed to the eldest son. Chiefly duties included providing village cohesion, leading warfare and peace negotiations with other groups, collecting village tributes, and arbitrating disputes within the village(s). The status of the chief was legitimized by safekeeping of the sacred bundle, a representation of the link between the material and spiritual realms and the embodiment of power (Bean and Smith 1978a; Kroeber 1976).

Shamans were leaders in the spirit realm. The duties of the shaman included conducting healing and curing ceremonies, guarding the sacred bundle, locating lost items, identifying and collecting poisons for arrows, and making rain (Bean and Smith 1978a; Kroeber 1976).

Marriages were made between individuals of equal social status and, in the case of powerful lineages, marriages were arranged to establish political ties between the lineages (Bean and Smith 1978a; Kroeber 1976).

Men conducted the majority of the heavy labor, hunting, fishing, and trading with other groups. Women's duties included gathering and preparing plant and animal resources, and making baskets, pots, and clothing (Bean and Smith 1978a; Kroeber 1976).

Gabrielino houses were domed, circular structures made of thatched vegetation. Houses varied in size and could house from one to several families. Sweathouses (semicircular, earth-covered buildings) were public structures used in male social ceremonies. Other structures included menstrual huts and a yuvar, an open-air, ceremonial structure built near the chief's house (Bean and Smith 1978a; Kroeber 1976).

Clothing was minimal; men and children most often went naked, while women wore deerskin or bark aprons. In cold weather, deerskin, rabbit fur, or bird skin (with feathers intact) cloaks were worn. Island and coastal groups used sea otter fur for cloaks. In areas of rough terrain, yucca fiber sandals were worn. Women often used red ochre on their faces and skin for adornment or protection from the sun. Adornment items included feathers, fur, shells, and beads (Bean and Smith 1978a; Kroeber 1976).

Hunting implements included wood clubs, sinew-backed bows, slings, and throwing clubs. Maritime implements included rafts, harpoons, spears, hooks and lines, and nets. A variety of other tools included deer scapulae saws, bone and shell needles, bone awls, scrapers, bone or shell flakers, wedges, stone knives and drills, metates, mullers, manos, shell spoons, bark platters, and wooden paddles and bowls. Baskets were made from rush, deer grass, and skunkbush. Baskets were fashioned for hoppers, plates, trays, and winnowers for leaching, straining, and gathering. Baskets were also used for storing, preparing, and serving food, and for keeping personal and ceremonial items (Bean and Smith 1978a; Kroeber 1976).

The Gabrielino had exclusive access to soapstone, or steatite, procured from Santa Catalina Island quarries. This highly prized material was used for making pipes, animal carvings, ritual objects, ornaments, and cooking utensils. The Gabrielino profited well from trading steatite since it was valued so much by groups throughout southern California (Bean and Smith 1978a; Kroeber 1976).

Serrano

Aboriginally, the Serrano occupied an area east of present-day Los Angeles. According to Bean and Smith (1978b), definitive boundaries are difficult to place for the Serrano due to their sociopolitical organization and a lack of reliable data:

> The Serrano were organized into autonomous localized lineages occupying definite, favored territories, but rarely claiming any territory far removed from the lineage's home base. Since the entire dialectical group was neither politically united nor amalgamated into supralineage groups, as many of their neighbors were, one must speak in terms of generalized areas of usage rather than pan-tribal holdings. (Strong [1971] in Bean and Smith 1978b)

However, researchers place the Serrano in the San Bernardino Mountains east of Cajon Pass and at the base of and north of the mountains near Victorville, east to Twentynine Palms, and south to the Yucaipa Valley (Bean and Smith 1978b). Serrano has been used broadly for languages in the Takic family including Serrano, Kitanemuk, Vanyume, and Tataviam.

The Serrano were part of "exogamous clans, which in turn were affiliated with one of two exogamous moieties, *tuk^{w}utam* (Wildcat) and *wahiʔiam* (Coyote)" (Bean and Smith 1978b). According to Strong (1971), details such as number, structure, and function of the clans are unknown. Instead, he states that clans were not political, but were rather structured based upon "economic, marital, or ceremonial reciprocity, a pattern common throughout Southern California" (Bean and Smith 1978b). The Serrano formed alliances amongst their own clans and with Cahuilla, Chemehuevi, Gabrielino, and Cupeño clans (Bean and Smith 1978b). Clans were large, autonomous political and landholding units formed patrilineally, with all males descending from a common male ancestor, including all wives and descendants of the males. However, even after marriage, women would still keep their original lineage and would still participate in those ceremonies (Bean and Smith 1978b).

According to Bean and Smith (1978b), the cosmogony and cosmography of the Serrano are very similar to those of the Cahuilla:

> There are twin creator gods, a creation myth told in "epic poem" style, each local group having its own origin story, water babies whose crying foretells death, supernatural beings of various kinds and on various hierarchically arranged power-access levels, an Orpheus-like myth, mythical deer that no one can kill, and tales relating the adventures (and misadventures) of Coyote, a tragicomic trickster-transformer culture hero. (Bean [1962-1972] and Benedict [1924] in Bean and Smith 1978b)

The Serrano had a shaman who acquired powers through dreams, which were induced through ingestion of the hallucinogen datura. The shaman was mostly a curer/healer, using herbal remedies and "sucking out the disease-causing agents" (Bean and Smith 1978b).

Serrano village locations were typically located near water sources. Individual family dwellings were likely circular, domed structures. Daily household activities would either take place outside of the house out in the open, or under a ramada constructed of a thatched willow pole roof held up by four or more poles inserted into the ground. Families could consist of a husband, wife/wives, unmarried female children, married male children, the husband's parents, and/or widowed aunts and uncles. Rarely, an individual would occupy his own house, typically in the mountains. Serrano villages also included a large ceremonial house where the lineage leader would live, which served as the religious center for lineages or lineage-sets, granaries, and sweathouses (Bean and Smith 1978b).

The Serrano were primarily hunter/gatherers. Vegetal staples varied with locality. Acorns and piñon nuts were found in the foothills, and mesquite, yucca roots, cacti fruits, and piñon nuts were found in or near the desert regions. Diets were supplemented with other roots, bulbs, shoots, and seeds (Heizer 1978). Deer, mountain sheep, antelopes, rabbits, and other small rodents were among the principal food packages. Various game birds, especially quail, were also hunted. The bow and arrow was used for large game, while smaller game and birds were killed with curved throwing sticks, traps, and snares. Occasionally, game was hunted communally, often during mourning ceremonies (Benedict 1924; Drucker 1937; Heizer 1978). Earth ovens were used to cook meat, bones were boiled to extract marrow, and blood was either drunk cold or cooked to a thicker consistency and then eaten. Some meat and vegetables were sun-dried and stored. Food acquisition and processing required the manufacture of additional items such as knives, stone or bone scrapers, pottery trays and bowls, bone or horn spoons, and stirrers. Mortars, made of either stone or wood, and metates were also manufactured (Strong 1971; Drucker 1937; Benedict 1924).

The Serrano were very similar technologically to the Cahuilla. In general, manufactured goods included baskets, some pottery, rabbit-skin blankets, awls, arrow straighteners, sinew-backed bows, arrows, fire drills, stone pipes, musical instruments (rattles, rasps, whistles, bull-roarers, and flutes), feathered costumes, mats for floor and wall coverings, bags, storage pouches, cordage (usually comprised of yucca fiber), and nets (Heizer 1978).

1.3.2 Historic Period

Traditionally, the history of the state of California has been divided into three general periods: the Spanish Period (1769 to 1821), the Mexican Period (1822 to 1846), and the American Period (1848 to present) (Caughey 1970). The American Period is often further subdivided into additional phases: the nineteenth century (1848 to 1900), the early twentieth century (1900 to 1950), and the Modern Period (1950 to present). From an archaeological standpoint, all of these phases can be referred to together as the Ethnohistoric Period. This provides a valuable tool for archaeologists, as ethnohistory is directly concerned with the study of indigenous or non-Western peoples from a combined historical/anthropological viewpoint, which employs written documents,

oral narrative, material culture, and ethnographic data for analysis.

European exploration along the California coast began in 1542 with the landing of Juan Rodríguez Cabrillo and his men at San Diego Bay. Sixty years after the Cabrillo expeditions, an expedition under Sebastián Vizcaíno made an extensive and thorough exploration of the Pacific coast. Although the voyage did not extend beyond the northern limits of the Cabrillo track, Vizcaíno had the most lasting effect upon the nomenclature of the coast. Many of his place names have survived, whereas practically every one of the names created by Cabrillo have faded from use. For instance, Cabrillo named the first (now) United States port he stopped at "San Miguel"; 60 years later, Vizcaíno changed it to "San Diego" (Rolle 1969). The early European voyages observed Native Americans living in villages along the coast but did not make any substantial, long-lasting impact. At the time of contact, the Luiseño population was estimated to have ranged from 4,000 to as many as 10,000 individuals (Bean and Shipek 1978; Kroeber 1976).

The historic background of the project area began with the Spanish colonization of Alta California. The first Spanish colonizing expedition reached southern California in 1769 with the intention of converting and civilizing the indigenous populations, as well as expanding the knowledge of and access to new resources in the region (Brigandi 1998). As a result, by the late eighteenth century, a large portion of southern California was overseen by Mission San Luis Rey (San Diego County), Mission San Juan Capistrano (Orange County), and Mission San Gabriel (Los Angeles County), who began colonizing the region and surrounding areas (Chapman 1921).

Native Californians may have first coalesced with Europeans around 1769 when the first Spanish mission was established in San Diego. In 1771, Father Francisco Garcés first searched the Californian desert for potential mission sites. Interactions between local tribes and Franciscan priests occurred by 1774 when Juan Bautista de Anza made an exploration of Alta California.

Serrano contact with the Europeans may have occurred as early as 1771 or 1772, but it was not until approximately 1819 that the Spanish directly influenced the culture. The Spanish established asistencias in San Bernardino, Pala, and Santa Ysabel. Between the founding of the asistencia and secularization in 1834, most of the Serranos in the San Bernardino Mountains were moved to the nearby missions (Beattie and Beattie 1939:366) while the Cahuilla maintained a high level of autonomy from Spain (Bean 1978).

Each mission gained power through the support of a large, subjugated Native American workforce. As the missions grew, livestock holdings increased and became increasingly vulnerable to theft. In order to protect their interests, the southern California missions began to expand inland to try and provide additional security (Beattie and Beattie 1939; Caughey 1970). In order to meet their needs, the Spaniards embarked upon a formal expedition in 1806 to find potential locations within what is now the San Bernardino Valley. As a result, by 1810, Father Francisco Dumetz of Mission San Gabriel had succeeded in establishing a religious site, or capilla, at a Cahuilla rancheria called Guachama (Beattie and Beattie 1939). San Bernardino Valley received its name from this site, which was dedicated to San Bernardino de Siena by Father Dumetz. The Guachama rancheria was located in present-day Bryn Mawr in San Bernardino County.

These early colonization efforts were followed by the establishment of estancias at Puente (circa 1816) and San Bernardino (circa 1819) near Guachama (Beattie and Beattie 1939). These efforts were soon mirrored by the Spaniards from Mission San Luis Rey, who in turn established a presence in what is now Lake Elsinore, Temecula, and Murrieta (Chapman 1921). The indigenous groups who occupied these lands were recruited by missionaries, converted, and put to work in the missions (Pourade 1961). Throughout this period, the Native American populations were decimated by introduced diseases, a drastic shift in diet resulting in poor nutrition, and social conflicts due to the introduction of an entirely new social order (Cook 1976).

Mexico achieved independence from Spain in 1822 and became a federal republic in 1824. As a result, both Baja and Alta California became classified as territories (Rolle 1969). Shortly thereafter, the Mexican Republic sought to grant large tracts of private land to its citizens to begin to encourage immigration to California and to establish its presence in the region. Part of the establishment of power and control included the desecularization of the missions circa 1832. These same missions were also located on some of the most fertile land in California and, as a result, were considered highly valuable. The resulting land grants, known as "ranchos," covered expansive portions of California and, by 1846, more than 600 land grants had been issued by the Mexican government. Rancho Jurupa was the first rancho to be established and was issued to Juan Bandini in 1838. Although Bandini primarily resided in San Diego, Rancho Jurupa was located in what is now Riverside County (Pourade 1963). A review of Riverside County place names quickly illustrates that many of the ranchos in Riverside County lent their names to present-day locations, including Jurupa, El Rincon, La Sierra, El Sobrante de San Jacinto, La Laguna (Lake Elsinore), Santa Rosa, Temecula, Pauba, San Jacinto Nuevo y Potrero, and San Jacinto Viejo (Gunther 1984). As was typical of many ranchos, these were all located in the valley environments within western Riverside County.

The treatment of Native Americans grew worse during the Rancho Period. Most of the Native Americans were forced off of their land or put to work on the now privately-owned ranchos, most often as slave labor. In light of the brutal ranchos, the degree to which Native Americans had become dependent upon the mission system is evident when, in 1838, a group of Native Americans from Mission San Luis Rey petitioned government officials in San Diego to relieve suffering at the hands of the rancheros:

> We have suffered incalculable losses, for some of which we are in part to be blamed for because many of us have abandoned the Mission … We plead and beseech you … to grant us a Rev. Father for this place. We have been accustomed to the Rev. Fathers and to their manner of managing the duties. We labored under their intelligent directions, and we were obedient to the Fathers according to the regulations, because we considered it as good for us. (Brigandi 1998:21)

Native American culture had been disrupted to the point where they could no longer rely upon prehistoric subsistence and social patterns. Not only does this illustrate how dependent the Native Americans had become upon the missionaries, but it also indicates a marked contrast in the way the Spanish treated the Native Americans as compared to the Mexican and United States ranchers. Spanish colonialism (missions) is based upon utilizing human resources while integrating them into their society. The ranchers, both Mexican and American, did not accept Native Americans into their social order and used them specifically for the extraction of labor, resources, and profit. Rather than being incorporated, they were either subjugated or exterminated (Cook 1976).

By 1846, tensions between the United States and Mexico had escalated to the point of war (Rolle 1969). In order to reach a peaceful agreement, the Treaty of Guadalupe Hidalgo was put into effect in 1848, which resulted in the annexation of California to the United States. Once California opened to the United States, waves of settlers moved in searching for gold mines, business opportunities, political opportunities, religious freedom, and adventure (Rolle 1969; Caughey 1970). By 1850, California had become a state and was eventually divided into 27 separate counties. While a much larger population was now settling in California, this was primarily in the central valley, San Francisco, and the Gold Rush region of the Sierra Nevada mountain range (Rolle 1969; Caughey 1970). During this time, southern California grew at a much slower pace than northern California and was still dominated by the cattle industry that was established during the earlier rancho period.

Although the first orange trees were planted in Riverside County circa 1871, it was not until a few years later when a small number of Brazilian navel orange trees were established that the citrus industry truly began in the region (Patterson 1971). The Brazilian navel orange was well suited to the climate of Riverside County and thrived with assistance from several extensive irrigation projects. At the close of 1882, an estimated half a million citrus trees were present in California, nearly half of which were estimated to be in Riverside County. Population growth and 1880s tax revenue from the booming citrus industry prompted the official formation of Riverside County in 1893 out of portions of what was once San Bernardino County (Patterson 1971).

General History of the City of Ontario

In late 1881, Canadian brothers George and William Chaffey (Plates 1.3–1 and 1.3–2) purchased 6,218 acres of land in the Cucamonga Desert known as the "San Antonio lands." The Chaffey brothers soon expanded to the Southern Pacific Railroad tracks on the south and into the San Antonio Canyon to the north (City of Ontario n.d.). The Chaffey brothers intended to establish a "model colony" for migrants coming to the region and named the area "Ontario" after their hometown. Before the land could be used, however, water had to be found and brought into the town. Because of this, George laid miles of cement pipe leading from San Antonio Canyon, which was later tapped into by the San Antonio Water Company. The need for electric power to lift the water from the deep wells in San Antonio Canyon led to the establishment of the first commercially successful hydroelectric plant in the country, the Ontario Power Company (City of Ontario n.d.).

During the late nineteenth century, anyone purchasing land within the Ontario Colony automatically received shares in the water company, which ensured that water would be pumped to their property. This development aided in establishing agricultural properties, primarily citrus groves, within Ontario (Plate 1.3–3). The Ontario Colony was officially incorporated as a city in 1891 and continued to grow throughout the twentieth century (City of Ontario n.d.). The city became known for air flight after Judge Archie Mitchell, Waldo Waterman, and other airplane enthusiasts established Latimer Field in 1923. Urban growth pushed the airfield further and further east until it reached its present location, which currently functions as the Ontario International Airport. During World War II, the airport served as a busy training center for fighter jet pilots (City of Ontario n.d.).

Plate 1.3–1: George Chaffey. ***(Photograph courtesy of Ontario City Library, Robert E. Ellingwood Model Colony History Room n.d.)***

Agriculture played a vital role in the development of the region. The area surrounding the subject property was historically tied to wine production. The most notable wine producer in the area was Secundo Guasti, an Italian immigrant who planted vineyards in the area in 1902. Guasti purchased a town site called Zucker in 1900, which had begun to grow around the 1875 Southern Pacific Railroad's South Cucamonga Station. Guasti established the Italian Vineyard Company and "His innovations in dry cultivation and processing techniques made the winemaking very productive" (Thirtieth Street Architects, Inc. 2011). Guasti organized the emigration of "experienced workers, coopers and craftsmen" and their families from Italy to work and live at his winery; by 1910, the Guasti vineyards consisted of 5,000 acres, which extended from the foothills of the San Gabriel Mountains to the valley floor, and Zucker was renamed Guasti (Thirtieth Street Architects, Inc. 2011). The vineyard cultivated a large variety of grapes specifically suited for wine, particularly for sherry and port varietals and "In spite of Prohibition and two World Wars, Guasti Winery remained in production until about 1962 when wine-making operations were relocated" (Thirtieth Street Architects, Inc. 2011). In 1975, the Guasti Winery was designated a California Point of Historical Interest (Meighan 1975).

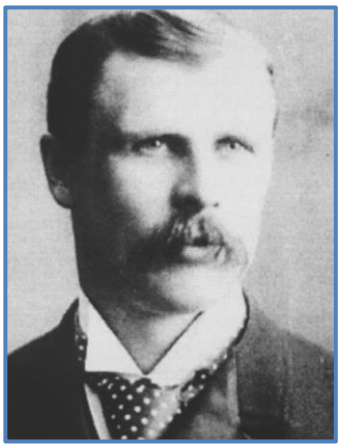

Plate 1.3–2: William Chaffey. ***(Photograph courtesy of the City of Ontario 2013)***

Between the 1950s and 1980s, the dairy industry flourished in other agricultural areas surrounding Ontario. Concerned with what many viewed as a decline in suitable agricultural land, the San Bernardino County Board of Supervisors designated 14,000 acres of agricultural land south and west of the city of Ontario as an "agricultural preserve" (City of Ontario 2006). With the dairy-friendly zoning in the southwest corner of San Bernardino County, many Dutch, Basque,

and Portuguese families relocated to the region and became the cornerstone of the dairy industry. By the 1980s, the area was recognized as having more cows per acre and higher milk yields than anywhere else in the world (City of Ontario 2006). Starting in the late twentieth century, much of the preserve began to be annexed by neighboring cities due to a housing boom and increased operating costs for dairies. In 1999, 8,200 acres were annexed by the City of Ontario with the remaining land annexed by either the City of Chino or Chino Hills. The portion annexed by the City of Ontario was labeled the "New Model Colony," creating a connection with the Chaffey brothers' original "Model Colony of Ontario" (Galvin and Associates 2004; City of Ontario 2006).

Plate 1.3–3: 1887 view of the town of Ontario drawn by H.S. Crocker Co.
(Illustration courtesy of Vintage City Maps 1887)

1.4 Results of the Archaeological Records Search

An archaeological records search was conducted by BFSA at the SCCIC (Appendix B). The records search identified 11 resources within one mile of the project, none of which are located within the subject property (Table 1.4–1). All of the recorded resources are historic and are primarily associated with the historic occupation and agricultural use of the project vicinity. These resources include four farm and single-family properties, two farms, one single-family property, one trash scatter, two transmission lines, and one site containing a trash scatter, water conveyance system, utility pole stumps, a cistern, and a possible well.

Table 1.4–1
Cultural Resources Located Within One Mile of the Project

Site Number(s)/Name	Resource Type
RIV-1848	Historic trash scatter
P-33-023815 and P-36-023626	Historic farm
RIV-12,624	Historic trash scatter, water conveyance system, utility pole stumps, cistern, and possible well
P-36-012622, P-36-012623, P-36-023625, and P-36-023627	Historic farm and single-family property
P-36-025440 and P-36-026051	Historic transmission line
11111 Edison Avenue	Historic single-family property

The records search also identified 38 previous studies which have been conducted within one mile of the proposed project, one of which overlaps the subject property (Dice 2002). The Dice (2002) study conducted an archaeological survey and records search that covered the western half of the subject property and did not identify any cultural resources within the subject property.

The following historic sources were also reviewed by BFSA:

- Historic USGS topographic maps (1942 to 1975)
- Historic aerial photographs (1938 to2025)
- The NRHP Index
- The Office of Historic Preservation (OHP), Archaeological Determinations of Eligibility (ADOE)
- The OHP, Built Environment Resources Directory (BERD)

Additionally, a review of historic maps and aerial photographs for the project illustrates that the subject property was developed for agricultural uses as early as 1938. Between 1938 and 2014, the subject property primarily consisted of cultivated fields. By 2018, the entire subject

property was graded during the development of the surrounding area which resulted in the creation of a water catchment basin in the northwest portion of the project. Subsequent aerial photographs demonstrate that as the surrounding neighborhood transitioned to residential development, the subject property remained vacant but at times was cleared of vegetation.

BFSA also requested a SLF search from the NAHC. This request is not part of any Assembly Bill 52 Native American consultation. The SLF search results were negative for recorded Native American sacred sites or locations of religious or ceremonial importance within the project vicinity. All correspondence with the NAHC is provided in Appendix C.

1.5 Applicable Regulations

Resource importance is assigned to districts, sites, buildings, structures, and objects that possess exceptional value or quality illustrating or interpreting the heritage of San Bernardino County in history, architecture, archaeology, engineering, and culture. A number of criteria are used in demonstrating resource importance. Specifically, the criteria outlined in CEQA provide the guidance for making such a determination. The following sections detail the criteria that a resource must meet in order to be determined important.

1.5.1 California Environmental Quality Act

According to CEQA (§ 15064.5a), the term "historical resource" includes the following:

1) A resource listed in or determined to be eligible by the State Historical Resources Commission for listing in the CRHR (Public Resources Code SS5024.1, Title 14 CCR [California Code of Regulations]. Section 4850 et seq.).
2) A resource included in a local register of historical resources, as defined in Section 5020.1(k) of the Public Resources Code, or identified as significant in a historical resource survey meeting the requirements of Section 5024.1(g) of the Public Resources Code, shall be presumed to be historically or culturally significant. Public agencies must treat any such resource as significant unless the preponderance of evidence demonstrates that it is not historically or culturally significant.
3) Any object, building, structure, site, area, place, record, or manuscript, which a lead agency determines to be historically significant or significant in the architectural, engineering, scientific, economic, agricultural, educational, social, political, military, or cultural annals of California may be considered a historical resource, provided the lead agency's determination is supported by substantial evidence in light of the whole record. Generally, a resource shall be considered by the lead agency to be "historically significant" if the resource meets the criteria for listing on the CRHR (Public Resources Code SS5024.1, Title 14, Section 4852) including the following:

    a) Is associated with events that have made a significant contribution to the broad patterns of California's history and cultural heritage;

b) Is associated with the lives of persons important in our past;
c) Embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of an important creative individual, or possesses high artistic values; or
d) Has yielded, or may be likely to yield, information important in prehistory or history.

4) The fact that a resource is not listed in, or determined eligible for listing in the CRHR, not included in a local register of historical resources (pursuant to Section 5020.1[k] of the Public Resources Code), or identified in a historical resources survey (meeting the criteria in Section 5024.1(g) of the Public Resources Code) does not preclude a lead agency from determining that the resource may be a historical resource as defined in Public Resources Code Section 5020.1(j) or 5024.1.

According to CEQA (§ 15064.5b), a project with an effect that may cause a substantial adverse change in the significance of a historical resource is a project that may have a significant effect on the environment. CEQA defines a substantial adverse change as:

1) Substantial adverse change in the significance of a historical resource means physical demolition, destruction, relocation, or alteration of the resource or its immediate surroundings such that the significance of a historical resource would be materially impaired.
2) The significance of a historical resource is materially impaired when a project:

a) Demolishes or materially alters in an adverse manner those physical characteristics of a historical resource that convey its historical significance and that justify its inclusion in, or eligibility for inclusion in the CRHR; or
b) Demolishes or materially alters in an adverse manner those physical characteristics that account for its inclusion in a local register of historical resources pursuant to Section 5020.1(k) of the Public Resources Code or its identification in a historical resources survey meeting the requirements of Section 5024.1(g) of the Public Resources Code, unless the public agency reviewing the effects of the project establishes by a preponderance of evidence that the resource is not historically or culturally significant; or,
c) Demolishes or materially alters in an adverse manner those physical characteristics of a historical resource that convey its historical significance and that justify its eligibility for inclusion in the CRHR as determined by a lead agency for purposes of CEQA.

Section 15064.5(c) of CEQA applies to effects on archaeological sites and contains the following additional provisions regarding archaeological sites:

1) When a project will impact an archaeological site, a lead agency shall first determine whether the site is a historical resource, as defined in subsection (a).
2) If a lead agency determines that the archaeological site is a historical resource, it shall refer to the provisions of Section 21084.1 of the Public Resources Code, Section 15126.4 of the guidelines, and the limits contained in Section 21083.2 of the Public Resources Code do not apply.
3) If an archaeological site does not meet the criteria defined in subsection (a) but does meet the definition of a unique archaeological resource in Section 21083.2 of the Public Resources Code, the site shall be treated in accordance with the provisions of Section 21083.2. The time and cost limitations described in Public Resources Code Section 21083.2(c-f) do not apply to surveys and site evaluation activities intended to determine whether the project location contains unique archaeological resources.
4) If an archaeological resource is neither a unique archaeological nor historical resource, the effects of the project on those resources shall not be considered a significant effect on the environment. It shall be sufficient that both the resource and the effect on it are noted in the Initial Study or Environmental Impact Report, if one is prepared to address impacts on other resources, but they need not be considered further in the CEQA process.

Section 15064.5(d) and 15064.5(e) contain additional provisions regarding human remains. Regarding Native American human remains, paragraph (d) states:

(d) When an Initial Study identifies the existence of, or the probable likelihood of, Native American human remains within the project, a lead agency shall work with the appropriate Native Americans as identified by the NAHC as provided in Public Resources Code SS5097.98. The applicant may develop an agreement for treating or disposing of, with appropriate dignity, the human remains and any items associated with Native American burials with the appropriate Native Americans as identified by the NAHC. Action implementing such an agreement is exempt from:

    1) The general prohibition on disinterring, disturbing, or removing human remains from any location other than a dedicated cemetery (Health and Safety Code Section 7050.5).
    2) The requirements of CEQA and the Coastal Act.

2.0 RESEARCH DESIGN

The primary goal of the research design is to attempt to understand the way in which humans have used the land and resources within the project through time, as well as to aid in the determination of resource significance. For the current project, the study area under investigation is southwestern San Bernardino County. The scope of work for the cultural resources study conducted for the Eucalyptus and Amherst Avenues Project included the survey of a 10.02-acre property. Given the area involved, the research design for this project was focused upon realistic study options. Since the main objective of the investigation was to identify the presence of and potential impacts to cultural resources, the goal here is not necessarily to answer wide-reaching theories regarding the development of early southern California, but to investigate the role and importance of identified resources. The assessment of the significance of a resource must take into consideration a variety of factors, as well as the ability of a resource to address regional research topics and issues.

Although elementary resource evaluation programs are limited in terms of the amount of information available, several specific research questions were developed that could be used to guide the initial investigations of any observed cultural resources. The following research questions consider the small size and location of the project discussed above.

Research Questions:

- Can located cultural resources be associated with a specific time period, population, or individual?
- Do the types of any located cultural resources allow a site activity/function to be determined from a preliminary investigation? What are the site activities? What is the site function? What resources were exploited?
- How do located sites compare to others reported from different surveys conducted in the area?
- How do located sites fit existing models of settlement and subsistence for mountainous environments of the region?

Data Needs

At the survey level, the principal research objective is a generalized investigation of changing settlement patterns in both the prehistoric and historic periods within the study area. The overall goal is to understand settlement and resource procurement patterns of the project occupants. Therefore, adequate information on site function, context, and chronology from an archaeological perspective is essential for the investigation. The fieldwork and archival research were undertaken with the following primary research goals in mind:

1) To identify cultural resources occurring within the project;
2) To determine, if possible, site type and function, context of the resource(s), and chronological placement of each cultural resource identified;
3) To place each cultural resource identified within a regional perspective; and
4) To provide recommendations for the treatment of each cultural resources identified.

3.0 ANALYSIS OF PROJECT EFFECTS

The cultural resources study of the project consisted of an institutional records search, archival research, and an intensive cultural resources survey of the 10.02-acre property, along with the preparation of this technical report. This study was conducted in conformance with Section 21083.2 of the California Public Resources Code and CEQA. Regulatory requirements of CEQA (Section 15064.5) were followed for the identification and evaluation of resources. Specific definitions for archaeological resource type(s) used in this report are those established by the State Historic Preservation Office (SHPO 1995).

3.1 Survey Methods

The survey methodology employed during the current investigation followed standard archaeological field procedures and was sufficient to accomplish a thorough assessment of the project. The field methodology employed for the project included walking evenly spaced survey transects set approximately 15 meters apart when not obstructed by the current development within the property. Photographs documenting survey areas and overall survey conditions were taken frequently.

3.2 Results of the Field Survey

BFSA archaeologist Parker Sheriff conducted the archaeological survey of the project and off-site infrastructure improvement areas on February 27, 2025. Visibility of the natural ground surface was characterized as moderate to good (Plates 3.2–1 to 3.2–3). The vegetation within the property is dominated by non-native grasses and weeds. The survey confirmed that the entire property has been previsouly graded. Grading resulted in the devlopment of a water catchment basin within the northwest portion of the property and a pad within the southern half of the property (Plates 3.2–4 to 3.2–5). Additionally, within the southern corner of the project, a modern storm drain is present (Plate 3.2–6). No cultural resources were identified during the survey.

Plate 3.2–1: Overview of the project from the eastern corner, facing west.

Plate 3.2–2: Overview of the project from the southern corner, facing north.

Plate 3.2–3: Overview of the project from the northern corner, facing south.

Plate 3.2–4: Overview of the water catchment basin from the western corner of the project, facing east.

Plate 3.2–5: Western overview of the water catchment basin and graded pad, facing northeast.

Plate 3.2–6: Overview of the modern storm drain in the southern corner of the project, facing southeast.

4.0 RECOMMENDATIONS

The archaeological study for the Eucalyptus and Amherst Avenues Project was completed in accordance with City of Ontario environmental policies and CEQA regulatory requirements. No cultural resources were identified within the project during the survey. Further, no natural resources associated with archaeological sites such as natural water sources or bedrock outcroppings were present within the project. A review of historic aerial photographs demonstrate that the subject property was developed for agricultural uses as early as 1938. Further, in 2018, the entire subject property was graded resulting in the development of a water catchment basin and a graded pad.

Due to the prior ground disturbance and the absence of identified cultural resources within the project vicinity, the potential for any significant resources to be present or impacted by the proposed project is minimal. Given that no archaeological sites, features, or artifacts have been identified within or directly adjacent to the project, no potential impacts to cultural resources associated with the proposed development are anticipated. Based upon the results of this study, no further archaeological study or mitigation measures are recommended. A copy of this report will be submitted to the SCCIC at CSU Fullerton.

5.0 LIST OF PREPARERS AND ORGANIZATIONS CONTACTED

The archaeological survey program for the Eucalyptus and Amherst Avenues Project was directed by Principal Investigator Tracy A. Stropes, M.A., RPA. The archaeological fieldwork was conducted by BFSA archaeologists Parker Sheriff. The report text was prepared by Kathleen Krogh and Tracy A. Stropes. Graphics were created by Kathleen Krogh. Technical editing and report production was conducted by Payton Swanson. The archaeological records search was conducted by Emily Soong at the SCCIC at CSU Fullerton.

6.0 CERTIFICATION

I hereby certify that the statements furnished above and in the attached exhibits present the data and information required for this archaeological report, and that the facts, statements, and information presented are true and correct to the best of my knowledge and belief.

April 1, 2025

Tracy A. Stropes, M.A, RPA
Principal Investigator

Date

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1983 Detection and Assessment of Prehistoric Artifact Sites off the Coast of Southern California. In *Quaternary Coastlines and Marine Archaeology: Towards the Prehistory of Land Bridges and Continental Shelves*, edited by Patricia M. Masters and Nicholas C. Fleming, pp. 189–213. Academic Press, London.

1994 *Archaeological Investigations at Five Sites on the Lower San Luis Rey River, San Diego County, California*, edited by Michael Moratto, pp. A1-A19. INFOTEC Research, Inc., Fresno, California and Gallegos and Associates, Pacific Palisades, California.

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Miller, Jaquelin Neva
1966 *The Present and Past Molluscan Faunas and Environments of Four Southern California Coastal Lagoons.* Master's thesis, Scripps Institution of Oceanography, University of California, San Diego.

Moratto, Michael J.
1984 *California Archaeology*. Academic Press, New York.

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Natural Resources Conservation Service (NRCS)
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Patterson, Tom
1971 *A Colony for California: Riverside's First Hundred Years.* Press-Enterprise, Riverside, California.

Pourade, Richard F.
1961 *Time of the Bells*. The History of San Diego Volume 2. Union-Tribune Publishing Company, San Diego, California.

1963 The Silver Dons. In *The History of San Diego* (Volume 3). Union-Tribune Publishing Company, San Diego, California.

Reddy, Seetha
2000 Settling the Highlands: Late Holocene Highland Adaptations on Camp Pendleton, San Diego County California. Prepared for the Army Corps of Engineers by ASM Affiliates. Manuscript on file at South Coastal Information Center at San Diego State University, San Diego, California.

Rogers, Malcolm
1929 Archaeological Field Work in North America During 1928, California. *American Anthropologist* 31(2):340–341.

Rolle, Andrew F.
1969 *California: A History*. 2nd ed. Thomas Y. Crowell Company, New York.

State Historic Preservation Office (SHPO)
1995 *Instructions for Recording Historical Resources*. Office of Historic Preservation, Sacramento.

Strong, William Duncan
1971 Aboriginal Society in Southern California. Reprint of 1929 *Publications in American Archaeology and Ethnology* No. 26, University of California, Berkeley.

Thirtieth Street Architects, Inc.
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Van Devender, Thomas R. and W. Geoffrey Spaulding
1979 Development of Vegetation and Climate in the Southwestern United States. *Science* 204(4394):701–710.

Warren, Claude N. and M.G. Pavesic
1963 Shell Midden Analysis of Site SDI-603 and Ecological Implications for Cultural Development of Batiquitos Lagoon, San Diego County, Los Angeles. *University of California, Los Angeles, Archaeological Survey Annual Report* 1960-1961:246–338.

APPENDIX A

Resumes of Key Personnel

Tracy A. Stropes, MA, RPA

Vice President of Cultural Resources/ Principal Archaeologist
BFSA Environmental Services, a Perennial Company
14010 Poway Road • Suite A •
Phone: (858) 484-0915 • Fax: (858) 679-9896 • Email: tstropes@bfsa.perennialenv.com

Education

Master of Arts, Anthropology, San Diego State University, California **2007**

Bachelor of Science, Anthropology, University of California, Riverside **2000**

Professional Memberships

Register of Professional Archaeologists
Society for California Archaeology
Archaeological Institute of America
Association of Oregon Archaeologists

Experience

Vice President of Cultural Resources/Principal Archaeologist **March 2009–Present**
BFSA Environmental Services, a Perennial Company
Poway, California

Tracy A. Stropes has over 33 years of experience in cultural resource management, with experience in project management, report authorship, lithic analysis, laboratory management, Native American consultation, and technical report editing for numerous projects throughout the western United States. Mr. Stropes has conducted cultural resource surveys, archaeological site testing and evaluations for National Register eligibility and CEQA compliance, mitigation of resources through data recovery for archaeological sites, budget and report preparation, and direction of crews of all sizes for projects ranging in duration from a single-day site visit to multiple years. Mr. Stropes is a Registered Professional Archaeologist (RPA) and is on the list of archaeological consultants qualified to conduct archaeological investigations in the city and county of San Diego, county of Riverside, State of Oregon, State of Arizona, and on Arizona and California BLM lands. He has served as project archaeologist for hundreds of projects and composed data recovery and preservation programs for sites throughout the western United States for both CEQA- and NEPA-level compliance.

Archaeological Principal Investigator **June 2008–February 2009**
TRC Solutions **Irvine, California**

Cultural resource segment of Natural Sciences and Permitting Division; management of archaeological investigations for private companies and local, state, and federal agencies, personnel management, field and laboratory supervision, lithic analysis, Native American consultation and reporting, NRHP and CEQA site evaluations, and authoring/coauthoring cultural resource management reports.

Principal Investigator and Project Archaeologist **June 2006–May 2008**
Archaeological Resource Analysts **Oceanside, California**

As a sub consultant, served as Principal Investigator and Project Archaeologist for several projects for SRS Inc., including field direction, project and personnel management, lab analysis, and authorship of company reports.

Project Archaeologist **September 1996–June 2006**
Gallegos & Associates **Carlsbad, California**

Project management, laboratory management, lithic analysis, field direction, Native American consultation, report authorship/technical editing, and composition of several data recovery/preservation programs for both CEQA and NEPA level compliance.

Project Archaeologist **September 1993–September 1996**
Macko Inc. **Santa Ana, California**

Project management, laboratory management, lithic analysis, field supervision, and report authorship/technical editing.

Archaeological Field Technician **January 1993–September 1993**
Chambers Group Inc. **Irvine, California**

Archaeological excavation, surveying, monitoring, wet screen facilities management, and project logistics.

Archaeological Field Technician **May 1992–September 1992**
John Minch and Associates **San Juan Capistrano, California**

Archaeological excavation, surveying, monitoring, wet screen facilities management, and project logistics.

Selected Reports/Papers

Principal Author

2023 A Section 106 (NHPA) Historic Resource Study for the Oak Creek Canyon Project, City of Wildomar, Riverside County, California. Prepared for Ambient Pacific OCC, LLC.

2023 A Section 106 (NHPA) Historic Resource Study for The Questhaven 76 Project, San Diego County, California (APNs 223-070-007, 223-070-008, and 223-080-046). Prepared for ColRich.

2023 A Phase I Cultural Resources Survey for the Bermuda Dunes Self Storage Project, PAR220053, Riverside County, California. Prepared for FAMA Dairy.

2023 A Cultural Resources Study for 4846 Pacifica Drive, City of San Diego. Prepared for Colliers International.

2023 A Section 106 (NHPA) Historical Resources Study for the Maison's Sierra Project, City of Lancaster, California (Tract No. 27099). Prepared for Ravello Holdings, Inc.

2023 Cultural Resource Survey and Evaluation Program for the Omni Hotel Driving Range/Parking Lot Project, City of Carlsbad, California. Prepared for TRT Holdings, Inc.

2022 A Class III Historic Resources Study for the Anna Avenue Project for Section 106 Compliance, City of San Diego, California. Prepared for John Smith Earthworks, Inc.

2022 A Section 106 (NHPA) Historic Resource Study for the Grand Avenue Project, Riverside County, California (APN 379-060-005). Prepared for TriPointe Homes

2022 A Section 106 (NHPA) Historic Resources Study for the Boulder Springs North Project, Riverside County, California (TTMs 31243, 31244, and 31245; APNs 321-020-027, -028, -029, and -030 and 321-130-047 and -048). Prepared for KB Home.

2022 A Section 106 (NHPA) Historical Resources Study for the Alpine Rancho Palo Verde Project, San Diego County, California (SPL-219-00698-CJA). Prepared for Schindler Real Estate Services, Inc.

2022 A Section 106 (NHPA) Historic Resource Study for the Cumming Ranch Project, San Diego County, California (APNs 282-010-08, -30, -34, and -43; 283-011-06; 283-021-01 and -02; 283-022-02; 283-041-25 and -26; and 283-051-01). Prepared for 805 Properties.

2021 A Section 106 (NHPA) Historic Resources Study for the Gatchell Road Project, San Diego County, California (Project No. 100203). Prepared for the National Park Service.

2021 A Section 106 (NHPA) Historic Resources Study for Site CA-SDI-11,934/H, San Diego County, California (APN 532-520-15). Prepared for the National Park Service.

2021 A Section 106 (NHPA) Historical Resources Study for the Renaissance Ranch Project, Riverside County, California (SPL-2004-01431-JPL). Prepared for Richland Developers, Inc.

2021 A Phase I Cultural Resource Survey for the Coppel Remodel & Addition Project, La Jolla, California. Prepared for Marengo Morton Architects, Inc.

2021 A Section 106 (NHPA) Historic Resources Study for CAB-20-1, San Diego County, California (APN 532-520-15). Prepared for the National Park Service.

2021 Cultural Resources Study for 7951 Paseo Del Ocaso, La Jolla, California. Prepared for Aidlin Darling Design.

2021 Cultural Resources Study for the Secret Hills Ranch Project, San Diego County, California (PDS2020-LDGRMJ-30253, APN 520-060-18)

2021 Cultural Resources Study for the UCLA Cedar Suites and Willow Creek Staff Housing Project, Lake Arrowhead, San Bernardino County, California. Prepared for T&B Planning, Inc.

2021 A Section 106 (NHPA) Historic Resources Study for CA-SDI-13,884, San Diego County, California (APN 532-520-13). Prepared for the National Park Service.

2021 A Cultural Resources Study for the UCLA Glamping Facility Project, Lake Arrowhead, San Bernardino County, California. Prepared for UCLA Capital Programs.

2021 Archaeological Test Results for 2596 Chalcedony Street, San Diego, California. Prepared for Colliers International.

2021 Cultural Resources Study for the 12247 Elliott Avenue Project, Los Angeles County, California. Prepared for EPD Solutions.

2021 A Section 106 (NHPA) Historic Resources Study for the Roquet Ranch Project, City of Colton, San Bernardino County, California (Tentative Tract Map No. 19983; APNs 116-701-101, -102, 116-702-101, -105, -121, -122, -123, and 116-703-118). Prepared for Sunmeadows, LLC.

2020 A Section 106 (NHPA) Historical Resources Study for the Ocean Breeze Ranch Project, Bonsall, San Diego County, California (SPL-2020-00176). Prepared for Ocean Breeze Ranch, LLC.

2020 Cultural Resource Monitoring Report for the Encinitas Beach Hotel Project, Encinitas, California. Prepared for JMI Realty, LLC

2020 A Section 106 (NHPA) Historic Resources Study for the Pacifica Estates Project, Fallbrook, San Diego County, California. Prepared for Jose Islas.

2020 A Section 106 (NHPA) Historic Resources Study for the Hidden Valley Ranch Project, SPL-2004-01124, City of Poway, California. Prepared for Barbara Malone.

2020 A Section 106 (NHPA) Historic Resource Study for The Farms in Poway Project, Poway, San Diego County, California (APNs 273-110-070, -080, and -180). Prepared for Kevin McNamara.

2020 A Phase I and II Cultural Resources Assessment for the Hansen Lot Split Project, TPM 37655, Riverside County, California. Prepared for Forest Hansen.

2020 Cultural Resources Study for the West Coast Cold Storage Project, City of Jurupa Valley, County of Riverside (APNs 178-140-010 and -018). Prepared for

2020 Cultural Resources Study for the 340 East Bradley Avenue Project, San Diego County, California (PDS2021-LDGRMJ-30346). Prepared for A N1-Mart, LLC.

2019 Archaeological Monitoring Report for the Atwell Phase 1A Project (formerly Butterfield Specific Plan), City of Banning, Riverside County, California. Prepared for Pardee Homes.

2019 A Cultural Resource Assessment for the Glen Circle Project, Poway, California. Prepared for MDD Homes.

2019 Cultural Resources Survey for the Highlands at Warner Springs and Off-Site Fire Access Road Project, Warner Springs, San Diego County, California. Prepared for Warner Springs Estates, LLC.

2019 A Cultural Resources Assessment for the 8801 East Marginal Way Project, City of Tukwila, King County, Washington. Prepared for CenterPoint Properties Trust.

2019 Cultural Resource Monitoring Report for the 7980 Park Village Road Emergency Repair Project, San Diego, California. Prepared for Orion Construction Corporation.

2019 Mitigation Monitoring and Reporting Program for the Harmony Grove Village, San Diego County, California. Prepared for Lennar – San Diego Division.

2019 Cultural Resource Monitoring Report for the Price-Cohen Residence Project, 2045 Lowry Place, La Jolla, California 92037. Prepared for Lena Price and Thomas Cohen.

2019 A Section 106 (NHPA) Historic Resources Study for the Melrose Drive Widening Project, City of Oceanside, California. Prepared for California West Communities.

2019 A Cultural Resources Study for the Majestic Chino Heritage Project, City of Chino, San Bernardino County, California. Prepared for T&B Planning, Inc.

2019 Cultural Resources Study for the Ocean Breeze Ranch Project, Bonsall, San Diego County, California. Prepared for Ocean Breeze Ranch, LLC.

2019 Mitigation Monitoring and Reporting Program for the Arthofer Residence Project, 1890 Viking Way, La Jolla, California. Prepared for Frank and Sharon Arthofer.

2019 A Phase I and II Cultural Resources Assessment for the Greentree Ranch Project, Riverside County, California. Prepared for T&B Planning, Inc.

2018 A Section 106 (NHPA) Historic Resources Study for the Escondido Country Club Project, SPL-2018-00135-CJA, City of Escondido, California. Prepared for New Urban West, Inc.

2018 A Phase I Cultural Resources Study for the North County Plaza Project, Carlsbad, California. Prepared for Planning Systems, Inc.

2018 Cultural Resources Addendum Report for the Ivey Palms Project, Thousand Palms, Riverside, California. Prepared for T&B Planning, Inc.

2017 Cultural Resource Monitoring Report for the Altman Residence Project, 9696 La Jolla Farms Road, La Jolla, California 92037. Prepared for Steve and Lisa Altman.

2017 Cultural Resources Study for the Escondido Country Club Project, City of Escondido, California. Prepared for New Urban West, Inc.

2017 A Class III Archaeological Study for the Tract 28859 Project for Section 106 Compliance. Prepared for Menifee 28859, LLC.

2016 A Section 106 (NHPA) Historic Resources Study for the Lake Ranch Project, TR 36730, Riverside County, California.

2016 Mitigation Monitoring and Reporting Program for the Imperial Beach Bikeway Village Project, 536 13th Street and 535 Florence Street, Imperial Beach, California. Prepared for Bikeway Village, LLC.

2015 Cultural Resource Data Recovery and Mitigation Monitoring Program for Site SDI-10,237 Locus F, Everly Subdivision Project, El Cajon, California. Prepared for Shea Homes.

2015 A Class III Historic Resource Study for the Miramar Clearwell Improvements Project, San Diego, California. Prepared for Global Environmental Permitting, Inc.

2015 A Class III Historic Resource Study for the College Boulevard Project, Carlsbad, California. Prepared for Bent West, LLC.

2015 A Class III Archaeological Study for the Parkside Project for Section 106 Compliance, Riverside County, California. Prepared for Lennar Corporation.

2015 A Cultural Resource Assessment for the Zhao Residence Project, Poway, California (275-240-66). Prepared for Pacific Sotheby's International Realty.

2014 Phase I Cultural Resources Survey for the Utah Trail Project, County of San Bernardino, California (APNs 621-281-22 through 621-281-25). Prepared for Ecos Energy, LLC.

2014 Phase I Archaeological Assessment for the Sky Canyon Project (PP25309), Riverside County, California. Prepared for Rocky Snider California Project Management Office.

2014 Phase I Cultural Resources Survey for the Shoshone Valley Road Project, County of San Bernardino, California (APNs 613-233-01, -02, -03, -04, -27, -28, -29, and -30). Prepared for Ecos Energy, LLC.

2014 Phase I Cultural Resources Survey for the Nuevo 055 Project, Community of Nuevo, County of Riverside. Prepared for Ecos Energy, LLC.

2014 A Phase I Cultural Resource Study for the Bourgeoios Project, Poway, California. Prepared for Bill Yen & Associates, Inc.

2014 A Cultural Resources Survey for the Aliso Canyon Major Subdivision Project, Rancho Santa Fe, San Diego County, California. Prepared for Zephyr Partners.

2014 Cultural Resource Monitoring Report for the Sewer Group 723 Project, San Diego, California. Prepared for
Ortiz Corporation.

2013 A Phase I Cultural Resource Study for the Rogers Tierra Bonita Project, Poway, California. Prepared for John D. Fitch & Associates.

2013 A Cultural Resource Assessment Update for the Girard Townhome Project, TR 35477, Riverside County, California. Prepared for G8 Development, Inc.

2013 Phase I Archaeological Assessment for the Ridge Park Project, City of Temecula, California. Prepared for Ambient Communities.

2013 A Phase I and Phase II Cultural Resource Study for the Citrus Heights/Fairway Drive Project, Riverside County, California. Prepared for CV Communities.

2013 Phase I Archaeological Assessment for the Bixby Highgrove Project (TTM 36437), Riverside County, California. Prepared for T&B Planning, Inc.

2013 A Class III Cultural Resources Study for the Ramona Ranch Affordable Housing Project for Section 106 Compliance, San Diego County, California. Prepared for AMCAL Multi-Housing, Inc.

2013 Phase I Archaeological Assessment for the Yates Road Project (TTM 36437), Riverside County, California. Prepared for CV Communities, LLC.

2013 A Cultural Resources Survey and Evaluation Program for the Warner Ranch Project, San Diego County, California. Prepared for HP Warner Ranch, LP.

2013 A Phase I Cultural Resource Assessment for TPM 36585, Riverside County, California. Prepared for GF Real Estate Services.

2013 A Class III Cultural Resources Study for TR 31597 and TR 32627, Riverside County, California. Prepared for Standard Pacific Homes.

2013 Phase I Cultural Resources Survey for the Sunny Cal Project, City of Beaumont, County of Riverside. Prepared for CV Communities, LLC.

2013 A Class III Cultural Resources Study for The Sierra Bella Project for Section 106 Compliance, Riverside County, California. Prepared for Forestar Corona, LLC.

2013 A Class III Cultural Resources Study for the Moosa Creek Mitigation Bank Project. Prepared for a Creek LLC.

2013 Archaeological Survey of the Rohmiller Residence for a Bulletin 560 Permit Application, 2350 Calle De La Garza, La Jolla, California 92037 (APN 346-180-22). Prepared for Architect Mark D. Lyon, Inc.

2013 Cultural Resources Survey and Evaluation Program for the Oak Creek Project, City of Escondido, California. Prepared for New Urban West, Inc.

2013 Phase I Cultural Resources Survey for the Hope Harbor Project, Riverside County, California. Prepared for Medhat Rofael.

2013 Archaeological Survey of the Liske Residence, La Jolla, California. Prepared for ECEGC Inc.

2013 An Updated Phase I Cultural Resources Assessment for Tentative Tract Maps Nos. 36484 and 36485, Audie Murphy Ranch. Prepared for Brookfield Residential.

2013 A Phase I Cultural Resources Study For the 401 West Ash Street Project San Diego, California. Prepared for PierPoint Legacy Holdings, LLC.

2013 Cultural Resource Test Plan for the Ten on Columbia Project, San Diego, California. Prepared for InDev, Inc.

2013 Phase I Cultural Resources Survey for the Washington Avenue Project, City of Murrieta, California. Prepared for Coastal Land Solutions.

2012 Phase I Cultural Resources Survey for the Wildomar 23 Project, Riverside County, California. Prepared for Lennar.

2012 A Class III Cultural Resources Study for the USGS Creepmeter Project. Prepared for Bureau of Land Management, El Centro Office.

2012 Mitigation Monitoring Report for the for the Johnston Residence Project, La Jolla, California. Prepared for Heather Johnston.

2012 A Phase I Cultural Resource Study for the Howell Residence Project, Poway, California. Prepared for Cal Howell.

2012 Cultural Resource Monitoring Report for the Sewer and Water Group 799 Project. Prepared for Burtech Pipeline.

2012 A Phase I Cultural Resources Study For the Villa Hermosa Project San Diego, California. Prepared for David Chow.

2012 A Phase I Cultural Resource Study for the Payan Property Project, San Diego, California. Prepared for Landmark Engineering.

2012 A Phase I Cultural Resource Study for the El Camino Real Widening Project, Carlsbad, California. Prepared for Planning Systems.

2012 A Phase I Cultural Resource Study for the Encore Trust Project, La Jolla, California. Prepared for Metcalf Development and Consulting.

2012 A Phase I Cultural Resource Study for the Andres Residence Project, La Jolla, California. Prepared for Engineering Design Group.

2012 Phase I Cultural Resources Survey for the Diamond Springs Project, Riverside County, California. Prepared for Benjamin J. Stables III, B 3 Consulting.

2012 A Phase I Cultural Resource Study for the ActivCare at Mission Bay Project, San Diego, California. Prepared for ActivCare Living, Inc.

2012 Mitigation Monitoring Report for the Water Group 790 Project, City of San Diego, California. Prepared for Orion Construction Corporation.

2012 Results of the Mitigation Monitoring Program for the Mission Brewery Villas Project, City of San Diego, California. Prepared for Eilar Associates, Inc.

2012 Cultural Resource Monitoring Report for the Gatto Residence Project, La Jolla, California. Prepared for Marengo Morton Architects Inc.

2012 Cultural Resource Monitoring Report for the Sunset Cliffs Trunk Sewer Project, City of San Diego, California. Prepared for KTA Construction.

2012 Mitigation Monitoring Report for the Sewer Group 682M Project, City of San Diego, California. Prepared for BRH Garver.

2012 Cultural Resource Monitoring Report for the Pelberg Residence Project, City of San Diego, California. Prepared for Linda and Art Pelberg.

2012 Cultural Resource Monitoring Report for the Rose Creek Bikeway Bridge Project, City of San Diego, California. Prepared for Flatiron West, Inc.

2011 Mitigation Monitoring Report for the South Mission Valley Trunk Sewer Project, City of San Diego, California. Prepared for HPS Mechanical, Inc.

2011 A Class III Cultural Resources Study for the La Dama de Oro Project, San Bernardino County, California. Prepared for Mohave Gold Mining & Exploration, Inc.

2011 Mitigation Monitoring Report for the Jacobs Health Care Facility Project, City of San Diego, California. Prepared for Jacobs Health Care, LLC.

2011 A Phase I Cultural Resources Study For the Rowland Auto Dismantling Project, City of San Diego, California. Prepared for David Rowland.

2011 A Phase I Cultural Resource Study for the Dye Residence Project, La Jolla, California. Prepared for Eric Dye.

2011 Phase I Cultural Resources Survey for the Santa Rosa Academy Project, Riverside County, California. Prepared for Santa Rosa Academy Charter School c/o Bradley Burke Competitive Edge Development, LLC.

2011 Cultural Resource Data Recovery Study for SDI-4606 Locus B for Saint Gabriel's Catholic Church, Poway, California. Prepared for Saint Gabriel's Catholic Church.

2011 A Phase I Cultural Resource Study for the Nooren Residence Project, La Jolla, California. Prepared for Jack Nooren.

2011 Mitigation Monitoring Report for the Sewer and Water Group 768 Project, City of San Diego, California. Prepared for Ortiz Corporation.

2011 Cultural Resource Test for the 10th Avenue Parking Lot Project, City of San Diego, California. Prepared for 11th and B Investment Associates, LLC.

2011 A Cultural Resources Study for the Ampudia Lot Project, City of San Diego, California. Prepared for Venture Pacific Commercial Services, Inc.

2011 A Phase I Cultural Resource Study for the Hyde Residence Project, La Jolla, California. Prepared for Paul and Denise Hyde.

2011 A Phase I Cultural Resource Study for the Fialko Residence Project, La Jolla, California. Prepared for Thomas Armstrong Construction, Inc.

2011 Mitigation Monitoring Report for the Sewer Group 682M Project, City of San Diego, California. Prepared for HTA Engineering & Construction Inc.

2011 A Phase I Cultural Resource Study for the Butterfield Residence Project, La Jolla, California. Prepared for Geotechnical Exploration, Inc.

2011 A Cultural Resource Monitoring Report for the Eichen Residence Project, San Diego, California. Prepared for Steigerwald-Dougherty, Inc.

2011 Phase I Cultural Resources Survey for the Galway Downs Project, Riverside County, California. Prepared for Trip Hord.

2011 Cultural Resource Monitoring Report for Rancho Bella Vista Phase IV (TR 31871), Riverside County, California. Prepared for Lennar Inland Division.

2011 Cultural Resource Monitoring Report for the Salvation Army Vehicle Storage Area Demolition Project. Prepared for The Salvation Army General Counsel.

2011 A Phase I Cultural Resource Study for the Kates Residence Project, La Jolla, California. Prepared for Brad and Shannon Kates.

2011 A Phase I Cultural Resource Study for the Kralik Residence Project, La Jolla, California. Prepared for John Kralik.

2010 An Archaeological Monitoring Report for the Cricket Cell Tower Project (Permit # 3399 06-032), San Diego County, California. Prepared for Ken Hayes.

2010 A Cultural Resources Study for the 47th Street Warehouse Project City of San Diego, California, Project No. 190957. Prepared for 47th Street Properties.

2010 A Cultural Resource Study for the Dickenson Ranch Project, San Bernardino County, California. Prepared for Dickenson and Son Property Management and Investments.

2010 A Phase I Cultural Resources Survey for the Young Family Trust Lot Split Project City of Escondido, California. Prepared for Young Family Trust.

2010 An Archaeological Monitoring Report for the Jamul Rural Fire Station Auxiliary Access Road Project, San Diego County, California. Prepared for TCB.

2010 Cultural Resource Survey and Evaluation Program for the Citracado Parkway Extension Project, City of Escondido, California. Prepared for AECOM.

2010 Phase I Cultural Resources Survey for the Sycamore Creek Specific Plan No. 256 Amendment No. 2, Riverside County, California. Prepared for T&B Planning.

2010 A Phase III Cultural Resource Data Recovery Program for CA-SDI-16,986, Hidden Meadows, San Diego County, California (TPM 20794). Tuscan Ridge, LLC.

2010 Historic Properties Treatment Plan for the Talega (64 Area) 12kV Conversion Project Marine Corps Base Camp Pendleton San Diego County California. Prepared for Synergy Electric Company, Inc.

2010 A Cultural Resources Survey and Evaluation Program for the Highlands at Warner Springs Project, Warner Springs, San Diego County, California. Prepared for Warner Springs Estates, LLC.

2010 A Cultural Resources Literature Review for the 11099 North Torrey Pines Road Project, San Diego, California. Prepared for Touchstone Investments.

2010 A Phase I Cultural Resources Survey for the San Jacinto Poultry Ranch Storage Building Project, San Jacinto, California. Prepared for Moark, LLC.

2010 A Phase III Cultural Resource Data Recovery Program for SDI-16986, Hidden Meadows, San Diego, California (TPM 20794). Prepared for Tuscan Ridge, LLC.

2010 Cultural Resources Study for the Dos Colinas Project, Carlsbad, California. Prepared for Dos Colinas, LLC.

2010 A Phase I Archaeological Survey of the Greater Alpine Fire Safe Council Horsethief Vegetation Management Project. Prepared for the Greater Alpine Fire Safe Council.

2010 A Phase I Cultural Resource Study for the Moses Residence Project, La Jolla, California. Prepared for Brian Moses.

2010 Pottery Canyon Site Archaeological Evaluation Project City of San Diego, California. Prepared for the City of San Diego Park and Recreation Department.

2010 A Phase I Cultural Resource Study for the Shabaz Residence Project, La Jolla, California. Prepared for Negar Shabaz.

2009 A Phase I Cultural Resources Study for the Kramer 453 Project, San Bernardino County, California. Prepared for LightSource Renewables LLC.

2009 A Cultural Resources Study for the Hronopoulus Residence Project, City of San Diego, California. Prepared for Andreas Hronopoulus.

2009 A Cultural Resources Monitoring Report for the East Point Loma Trunk Sewer Project, San Diego, California. Prepared for Southern California Soil and Testing.

2009 A Cultural Resources Study for the McKean SDP Project. San Diego, California.

2009 An Archaeological Assessment for the Rivera-Placentia Project, City of Riverside, California.

Prepared for Riverside Construction Company.

2009 Cultural Resource Data Recovery Plan for the North Ocean Beach Gateway Project. Prepared for the City of San Diego and KTU+A.

2009 Cultural Resource Letter Report for the Borrego Substation Feasibility Study, Borrego Springs, California. Prepared for RBF Consulting.

2009 A Cultural Resource Study for the Gatto Residence Project, La Jolla, California. Prepared for Marengo Martin Architects Inc.

2009 A Cultural Resource Report for the Central Feeder Connection Project, San Bernardino, California. Prepared for Albert A. Webb and Associates.

2009 A Cultural Resource Report for the Clay Street Connection Project, Riverside, California. Prepared for Albert A. Webb and Associates.

2009 A Cultural Resource Report for the Green Hills Project, San Diego County, California. Prepared for Atlas Investments, LLC.

2009 A Cultural Resource Report for the La Sierra Pipeline Project, Riverside, California. Prepared for Albert A. Webb and Associates.

2009 Cultural Resources Monitoring Report for the East Point Loma Trunk Sewer Project. Prepared for Southern California Soil & Testing.

2009 A Cultural Resource Report for the Mockingbird Connection Project, Riverside, California. Prepared for Albert A. Webb and Associates.

2009 A Cultural Resource Report for the Mesquite Lake Treatment Plan Project, Imperial County, California. Prepared for Albert A. Webb and Associates.

2008 Phase I Cultural Resource Survey for the 28220 Highridge Road Development Project, Rancho Palos Verdes, California. Prepared for REC Development.

2008 Wild Goose Expansion 3 Project Butte County, California Colusa County, California. Prepared for Niska Gas Storage LLC.

2008 Class III Cultural Resource Survey for the Burlington Northern Santa Fe Four Railway Bridge Renewal Project, San Bernardino County, California. Prepared for BNSF Railway Company.

2008 I-80 Colfax Site Cultural Resource Records Search Report, Placer County, California. Prepared for Granite Construction Company.

2008 I-80 Gold Run Site Cultural Resource Records Search Report, Placer County, California. Prepared for Granite Construction Company.

2008 Cultural Resource Monitoring at 31431 Camino Capistrano, San Juan Capistrano, California. Prepared for Herman Weissker, Inc.

2008 Cultural Resource Inventory for the Snow White Pumice Mine, Hinkley, California. Prepared for U.S. Mining and Minerals Corporation.

2007 Nodule Industries of North Coastal San Diego: Change and Stasis in 10,000 Years of Lithic

Technology. Masters thesis on file, San Diego State University.

2007 Cultural Resource Inventory for Empire Homes (APN 104-180-04), Lake Forest, California. Prepared for Empire Homes.

2007 Phase I Archaeological Assessment for APN 104-200-09, Beaumont, California. Prepared for Mary Chan.

2007 Cultural Resource Inventory for Empire Homes (APN 104-180-04), Lake Forest, California. Prepared for Empire Homes.

2006 Carlsbad Municipal Golf Course Data Recovery Program for CA-SDI-8694, and Indexing and Preservation Program Study for CA-SDI-8303 and CA-SDI-8797 Locus C, City of Carlsbad, California. Prepared for City of Carlsbad.

2005 Grand Pacific Resorts Data Recovery and Index Sample Program for CA-SDI-8797, Area A, City of Carlsbad, California. Prepared for Grand Pacific Resorts Inc.

2004 "Near the Harris Site Quarry" Cultural Resource Data Recovery and Preservation Program for CA-SDI-13028, San Diego County, California. Prepared for Harbrecht Development, L.P.

2004 Cultural Resource Survey and Boundary Test Report for the Lilac Ranch Project, San Diego County, California. Prepared for Empire Companies.

2003 Cultural Resource Data Recovery and Preservation Program for CA-SDI-12027, San Diego County, California. Prepared for Harbrecht Development Inc.

2002 Data Recovery Program for the Pacbell Site CA-SDI-5633, San Marcos, California. Prepared for Joseph Wong Design Associates.

2001 McCrink Ranch Cultural Resource Test Program Additional Information for Selected Sites, San Diego County, California. Prepared for Shapouri & Associates.

2001 The Quail Ridge Project Cultural Resource Test Program, San Diego County, California. Prepared for Helix Environmental Planning, Inc.

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APPENDIX B

Archaeological Records Search Results

(Deleted for Public Review; Bound Separately)

APPENDIX C

NAHC Sacred Lands File Search Results

(Deleted for Public Review; Bound Separately)

April 18, 2025 Project No. 25040-01

Mr. Dave Waters
Genstar Development Company
12770 El Camino Real, Ste. 220
San Diego, CA 92130

Subject: ***Geotechnical Evaluation of Mass Graded Site and Grading Plan Review of Proposed 10-Acre "Esperanza Townhomes" Residential Development, Buildings 1 through 28, Tentative Tract No. 20730, located North of Eucalyptus & Amherst Avenues, City of Ontario, County of San Bernardino, California***

In accordance with your request, LGC Geotechnical, Inc. has performed a geotechnical site evaluation of the mass graded site and grading plan review for the proposed "Esperanza Townhomes" multi-family residential development, Buildings 1 through 28, 161 unit, Tentative Tract No. 20730, located north of the intersection of Eucalyptus and Amherst Avenues in the City of Ontario, County of San Bernardino, California. This report summarizes the current geotechnical conditions and presents our findings, conclusions, and preliminary recommendations with regards to the proposed development.

If you should have any questions regarding this report, please do not hesitate to contact our office. We appreciate this opportunity to be of service.

Respectfully Submitted,

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Appendix D – General Earthwork and Grading Specifications

Sheet

Sheet 1 – Geotechnical Map (In Pocket)

1.0 INTRODUCTION

1.1 Purpose and Scope of Services

This report presents the results of our geotechnical evaluation for the proposed multi-family residential site, Buildings 1 through 28 and associated improvements of Tract 18380, located in the City of Ontario, California. The approximately 10-acre site is bound by residential development and existing streets including Eucalyptus and Amherst Avenues to the south and Chatham and Clifton to the north. Refer to the Site Location Map (Figure 1).

The purpose of our study was to provide a preliminary geotechnical evaluation of the mass graded pad conditions relative to the proposed residential development. As part of our scope of work, we have: 1) reviewed available geotechnical background information including in-house regional geologic maps and published geotechnical literature pertinent to the site (Appendix A); 2) performed excavation, testing, and sampling of regular-spaced test pits with backhoe across the site for evaluation of mass graded conditions; 3) nuclear gauge testing of in-situ graded fill placed under observation and testing by others; 4) laboratory testing of samples for design parameters and organic content testing of the compacted fill soils; and 5) prepared this geotechnical summary report presenting our findings and preliminary conclusions and recommendations for the proposed development.

1.2 Background

The subject site was originally part of the larger overall proposed "Esperanza West" residential development that covered areas north and south of a previous alignment of Eucalyptus Avenue. The northern portion of the area, encompassing the subject site, was reportedly used for agriculture since 1938, specifically "row crops", while the offsite southern portion was utilized as a dairy farm. Previous uses of the overall area were reviewed as part of the referenced methane site assessment by LGC Geo-Environmental (2014). The methane site assessment concluded that the subject parcel was not impacted by previous dairy farm uses and is not within the limits of a Methane Gas Potential Area.

As the surrounding areas have been developed over time, it is our understanding that the southern portion of the subject site was utilized as a borrow area for the surrounding developments. The site was eventually entitled for development with the referenced Updated Geotechnical Report and Manure Evaluation by LGC Geo-Environmental (2017) for the larger "Esperanza West" and "Esperanza East" proposed development. The report further confirmed that the subject parcel was not a part of previous dairy uses in the region. Recommendations were provided for earthwork of the site, aka Lot 1 (School Site) of Tract 18380, to a mass grade design with drainage to the southmost corner.

Mass grading of the site commenced during approximately 2020 as documented in the referenced Reliance Letter by LGC Geo-Environmental (2020). The mass grading operations reportedly included remedial grading to elevations between 695 feet and 698 feet and placement of compacted fill to existing grades, with exception of the northwest quadrant left low for intermittent soils import. Excess soils from specifically identified nearby development sites were reportedly end-dumped in the area left low, and presumably properly compacted over time. No as-graded report was available for review, therefore LGC Geotechnical's site

evaluation presented herein was focused on quality of the removals, quality of the fill to the existing grades, and verification of organics percentage within the compacted fill.

1.3 Project Description

The site is currently vacant, with a generally tightly compacted surface throughout, with light grasses. Drainage across the mass graded pad area flows from the northeast at elevation 708 to a low of approximately 700 at the southwest, to an existing storm drain inlet on-site. Based on the Preliminary Grading Plan by Walden & Associates dated January 24, 2025, the proposed development will consist of 161 units within 28 multi-family buildings, associated streets, recreation center, pool, and park.

Design grades for the proposed development are relatively close to existing mass graded elevations and will be achieved with minor cut-fill grading and import of soils for low areas.

PROJECT NAME	Genstar, Ontario
PROJECT NO.	25040-01
ENG. / GEOL.	RLD / KTM
SCALE	Not to Scale
DATE	April 2025

LGC Geotechnical, Inc.

FIGURE 1
Site Location Map

1.4 Subsurface Geotechnical Evaluation

A subsurface evaluation was performed by LGC Geo-Environmental for a larger overall area prior to mass grading of the subject site (2017). Their investigation included excavation of test pits and a boring on-site and two closely adjacent. The boring logs are provided in Appendix B, approximate locations provided on the Geotechnical Map (Sheet 1).

The recent site evaluation by LGC Geotechnical consisted of excavation of a total of 16 test pits in an approximate grid formation throughout the site by a project geologist, using a Caterpillar backhoe with a three-feet wide bucket to expose the compacted fill and the contact with native soils. Existing fill soils were visually evaluated and probed, and a soil technician took intermittent field density tests with a nuclear gauge to gain an opinion about fill compaction. Numerous samples were collected at vertical intervals within test pits in order to perform laboratory testing for moisture content and organic content. Results of field density testing are presented in Appendix C along with laboratory test results, and moisture and organic content testing results are presented on the test pit logs, Appendix B. Recommendations for remedial measures during future rough grading to project design grades were determined based on a combination of observations during test pit evaluation and results of field and laboratory testing.

Test pits were backfilled and compacted back to existing grades at completion of the field evaluation.

1.5 Laboratory Testing

Laboratory testing on samples collected during the recent subsurface investigation was performed including organic percentage, expansion index, maximum density and optimum moisture, and corrosion testing.

The following is a summary of the laboratory test results:

- Forty-eight organic content tests were performed in an approximate grid pattern within compacted fill soils. Results are presented on test pit logs, Appendix B. The average organic testing percentage for the total of 48 tests performed was approximately 2 percent.
- Three expansion potential tests were performed on finished grade soils and indicated an expansion index value ranged approximately 2 to 5, corresponding to “Very Low” expansion potential.
- Maximum density tests on three bulk samples indicated maximum densities of previously placed compacted fill soils ranges from 125.5 to 129.5 pcf, with optimum moistures from 8.5 to 11.5 percent.
- Corrosion testing of finished grade soils indicated soluble sulfate content less than approximately 0.01 percent by weight or less and a chloride content of 0.006 percent by weight or less.

A summary of the laboratory test results is presented in Appendix C.

2.0 GEOTECHNICAL CONDITIONS

2.1 Geologic Conditions

The subject site is located south of the San Gabriel Mountains within the broad alluvial plain of the Santa Ana River Basin, within the Peninsular Ranges Geomorphic Province. Specifically, the site is located within the northern portion of the Perris Block, a geologic zone consisting of granitics overlain by sedimentary deposits that are bounded by active faults including the northwest-trending Whittier-Elsinore Fault Zone at the southwest and the northwest-trending San Jacinto Fault Zone at the northeast (Morton, 2002). The roughly rectangular Perris Block is transected by the southwest-trending Santa Ana River that passes several miles south of the subject site.

2.2 Site-Specific Geology & Generalized Subsurface Conditions

The site generally consists of engineered fill placed over alluvial deposits. Mass grading of the site was performed under observation and testing by LGC Geo-Environmental (2020). Based on previous reports and regional mapping (Morton, 2002), the subject site is underlain by Holocene- to Pleistocene-age eolian (wind-blown) sedimentary deposits over young alluvium. The material is described on-site as sand and silty sand, with some sandy silt, generally fine to medium grained, yellowish brown, gray, and olive, dry to damp, medium dense to dense. The materials below the eolian deposits are young alluvial fan deposits, described on-site as sand, silty sand and sandy silt, generally fine-grained, yellowish to orangish brown, gray, olive, dry to very moist, medium dense to very dense and stiff to very stiff.

During rough grading, the upper, potentially compressible soils were recommended to be removed to competent alluvium (LGC Geo-Environmental, 2017), as was generally confirmed/observed in our test pits. As indicated on our field exploration logs, compacted fill soils generally consist of silty sand with localized areas of clayey to gravelly sand, medium dense to very dense, slightly moist. The thickness of existing engineered fill was encountered at depths of approximately 3.5 feet to greater than 10 feet within the mass graded pad.

2.3 Groundwater

Groundwater was not encountered during the site investigation to 51 feet below ground (LGC Geo-Environmental, 2017). Groundwater was reportedly estimated to be at a depth of 120 to 130 feet below ground based on available water well data compiled by LGC Geo-Environmental, 2017.

Seasonal fluctuations of groundwater elevations should be expected over time. In general, groundwater levels fluctuate with the seasons and local zones of perched groundwater may be present due to local seepage caused by irrigation and/or recent precipitation. Local perched groundwater conditions or surface seepage may develop once site development is completed.

2.3 Seismic Design Criteria

The site seismic characteristics were evaluated per the guidelines set forth in Chapter 16, Section 1613 of the 2022 California Building Code (CBC) and applicable portions of ASCE 7-16 which has been adopted by the CBC. **Please note that the following seismic parameters are only applicable for code-based acceleration response spectra and are not applicable for where site-specific ground motion procedures are required by ASCE 7-16.** Representative site coordinates of latitude 33.9908 degrees north and longitude -117.5629 degrees west were utilized in our analyses. The maximum considered earthquake (MCE) spectral response accelerations (S_{MS} and S_{M1}) and adjusted design spectral response acceleration parameters (S_{DS} and S_{D1}) for Site Class D are provided in Table 1 on the following page. Since site soils are Site Class D, additional adjustments are required to code acceleration response spectrums as outlined below and provided in ASCE 7-16. The structural designer should contact the geotechnical consultant if structural conditions (e.g., number of stories, seismically isolated structures, etc.) require site-specific ground motions.

A deaggregation of the PGA based on a 2,475-year average return period (MCE) indicates that an earthquake magnitude of 6.68 at a distance of 13.60 km from the site would contribute the most to this ground motion. A deaggregation of the PGA based on a 475-year average return period (Design Earthquake) indicates that an earthquake magnitude of 6.70 at a distance of 17.23 km from the site would contribute the most to this ground motion (USGS, 2014).

Section 1803.5.12 of the 2022 CBC (per Section 11.8.3 of ASCE 7) states that the maximum considered earthquake geometric mean (MCE_G) Peak Ground Acceleration (PGA) should be used for liquefaction potential. The PGA_M for the site is equal to 0.735g (SEAOC, 2025). The design PGA is equal to 0.490g (2/3 of PGA_M).

TABLE 1

Seismic Design Parameters

Selected Parameters from 2022 CBC, Section 1613 - Earthquake Loads	Seismic Design Values	Notes/Exceptions
Distance to applicable faults classifies the site as a "Near-Fault" site.		Section 11.4.1 of ASCE 7
Site Class	D*	Chapter 20 of ASCE 7
Ss (Risk-Targeted Spectral Acceleration for Short Periods)	1.614g	From SEAOC, 2025
S_1 (Risk-Targeted Spectral Accelerations for 1-Second Periods)	0.582g	From SEAOC, 2025
F_a (per Table 1613.2.3(1))	1.000	For Simplified Design Procedure of Section 12.14 of ASCE 7, F_a shall be taken as 1.4 (Section 12.14.8.1)
F_v (per Table 1613.2.3(2))	1.718	Value is only applicable per requirements/exceptions per Section 11.4.8 of ASCE 7
S_{MS} for Site Class D [Note: $S_{MS} = F_aS_S$]	1.614g	-
S_{M1} for Site Class D [Note: $S_{M1} = F_vS_1$]	0.999g	Value is only applicable per requirements/exceptions per Section 11.4.8 of ASCE 7
S_{DS} for Site Class D [Note: $S_{DS} = (^2/_3)S_{MS}$]	1.076g	-
S_{D1} for Site Class D [Note: $S_{D1} = (^2/_3)S_{M1}$]	0.666g	Value is only applicable per requirements/exceptions per Section 11.4.8 of ASCE 7
C_{RS} (Mapped Risk Coefficient at 0.2 sec)	0.941	ASCE 7 Chapter 22
C_{R1} (Mapped Risk Coefficient at 1 sec)	0.918	ASCE 7 Chapter 22
*Since site soils are Site Class D and S_1 is greater than or equal to 0.2, the seismic response coefficient Cs is determined by Eq. 12.8-2 for values of $T \leq 1.5T_s$ and taken equal to 1.5 times the value calculated in accordance with either Eq. 12.8-3 for $T_L \geq T > T_s$, or Eq. 12.8-4 for $T > T_L$. Refer to ASCE 7-16.		

2.4 Faulting

Prompted by damaging earthquakes in Northern and Southern California, State legislation and policies concerning the classification and land-use criteria associated with faults have been developed. Their purpose was to prevent the construction of urban developments across the trace of active faults, resulting in the Alquist-Priolo Earthquake Fault Zoning Act. Earthquake Fault Zones have been delineated along the traces of active faults within California. Where developments for human occupation are proposed within these zones, the state requires detailed fault evaluations be performed so that engineering geologists can mitigate the hazards

associated with active faulting by identifying the location of active faults and allowing for a setback from the zone of previous ground rupture.

The subject site is not located within a State of California Earthquake Fault Zone (Alquist-Priolo) and no faults are identified on the site (CGS, 2025). The possibility of damage due to ground rupture is considered low since no active faults are known to cross the site. The closest known active faults that may impact the site include the Whittier-Elsinore, Cucamonga, San Jacinto, and San Andreas Fault Zones, among others.

Secondary effects of seismic shaking resulting from large earthquakes on the major faults in the Southern California region, which may affect the site, include ground lurching and shallow ground rupture, soil liquefaction, and dynamic settlement. These secondary effects of seismic shaking are a possibility throughout the Southern California region and are dependent on the distance between the site and causative fault and the onsite geology. A discussion of these secondary effects is provided in the following sections.

2.4.1 Liquefaction and Dynamic Settlement

Liquefaction is a seismic phenomenon in which loose, saturated, granular soils behave similarly to a fluid when subject to high-intensity ground shaking. Liquefaction occurs when three general conditions coexist: 1) shallow groundwater; 2) low density non-cohesive (granular) soils; and 3) high-intensity ground motion. Studies indicate that saturated, loose near surface cohesionless soils exhibit the highest liquefaction potential, while dry, dense, cohesionless soils and cohesive soils exhibit low to negligible liquefaction potential. In general, cohesive soils are not considered susceptible to liquefaction, depending on their plasticity and moisture content. Effects of liquefaction on level ground include settlement, sand boils, and bearing capacity failures below structures. Dynamic settlement of dry loose sands can occur as the sand particles tend to settle and densify as a result of a seismic event.

Based on the previous field evaluation data performed by others (references), the site soils are generally not susceptible to liquefaction due to a lack of groundwater and the relatively dense native soils in the upper 50 feet; therefore, liquefaction potential is considered very low.

2.4.2 Lateral Spreading

Lateral spreading is a type of liquefaction-induced ground failure associated with the lateral displacement of surficial blocks of sediment resulting from liquefaction in a subsurface layer. Once liquefaction transforms the subsurface layer into a fluid mass, gravity plus the earthquake inertial forces may cause the mass to move downslope towards a free face (such as a river channel or an embankment). Lateral spreading may cause large horizontal displacements and such movement typically damages pipelines, utilities, bridges, and structures.

Due to the lack of groundwater in the upper 50 feet, very low potential for liquefaction, and lack of a nearby "free face" condition, the potential for lateral spreading is considered very low.

2.5 Oversized Material

Oversized materials (material larger than 8 inches in maximum dimension) are not expected to be encountered during the minor site grading. If encountered, recommendations are provided for appropriate handling of oversized materials in Appendix D. If feasible, exporting oversized materials may be considered. Incorporating oversized materials into "rock fills" (windrows, rock blankets or individual rock burial) is not feasible due to the limited depth of rough grading.

2.6 Expansion Potential

Based on the results of previous laboratory testing (LGC Geo-Environmental, 2017), our experience in the area, and results of recent expansion index testing presented herein, site soils are anticipated to have a "Very Low" expansion potential. Final expansion potential of site soils should be confirmed at the completion of grading. Results of expansion testing at finish grades should be utilized to confirm final foundation design.

2.7 Organic Rich Soils

Based on our review of the geotechnical design report (LGC Geo-Environmental, 2017), the consultant who graded the site recommended that the high and low organic "soils" be blended and mixed to achieve 2 percent organics or less in the compacted fill. To verify the results of the mass grading operation, we collected a total of 48 soil samples throughout the existing on-site fill to determine their organic content (based on ASTM 2974). Organic percentage is indicated on test pit logs at the depths of collection, presented in Appendix B. The organic content of the majority of samples ranged from approximately 1.2 percent to 2.7 percent, indicating relatively low organics, with locally higher organic contents of 8.8 percent within TP-13 and 4.8 percent within TP-11. Remedial grading is recommended for field evaluation of the two locally high percentage of organic content (Refer to Geotechnical Map), and the upper two inches of existing grasses and rootlets that have accumulated over time are recommended to be cleared and removed from the site prior to future rough grading operations in order to avoid blending additional organics into future fill. Refer to Section 4.1.1 for recommendations.

3.0 CONCLUSIONS

Based on the results of our geotechnical evaluation, it is our opinion that the proposed development is feasible from a geotechnical standpoint, provided the following conclusions and recommendations are implemented.

The following is a summary of the primary geotechnical factors that may affect future development of the site:

- On site soils consist of engineered fill placed over alluvial deposits under observation and testing by LGC Geo-Environmental, as nominally reported in the referenced letter (2020). Compacted fill materials observed by LGC Geotechnical generally consist of silty sand with localized areas of clayey to gravelly sand, medium dense to very dense, slightly moist.
- Based on the previously mass-graded condition of the site, recommended remedial measures are limited to removal and recompaction of weathered, near-surface, previously placed engineered fill, and few localized areas of removal as deep as 6 feet. Locally deeper removals were determined based on field observations, field density testing, and laboratory test results.
- The subject site is not located within a State of California Earthquake Fault Zone (aka "AP Zone"); and no "Holocene-active" faults have been identified to cross the site. The main seismic hazard that may affect the site is ground shaking from one of the active regional faults. The subject site will likely experience strong seismic ground shaking during its design life.
- From a geotechnical perspective, onsite soils are anticipated to be suitable for use as general compacted fill provided, they are screened of organic materials, construction debris and oversized material (8 inches in greatest dimension).
- Groundwater was not encountered during previous subsurface evaluations and was estimated to be a depth of more than 120 feet below existing grade.
- Based on the previous field evaluation data performed by others (references), the site soils are generally not susceptible to liquefaction due to a lack of groundwater and the relatively dense native soils in the upper 50 feet; therefore, liquefaction potential is considered very low.
- Based on the results of preliminary laboratory testing, site soils are anticipated to have "Very Low" expansion potential. Final design expansion potential must be confirmed at the completion of rough/precise grading.

4.0 PRELIMINARY RECOMMENDATIONS

The following recommendations are to be considered preliminary and should be confirmed upon completion of grading and earthwork operations. In addition, they should be considered minimal from a geotechnical viewpoint, as there may be more restrictive requirements from the architect, structural engineer, building codes, governing agencies, or the owner.

It should be noted that the following geotechnical recommendations are intended to provide sufficient information to develop the site in general accordance with the 2022 CBC requirements. With regard to the potential occurrence of potentially catastrophic geotechnical hazards such as fault rupture, earthquake-induced landslides, liquefaction, etc. the following geotechnical recommendations should provide adequate protection for the proposed development to the extent required to reduce seismic risk to an "acceptable level." The "acceptable level" of risk is defined by the California Code of Regulations as "that level that provides reasonable protection of the public safety, though it does not necessarily ensure continued structural integrity and functionality of the project" [Section 3721(a)]. Therefore, repair and remedial work of the proposed improvements may be required after a significant seismic event. With regards to the potential for less significant geologic hazards to the proposed development, the recommendations contained herein are intended as a reasonable protection against the potential damaging effects of geotechnical phenomena such as expansive soils, fill settlement, groundwater seepage, etc. It should be understood, however, that although our recommendations are intended to maintain the structural integrity of the proposed development and structures given the site geotechnical conditions, they cannot preclude the potential for some cosmetic distress or nuisance issues to develop as a result of the site geotechnical conditions.

The geotechnical recommendations contained herein must be confirmed to be suitable or modified based on the actual as-graded conditions.

4.1 Site Earthwork

We anticipate that earthwork at the subject site will consist of minor grading, import of soils, utility installation, street improvements, and foundation construction. We recommend that earthwork onsite be performed in accordance with the following recommendations, the City of Ontario grading requirements, and the 2022 CBC. In case of conflict, the following recommendations shall supersede previous recommendations.

4.1.1 Site Preparation, Remedial Grading, and Fill Processing

Because the subject site was already mass graded as nominally reported in LGC Geo-Environmental, 2020, and generally verified with our recent site investigation, it is our opinion that the majority of fill placed to the current mass grade design remains acceptable for the intended uses with exception of specific localized areas of recommended removals as follows.

The site has undergone near-surface weathering and limited vegetation growth over the last five years of vacancy. In general, we recommend that the upper, organic-rich couple of inches (vegetation and dense rootlets) should be fully cleared and removed/exported

from the site. Additionally, soils with organic contents higher than 3 percent are recommended to be temporarily removed, mixed and blended with "clean" soils, and placed as compacted fill with an organic content of approximately 2 percent or less. Several areas have been identified as high concentrations of organics including the soils in the vicinity of test pits TP-11 and TP-13, refer to our Test Pit Logs (Appendix B) and our Geotechnical Map (Sheet 1) for recommendations. Import should consist of "clean" soils with organic contents 2 percent or less. We recommend the geotechnical consultant be present during grading to observe the mixing of the onsite soils and perform periodic testing of the compacted fill. Organic materials shall be thoroughly mixed such that no nesting of organic materials occurs.

Based on near-surface weathering, a minimum of 1 foot of the existing grades on-site will require temporary removal and re-compaction to achieve design grades. Areas of recommended removal depths greater 1 feet were identified from our field observations within test pits, results of field density testing, and results of organic content and moisture content testing. Therefore, temporary removal and recompaction is recommended to range from approximately 1 to 6 feet below existing grades, refer to Geotechnical Map (Sheet 1) for recommended depths. Alternatively, if the design cut is determined to exceed the removal of unsuitable weathered near-surface older fill materials, the cut may be left at grade. The temporary removal and recompaction depths will need to be confirmed by the geotechnical consultant during rough/precise grading based on the observed field conditions.

Removal bottoms and/or reprocessing of acceptable near-surface soils should be observed and accepted by the geotechnical consultant prior to fill placement or construction. Areas prepared to receive structural fill and/or other surface improvements should be scarified to a minimum of 6 to 8 inches, brought to at least optimum-moisture content, and recompacted to at least 90 percent relative compaction (based on ASTM Test Method D1557). Deeper reprocessing of the previously placed compacted fill may be required based on the conditions observed during post-grading.

4.1.2 Material for Fill

From a geotechnical perspective, the onsite soils are generally suitable for use as compacted fill, provided they are screened of organic materials, construction debris and oversized materials (material greater than 8 inches in maximum dimension).

From a geotechnical viewpoint, any required import soils should consist of clean, free draining, relatively granular soils of very low expansion potential (expansion index 20 or less based on ASTM D4829) and no particles larger than 3 inches in greatest dimension. Source samples of planned importation should be provided to the geotechnical consultant for laboratory testing a minimum of 4 working days prior to any planned importation for required laboratory testing.

Retaining wall backfill should consist of imported sandy soils with a maximum of 35 percent fines (passing the No. 200 sieve) per ASTM Test Method D1140 (or ASTM D6913/D422) and a "Very Low" expansion potential (EI of 20 or less per ASTM D4829). Soils should also be screened of organic materials, construction debris, and any material

greater than 3 inches in maximum dimension. Portions of the onsite soil may not be suitable for retaining wall backfill due to their fines content (i.e., silt and clay content). Therefore, either select grading and stockpiling and/or import of suitable sandy soils meeting the criteria outlined above will be required.

Aggregate base should conform to the requirements of Section 200-2 of the Standard Specifications for Public Works Construction ("Greenbook") for untreated base materials, Caltrans Class 2 aggregate base and/or the City of Ontario/County of San Bernardino requirements.

4.1.3 Placement and Compaction of Fills

Material to be placed as fill should be brought to near-optimum moisture content (generally within optimum and 2 percent above optimum moisture content) and recompacted to at least 90 percent relative compaction (per ASTM D1557). Moisture conditioning of site soils will be required in order to achieve adequate compaction. Soils are present that will require additional moisture in order to achieve the required compaction. Drying and/or mixing the very moist soils may also be required prior to reusing the materials in compacted fills.

The optimum lift thickness to produce a uniformly compacted fill will depend on the type and size of compaction equipment used. In general, fill should be placed in uniform lifts not exceeding 8 inches in compacted thickness. Each lift should be thoroughly compacted and accepted prior to subsequent lifts. Generally, placement and compaction of fill should be performed in accordance with local grading ordinances and with observation and testing performed by the geotechnical consultant. Oversized material as previously defined should be removed from site fills.

Fill placed on any slopes greater than 5:1 (horizontal to vertical) should be properly keyed and benched into firm and competent soils as it is placed in lifts. During backfill of temporary excavations, fill should be properly benched into firm and competent soils as it is placed in lifts and compacted.

Aggregate base material should be compacted to a minimum of 95 percent relative compaction at or slightly above optimum moisture content per ASTM D1557. Subgrade below aggregate base should be compacted to a minimum of 90 percent relative compaction (or per the city requirements, whichever is higher) at or slightly above optimum moisture content per ASTM D1557.

If gap-graded ¾-inch rock is used for backfill (around storm drain storage chambers, retaining wall backfill, etc.) it will require compaction. Rock shall be placed in thin lifts (typically not exceeding 6 inches) and mechanically compacted with observation by geotechnical consultant. Backfill rock shall meet the requirements of ASTM D2321. Gap-graded rock is required to be entirely wrapped in filter fabric (Mirafi 140N or approved alternative) or at the very minimum to be vertically separated from the trench backfill with filter fabric to prevent the migration of fines into the rock backfill.

4.1.4 Trench and Conventional Retaining Wall Backfill and Compaction

The onsite materials may generally be suitable as trench backfill provided the soils are screened of organic matter, rocks greater than 6 inches in diameter and construction debris. Trench backfill should be compacted in uniform lifts (generally not exceeding 12 inches in compacted thickness) by mechanical means to at least 90 percent relative compaction (per ASTM Test Method D1557). A representative from LGC Geotechnical should observe and test the backfill to verify compliance with the project recommendations.

If trenches are shallow or the use of conventional equipment may result in damage to the utilities, sand having a sand equivalent (SE) of 20 or greater (per California Test Method [CTM] 217) may be used to bed and shade the pipes. Sand backfill within the pipe bedding zone may be densified by jetting or flooding and then tamped to ensure adequate compaction. Sand grains should be from a natural source with rounded shape. Manufactured sand from crushed rock or recycled material is not suitable for jetting/flooding as the grains are typically angular in shape and do not densify well enough with these methods. Manufactured sand can be used as shading material when mechanical compaction efforts are used. Subsequent trench backfill should be compacted in uniform thin lifts by mechanical means to at least a minimum 90 percent relative compaction (per ASTM D1557). If any ¾-inch rock is used for backfill, see Section 4.1.3 for filter fabric requirements.

Retaining wall backfill should consist of sandy soils as outlined in preceding Section 4.1.2. The limits of select sandy backfill should extend at minimum ½ the height of the retaining wall or the width of the heel (if applicable), whichever is greater (Figure 2). Retaining wall backfill soils should be compacted in relatively uniform thin lifts to at least 90 percent relative compaction (per ASTM D1557). Jetting or flooding of retaining wall backfill materials should not be permitted.

In backfill areas where mechanical compaction of soil backfill is impractical due to space constraints, typically sand-cement slurry may be substituted for compacted backfill. The slurry should contain about one sack of cement per cubic yard. When set, such a mix typically has the consistency of compacted soil. Sand cement slurry placed near the surface within landscape areas should be evaluated for potential impacts on planned improvements.

A representative from LGC Geotechnical should observe, probe, and test the backfill to verify compliance with the project recommendations.

4.1.5 Temporary Excavations

Temporary excavations should be performed in accordance with project plans, specifications, and all Occupational Safety and Health Administration (OSHA) requirements. Excavations should be laid back or shored in accordance with OSHA requirements before personnel or equipment are allowed to enter. Based on the reference geotechnical reports, site soils are anticipated to be OSHA Type "B" soils. Sandy soils are present and should be considered susceptible to caving. Soil conditions should

be regularly evaluated during construction to verify conditions are as anticipated. The contractor shall be responsible for providing the "competent person," required by OSHA standards, to evaluate soil conditions. Close coordination with the geotechnical consultant should be maintained to facilitate construction while providing safe excavations. Excavation safety is the sole responsibility of the contractor.

Vehicular traffic, stockpiles, and equipment storage should be set back from the perimeter of excavations a distance equivalent to a 1:1 projection from the bottom of the excavation. Once an excavation has been initiated, it should be backfilled as soon as practical. Prolonged exposure of temporary excavations may result in some localized instability. Excavations should be planned so that they are not initiated without sufficient time to shore/fill them prior to weekends, holidays, or forecasted rain.

It should be noted that any excavation that extends below a 1:1 (horizontal to vertical) projection of an existing foundation will remove existing support of the structure foundation. If requested, temporary shoring and/or ABC slot cut parameters will be provided.

4.2 Preliminary Foundation Recommendations

Provided that the remedial grading recommendations provided herein are implemented, the site may be considered suitable for the support of the residential structures using a conventional or post-tensioned foundation system. Laboratory testing indicates that the site soils have a "Very Low" expansion potential (EI of 20 or less per ASTM D4829), however, the foundation designer should take into consideration the total and differential settlement in his/her design. Please note that the following foundation recommendations are preliminary and must be confirmed by LGC Geotechnical at the completion of grading.

Preliminary foundation recommendations are provided in the following sections. Recommended soil bearing and estimated settlement due to structural loads are provided in Section 4.4.

4.2.1 Provisional Conventional Foundation Design Parameters

Due to the very low expansion potential of the onsite soils, the foundation/structural engineer may design a conventional foundation system that is tied together based upon the anticipated dead and live loads (wind, seismic) that will be imparted by the structure. The recommendations provided in the "Soil Bearing and Lateral Resistance" section may be utilized in the design of a rigid slab-on-grade conventional foundation designed in accordance with Section 1808 of the 2022 C.B.C.

4.2.2 Provisional Post-Tensioned Foundation Design Parameters

The geotechnical parameters provided herein may be used for post-tensioned slab foundations. These parameters have been determined in general accordance with the Post-Tensioning Institute (PTI, 2012) Standard Requirements (PTI DC 10.5), referenced in Chapter 18 of the 2022 CBC. In utilizing these parameters, the foundation engineer

should design the foundation system in accordance with the allowable deflection criteria of applicable codes and the requirements of the structural designer/architect. Other types of stiff slabs may be used in place of the CBC post-tensioned slab design provided that, in the opinion of the foundation structural designer, the alternative type of slab is at least as stiff and strong as that designed by the CBC/PTI method to resist expansive soils.

Our design parameters are based on our experience with similar residential projects and the anticipated nature of the soil (with respect to expansion potential). Please note that implementation of our recommendations will not eliminate foundation movement (and related distress) should the moisture content of the subgrade soils fluctuate. It is the intent of these recommendations to help maintain the integrity of the proposed structures and reduce (not eliminate) movement, based upon the anticipated site soil conditions. Should future owners not properly maintain the areas surrounding the foundation, for example by overwatering, then we anticipate for expansive soils the maximum differential movement of the perimeter of the foundation to the center of the foundation to be on the order of a couple of inches. Soils of lower expansion potential are anticipated to show less movement.

TABLE 2

Provisional Geotechnical Parameters for Post-Tensioned Foundation Slab Design

Parameter	PT Slab with Perimeter Footing	PT Mat with Thickened Edge
Expansion Index	Very Low[1]	Very Low[1]
Thornthwaite Moisture Index	-20	-20
Constant Soil Suction	PF 3.9	PF 3.9
Center Lift Edge moisture variation distance, e_m Center lift, y_m	 9.0 feet < 0.25 inch	 9.0 feet 0.25 inch
Edge Lift Edge moisture variation distance, e_m Edge lift, y_m	 6.1 feet 0.25 inch	 6.1 feet 0.25 inch
Modulus of Subgrade Reaction, k (assuming presoaking as indicated below)	200 pci	200 pci
Minimum perimeter footing/thickened edge embedment below finish grade	12 inches	6 inches
Perimeter foundation reinforcement	N/A[2]	N/A[2]
Presoak (moisture conditioning)	100% of Optimum to 12 inches	100% of Optimum to 12 inches

1. Assumed for preliminary design purposes. Further evaluation is needed at the completion of grading.
2. Recommendations for foundation reinforcement and slab thickness are ultimately the purview of the foundation engineer/structural engineer based upon geotechnical criteria and structural engineering considerations.
3. Recommendations for sand below slabs have traditionally been included with geotechnical foundation recommendations, although they are not the purview of the geotechnical consultant. The sand layer requirements are the purview of the foundation engineer/structural engineer, and should be provided in accordance with ACI Publication 302 "Guide for Concrete Floor and Slab Construction".
4. Recommendations for vapor retarders below slabs are also the purview of the foundation engineer/structural engineer and should be provided in accordance with applicable code requirements.

4.2.3 Foundation Subgrade Preparation and Maintenance

Moisture conditioning of the subgrade soils is recommended prior to trenching the foundation. The duration of this process varies greatly based on the chosen method and is also dependent on factors such as soil type and weather conditions. Time duration for presoaking from completion of rough grading to trenching of foundations should be accounted for in the construction schedule (typically a few days for Very Low expansion soils). The recommendations specific to the anticipated site soil conditions, including recommended presoak, are presented in Table 2. The subgrade moisture condition of

the building pad soils should be maintained at near-optimum moisture content up to the time of concrete placement. This moisture content should be maintained around the immediate perimeter of the slab during construction and up to occupancy of the homes.

The geotechnical parameters provided herein assume that if the areas adjacent to the foundation are planted and irrigated, these areas will be designed with proper drainage and adequately maintained so that ponding, which causes significant moisture changes below the foundation, does not occur. Our recommendations do not account for excessive irrigation and/or incorrect landscape design. Plants should only be provided with sufficient irrigation for life and not overwatered to saturate subgrade soils. Sunken planters placed adjacent to the foundation should either be designed with an efficient drainage system or liners to prevent moisture infiltration below the foundation. Some lifting of the perimeter foundation beam should be expected even with properly constructed planters.

In addition to the factors mentioned above, future owners/property management personnel should be made aware of the potential negative influences of trees and/or other large vegetation. Roots that extend near the vicinity of foundations can cause distress to foundations. Future owners (and the owner's landscape architect) should not plant trees/large shrubs closer to the foundations than a distance equal to half the mature height of the tree or 20 feet, whichever is more conservative unless specifically provided with root barriers to prevent root growth below the building foundation.

It is the owner's responsibility to perform periodic maintenance during hot and dry periods to ensure that adequate watering has been provided to keep soil from separating or pulling back from the foundation. Future owners and property management personnel should be informed and educated regarding the importance of maintaining a constant level of soil-moisture. The owners should be made aware of the potential negative consequences of both excessive watering, as well as allowing potentially expansive soils to become too dry. Expansive soils can undergo shrinkage during drying, and swelling during the rainy winter season, or when irrigation is resumed. This can result in distress to building structures and hardscape improvements. The builder should provide these recommendations to future owners and property management personnel.

4.2.4 Slab Underlayment Guidelines

The following recommendations are for informational purposes since they are unrelated to the geotechnical performance of the foundation. Some post-construction moisture migration should be expected below the foundation; the foundation engineer must assume soil moisture to be present below the slab. The following recommendations may be superseded by the foundation engineer and/or owner.

In general, interior floor slabs with moisture sensitive floor coverings should be underlain by a minimum 10-15 mil thick vapor retarder, which has a water vapor transmission rate (permeance) of less than 0.3 perms, as determined by ASTM E 96, and meets the applicable code requirements (ASTM E 1745).

It is the responsibility of the contractor to ensure that the moisture/vapor retarder systems are properly installed in accordance with the project plans and manufacturer's specifications, and that the moisture/vapor retarder materials are free of tears and punctures prior to and as a result of concrete placement. Additional moisture reduction and/or prevention measures may be needed, depending on the performance requirements of future interior floor coverings.

The foundation engineer/architect should determine whether the use of a capillary break (sand or gravel layer) in conjunction with the vapor retarder is necessary or required by code. Sand layer thickness and location (above and/or below vapor retarder) should also be determined by the foundation engineer/architect. However, we often observe the membrane to be sandwiched between a layer of sand, 1-inch above and 1-inch below. Sand layers should be installed, where applicable, in accordance with ACI Publication 302 – "Guide for Concrete Floor and Slab Construction."

4.3 Soil Bearing and Lateral Resistance

Provided our earthwork recommendations are implemented, an allowable soil bearing pressure of 2,000 pounds per square foot (psf) may be used for the design of footings having a minimum width of 12 inches and minimum embedment of 12 inches below lowest adjacent ground surface. This value may be increased by 300 psf for each additional foot of embedment and 150 psf for each additional foot of foundation width to a maximum value of 3,000 psf. A post-tensioned mat foundation a minimum of 6 inches below lowest adjacent grade may be designed for an allowable soil bearing pressure of 1,200 psf. These allowable bearing pressures are applicable for level (ground slope equal to or flatter than 5H:1V) conditions only. Bearing values indicated are for total dead loads and frequently applied live loads and may be increased by ⅓ for short duration loading (i.e., wind or seismic loads).

In utilizing the above-mentioned allowable bearing capacity and provided our earthwork recommendations are implemented, foundation settlement due to structural loads is anticipated to be 1-inch or less. Differential static settlement may be taken as half of the static settlement (i.e., ½-inch over a horizontal span of 40 feet).

Resistance to lateral loads can be provided by friction acting at the base of foundations and by passive earth pressure. For concrete/soil frictional resistance, an allowable coefficient of friction of 0.35 may be assumed with dead-load forces. For slabs constructed over a moisture retarder, the allowable friction coefficient should be provided by the manufacturer. An allowable passive lateral earth pressure of 250 psf per foot of depth (or pcf) to a maximum of 2,500 psf may be used for the sides of footings poured against properly compacted fill. Allowable passive pressure may be increased to 340 pcf (maximum of 3,400 psf) for short duration seismic loading. This passive pressure is applicable for level (ground slope equal to or flatter than 5H:1V) conditions only. For a 2:1 sloping condition an allowable passive lateral earth pressure of 100 psf per foot of depth (or pcf) to a maximum of 1,000 psf may be used for lateral resistance. Allowable passive pressure may be increased to 130 pcf to a maximum of 1,300 psf for short duration seismic or wind loading. Frictional resistance and passive pressure may be used in combination without reduction. We recommend that the upper foot of passive resistance be neglected if finished grade will not be covered with concrete or asphalt. The provided allowable passive pressures are based on a factor of safety of 1.5 and 1.1 for static and seismic loading conditions,

respectively. The structural designer should incorporate appropriate factors of safety and/or load factors in their design.

4.4 Lateral Earth Pressures for Retaining Walls

Lateral earth pressures for approved sandy soils meeting indicated project recommendations (Section 4.1.2) are provided below. Lateral earth pressures are provided as equivalent fluid unit weights, in psf per foot of depth (or pcf). These values do not contain an appreciable factor of safety, so the retaining wall designer should apply the applicable factors of safety and/or load factors during design. A soil unit weight of 120 pcf may be assumed for calculating the actual weight of soil over the wall footing.

The following lateral earth pressures are presented on Table 3 are for backfilled retaining walls using approved select granular soils with a maximum of 35 percent fines (passing the No. 200 sieve per ASTM D-421/422) and a maximum Expansion Index of 20 (per ASTM D-4829). Portions of the onsite soil may not be suitable for retaining wall backfill due to their fines content (i.e., silt and clay content). Therefore, either select grading and stockpiling and/or import of suitable sandy soils meeting the criteria outlined above will be required. The retaining wall designer should clearly indicate on the retaining wall plans the required sandy soil backfill criteria.

TABLE 3

Lateral Earth Pressures – Approved On-site or Imported Sandy Soils

Conditions	Equivalent Fluid Weight (pcf)	Equivalent Fluid Weight (pcf)
	Level Backfill	2:1 Sloped Backfill
	Approved Sandy Soils	Approved Sandy Soils
Active	35	55
At-Rest	55	70

If the wall can yield enough to mobilize the full shear strength of the soil, it can be designed for "active" pressure. If the wall cannot yield under the applied load, the earth pressure will be higher. This would include 90-degree corners of retaining walls. Such walls should be designed for "at-rest." The equivalent fluid pressure values assume free-draining conditions. If conditions other than those assumed above are anticipated, the equivalent fluid pressure values should be provided on an individual-case basis by the geotechnical engineer.

Surcharge loading effects from any adjacent structures should be evaluated by the retaining wall designer. In general, structural loads within a 1:1 (horizontal to vertical) upward projection from the bottom of the proposed retaining wall footing will surcharge the proposed retaining wall. In addition to the recommended earth pressure, retaining walls adjacent to streets should be designed to resist a uniform lateral pressure of 85 pounds per square foot (psf) due to normal street vehicle traffic, if applicable. The retaining wall designer should contact the geotechnical consultant for any required geotechnical input in estimating surcharge

loads.

Retaining wall structures should be provided with appropriate drainage and appropriately waterproofed. To reduce, but not eliminate, saturation of near-surface (upper approximate 1-foot) soils in front of the retaining walls, the perforated subdrain pipe should be located as low as possible behind the retaining wall. The outlet pipe should be sloped to drain to a suitable outlet. In general, we do not recommend retaining wall outlet pipes be connected to area drains. If subdrains are connected to area drains, special care and information should be provided to homeowners to maintain these drains. Typical retaining wall drainage is illustrated in Figure 3. It should be noted that the recommended subdrain does not provide protection against seepage through the face of the wall and/or efflorescence. Efflorescence is generally a white crystalline powder (discoloration) that results when water containing soluble salts migrates over a period of time through the face of a retaining wall and evaporates. If such seepage or efflorescence is undesirable, retaining walls should be waterproofed to reduce this potential.

If retaining walls greater than 6 feet in height are proposed, the retaining wall designer should contact LGC Geotechnical for specific seismic lateral earth pressure increments based on the configuration and height of the planned retaining wall structures.

Soil bearing and lateral resistance (friction coefficient and passive resistance) are provided in Section 4.4. Earthwork considerations (temporary backcuts, backfill, compaction, etc.) for retaining walls are provided in Section 4.1 (Site Earthwork) and the subsequent earthwork related sub-sections.

4.5 Soil Corrosivity

Although not corrosion engineers (LGC Geotechnical is not a corrosion consultant), several governing agencies in Southern California require the geotechnical consultant to determine the corrosion potential of soils to buried concrete and metal facilities. We therefore present the results of our testing with regard to corrosion for the use of the client and other consultants, as they determine necessary.

Corrosion testing of near-surface bulk samples indicated a soluble sulfate content ranging from approximately 0.006 to 0.010 percent and chloride content ranging from approximately 37 to 60 parts per million (ppm). Based on Caltrans Corrosion Guidelines (Caltrans, 2021), soils are considered corrosive to structural elements if the chloride concentration is 500 ppm or greater, or the sulfate concentration is 2,000 ppm (0.2 percent) or greater. Based on test results, soils are not considered corrosive using Caltrans criteria. Note that based on minimum resistivity the soils are considered corrosive to metallic improvements. If improvements that may be susceptible to corrosion are proposed, it is recommended that further evaluation by a corrosion engineer be performed.

Based on laboratory sulfate test results, the near surface soils are designated to a class “S0” per ACI 318, Table 19.3.1.1 with respect to sulfates. Concrete in direct contact with the onsite soils can be designed according to ACI 318, Table 19.3.2.1 using the “S0” sulfate classification.

Laboratory testing may need to be performed at the completion of grading by the project corrosion engineer to further evaluate the as-graded soil corrosivity characteristics including sulfate, chloride, pH, minimum resistivity, etc. and provide design level recommendations. Accordingly, revision of the corrosion potential may be needed, should future test results differ substantially from the conditions reported herein. The client and/or other members of the development team should consider this during the design and planning phase of the project and formulate an appropriate course of action.

4.6 Control of Surface Water and Drainage Control

From a geotechnical perspective, positive drainage of surface water away from structures is very important. Water should not be allowed to pond adjacent to buildings or to flow freely down a graded slope. Per section 1804.4 of the 2022 CBC, positive drainage may be accomplished by providing drainage away from buildings at a gradient of at least 5 percent for earthen surfaces for a distance of at least 10 feet away from the face of wall. If a distance of 10 feet cannot be achieved, an alternative of a gradient of at least 5 percent to an area drain or swale having a gradient of 2 percent is acceptable. Where necessary, drainage paths may be shortened by use of area drains and collector pipes. Eave gutters are recommended and should reduce water infiltration into the subgrade soils if the downspouts are properly connected to appropriate outlets. Ultimately surface drainage and code compliance are the purview of the project civil engineer.

Planters with open bottoms adjacent to buildings should be avoided. Planters should not be designed adjacent to buildings unless provisions for drainage, such as catch basins, liners, and/or area drains, are made. Overwatering must be avoided.

Planters adjacent to a building or structure should be avoided wherever possible or be properly designed (e.g., lined with a membrane), to reduce the penetration of water into the adjacent footing subgrades and thereby reduce moisture related damage to the foundation. Planting areas at grade should be provided with appropriate positive drainage. Wherever possible, exposed soil areas should be above adjacent paved grades to facilitate drainage. Planters should not be depressed below adjacent paved grades unless provisions for drainage, such as multiple depressed area drains, are constructed. Adequate drainage gradients, devices, and curbing should be provided to prevent runoff from adjacent pavement or walks into the planting areas. Irrigation methods should promote uniformity of moisture in planters and beneath adjacent concrete flatwork. Overwatering and underwatering of landscape areas must be avoided.

Area drain inlets should be maintained and kept clear of debris in order to properly function. Homeowners should also be made aware that excessive irrigation of neighboring properties can cause seepage and moisture conditions on adjacent lots. Homeowners should be furnished with these recommendations communicating the importance of maintaining positive drainage away from structures, towards streets, when they design their improvements.

The impact of heavy irrigation or inadequate runoff gradients can create perched water conditions. This may result in seepage or shallow groundwater conditions where previously none existed. Maintaining adequate surface drainage and controlled irrigation will significantly reduce the potential for nuisance-type moisture problems. To reduce differential earth

movements such as heaving and shrinkage due to the change in moisture content of foundation soils, which may cause distress to a residential structure and associated improvements, moisture content of the soils surrounding the structure should be kept as relatively constant as possible.

Subdrains and v-ditches must be properly maintained, and their outlets kept free draining and clear of any potential obstructions. Routine maintenance should be performed, especially prior to and during the rainy season. Failure to properly maintain these elements may result in slope failures, slumps, excessive erosion, localized saturated zones, nuisance type water issues, etc.

Any future trenches excavated on a slope face for utility or irrigation lines and/or for any purpose should be properly backfilled and compacted to the slope face. Observation/testing and acceptance by the geotechnical consultant during trench backfill are recommended.

A program for the elimination of burrowing animals in both native and graded slope areas must be established and properly maintained to protect slope stability by reducing the potential for surface water to penetrate into the soil. Continuous erosion control, rodent control, and maintenance are essential to the long-term stability of all slopes.

4.7 Preliminary Asphalt Concrete Pavement Sections

The following provisional minimum asphalt concrete (AC) street sections are provided in Table 4 on the following page for Traffic Indices (TI) of 5.5 (or less) and 8.0. These sections are based on an assumed R-value of 40. These recommendations must be confirmed with R-value testing of representative near-surface soils at the completion of grading and after underground utilities have been installed and backfilled. Final pavement sections should be confirmed by the project civil engineer based upon the final design Traffic Index. The final Traffic Index is determined by the Civil Engineer or City Engineer. We are not responsible for selecting a design Traffic Index. If requested, LGC Geotechnical will provide sections for alternate TI values. The city of Ontario minimum pavement sections have been incorporated into our preliminary recommendations.

TABLE 4

Preliminary Asphalt Concrete Pavement Section Options

Assumed Traffic Index	5.5 (or less)	8.0
R -Value Subgrade	40	40
AC Thickness	4.0 inches	6.0 inches
Aggregate Base Thickness	6.0 inches	8.0 inches

Due to anticipated heavy construction traffic during installation of utilities and home construction, we recommend that the total thickness (base course and capping course) of AC be placed at essentially the same time. Allowing heavy construction traffic loading on only the base course of the AC will increase the potential for pavement distress. It should be noted that construction traffic such as concrete trucks will likely exceed traffic loading after completion of construction.

The pavement section thicknesses provided above are considered minimum thicknesses. Increasing the thickness of any of the above layers will reduce the likelihood of the pavement experiencing distress during its service life. The above recommendations assume that proper maintenance and irrigation of the areas adjacent to the roadway will occur throughout the design life of the pavement. Failure to maintain a proper maintenance and/or irrigation program may jeopardize the integrity of the pavement.

Earthwork recommendations regarding aggregate base and subgrade are provided in Section 4.1 "Site Earthwork" and the related sub-sections of this report.

4.8 Nonstructural Concrete Flatwork

Nonstructural concrete flatwork (such as walkways, private drives, patio slabs, etc.) has a potential for cracking due to changes in soil volume related to soil-moisture fluctuations. To reduce the potential for excessive cracking and lifting, concrete may be designed in accordance with the minimum guidelines outlined in Table 5. These guidelines will reduce the potential for irregular cracking and promote cracking along construction joints but will not eliminate all cracking or lifting. Thickening the concrete and/or adding additional reinforcement will further reduce cosmetic distress.

TABLE 5

Nonstructural Concrete Flatwork Guidelines for Very Low Expansion Potential

	Community Sidewalks (≤4 feet wide)	**Patios/ Walkways** (adjacent to homes or flatwork >4 feet wide)	**Private Vehicular Driveways**	**City Sidewalk Curb and Gutters**
Minimum Thickness (in.)	4 (full)	4 (full)	4 (full)	City/Agency Standard
Presoaking	Wet down prior to placing	Wet down prior to placing	Wet down prior to placing	City/Agency Standard
Reinforcement	—	No. 3 at 36 inches on centers	No. 3 at 36 inches on centers	City/Agency Standard
Thickened Edge (in.)	—	—	8 x 8	City/Agency Standard
Crack Control Joints	Saw cut or deep open tool joint to a minimum of $^1/_3$ the concrete thickness	Saw cut or deep open tool joint to a minimum of $^1/_3$ the concrete thickness	Saw cut or deep open tool joint to a minimum of $^1/_3$ the concrete thickness	City/Agency Standard
Maximum Joint Spacing	5 feet	6 feet	10 feet or quarter cut whichever is closer	City/Agency Standard

To reduce the potential for driveways to separate from the garage slab, the builder may elect to install dowels to tie these two elements together. Similarly, future homeowners should consider the use of dowels to connect flatwork to the foundation.

4.9 Geotechnical Plan Review

When available, grading, retaining wall and foundation plans should be reviewed by LGC Geotechnical in order to verify our geotechnical recommendations are implemented. Updated recommendations and/or additional fieldwork may be necessary.

4.10 Geotechnical Observation and Testing During Construction

The recommendations provided in this report are based on limited subsurface observations and geotechnical analysis. The interpolated subsurface conditions should be checked in the field during construction by a representative of LGC Geotechnical. Geotechnical observation and testing is required per Section 1705 of the 2022 California Building Code (CBC).

Geotechnical observation and/or testing should be performed by LGC Geotechnical at the following stages:

- During grading (removal bottoms, fill placement, etc.);
- During retaining wall backfill and compaction;
- During utility trench backfill and compaction;
- After presoaking building pads and other concrete-flatwork subgrades, and prior to placement of aggregate base or concrete;
- Preparation of pavement subgrade and placement of aggregate base;
- After building and wall footing excavation and prior to placing steel reinforcement and/or concrete; and
- When any unusual soil conditions are encountered during any construction operation subsequent to issuance of this report.

5.0 LIMITATIONS

Our services were performed using the degree of care and skill ordinarily exercised, under similar circumstances, by reputable soils engineers and geologists practicing in this or similar localities. No other warranty, expressed or implied, is made as to the conclusions and professional advice included in this report.

This report is based on data obtained from limited observations of the site, which have been extrapolated to characterize the site. While the scope of services performed is considered suitable to adequately characterize the site geotechnical conditions relative to the proposed development, no practical evaluation can completely eliminate uncertainty regarding the anticipated geotechnical conditions in connection with a subject site. Variations may exist and conditions not observed or described in this report may be encountered during grading and construction.

This report is issued with the understanding that it is the responsibility of the owner, or of his/her representative, to ensure that the information and recommendations contained herein are brought to the attention of the other consultants (at a minimum the civil engineer, structural engineer, landscape architect) and incorporated into their plans. The contractor should properly implement the recommendations during construction and notify the owner if they consider any of the recommendations presented herein to be unsafe, or unsuitable.

The findings of this report are valid as of the present date. However, changes in the conditions of a site can and do occur with the passage of time, whether they be due to natural processes or the works of man on this or adjacent properties. The findings, conclusions, and recommendations presented in this report can be relied upon only if LGC Geotechnical has the opportunity to observe the subsurface conditions during grading and construction of the project, in order to confirm that our preliminary findings are representative for the site. This report is intended exclusively for use by the client, any use of or reliance on this report by a third party shall be at such party's sole risk.

In addition, changes in applicable or appropriate standards may occur, whether they result from legislation or the broadening of knowledge. Accordingly, the findings of this report may be invalidated wholly or partially by changes outside our control. Therefore, this report is subject to review and modification.

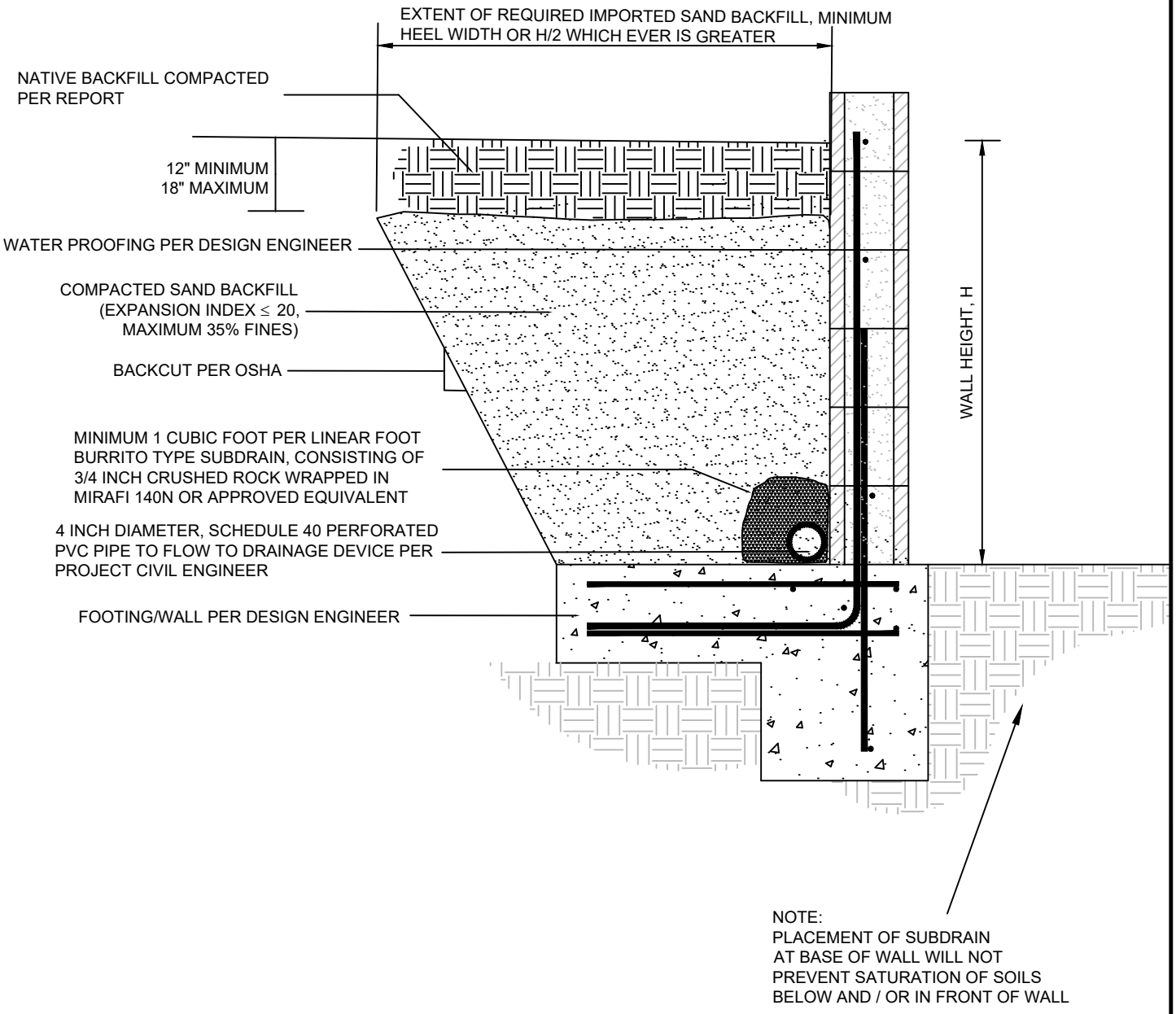

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FIGURE 2
Retaining Wall Backfill Detail

PROJECT NAME	Genstar, Ontario
PROJECT NO.	25040-01
ENG. / GEOL.	RLD / KTM
SCALE	Not to Scale
DATE	April 2025

Appendix A
References

APPENDIX A

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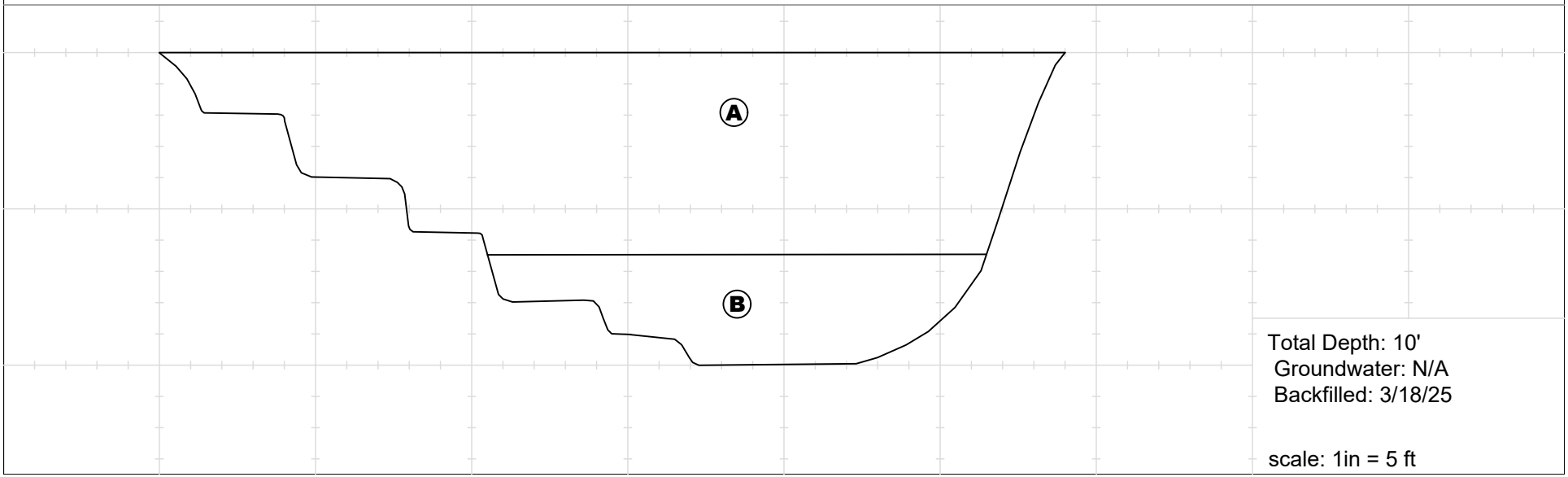
Appendix B
Subsurface Exploration Logs

Project Name: Genstar, Ontario	Logged By: MJG	Trench No.: TP-1	LGC Geotechnical, Inc.
Project Number: 25040-01	Date: 3/18/2025	Engineering Properties:	
Equipment: Backhoe	Location: See Geotechnical Map		

Geologic Attitudes	Unit	SOIL DESCRIPTION:	GEOLOGIC UNIT	USCS	SAMPLE No	MOISTURE (%)	ORGANICS (%)
	A	**Artificial Fill By Others (afo)** @ 0' to 6.5' - Sandy SILT to Silty SAND with some Clayey SAND: gray with some brownish gray to olive gray, generally mottled, moist, medium dense to dense (probes firm throughout), minor detritus in upper 3', some fill lifts are visible, ~6"-8" thick, ~6" topsoil & vegetation	afo	SM	B-1 @0'-10'		
					G-1 @0'-1'	9.8	2.3
					G-2 @1'-3'	7.5	2.0
	B	**Quaternary Alluvium (Qal)** @ 6.5' to 8' - SAND: off white, slightly moist, medium dense, iron oxides stains -----Gradational contact ----- @ 8' to 10' Sandy SILT to SILT: light gray with orange mottling, slightly moist, dense (probed firm), minor porosity (pinhole) some caliche	Qal		G-3 @3'-5'	7.6	1.6

GRAPHICAL REPRESENTATION BELOW: **Elevation: 708' MSL** **Surface Slope: 0 deg.** **Trend: N-S**

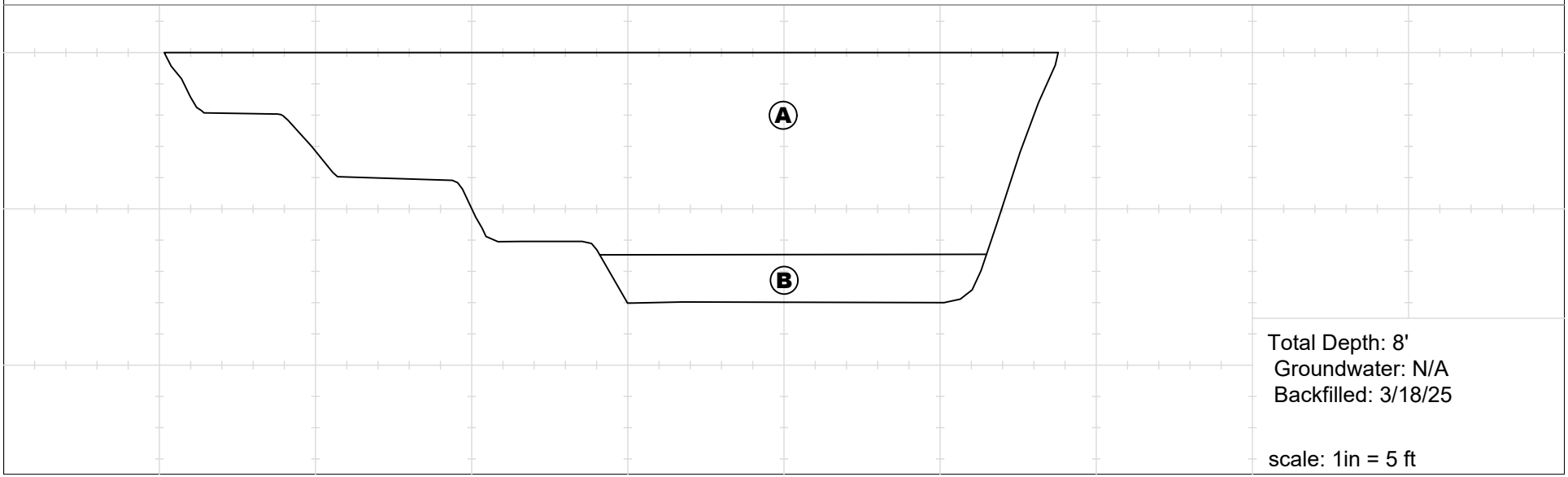


Project Name: Genstar, Ontario	Logged By: MJG	Trench No.: TP-2
Project Number: 25040-01	Date: 3/18/2025	Engineering Properties:
Equipment: Backhoe	Location: See Geotechnical Map	

LGC Geotechnical, Inc.

Geologic Attitudes	Unit	SOIL DESCRIPTION:	GEOLOGIC UNIT	USCS	SAMPLE No	MOISTURE (%)	ORGANICS (%)
	A	**Artificial Fill By Others (afo)** @ 0' to 6.5' - Silty SAND with trace Clay: light gray to brownish gray, moist, slightly moist and some dry areas; dense, probes <1" (firm and unyielding), misc gravel <¾", minor detritus, few granitic cobbles	afo	SM	G-1 @0'-2'	6.9	2.2
					G-2 @2'-4'	6.4	2.1
	B	**Quaternary Alluvium (Qal)** @ 6.5' to 8' - Sandy SILT: gray and orange mottled, slightly moist, dense, probes firm, minor pinhole porosity, some subrounded gravel	Qal		G-3 @4'-6'	3.7	1.8
					G-4 @6'-6.5	7.5	1.9

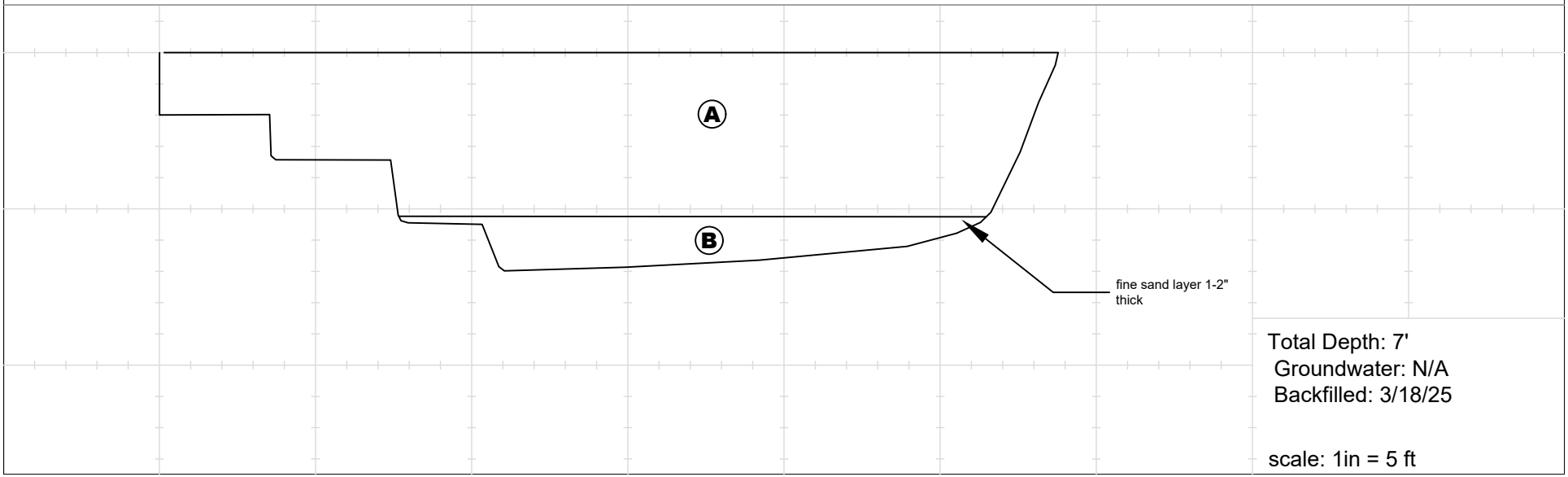
GRAPHICAL REPRESENTATION BELOW: **Elevation: 707' MSL** **Surface Slope: 0 deg.** **Trend: N-S**



Project Name: Genstar, Ontario	Logged By: MJG	Trench No.: TP-3
Project Number: 25040-01	Date: 3/18/2025	Engineering Properties:
Equipment: Backhoe	Location: See Geotechnical Map	

Geologic Attitudes	Unit	SOIL DESCRIPTION:	GEOLOGIC UNIT	USCS	SAMPLE No	MOISTURE (%)	ORGANICS (%)
	A	**Artificial Fill By Others (afo)** @ 0' to 5.25' - Silty Clayey SAND: Gray to grayish brown, slightly moist to moist, medium dense in upper 2' then dense below, probes firm, minor detritus, scattered gravel (¾" to 2")	afo	SM	B-1 @0'-7'		
					G-1 @0'-1'	8.3	1.8
				SC/SM	G-2 @1'-2'	9.7	1.9
	B	**Quaternary Alluvium (Qal)** @ 5.25' to 7' - Poorly Graded SAND to Sandy SILT: gray, slightly moist, dense, probes firm, some iron oxide	Qal	SM	G-3 @2'-3'	9.0	1.8
					G-4 @3'-5.25'	7.3	1.6

GRAPHICAL REPRESENTATION BELOW: **Elevation: 704' MSL** **Surface Slope: 0 deg.** **Trend: W-E**

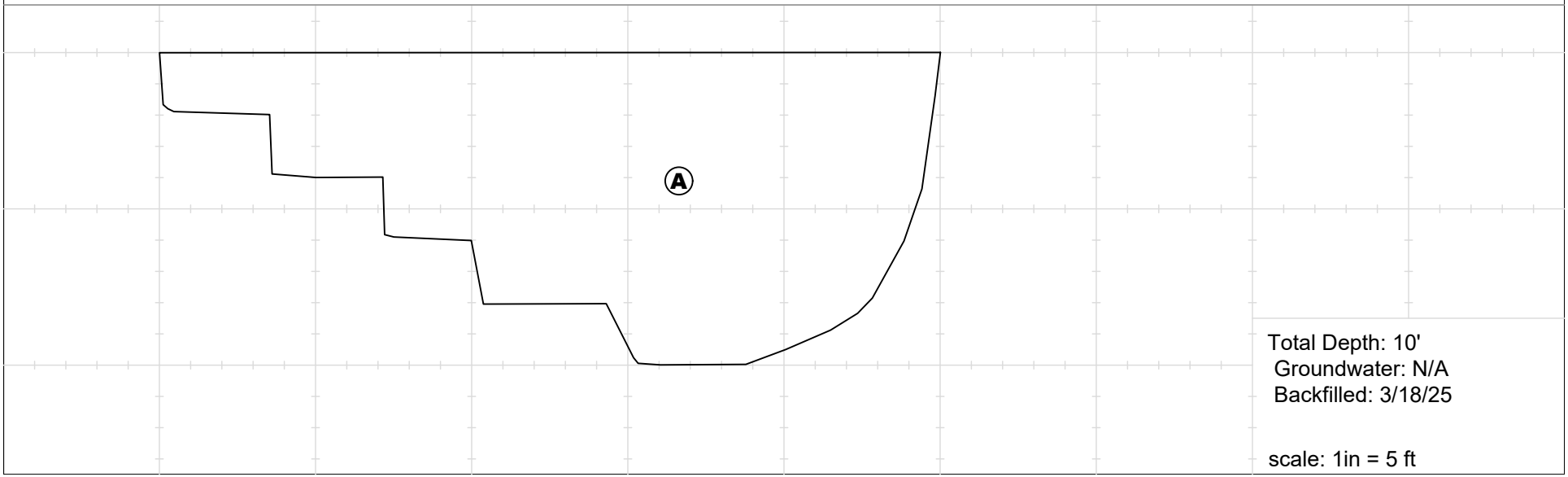


1251

Project Name: Genstar, Ontario	Logged By: MJG	Trench No.: TP-4	LGC Geotechnical, Inc.
Project Number: 25040-01	Date: 3/18/2025	Engineering Properties:	
Equipment: Backhoe	Location: See Geotechnical Map		

Geologic Attitudes	Unit	SOIL DESCRIPTION:	GEOLOGIC UNIT	USCS	SAMPLE No	MOISTURE (%)	ORGANICS (%)
	A	**Artificial Fill By Others (afo)** @ 0' to 10' - Silty SAND with some Sandy SILT: brownish gray, slightly moist, dense to very dense (can barely probe) misc gravel, minor detritus	afo	SM	B-1 @0'-10'		
					G-1 @0'-2'	7.8	1.5
					G-2 @2'-4'	4.9	1.6
					G-3 @4'-8'	7.2	2.3
					G-4 @8'-10'	6.2	1.7

GRAPHICAL REPRESENTATION BELOW: **Elevation: 706' MSL** **Surface Slope: 0 deg.** **Trend: E-W**

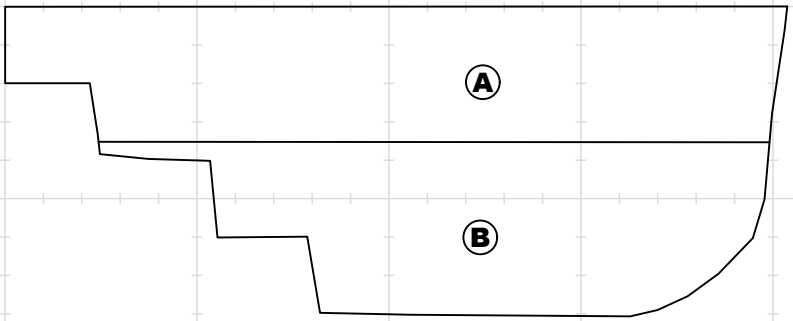


Project Name: Genstar, Ontario	Logged By: MJG	Trench No.: TP-5
Project Number: 25040-01	Date: 3/18/2025	Engineering Properties:
Equipment: Backhoe	Location: See Geotechnical Map	

LGC Geotechnical, Inc.

Geologic Attitudes	Unit	SOIL DESCRIPTION:	GEOLOGIC UNIT	USCS	SAMPLE No	MOISTURE (%)	ORGANICS (%)
	A	**Artificial Fill By Others (afo)** @ 0' to 3.5' - Silty SAND with Sandy SILT: brownish gray, moist to wet, medium dense (probes 2" to 3")	afo	SM	G-1 @0'-2'	8.5	2.1
					G-2 @2'-3.5'	15.7	2.2
	B	**Quaternary Alluvium (Qal)** @ 3.5' to 8' - Silty SAND: gray with orange mottled, slightly moist, medium dense (probes 2" to 3")	Qal				

GRAPHICAL REPRESENTATION BELOW: **Elevation: 701' MSL** **Surface Slope: 0 deg.** **Trend: E-W**



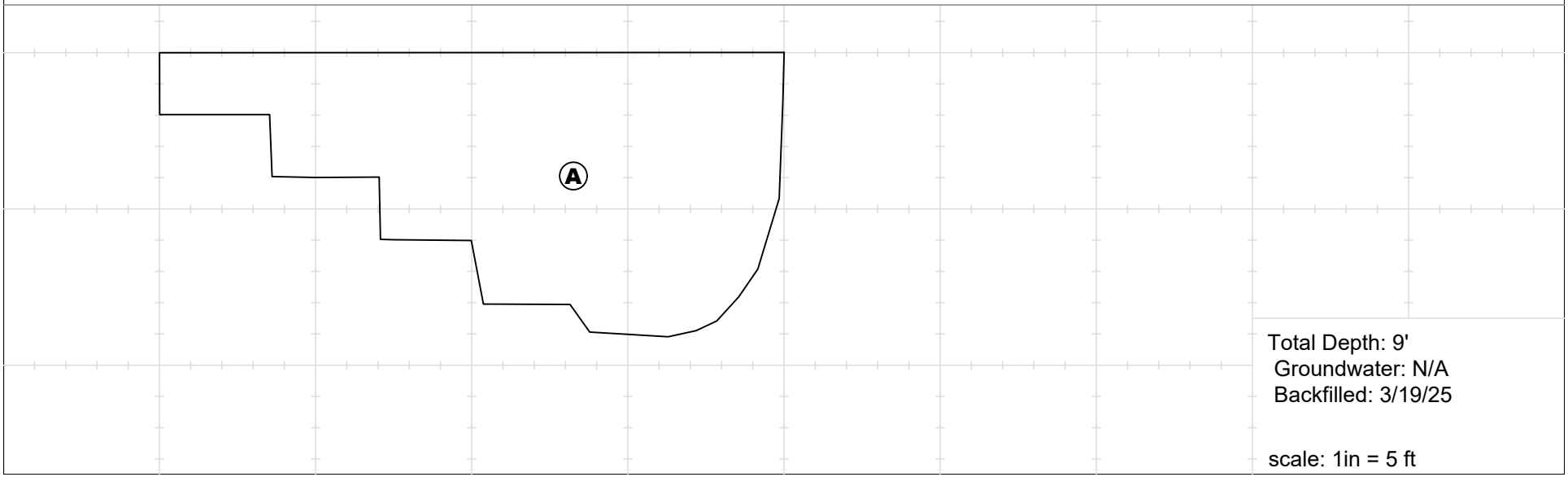
Total Depth: 8'
Groundwater: N/A
Backfilled: 3/18/25

scale: 1in = 5 ft

Project Name: Genstar, Ontario	Logged By: MJG	Trench No.: TP-6
Project Number: 25040-01	Date: 3/19/2025	Engineering Properties:
Equipment: Backhoe	Location: See Geotechnical Map	

Geologic Attitudes	Unit	SOIL DESCRIPTION:	GEOLOGIC UNIT	USCS	SAMPLE No	MOISTURE (%)	ORGANICS (%)
	A	**Artificial Fill By Others (afo)** @ 0' to 9' - Silty SAND with some Clayey SAND: brownish gray, slightly moist, dense, probes firm & unyielding, scattered gravel, minor detritus	afo	SM	G-1 @0'-2'	6.0	1.6
					G-2 @2'-4'	4.4	2.0
					G-3 @4'-6'	6.7	1.6
				SC	G-4 @6'-9'	6.7	1.5

GRAPHICAL REPRESENTATION BELOW: **Elevation: 705' MSL** **Surface Slope: 0 deg.** **Trend: W-E**

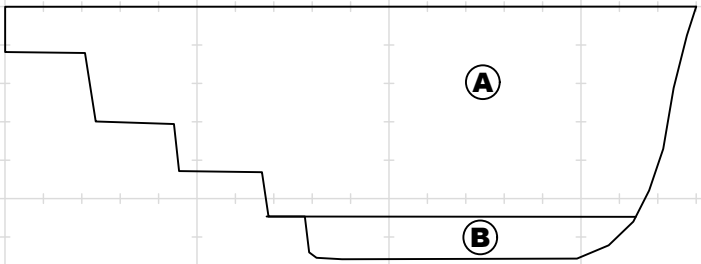


Project Name: Genstar, Ontario	Logged By: MJG	Trench No.: TP-7
Project Number: 25040-01	Date: 3/19/2025	Engineering Properties:
Equipment: Backhoe	Location: See Geotechnical Map	

LGC Geotechnical, Inc.

Geologic Attitudes	Unit	SOIL DESCRIPTION:	GEOLOGIC UNIT	USCS	SAMPLE No	MOISTURE (%)	ORGANICS (%)
	A	**Artificial Fill By Others (afo)** @ 0' to 5.5' - Silty to Clayey SAND: brownish gray, slightly moist, dense probes firm & unyielding, minor detritus, scattered fine gravel	afo	SC	G-1 @0'-2'	7.9	1.9
				SM	G-2 @2'-4'	5.1	1.9
	B	**Quaternary Alluvium (Qal)** @ 5.5' to 6.5' - Sandy SILT: gray with iron oxide mottled, slightly moist, dense/very dense (probes firm & unyielding), indurated, minor pinhole porosity	Qal	SC/SM	G-3 @4'-5.5'	6.0	1.4

GRAPHICAL REPRESENTATION BELOW: **Elevation: 701' MSL** **Surface Slope: 0 deg.** **Trend: W-E**



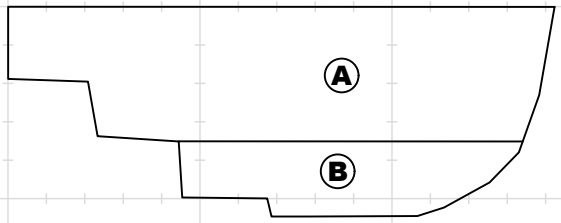
Total Depth: 6.5'
Groundwater: N/A
Backfilled: 3/19/25

scale: 1in = 5 ft

Project Name: Genstar, Ontario	Logged By: MJG	Trench No.: TP-8
Project Number: 25040-01	Date: 3/19/2025	Engineering Properties:
Equipment: Backhoe	Location: See Geotechnical Map	

Geologic Attitudes	Unit	SOIL DESCRIPTION:	GEOLOGIC UNIT	USCS	SAMPLE No	MOISTURE (%)	ORGANICS (%)
	A	**Artificial Fill By Others (afo)** @ 0' to 3.5' - Silty SAND: brownish gray, slightly moist, dense (probes firm), scattered gravel, upper 6" is topsoil, rootlets & grass vegetation	afo	SM	G-1 @0'-2'	6.9	1.5
					G-2 @2'-3.5'	6.2	1.4
	B	**Quaternary Alluvium (Qal)** @ 3.5' to 5.5' - Silty SAND to Sandy SILT: gray with orange mottled, slightly moist, dense (probes firm)	Qal	SM/ML			

GRAPHICAL REPRESENTATION BELOW: **Elevation: 701' MSL** **Surface Slope: 0 deg.** **Trend: E-W**



Total Depth: 5.5'
Groundwater: N/A
Backfilled: 3/19/25

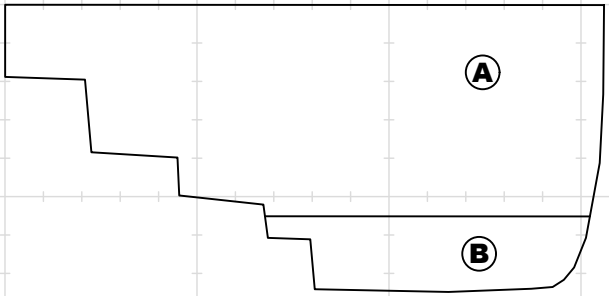
scale: 1in = 5 ft

1256

Project Name: Genstar, Ontario	Logged By: MJG	Trench No.: TP-9	LGC Geotechnical, Inc.
Project Number: 25040-01	Date: 3/19/2025	Engineering Properties:	
Equipment: Backhoe	Location: See Geotechnical Map		

Geologic Attitudes	Unit	SOIL DESCRIPTION:	GEOLOGIC UNIT	USCS	SAMPLE No	MOISTURE (%)	ORGANICS (%)
	A	**Artificial Fill By Others (afo)** @ 0' to 5.5' - Silty SAND with some Sandy SILT: light brownish gray, slightly moist, dense (probes firm), scattered gravel, minor detritus	afo	SM	G-1 @0'-2'	6.8	2.0
					G-2 @2'-4'	4.9	2.1
					G-3 @4'-5.5'	6.3	1.9
	B	**Quaternary Alluvium (Qal)** @ 5.5' to 7.5' - Gravelly SAND: gray, loose to medium dense (probes ~3" to 6"), rounded to subrounded, friable, fine sand & gravel, up to 3", moderate to poor sorting	Qal	GM			

GRAPHICAL REPRESENTATION BELOW: **Elevation: 699' MSL** **Surface Slope: 0 deg.** **Trend: E-W**



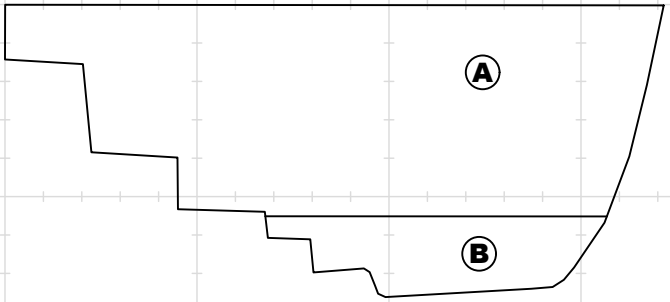
Total Depth: 7.5'
Groundwater: N/A
Backfilled: 3/19/25

scale: 1in = 5 ft

Project Name: Genstar, Ontario	Logged By: MJG	Trench No.: TP-10
Project Number: 25040-01	Date: 3/19/2025	Engineering Properties:
Equipment: Backhoe	Location: See Geotechnical Map	

Geologic Attitudes	Unit	SOIL DESCRIPTION:	GEOLOGIC UNIT	USCS	SAMPLE No	MOISTURE (%)	ORGANICS (%)
	A	**Artificial Fill By Others (afo)** @ 0' to 5.5' - Silty SAND: light brownish gray, slightly moist to wet, dense (probes firm & unyielding), scattered gravel, minor detritus	afo	SM	G-1 @0'-2'	30.3	1.9
					G-2 @2'-4'	4.8	1.8
					G-3 @4'-5.5'	5.8	2.5
	B	**Quaternary Alluvium (Qal)** @ 5.5' to 7.5' - Gravelly SAND: gray, slightly moist, medium dense ,friable, rounded to subrounded, moderate to poor sorting, scattered cobbles up to 4"	Qal	GM			

GRAPHICAL REPRESENTATION BELOW: **Elevation: 701' MSL** **Surface Slope: 0 deg.** **Trend: W-E**



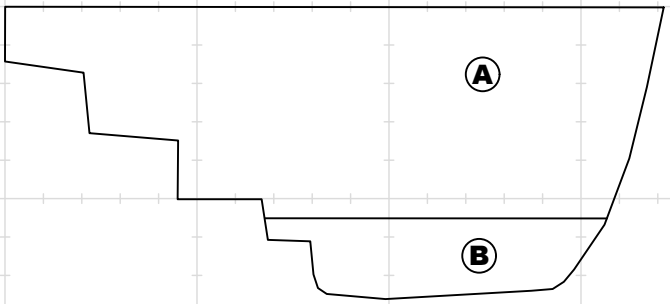
Total Depth: 7.5'
Groundwater: N/A
Backfilled: 3/19/25

scale: 1in = 5 ft

Project Name: Genstar, Ontario	Logged By: MJG	Trench No.: TP-11	LGC Geotechnical, Inc.
Project Number: 25040-01	Date: 3/19/2025	Engineering Properties:	
Equipment: Backhoe	Location: See Geotechnical Map		

Geologic Attitudes	Unit	SOIL DESCRIPTION:	GEOLOGIC UNIT	USCS	SAMPLE No	MOISTURE (%)	ORGANICS (%)
	A	Artificial Fill By Others (afo) @ 0' to 5.5' - Silty SAND: brownish gray, slightly moist to moist, dense, lenses of gravel & sand (gray)	afo	SM	G-1 @0'-2'	5.9	1.9
					G-2 @2'-4'	9.6	4.8*
					G-3 @4'-5.5'	13.2	1.8
	B	Quaternary Alluvium (Qal) @ 5.5' to 7.5' - Gravelly SAND: gray, slightly moist, medium dense (friable), moderate to poor sorting	Qal	GM			
		*Material to be evaluated during future rough grading					

GRAPHICAL REPRESENTATION BELOW: **Elevation: 704' MSL** **Surface Slope: 0 deg.** **Trend: N-S**



Total Depth: 7.5'
Groundwater: N/A
Backfilled: 3/19/25

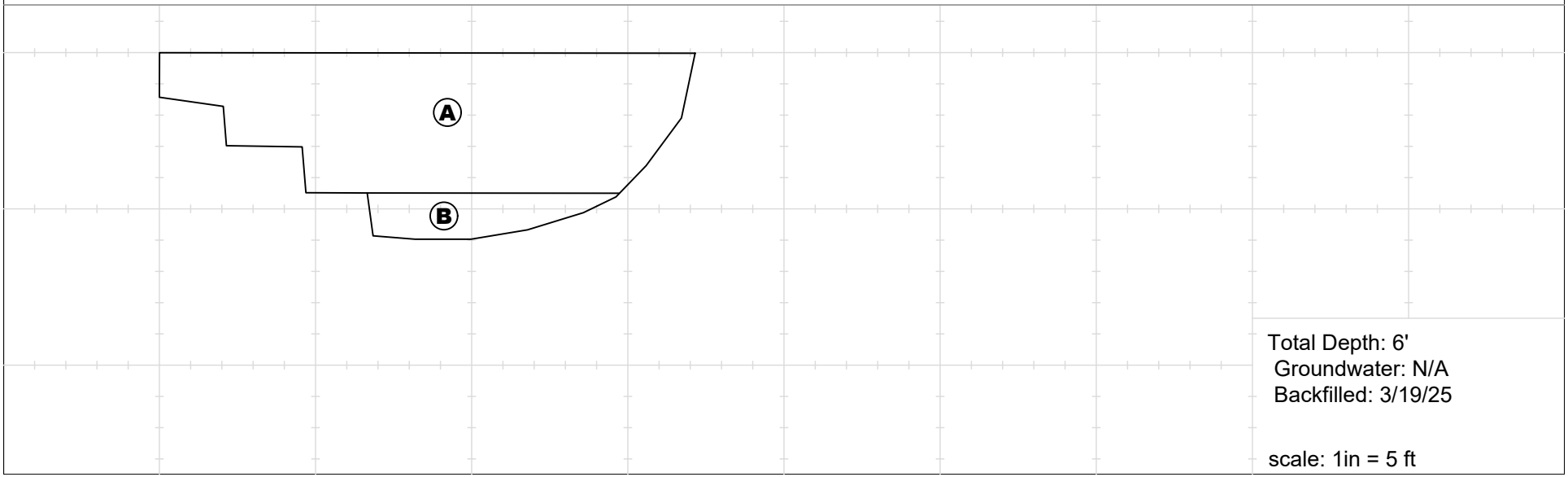
scale: 1in = 5 ft

1259

Project Name: Genstar, Ontario	Logged By: MJG	Trench No.: TP-12	LGC Geotechnical, Inc.
Project Number: 25040-01	Date: 3/19/2025	Engineering Properties:	
Equipment: Backhoe	Location: See Geotechnical Map		

Geologic Attitudes	Unit	SOIL DESCRIPTION:	GEOLOGIC UNIT	USCS	SAMPLE No	MOISTURE (%)	ORGANICS (%)
	A	**Artificial Fill By Others (afo)** @ 0' to 4.5' - Silty SAND: light brownish gray, slightly moist to dry, dense (probes firm & unyielding), minor detritus, upper 6" is topsoil & vegetation, rootlets	afo	SM	B-1 @0'-6'		
					G-1 @0'-2'	5.1	1.8
					G-2 @2'-4.5'	3.8	2.2
	B	**Quaternary Alluvium (Qal)** @ 4.5' to 6' - Gravelly SAND: gray, slightly moist, medium dense (friable) probes ~5", rounded to subrounded, moderate to poor sorting	Qal	GM			

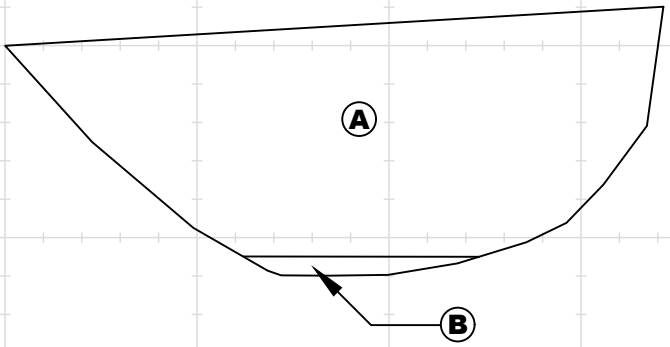
GRAPHICAL REPRESENTATION BELOW: **Elevation: 699' MSL** **Surface Slope: 0 deg.** **Trend: W-E**



Project Name: Genstar, Ontario	Logged By: MJG	Trench No.: TP-13	LGC Geotechnical, Inc.
Project Number: 25040-01	Date: 3/20/2025	Engineering Properties:	
Equipment: Backhoe	Location: See Geotechnical Map		

Geologic Attitudes	Unit	SOIL DESCRIPTION:	GEOLOGIC UNIT	USCS	SAMPLE No	MOISTURE (%)	ORGANICS (%)
	A	**Artificial Fill By Others (afo)** @ 0' to 5.5' - Silty SAND: light gray, slightly moist with wet and dry, loose in upper 3', probes easily, below 3' fill becomes medium dense, mottled brown to dark brown, fill quality is poor, possible mottled organics in sample G-3	afo	SM	B-1 @0'-5'		
					G-1 @0'-2'	4.4	2.2
					G-2 @2'-4'	5.9	2.7
				CL/ML	G-3 @4'-5.5'	17.5	8.8*
	B	**Quaternary Alluvium (Qal)** @ 5.5' to 6' - Gravelly SAND: gray, slightly moist, medium dense, rounded to subrounded, some coarse sand	Qal	GM			
		*Material to be evaluated during future rough grading					

GRAPHICAL REPRESENTATION BELOW: **Elevation: 706' MSL** **Surface Slope: 11 deg.** **Trend: N-S**



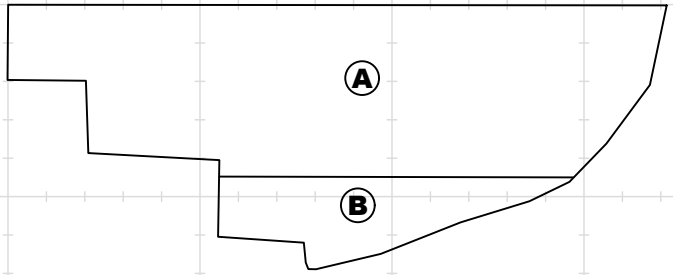
Total Depth: 6'
Groundwater: N/A
Backfilled: 3/20/25

scale: 1in = 5 ft

Project Name: Genstar, Ontario	Logged By: MJG	Trench No.: TP-14	LGC Geotechnical, Inc.
Project Number: 25040-01	Date: 3/20/2025	Engineering Properties:	
Equipment: Backhoe	Location: See Geotechnical Map		

Geologic Attitudes	Unit	SOIL DESCRIPTION:	GEOLOGIC UNIT	USCS	SAMPLE No	MOISTURE (%)	ORGANICS (%)
	A	**Artificial Fill By Others (afo)** @ 0' to 4.5' - Silty SAND: light gray to light gray brown, dry to slightly moist, medium dense to dense (probes firm <2"), minor detritus, some gravel	afo	SM	G-1 @0'-2'	4.1	2.1
					G-2 @2'-4.5'	6.4	1.5
	B	**Quaternary Alluvium (Qal)** @ 4.5' to 7' - Sandy SILT to Silty SAND: gray with orange mottling, slightly moist, dense (probes firm), white mineralization, pinhole porosity	Qal	ML/SM			

GRAPHICAL REPRESENTATION BELOW: **Elevation: 703' MSL** **Surface Slope: ~2.5-5 deg.** **Trend: W-E**



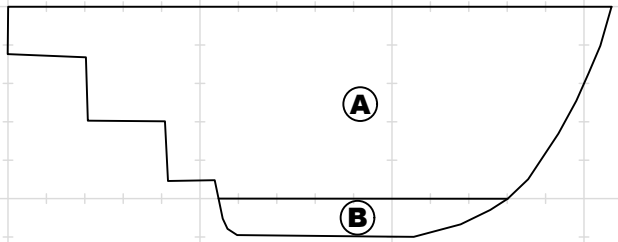
Total Depth: 7'
Groundwater: N/A
Backfilled: 3/20/25

scale: 1in = 5 ft

Project Name: Genstar, Ontario	Logged By: MJG	Trench No.: TP-15	LGC Geotechnical, Inc.
Project Number: 25040-01	Date: 3/20/2025	Engineering Properties:	
Equipment: Backhoe	Location: See Geotechnical Map		

Geologic Attitudes	Unit	SOIL DESCRIPTION:	GEOLOGIC UNIT	USCS	SAMPLE No	MOISTURE (%)	ORGANICS (%)
	A	**Artificial Fill By Others (afo)** @ 0' to 5' - Silty to Clayey SAND: light brownish gray, slightly moist, dense (probes firm), scattered gravel, upper 6" is topsoil, vegetation/rootlets	afo	SC/SM	G-1 @0'-2'	5.3	1.5
				SM	G-2 @2'-4'	10.7	1.5
					G-3 @4'-5'	7.3	1.2
	B	**Quaternary Alluvium (Qal)** @ 5' to 6' - Sandy SILT: gray with orange mottled, slightly moist, dense (probes firm), some white mineralization, minor pinhole porosity	Qal	ML			

GRAPHICAL REPRESENTATION BELOW: **Elevation: 699' MSL** **Surface Slope: 0 deg.** **Trend: N-S**



Total Depth: 6'
Groundwater: N/A
Backfilled: 3/20/25

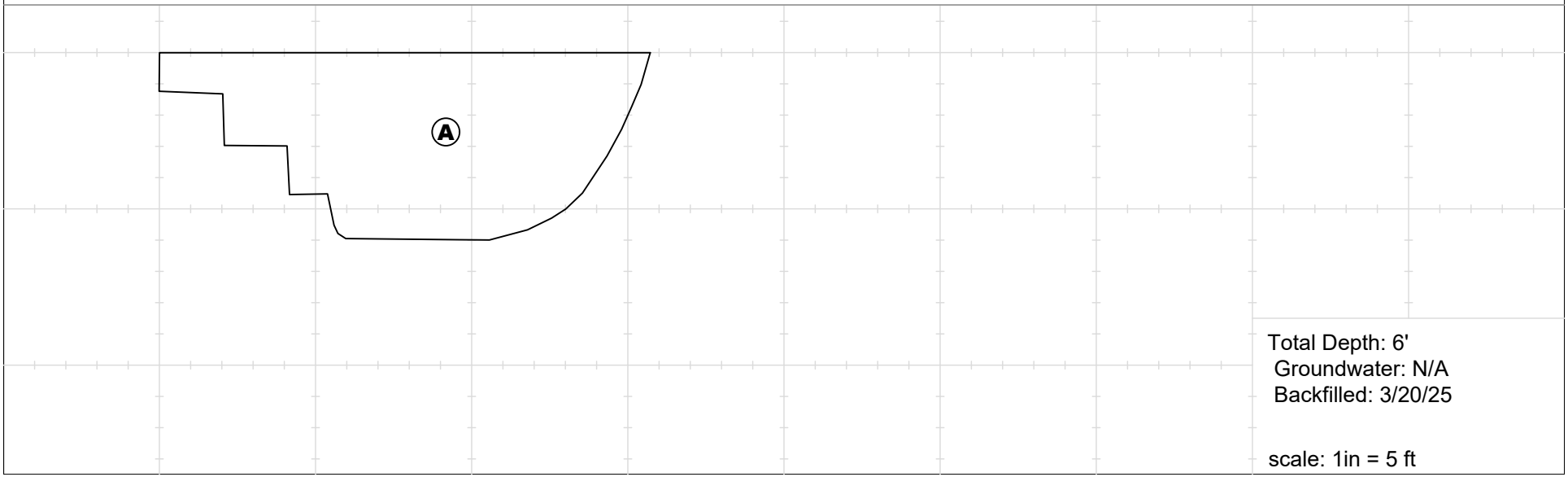
scale: 1in = 5 ft

Project Name: Genstar, Ontario	Logged By: MJG	Trench No.: TP-16
Project Number: 25040-01	Date: 3/20/2025	Engineering Properties:
Equipment: Backhoe	Location: See Geotechnical Map	

LGC Geotechnical, Inc.

Geologic Attitudes	Unit	SOIL DESCRIPTION:	GEOLOGIC UNIT	USCS	SAMPLE No	MOISTURE (%)	ORGANICS (%)
	A	**Artificial Fill By Others (afo)** @ 0' to 1' - Silty SAND: reddish brown, slightly moist, roots at surface, (~2" of vegetation) @ 1' to 6' - Silty SAND: light gray, slightly moist, dense (probes firm & unyielding), minor detritus, scattered gravel	afo	SM	G-1 @0'-2' G-2 @2'-4' G-3 @4'-6'	6.3 5.5 7.9	1.7 1.5 1.5

GRAPHICAL REPRESENTATION BELOW: **Elevation: 702' MSL** **Surface Slope: 0 deg.** **Trend: S-N**



EXPLORATION LOG

Project: Ontario Legacy		Boring No.:	B-1
Location: NE of Cleveland Ave & Bellegrave Ave., Ontario		Elevation:	702 ft
Job No.: 322-05	Client: Armada LLC	Date:	6/7/05
Drill Method: Hollow-Stem Auger	Driving Weight: 140 lbs / 30 in	Logged By:	EG

Depth (Feet)	Lithology	Material Description	Water	Samples: Blows	Samples: Core	Samples: Bulk	Laboratory Tests: Moisture Content (%)	Laboratory Tests: Dry Density (pcf)	Laboratory Tests: Other Lab Tests
		ALLUVIUM (Qal)							
		Silty Sand (SM): Light brown; dry upper foot becomes slightly moist below; loose to medium dense; fine- to medium-grained sand.		5			9.5	114.5	
				11					
		Sandy Silt (ML): Olive; moist; stiff; fine-grained sand; some clay; some carbonate stringers.		12					
5		Silty Sand (SM): Olive brown; moist; medium dense; fine- to medium-grained sand with some coarse sand; slightly micaceous.		5			7.1	110.5	CON
				5					
		Clayey Sand (SC): Olive; moist; dense; fine-grained sand; some carbonates; trace of rootlets; low plasticity; zones of Silt (ML) and Silty Sand (SM).		12					
				11			17.5	111.4	
				18					
				21					
10		Silty Sand (SM): Olive brown; moist; medium dense to dense; fine-grained sand; some iron oxide staining.		8			11.2	102.4	
				15					
				19					
15		Silty Sand with Gravel (SM): Olive brown; moist; dense to very dense; fine- to coarse-grained sand; subrounded gravel up to 1" diameter; ~ 20% gravel.		19			4.3	103.3	
				28					
				30					
20		Sand and Gravel (SW-GW): Reddish-yellow; moist; very dense to hard; fine- to coarse-grained sand; subrounded gravel up to 1 1/2" diameter.		50-3"			1.4	116.4	
25		Sand with Gravel (SP): Gray; slightly moist; very dense; fine- to medium-grained sand with some coarse sand; gravel ~ 30-40%.		21					
				29					
				30					
		Total Depth = 26.5 feet No Groundwater Borehole backfilled with soil cuttings.							

EXPLORATION LOG - V3 322-05.GPJ PETRA.GDT 7/8/05

PLATE A-1

Petra Geotechnical, Inc.

EXPLORATION LOG

Project: Ontario Legacy			Boring No.: B-2
Location: NE of Cleveland Ave & Bellegrave Ave., Ontario			Elevation: 712 ft
Job No.: 322-05	Client: Armada LLC		Date: 6/7/05
Drill Method: Hollow-Stem Auger	Driving Weight: 140 lbs / 30 in		Logged By: EG

Depth (Feet)	Lithology	Material Description	Water	Samples: Blows	Samples: Core	Samples: Bulk	Laboratory Tests: Moisture Content (%)	Laboratory Tests: Dry Density (pcf)	Laboratory Tests: Other Lab Tests
		ALLUVIUM (Qal)							
		Silty Sand (SM): Brown to light brown; dry upper foot becomes slightly moist below; loose to medium dense; fine- to medium-grained sand.		6			9.6	113.9	MAX
		@ 2.0 feet: Brown; moist; medium dense; fine-grained sand; trace of rootlets; slightly micaceous.		7					SO4
				9					pH CL
5		Silty Sand (SM): Brown; moist; medium dense to dense; fine-grained sand with some medium sand; slightly micaceous.		6			14.7	108.7	RES
				9					CON
				18					
		Silty Sand (SM): Olive brown; very moist; dense; fine- to medium-grained sand; some iron oxide staining; slightly micaceous.		9			8.3	98.4	
10				13					
				16					
		Sand with Gravel (SP): Gray to reddish-yellow; slightly moist; dense to very dense; fine- to medium-grained sand with some coarse sand; subrounded gravel ~ 20%; micaceous.		18			1.9	95.8	
				25					
				32					
15		Same as above; increase in gravel content ~ 30-40%.		9			1.0	122.8	
				15					
				30					
20		Silty Sand (SM): Mottled gray - reddish brown; moist; dense; fine-grained sand; slightly micaceous; silt ~ 30-40%.		12			8.2	98.9	
				25					
				25					
25		Silty Sand (SM): Olive gray; moist; medium dense to dense; fine-grained sand; micaceous.		6					
				7					
				11					

EXPLORATION LOG - V3 322-05.GPJ PETRA.GDT 7/13/05

PLATE A-2

Petra Geotechnical, Inc.

EXPLORATION LOG

Project: Ontario Legacy			Boring No.: B-2
Location: NE of Cleveland Ave & Bellegrave Ave., Ontario			Elevation: 712 ft
Job No.: 322-05	Client: Armada LLC		Date: 6/7/05
Drill Method: Hollow-Stem Auger	Driving Weight: 140 lbs / 30 in		Logged By: EG

Depth (Feet)	Lithology	Material Description	Water	Samples: Blows	Samples: Core	Samples: Bulk	Laboratory Tests: Moisture Content (%)	Laboratory Tests: Dry Density (pcf)	Laboratory Tests: Other Lab Tests
		Clayey Sand (SC): Yellowish-brown; moist; medium dense to dense; fine-grained sand; zones of Sandy Clay (CL): gray, very moist, stiff.		7 9 13			27.1	92.1	
35		Silty Sand with Clay (SM): Reddish-brown; moist; dense; fine-grained sand; abundance of silt.		8 11 16					
40		Sandy Clay (CL): Brownish-gray; very moist to wet; firm to stiff; fine-grained sand.		7 14 19			25.4	95.8	
45		Clayey Sand (SC): Light reddish-brown; moist to very moist; dense; fine-grained sand; slightly micaceous.		15 17 15					
50		Silty Sand (SM): Light brown; slightly moist; very dense; fine-grained sand; micaceous.		28 50			5.7	107.6	
		Total Depth = 51.0 feet No Groundwater Borehole backfilled with soil cuttings.							

EXPLORATION LOG - VS 322-05.GPJ PETRA.GDT 7/13/05

PLATE A-3

Petra Geotechnical, Inc.

EXPLORATION LOG

Project: Ontario Legacy			Boring No.: B- 4
Location: NE of Cleveland Ave & Bellegrave Ave., Ontario			Elevation: 705 ft
Job No.: 322-05	Client: Armada LLC		Date: 6/7/05
Drill Method: Hollow-Stem Auger	Driving Weight: 140 lbs / 30 in		Logged By: EG

Depth (Feet)	Lithology	Material Description	Water	Samples: Blows	Samples: Core	Samples: Bulk	Laboratory Tests: Moisture Content (%)	Laboratory Tests: Dry Density (pcf)	Laboratory Tests: Other Lab Tests
		ALLUVIUM (Qal)							
		Silty Sand (SM): Brown; dry (upper foot) to moist; loose to medium dense; fine-grained sand with some medium sand; slightly porous; trace of rootlets; slightly micaceous.		7			8.5	119.3	
				8					
				9					
		Silty Sand (SM): Brown; moist; medium dense; fine- to coarse-grained sand; trace of rootlets; slightly micaceous.		7			12.8	111.0	CON
5				9					
				17					
		Sand (SP): Yellowish-brown; moist; dense; fine-grained sand; micaceous.		10			3.1	99.9	
				12					
				13					
10		Clayey Sand (SC): Olive brown; very moist; medium dense to dense; fine-grained sand; some silt; some carbonate stringers; zones of Sandy Clay (CL).		5			13.3	113.7	
				10					
				12					
15		Silty Sand (SM): Yellowish-brown to brown; moist; dense to very dense; fine- to medium-grained sand with some coarse sand; some carbonate stringers; slightly micaceous; zones of Silt (ML): olive, very moist, stiff.		12			10.4	114.1	
				22					
				35					
20		Silty Sand (SM): Mottled reddish brown - gray; very moist; dense; fine-grained sand; some clay; zones of Sand (SP): yellowish gray, moist, dense, fine-grained sand.		14			16.7	106.5	
				11					
				13					
25		Silty Sand (SM): Olive; very moist; medium dense to dense; fine-grained sand; micaceous; zones of Silt (ML).		8					
				11					
				14					
		Total Depth = 26.5 feet No Groundwater Borehole backfilled with soil cuttings.							

EXPLORATION LOG - V3 SIZE-BLSP.J PETRA.GDT 7/8/05

PLATE A-5

Petra Geotechnical, Inc.

Appendix C
Field and Laboratory Test Results

APPENDIX C

Laboratory Test Results

Samples collected by PSE that are considered representative of site conditions were generally tested in accordance with American Society for Testing and Materials (ASTM) procedures, where applicable. The following summary is a brief outline of the test type and a table summarizing the test results.

Expansion Index: The expansion potential of selected representative samples was evaluated by the Expansion Index Test per ASTM D4829.

Sample Location	Expansion Index	Expansion Potential*
TP-1 (B-1)	4	Very Low
TP-4 (B-1)	5	Very Low
TP-12 (B-1)	2	Very Low

*Per ASTM D 4829

Maximum Density Tests: The maximum dry density and optimum moisture content of materials were determined in accordance with ASTM Test Method D1557. The results of these tests are presented in the table below.

Sample Location (Soil Type)	Sample Description	Maximum Dry Density (pcf)	Optimum Moisture Content (%)
TP-1 (B-1); "1"	Pale Brown Silty Sand	125.5	11.5
TP-4 (B-1); "4"	Pale Brown Silty Sand	127.5	9.5
TP-12 (B-1); "12"	Pale Brown Silty Sand	129.5	8.5

Organic Content: The organic content of selected samples was determined by standard ASTM D 2974 (Test Methods A & C). Results of organic content testing are presented on Test Pit logs, Appendix B.

Laboratory Testing Procedures and Test Results

Chloride Content: Chloride content was tested in accordance with Caltrans Test Method (CTM) 422. The results are presented below.

Sample Location	Chloride Content (% by Weight)
TP-1 (B-1)	0.004
TP-4 (B-1)	0.004
TP-12 (B-1)	0.006

Soluble Sulfates: The soluble sulfate contents of selected samples were determined by standard geochemical methods (CTM 417). The soluble sulfate content is used to determine the appropriate cement type and maximum water-cement ratios. The test results are presented in the table below.

Sample Location/Number	Sulfate Content (% by Weight)
TP-1 (B-1)	0.008
TP-4 (B-1)	0.010
TP-12 (B-1)	0.006

Appendix B
Explanation and Summary of Field Density Test Results

Test No.	Test Method	Test Date	Test of	Tech	Test Location	Test Elev. (feet)	Soil Type	Dry Density (pcf) Field	Moisture Content (%) Field	Relative Compaction (%)	Remarks
Test Pits											
1	N	3/18/2025	CF	CMR	TP1	-2	4	116.8	11.1	91	
2	N	3/18/2025	CF	CMR	TP2	-4	4	115.0	10.1	90	
3	N	3/18/2025	CF	CMR	TP2	-2	1	113.3	10.9	90	
4	N	3/18/2025	CF	CMR	TP4	-8	1	113.3	13.4	90	
5	N	3/18/2025	CF	CMR	TP3	-1	1	105.9	10.8	84	F
6	N	3/18/2025	CF	CMR	TP4	-6	1	115.3	13.4	91	
7	N	3/18/2025	CF	CMR	TP4	-4	4	115.0	12.1	90	
8	N	3/18/2025	CF	CMR	TP5	-2	1	108.1	17.9	86	F
9	N	3/19/2025	CF	CMR	TP6	-5	1	113.0	11.3	90	
10	N	3/19/2025	CF	CMR	TP6	-3	1	114.4	10.1	91	
11	N	3/19/2025	CF	CMR	TP7	-4	1	114.4	9.8	91	
12	N	3/19/2025	CF	CMR	TP7	-2	1	114.3	8.1	91	
13	N	3/19/2025	CF	CMR	TP8	-2	1	114.4	11.4	91	
14	N	3/19/2025	CF	CMR	TP9	-3	1	117.1	8.0	93	
15	N	3/19/2025	CF	CMR	TP10	-3	1	117.2	11.1	93	
16	N	3/19/2025	CF	CMR	TP10	-1.5	1	106.0	7.8	84	F
17	N	3/19/2025	CF	CMR	TP11	-3	1	113.2	10.3	90	
18	N	3/19/2025	CF	CMR	TP11	-1	1	114.5	9.2	91	
19	N	3/19/2025	CF	CMR	TP12	-5	1	116.3	7.0	92	
20	N	3/19/2025	CF	CMR	TP12	-1	1	113.5	6.3	90	
21	N	3/20/2025	CF	CMR	TP13	-4.5	1	106.5	8.9	84	F
22	N	3/20/2025	CF	CMR	TP13	-3.5	1	108.0	9.4	86	F
23	N	3/20/2025	CF	CMR	TP13	-2	1	106.3	6.8	84	F
24	N	3/20/2025	CF	CMR	TP14	-3	1	108.8	2.2	86	F
25	N	3/20/2025	CF	CMR	TP15	-2	1	113.9	8.6	90	
26	N	3/20/2025	CF	CMR	TP16	-4	1	114.4	11.1	91	
27	N	3/20/2025	CF	CMR	TP16	-2	4	119.8	7.4	93	

Appendix D
General Earthwork and Grading Specifications

General Earthwork and Grading Specifications for Rough Grading

1.0 General

1.1 Intent

These General Earthwork and Grading Specifications are for the grading and earthwork shown on the approved grading plan(s) and/or indicated in the geotechnical report(s). These Specifications are a part of the recommendations contained in the geotechnical report(s). In case of conflict, the specific recommendations in the geotechnical report shall supersede these more general Specifications. Observations of the earthwork by the project Geotechnical Consultant during the course of grading may result in new or revised recommendations that could supersede these specifications or the recommendations in the geotechnical report(s).

1.2 The Geotechnical Consultant of Record

Prior to commencement of work, the owner shall employ a qualified Geotechnical Consultant of Record (Geotechnical Consultant). The Geotechnical Consultant shall be responsible for reviewing the approved geotechnical report(s) and accepting the adequacy of the preliminary geotechnical findings, conclusions, and recommendations prior to the commencement of the grading.

Prior to commencement of grading, the Geotechnical Consultant shall review the "work plan" prepared by the Earthwork Contractor (Contractor) and schedule sufficient personnel to perform the appropriate level of observation, mapping, and compaction testing.

During the grading and earthwork operations, the Geotechnical Consultant shall observe, map, and document the subsurface exposures to verify the geotechnical design assumptions. If the observed conditions are found to be significantly different than the interpreted assumptions during the design phase, the Geotechnical Consultant shall inform the owner, recommend appropriate changes in design to accommodate the observed conditions, and notify the review agency where required.

The Geotechnical Consultant shall observe the moisture-conditioning and processing of the subgrade and fill materials and perform relative compaction testing of fill to confirm that the attained level of compaction is being accomplished as specified. The Geotechnical Consultant shall provide the test results to the owner and the Contractor on a routine and frequent basis.

1.3 The Earthwork Contractor

The Earthwork Contractor (Contractor) shall be qualified, experienced, and knowledgeable in earthwork logistics, preparation and processing of ground to receive fill, moisture-conditioning and processing of fill, and compacting fill. The Contractor shall review and accept the plans, geotechnical report(s), and these Specifications prior to commencement of grading. The Contractor shall be solely responsible for performing the grading in accordance with the project plans and specifications. The Contractor shall prepare and submit to the owner and the Geotechnical Consultant a work plan that indicates the sequence of earthwork grading, the number of “equipment” of work and the estimated quantities of daily earthwork

contemplated for the site prior to commencement of grading. The Contractor shall inform the owner and the
Geotechnical Consultant of changes in work schedules and updates to the work plan at least 24 hours in advance of such changes so that appropriate personnel will be available for observation and testing. The Contractor shall not assume that the Geotechnical Consultant is aware of all grading operations.

The Contractor shall have the sole responsibility to provide adequate equipment and methods to accomplish the earthwork in accordance with the applicable grading codes and agency ordinances, these Specifications, and the recommendations in the approved geotechnical report(s) and grading plan(s). If, in the opinion of the Geotechnical Consultant, unsatisfactory conditions, such as unsuitable soil, improper moisture condition, inadequate compaction, insufficient buttress key size, adverse weather, etc., are resulting in a quality of work less than required in these specifications, the Geotechnical Consultant shall reject the work and may recommend to the owner that construction be stopped until the conditions are rectified. It is the contractor's sole responsibility to provide proper fill compaction.

2.0 Preparation of Areas to be Filled

2.1 Clearing and Grubbing

Vegetation, such as brush, grass, roots, and other deleterious material shall be sufficiently removed and properly disposed of in a method acceptable to the owner, governing agencies, and the Geotechnical Consultant.

The Geotechnical Consultant shall evaluate the extent of these removals depending on specific site conditions. Earth fill material shall not contain more than 1 percent of organic materials (by volume). Nesting of the organic materials shall not be allowed.

If potentially hazardous materials are encountered, the Contractor shall stop work in the affected area, and a hazardous material specialist shall be informed immediately for proper evaluation and handling of these materials prior to continuing to work in that area.

As presently defined by the State of California, most refined petroleum products (gasoline, diesel fuel, motor oil, grease, coolant, etc.) have chemical constituents that are considered to be hazardous waste. As such, the indiscriminate dumping or spillage of these fluids onto the ground may constitute a misdemeanor, punishable by fines and/or imprisonment, and shall not be allowed. The contractor is responsible for all hazardous waste relating to his work. The Geotechnical Consultant does not have expertise in this area. If hazardous waste is a concern, then the Client should acquire the services of a qualified environmental assessor.

2.2 Processing

Existing ground that has been declared satisfactory for support of fill by the Geotechnical Consultant shall be scarified to a minimum depth of 6 inches. Existing ground that is not satisfactory shall be over-excavated as specified in the following section. Scarification shall continue until soils are broken down and free of oversize material and the working surface is reasonably uniform, flat, and free of uneven features that would inhibit uniform compaction.

2.3 Over-excavation

In addition to removals and over-excavations recommended in the approved geotechnical report(s) and the grading plan, soft, loose, dry, saturated, spongy, organic-rich, highly fractured or otherwise unsuitable ground shall be over-excavated to competent ground as evaluated by the Geotechnical Consultant during grading.

2.4 Benching

Where fills are to be placed on ground with slopes steeper than 5:1 (horizontal to vertical units), the ground shall be stepped or benched. Please see the Standard Details for a graphic illustration. The lowest bench or key shall be a minimum of 15 feet wide and at least 2 feet deep, into competent material as evaluated by the Geotechnical Consultant. Other benches shall be excavated a minimum height of 4 feet into competent material or as otherwise recommended by the Geotechnical Consultant. Fill placed on ground sloping flatter than 5:1 shall also be benched or otherwise over-excavated to provide a flat subgrade for the fill.

2.5 Evaluation/Acceptance of Fill Areas

All areas to receive fill, including removal and processed areas, key bottoms, and benches, shall be observed, mapped, elevations recorded, and/or tested prior to being accepted by the Geotechnical Consultant as suitable to receive fill. The Contractor shall obtain a written acceptance from the Geotechnical Consultant prior to fill placement. A licensed surveyor shall provide the survey control for determining elevations of processed areas, keys, and benches.

3.0 Fill Material

3.1 General

Material to be used as fill shall be essentially free of organic matter and other deleterious substances evaluated and accepted by the Geotechnical Consultant prior to placement. Soils of poor quality, such as those with unacceptable gradation, high expansion potential, or low strength shall be placed in areas acceptable to the Geotechnical Consultant or mixed with other soils to achieve satisfactory fill material.

3.2 Oversize

Oversize material defined as rock, or other irreducible material with a maximum dimension greater than 8 inches, shall not be buried or placed in fill unless location, materials, and placement methods are specifically accepted by the Geotechnical Consultant. Placement operations shall be such that nesting of oversized material does not occur and such that oversize material is completely surrounded by compacted or densified fill. Oversize material shall not be placed within 10 vertical feet of finish grade or within 2 feet of future utilities or underground construction.

3.3 Import

If importing of fill material is required for grading, proposed import material shall meet the requirements of the geotechnical consultant. The potential import source shall be given to the Geotechnical Consultant at least 48 hours (2 working days) before importing begins so that its suitability can be determined and appropriate tests performed.

4.0 Fill Placement and Compaction

4.1 Fill Layers

Approved fill material shall be placed in areas prepared to receive fill (per Section 3.0) in near-horizontal layers not exceeding 8 inches in loose thickness. The Geotechnical Consultant may accept thicker layers if testing indicates the grading procedures can adequately compact the thicker layers. Each layer shall be spread evenly and mixed thoroughly to attain relative uniformity of material and moisture throughout.

4.2 Fill Moisture Conditioning

Fill soils shall be watered, dried back, blended, and/or mixed, as necessary to attain a relatively uniform moisture content at or slightly over optimum. Maximum density and optimum soil moisture content tests shall be performed in accordance with the American Society of Testing and Materials (ASTM Test Method D1557).

4.3 Compaction of Fill

After each layer has been moisture-conditioned, mixed, and evenly spread, it shall be uniformly compacted to not less than 90 percent of maximum dry density (ASTM Test Method D1557). Compaction equipment shall be adequately sized and be either specifically designed for soil compaction or of proven reliability to efficiently achieve the specified level of compaction with uniformity.

4.4 Compaction of Fill Slopes

In addition to normal compaction procedures specified above, compaction of slopes shall be accomplished by backrolling of slopes with sheepsfoot rollers at increments of 3 to 4 feet in fill elevation, or by other methods producing satisfactory results acceptable to the Geotechnical Consultant. Upon completion of grading, relative compaction of the fill, out to the slope face, shall be at least 90 percent of maximum density per ASTM Test Method D1557.

4.5 Compaction Testing

Field tests for moisture content and relative compaction of the fill soils shall be performed by the Geotechnical Consultant. Location and frequency of tests shall be at the Consultant's discretion based on field conditions encountered. Compaction test locations will not necessarily be selected on a random basis. Test locations shall be selected to verify adequacy of compaction levels in areas that are judged to be prone to inadequate compaction (such as close to slope faces and at the fill/bedrock benches).

4.6 Frequency of Compaction Testing

Tests shall be taken at intervals not exceeding 2 feet in vertical rise and/or 1,000 cubic yards of compacted fill soils embankment. In addition, as a guideline, at least one test shall be taken on slope faces for each 5,000 square feet of slope face and/or each 10 feet of vertical height of slope. The Contractor shall assure that fill construction is such that the testing schedule can be accomplished by the Geotechnical Consultant. The Contractor shall stop or slow down the earthwork construction if these minimum standards are not met.

4.7 Compaction Test Locations

The Geotechnical Consultant shall document the approximate elevation and horizontal coordinates of each test location. The Contractor shall coordinate with the project surveyor to assure that sufficient grade stakes are established so that the Geotechnical Consultant can determine the test locations with sufficient accuracy. At a minimum, two grade stakes within a horizontal distance of 100 feet and vertically less than
5 feet apart from potential test locations shall be provided.

5.0 Subdrain Installation

Subdrain systems shall be installed in accordance with the approved geotechnical report(s), the grading plan, and the Standard Details. The Geotechnical Consultant may recommend additional subdrains and/or changes in subdrain extent, location, grade, or material depending on conditions encountered during grading. All subdrains shall be surveyed by a land surveyor/civil engineer for line and grade after installation and prior to burial. Sufficient time should be allowed by the Contractor for these surveys.

6.0 Excavation

Excavations, as well as over-excavation for remedial purposes, shall be evaluated by the Geotechnical Consultant during grading. Remedial removal depths shown on geotechnical plans are estimates only. The actual extent of removal shall be determined by the Geotechnical Consultant based on the field evaluation of exposed conditions during grading. Where fill-over-cut slopes are to be graded, the cut portion of the slope shall be made, evaluated, and accepted by the Geotechnical Consultant prior to placement of materials for construction of the fill portion of the slope, unless otherwise recommended by the Geotechnical Consultant.

7.0 Trench Backfills

7.1 The Contractor shall follow all OHSA and Cal/OSHA requirements for safety of trench excavations.

7.2 All bedding and backfill of utility trenches shall be done in accordance with the applicable provisions of Standard Specifications of Public Works Construction. Bedding material shall have a Sand Equivalent greater than 30 (SE>30). The bedding shall be placed to 1 foot over

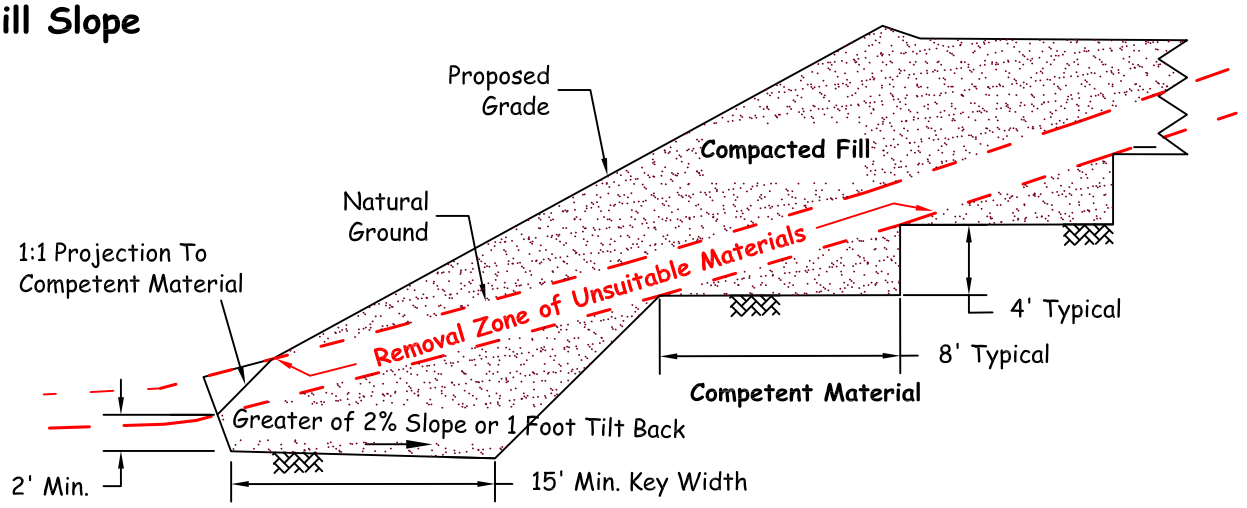
the top of the conduit and densified by jetting. Backfill shall be placed and densified to a minimum of 90 percent of maximum from 1 foot above the top of the conduit to the surface.

7.3 The jetting of the bedding around the conduits shall be observed by the Geotechnical Consultant.

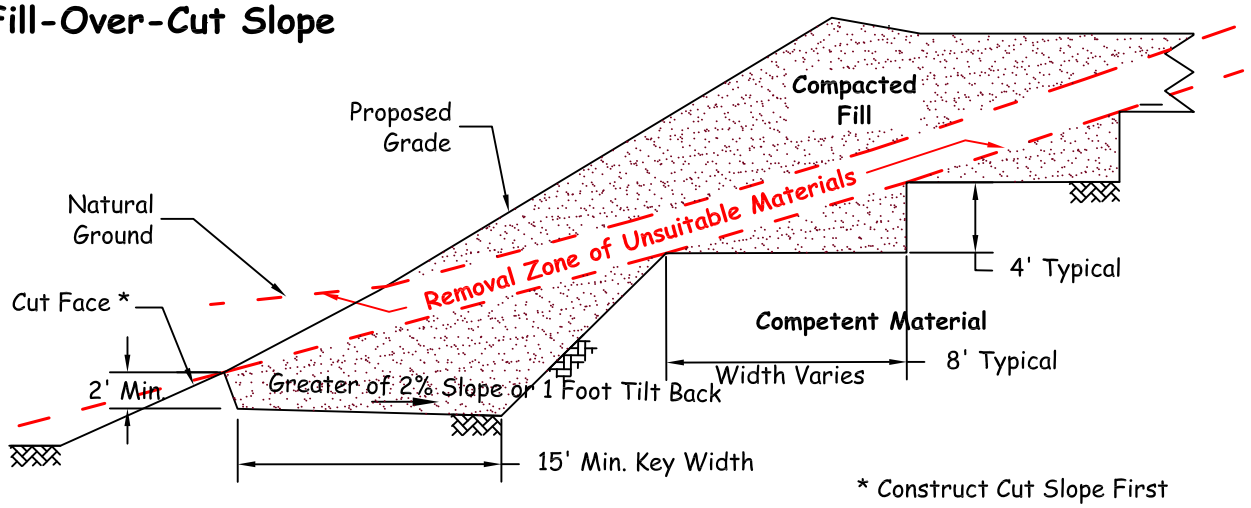
7.4 The Geotechnical Consultant shall test the trench backfill for relative compaction. At least one test should be made for every 300 feet of trench and 2 feet of fill.

7.5 Lift thickness of trench backfill shall not exceed those allowed in the Standard Specifications of Public Works Construction unless the Contractor can demonstrate to the Geotechnical Consultant that the fill lift can be compacted to the minimum relative compaction by his alternative equipment and method.

Fill Slope

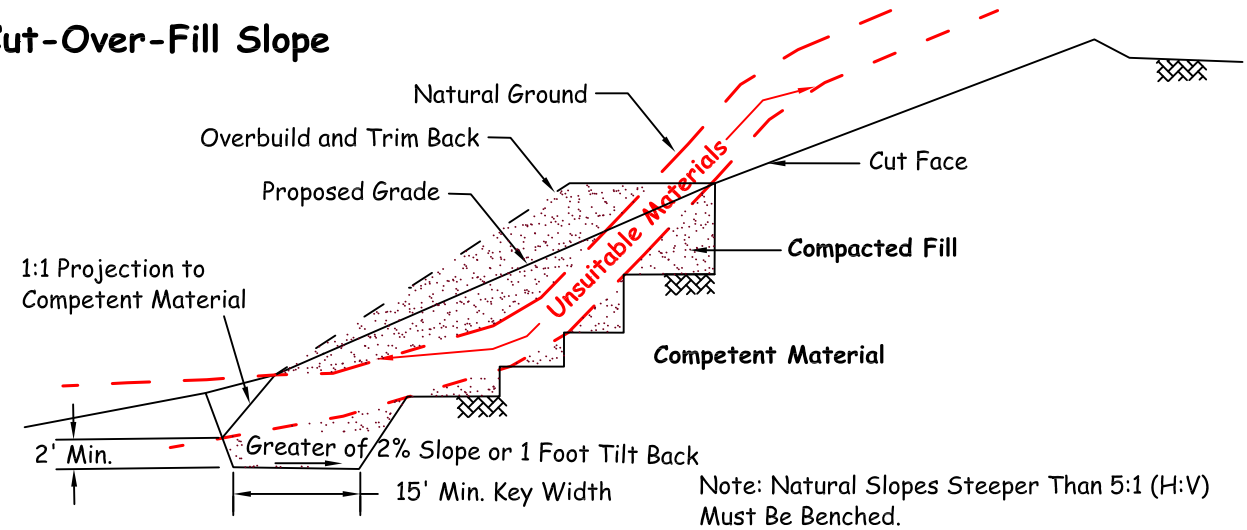


Fill-Over-Cut Slope



* Construct Cut Slope First

Cut-Over-Fill Slope

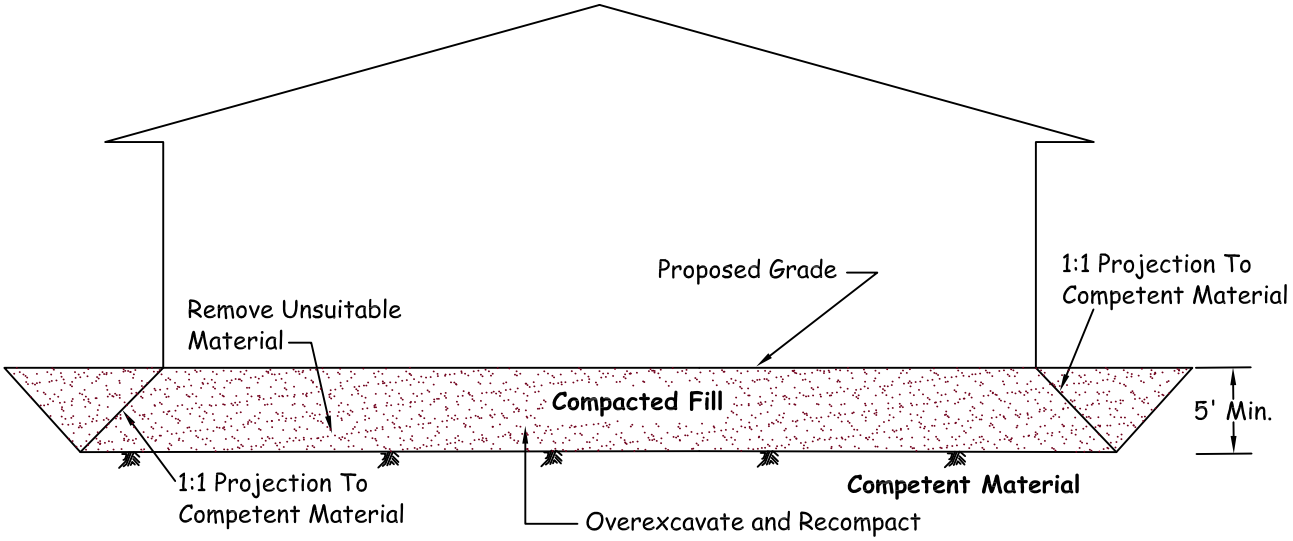


Note: Natural Slopes Steeper Than 5:1 (H:V) Must Be Benched.

LGC Geotechnical, Inc.

KEYING AND BENCHING

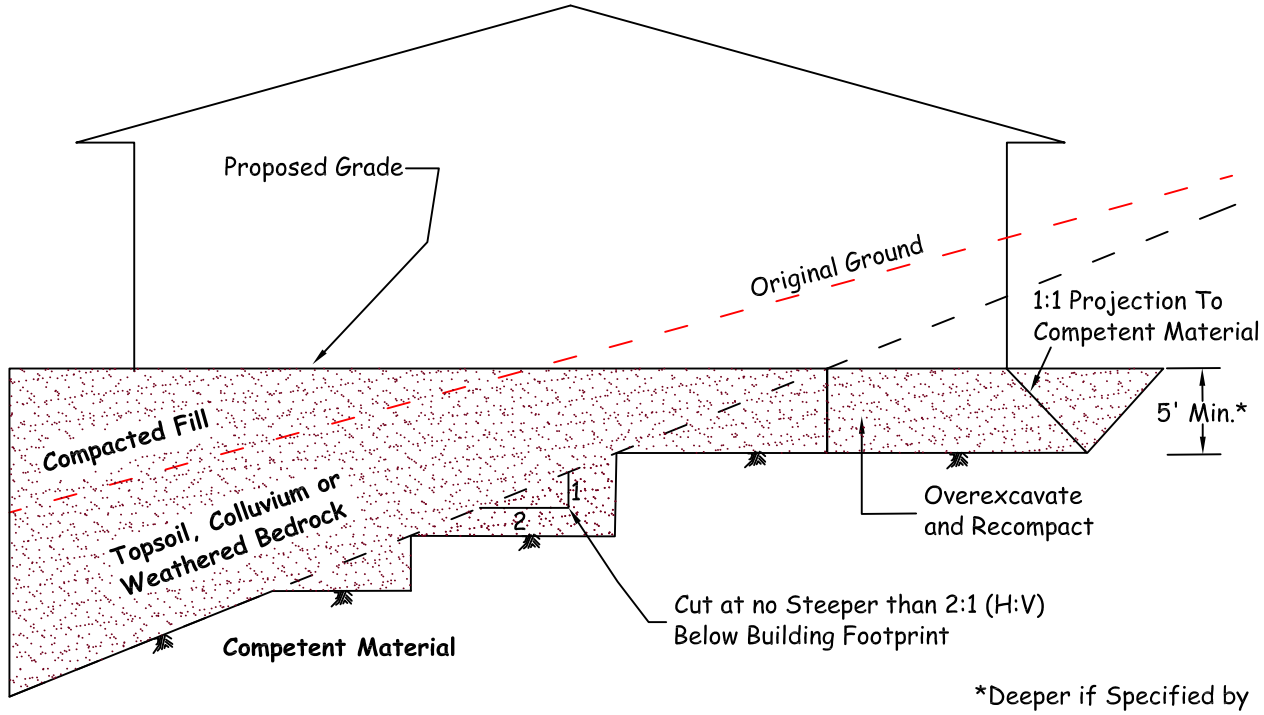
Cut Lot
(Exposing Unsuitable Soils at Design Grade)



Note 1: Removal Bottom Should be Graded With Minimum 2% Fall Towards Street or Other Suitable Area (as Determined by Soils Engineer) to Avoid Ponding Below Building

Note 2: Where Design Cut Lots are Excavated Entirely Into Competent Material, Overexcavation May Still be Required for Hard-Rock Conditions or for Materials With Variable Expansion Characteristics.

Cut/Fill Transition Lot



*Deeper if Specified by Soils Engineer

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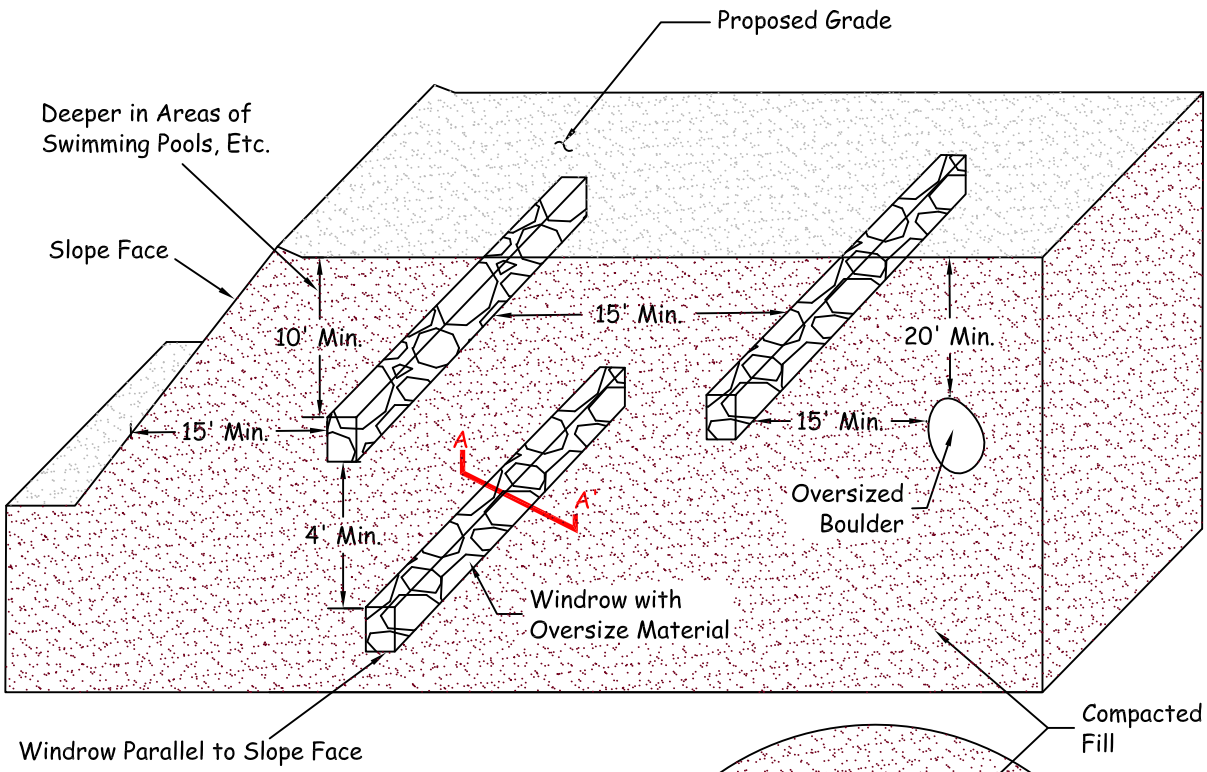
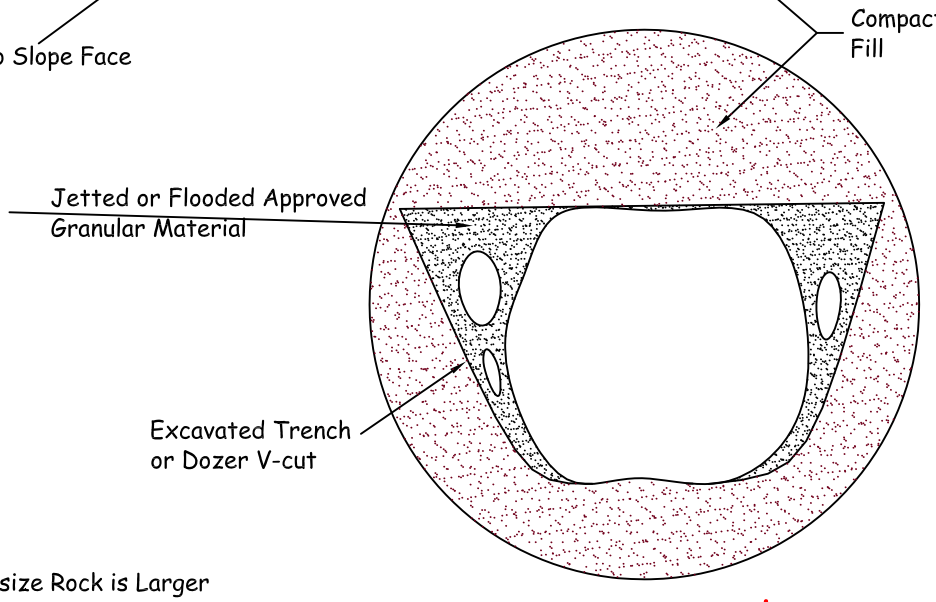
CUT AND TRANSITION LOT OVEREXCAVATION DETAIL





Note: Oversize Rock is Larger
than 8" in Maximum Dimension.

Section A-A'

LGC Geotechnical, Inc.

OVERSIZE ROCK DISPOSAL DETAIL

LEGEND

TP-16 — Approximate Location of Exploratory Test Pit by LGC Geotechnical

Approximate Site Limits

B-4, T.D. = 26.5' — Approximate Location of Boring by Others (LGC Geo-Environmental, 2017)

6' — Approximate Recommended Remedial Depths, in Feet

TP-1 1'
TP-2 1'
TP-3 2'
TP-4 2'
TP-5 2'
TP-6 1'
TP-7 1'
TP-8 1'
TP-9 1'
TP-10 2'
TP-11 4'
TP-12 1'
TP-13 6'
TP-14 3'
TP-15 1'
TP-16 1'
B-1, T.D. = 26.5'
B-2, T.D. = 51'
B-4, T.D. = 26.5'

CHATHAM STREET
CLIFTON AVENUE
EUCALYPTUS AVENUE
AMHERST AVENUE
SOUTH VENTURA AVENUE
SHELBURNE STREET
LOT A TRACT NO. 20160 M.B. 366/1-7
TRACT NO. 20285 M.B. 361/14-20
LOT 1 TRACT NO. 18380 M.B. 350/60-68 436,567 SQ. FT. ± 10.02 AC APN: 1073-101-05-000
LOT 2 TRACT NO. 20233 M.B. 351/31-35
TRACT NO. 17931 M.B. 354/21-25

SCALE: 1"=40'
40' 0 40' 80'

LGC Geotechnical, Inc.	LGC Geotechnical, Inc. 131 Calle Iglesia, Ste. 200 San Clemente, CA 92672 TEL (949) 369-6141 FAX (949) 369-6142

Geotechnical Map

PROJECT NAME	Genstar, Ontario
PROJECT NO.	25040-01
ENG. / GEOL.	RLD / KTM
SCALE	1" = 40'
DATE	April 2025

SHEET 1 of 1

1282

PALEONTOLOGICAL ASSESSMENT FOR THE EUCALYPTUS AND AMHERST AVENUES PROJECT

CITY OF ONTARIO, SAN BERNARDINO COUNTY, CALIFORNIA

APN 1073-101-05

Prepared for:

Moser Ventures, Inc.
45478 Blackfoot Way
Indian Wells, California 92210

Submitted to:

City of Ontario
Planning Department
303 East B Street
Ontario, California 91764

Prepared by:

BFSA Environmental Services,
a Perennial Company
14010 Poway Road, Suite A
Poway, California 92064

April 1, 2025

BFSA Environmental Services
A Perennial Company

Paleontological Database Information

Author:	Todd A. Wirths, M.S., P.G., Principal Paleontologist, California Professional Geologist No. 7588
Consulting Firm:	BFSA Environmental Services, a Perennial Company 14010 Poway Road, Suite A Poway, California 92064 (858) 679-8218
Report Date:	April 1, 2025
Report Title:	Paleontological Assessment for Eucalyptus and Amherst Avenues Project, City of Ontario, San Bernardino County, California
Prepared for:	Moser Ventures, Inc. 45478 Blackfoot Way Indian Wells, California 92210
Submitted to:	City of Ontario Planning Department 303 East B Street Ontario, California 91764
USGS Quadrangle:	Section 13, Township 2 South, Range 7 West of the *Corona North* (7.5-minute) USGS Quadrangle
Assessor's Parcel Number:	1073-101-05
Study Area:	10.02 acres
Key Words:	Paleontological assessment; Pleistocene alluvial deposits; high paleontological resource sensitivity; full-time monitoring recommended.

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I. INTRODUCTION AND LOCATION

A paleontological resource assessment has been completed for the Eucalyptus and Amherst Avenues Project, located within the city of Ontario, San Bernardino County, California (Figures 1 and 2). The project, bounded by Chatham Street, Clifton Avenue, South Amherst Avenue, and East Eucalyptus Avenue, consists of one 10.02-acre parcel (Assessor's Parcel Number [APN] 1073-101-05) and is located within Section 13, Township 2 South, Range 7 West, as shown on the United States Geological Survey 1:24,000-scale (7.5-minute) *Corona North* topographic quadrangle maps (see Figure 2). As designed, the applicant proposes to clear the property for the construction of a multi-family residential development with associated landscape, hardscape, and infrastructure (Figure 3). The parcel is currently vacant and was previously graded.

As the lead agency, the City of Ontario has required the preparation of a paleontological assessment to evaluate the project's potential to yield paleontological resources. The paleontological assessment of the project included a review of paleontological literature and fossil locality records for a previous project in the area, a review of the underlying geology, and recommendations to mitigate impacts to potential paleontological resources.

II. REGULATORY SETTING

The California Environmental Quality Act (CEQA), which is patterned after the National Environmental Policy Act, is the overriding environmental regulation that sets the requirement for protecting California's paleontological resources. CEQA mandates that governing permitting agencies (lead agencies) set their own guidelines for the protection of nonrenewable paleontological resources under their jurisdiction.

State of California

Under "Guidelines for Implementation of the California Environmental Quality Act," as amended in December 2018 (California Code of Regulations [CCR] Title 14, Division 6, Chapter 3, Sections 15000 et seq.), procedures define the types of activities, persons, and public agencies required to comply with CEQA. Section 15063 of the CCR provides a process by which a lead agency may review a project's potential impact to the environment, determine whether the impacts are significant, and, if necessary, provide recommendations.

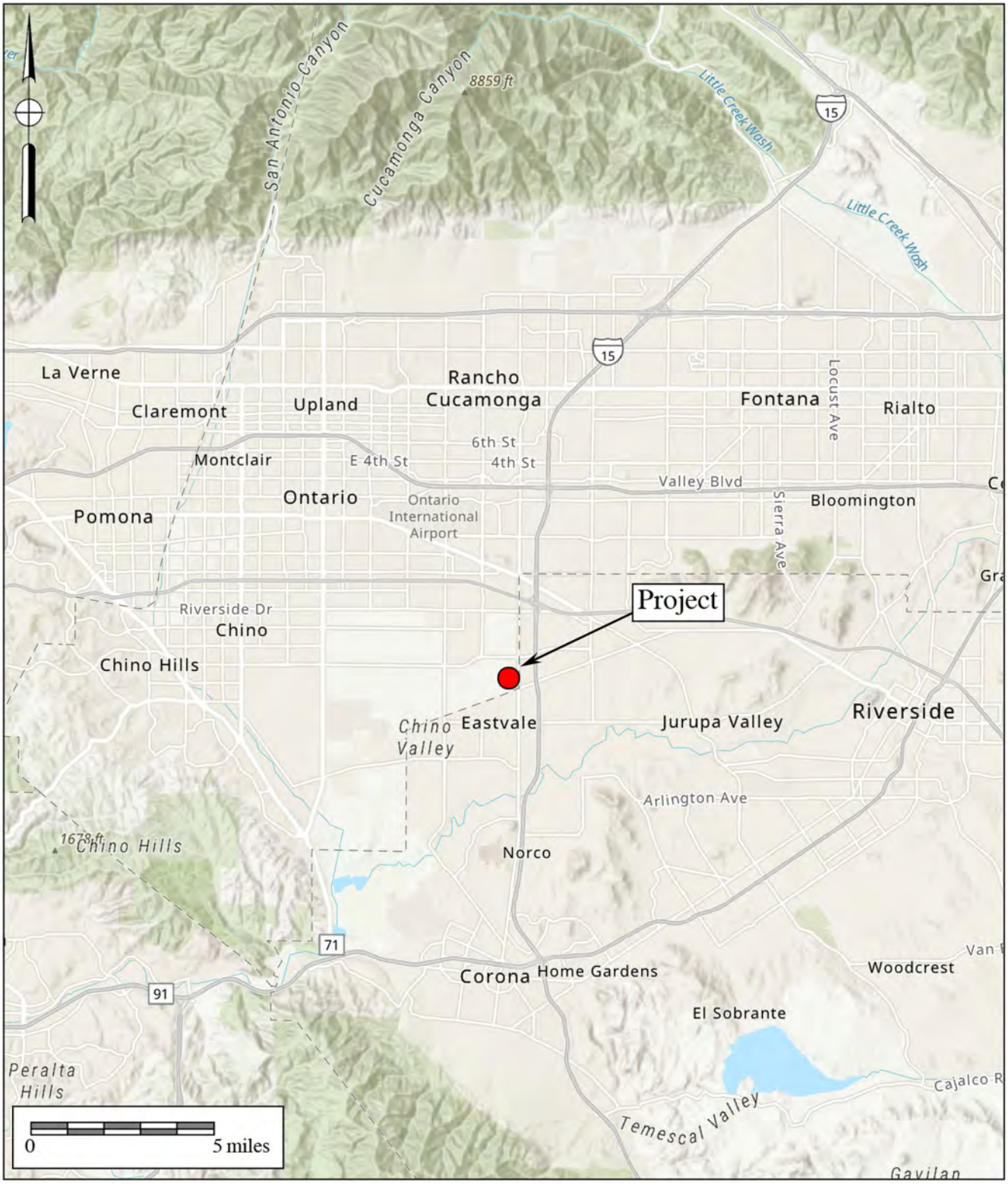

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Figure 1
General Location Map

The Eucalyptus and Amherst Avenues Project

ESRI (1:250,000 series)

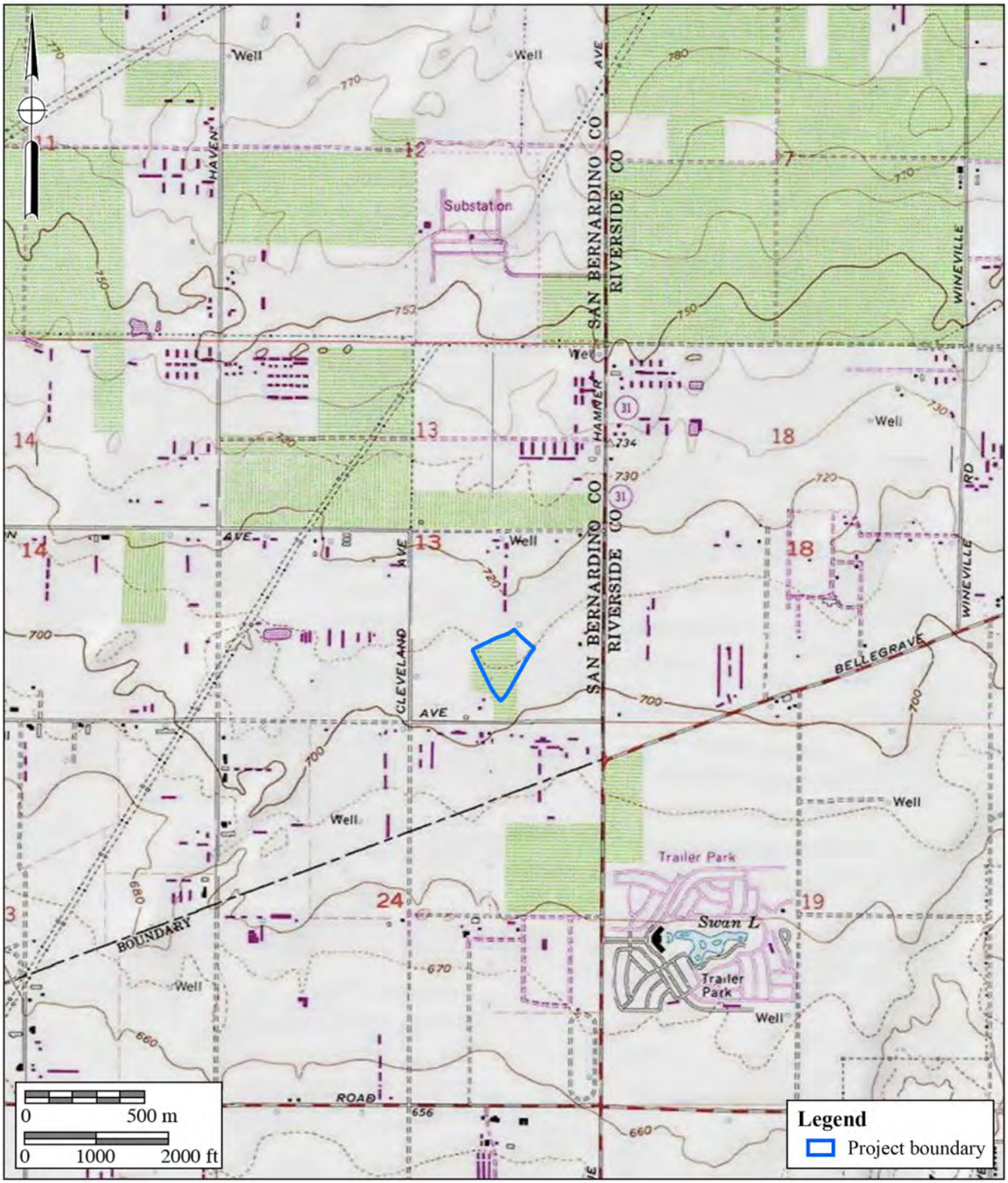

Figure 2

Project Location Map

The Eucalyptus and Amhert Avenues Project

USGS *Corona North* Quadrangle (7.5-minute series)

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Figure 3

Project Development Map

The Eucalytpus and Amherst Avenues Project

In CEQA's Environmental Checklist Form, a question to respond to is, "Would the project directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?" (Appendix G, Section VII, Part f). This is to ensure compliance with California Public Resources Code Section 5097.5, the law that protects nonrenewable resources, including fossils, which is paraphrased below:

a) A person shall not knowingly and willfully excavate upon, or remove, destroy, injure or deface any historic or prehistoric ruins, burial grounds, archaeological or vertebrate paleontological site, including fossilized footprints, inscriptions made by human agency, rock art, or any other archaeological, paleontological or historical feature, situated on public lands, except with the express permission of the public agency having jurisdiction over such lands.
b) As used in this section, "public lands" means lands owned by, or under the jurisdiction of, the state, or any city, county, district, authority, or public corporation, or any agency thereof.
c) A violation of this section is a misdemeanor.

City of Ontario

The Ontario Plan (TOP) 2050 Final Supplemental Environmental Impact Report (FSEIR) sets forth goals and policies for the City to manage future growth and land uses. According to Impact 5.7-6 of the FSEIR:

> Ontario is underlain by deposits of Quaternary and upper-Pleistocene sediments deposited during Pliocene and early Pleistocene time. Quaternary Older Alluvial sediments may contain significant, nonrenewable, paleontological resources and are therefore considered to have high sensitivity. Older Pleistocene alluvial sediments can yield fossil remains, often found at depths of 10 feet or more below existing ground surface. As previously discussed, for the Approved TOP, the San Bernardino County Museum, Division of Geological Sciences, conducted the paleontological records search and found one previously known paleontological resource locality recorded by the Regional Paleontologic Locality Inventory, a computer database with positional and contextual data for more than 3,000 fossil localities throughout California and the southwestern United States. This review found one paleontological locality for the City area (SBCM 5.1.8). This locality yielded the remains of a mammoth from approximately 20 feet below the ground surface. As a result, the possibility of finding additional paleontological resources within City boundaries is moderate to high at depths of 10 feet or more below ground surface. (PlaceWorks 2022a)

To mitigate the potential impacts identified in Impact 5.7-6, the FSEIR proposes the following mitigation measures. These measures are also stated in the Mitigation Monitoring and Reporting Program of TOP 2050 (PlaceWorks 2022b):

> **Mitigation Measure MM 5-2:** In areas of documented or inferred archaeological and/or paleontological resource presence, City staff shall require applicants for development permits to provide studies to document the presence/absence of such resources. On properties where resources are identified, such studies shall provide a detailed mitigation plan, including a monitoring program and recovery and/or in situ preservation plan, based on the recommendations of a qualified cultural preservation expert. The mitigation plan shall include the following requirements:
>
> a) Archaeologists and/or paleontologist shall be retained for the project and will be on call during grading and other significant ground-disturbing activities.
>
> b) Should any cultural resources be discovered, no further grading shall occur in the area of the discovery until the Planning Director or designee is satisfied that adequate provisions are in place to protect these resources.
>
> c) Unanticipated discoveries shall be evaluated for significance by a San Bernardino County Certified Professional Archaeologist/Paleontologist. If significance criteria are met, then the project shall be required to perform data recovery, professional identification, radiocarbon dates, and other special studies; submit materials to a museum for permanent curation; and provide a comprehensive final report including a catalog with museum numbers. (PlaceWorks 2022a, 2022b)

III. GEOLOGY

Surficial sediments below the project are mapped by Morton and Miller (2006) as Holocene and late Pleistocene eolian (wind-blown) deposits, with nearby sandy alluvial sediments of similar age (Figure 4). These surficial units overlie the ancestral Santa Ana River flood plain deposits mapped as lower to middle Pleistocene very old sandy alluvial channel deposits that are exposed on the surface to the south of the project and closer to the present course of the Santa Ana River.

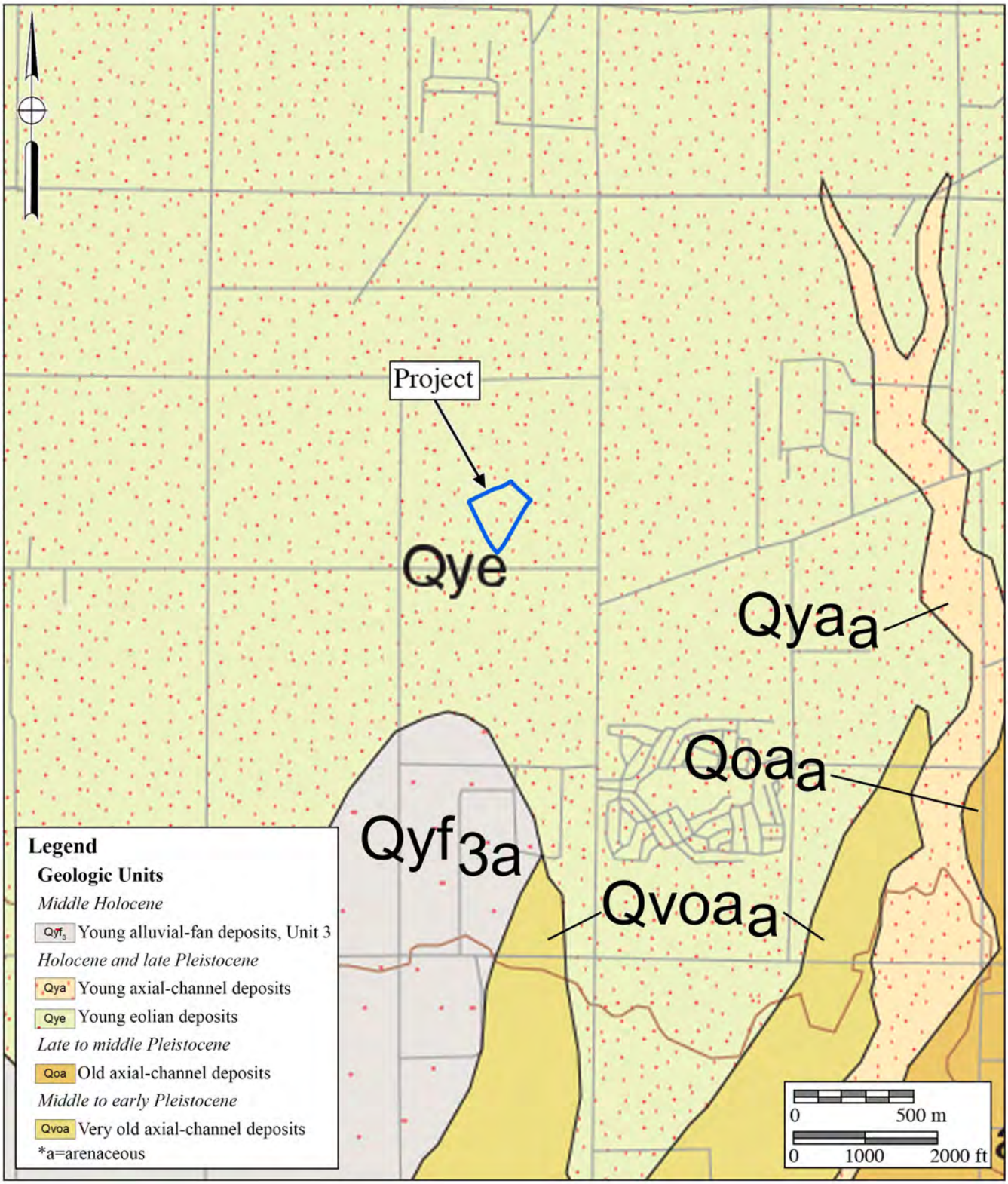

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Figure 4
Geologic Map
The Eucalyptus and Amhert Avenues Project
Geology after Morton and Miller (2006)

IV. PALEONTOLOGICAL RESOURCES

Definition

Paleontological resources are the remains of prehistoric life that have been preserved in geologic strata. These remains are called fossils and include bones, shells, teeth, and plant remains (including their impressions, casts, and molds) in the sedimentary matrix, as well as trace fossils such as footprints and burrows. Fossils are considered older than 5,000 years of age (Society of Vertebrate Paleontology 2010) but may include younger remains (subfossils) when viewed in the context of local extinction of the organism or habitat, for example. Fossils are considered a nonrenewable resource under state and local guidelines (see Section II).

Fossil Locality Records Search

A paleontological literature review and collections and locality records search was conducted for the project using records obtained for prior projects from the Division of Geological Sciences at the San Bernardino County Museum (SBCM), the Natural History Museum of Los Angeles County (LACM), and the Western Science Center (WSC) in Hemet, and data from published and unpublished paleontological literature. The nearest recorded fossil locality is situated about a mile southwest of the project in Eastvale, consisting of the bones of a Pleistocene snake (LACM locality no. (loc.) 7811). Farther southwest, between one and two miles, Pleistocene vertebrate fossils were discovered during trenching activities along the nearby County Line Channel Project by BFSA paleontological monitors (Kennedy et al. 2005). Fossils occurred at depths ranging from 11 to 17 feet deep, and consisted of fragmentary bones from a camel, *Camelops* sp. cf. *C. hesternus*, a fragmentary jaw of a bighorn sheep, *Ovis canadensis*, and several unidentifiable bone fragments of large mammals. These fossils were deposited at the WSC.

More Pleistocene fossils have been recovered from a number of completed and ongoing projects by BFSA, all within two miles of the current project. The Vernola Ranch project to the east in Jurupa Valley and the TTM 20472 and Merril Commerce Center projects to the west have all recently yielded the fossil bones of yet-unidentified large mammals and await curation. Fossil bones from these projects were variously collected from depths ranging from 2.5 to 25 feet. At the Ontario 432 Project, two miles to the west of the current project, the sacrum from a large artiodactyl (hoofed grazer) and other unidentified mammalian remains were discovered, at depths ranging from five to seven feet. These specimens have been deposited at the WSC (Wirths 2021).

The nearest known fossil localities held by the SBCM are situated between two and three miles northwest of the project, containing several isolated fossil bones of camels (*Camelops* sp.) and a mastodon (*Mammut pacificus*) rib fragment (SBCM localities 5.1.23 – 5.1.27; Kottkamp 2022). Kottkamp (2022) indicates that the deposits mapped at the surface of this area are unlikely to yield fossils, but the underlying, older deposits "have been found to be highly

fossiliferous in the local area." It should be noted that all of these discoveries post-date the research materials used for paleontological resources in the FSEIR (PlaceWorks 2022a) and, therefore, the document can be construed as out-of-date in that regard.

Project Survey

On February 27, 2025, BFSA staff, under the supervision of Principal Investigator Todd A. Wirths, conducted an intuitive review of the property to determine if any paleontological resources were visible. The field methodology employed for the project included walking evenly spaced survey transects set approximately 15 meters apart while visually inspecting the ground surface, when possible. All potentially sensitive areas where paleontological resources might be located were closely inspected. Visibility of the natural ground surface was characterized as moderate to good. The vegetation within the property is dominated by non-native grasses and weeds. The survey confirmed that the entire property has been previously graded. Grading resulted in the development of a water catchment basin within the northwest portion of the property and a pad at the property's south half. No bedrock outcrops were exposed that might indicate the presence of fossils. No paleontological resources, or evidence of paleontological resources, were observed during the survey.

V. PALEONTOLOGICAL SENSITIVITY

Overview

The degree of paleontological sensitivity of any particular area is based upon a number of factors, including the documented presence of fossiliferous resources on a site or in nearby areas, the presence of documented fossils within a particular geologic formation or lithostratigraphic unit, and whether or not the original depositional environment of the sediments is one that might have been conducive to the accumulation of organic remains that may have become fossilized over time. Holocene alluvium is generally considered to be geologically too young to contain significant nonrenewable paleontological resources (*i.e.,* fossils) and thus is typically assigned a low paleontological sensitivity. Pleistocene (over 11,700 years old) alluvial and alluvial fan deposits in the Inland Empire, however, often yield important terrestrial vertebrate fossils such as extinct mammoths, mastodons, and giant ground sloths, as well as extinct species of horse, bison, camel, saber-toothed cats, and others (Jefferson 1991). These Pleistocene sediments are thus accorded a high paleontological resource sensitivity.

Professional Standards

The Society of Vertebrate Paleontology (2010) has drafted guidelines that include four categories of paleontological sensitivity for geologic units (formations) that might be impacted by a proposed project, and are summarized below:

- *High Potential:* Rock units from which vertebrate or significant invertebrate, plant, or trace fossils have been recovered.
- *Undetermined Potential:* Rock units for which little information is available concerning their paleontological content, geologic age, and depositional environment, and further study is needed to determine the potential of the rock unit.
- *Low Potential:* Rock units that are poorly represented by fossil specimens in institutional collections or, based on a general scientific consensus, that only preserve fossils in rare circumstances.
- *No Potential:* Rock units that have no potential to contain significant paleontological resources, such as high-grade metamorphic rocks and plutonic igneous rocks.

Using these criteria, based upon nearby fossil localities in southern and eastern Ontario and western Jurupa Valley, and the mapped geology, the Holocene eolian deposits at the surface of the project may be considered to have a low potential for paleontological resources. However, with increasing depth and age, this potential increases to a high potential for yielding significant paleontological resources.

City of Ontario Assessment of Paleontological Sensitivity

The City of Ontario considers strata at depths of 10 feet or greater as having a moderate to high paleontological sensitivity. As such, the potential to uncover undiscovered paleontological resources is considered high (PlaceWorks 2022a: 5.7-17).

VI. CONCLUSIONS AND RECOMMENDATIONS

Potentially fossiliferous late Pleistocene alluvial wash or fan deposits likely occur at a depth below the project. These deposits underlie the Holocene eolian deposits mapped at the surface ("Qye" on Figure 4). The occurrence of terrestrial vertebrate fossils at shallow depths from Pleistocene alluvial fan sediments across the Inland Empire is well documented. The high paleontological sensitivity rating typically assigned to Pleistocene alluvial fan sediments for yielding paleontological resources supports the recommendation that paleontological monitoring be implemented during mass grading and excavation activities in undisturbed Pleistocene alluvial fan sediments to mitigate any adverse impacts (loss or destruction) to potential nonrenewable paleontological resources.

On the basis of these statements, a Paleontological Resources Impact Mitigation Program (PRIMP) is recommended, in accordance with Mitigation Measure (MM) 5-2 of the City of Ontario (PlaceWorks 2022a, 2022b). The PRIMP shall be approved by the Planning Department of the City of Ontario prior to the issuance of the project's grading permit. Based upon these findings, **full-time monitoring starting at a depth of four feet below the surface** during earth disturbance activities is strongly recommended. A proposed paleontological monitoring plan is

detailed below. When implemented with the provisions of CEQA, the City of Ontario (PlaceWorks 2022a, 2022b), and the guidelines of the Society of Vertebrate Paleontology (2010), this paleontological monitoring plan would mitigate any adverse impacts (loss or destruction) to potential nonrenewable paleontological resources (fossils), if present, to a level below significant.

Paleontological Monitoring Plan

1. All mitigation programs shall be performed by a qualified professional (project) paleontologist, defined as an individual with an M.S. or Ph.D. in paleontology or geology who has proven experience and who is knowledgeable in professional paleontological procedures and techniques. Fieldwork may be conducted by a qualified paleontological monitor, defined as an individual who has experience in the collection and salvage of fossil materials. The paleontological monitor shall always work under the direction of a qualified paleontologist.
2. Monitoring of mass grading and excavation activities shall be performed by a qualified paleontologist or paleontological monitor. Starting at a depth of four feet, monitoring will be conducted full-time in areas of grading or excavation in undisturbed sediments. Monitoring of artificial fill is not recommended.
3. If a fossil(s) is found at a shallower depth, earth disturbance activities should be halted within a radius of 50 feet from the location of the fossil, and a project-level paleontologist shall be consulted to determine the significance of the fossilized remains. If the fossil is deemed significant by the project-level paleontologist, full-time monitoring should be initiated at the project.
4. Paleontological monitors will be equipped to salvage fossils as they are unearthed to avoid construction delays. The monitor must be empowered to temporarily halt or divert equipment to allow removal of abundant or large specimens in a timely manner. Monitoring may be reduced if the potentially fossiliferous units are not present in the subsurface or, if present, are determined upon exposure and examination by qualified paleontological personnel to have low potential to contain fossil resources. The monitor shall notify the project paleontologist, who will then notify the concerned parties of the discovery.
5. Paleontological salvage during trenching and boring activities is typically from the generated spoils and does not delay the trenching or drilling activities. Fossils will be collected and placed in cardboard flats or plastic buckets and identified by field number, collector, and date collected. Notes will be taken on the map location and stratigraphy of the site, which will be photographed before it is vacated, and the fossils are removed to a safe place. On mass grading projects, discovered fossil sites will be protected by flagging to prevent them from being overrun by earthmovers (scrapers) before salvage begins. Fossils will be collected in a similar manner, with

notes and photographs being taken before removing the fossils. The precise location of the site is determined with the use of electronic handheld devices. If the site involves remains from a large terrestrial vertebrate, such as large bone(s) or a mammoth tusk, that is/are too large to be easily removed by a single monitor, a fossil recovery crew shall excavate around the find, encase the find within a plaster and burlap jacket, and remove it after the plaster is set. For large fossils, use of the contractor's construction equipment may be solicited to help move the jacket to a safe location.

6. Isolated fossils will be collected by hand, wrapped in protective materials, and placed in temporary collecting flats or five-gallon buckets. Notes will be taken on the map location and stratigraphy of the site, which will be photographed before it is vacated, and the fossils are moved to a safe place.
7. Particularly small invertebrate fossils typically represent multiple specimens of a limited number of organisms, and a scientifically suitable sample can be obtained from one to several five-gallon buckets of fossiliferous sediment. If it is possible to dry screen the sediment in the field, a concentrated sample may consist of one or two buckets of material.
8. In accordance with the "Microfossil Salvage" section of the SVP guidelines (2010:7), bulk sampling and screening of fine-grained sedimentary deposits (including carbonate-rich paleosols) must be performed if the deposits are identified to possess indications of producing fossil "microvertebrates" to test the feasibility of the deposit to yield fossil bones and teeth. If indicators of potential microvertebrate fossils are found, screening of a test sample (approximately 600 pounds) is recommended, according to the SVP guidelines. If feasible, wet screening shall be conducted on the project site. If screening yields significant fossils, then removing and processing a "standard sample" of 6,000 pounds shall be performed.
9. In the laboratory, individual fossils will be cleaned of extraneous matrix, any breaks will be repaired, and the specimen, if needed, will be stabilized by soaking in an archivally approved acrylic hardener (*e.g.,* a solution of acetone and Paraloid B-72).
10. Recovered specimens will be prepared to a point of identification and permanent preservation (not display), including screen-washing sediments to recover small invertebrates and vertebrates. Preparation of individual vertebrate fossils is often more time-consuming than for accumulations of invertebrate fossils.
11. Recovered specimens will be identified and curated into a professional, accredited public museum repository with a commitment to archival conservation and permanent retrievable storage (*e.g.,* the San Bernardino County Museum). The paleontological program should include a written repository agreement prior to the initiation of mitigation activities. Prior to curation, the lead agency (the City of Ontario) will be consulted on the repository/museum to receive the fossil material.

12. A final report of findings and significance will be prepared, including lists of all fossils recovered and necessary maps and graphics to accurately record their original location(s). The report, when submitted to and accepted by the appropriate lead agency, will signify satisfactory completion of the project program to mitigate impacts to any potential nonrenewable paleontological resources (*i.e.,* fossils) that might have been lost or otherwise adversely affected without such a program in place.

VII. CERTIFICATION

I hereby certify that the statements furnished above and in the attached exhibits present the data and information required for this paleontological report, and that the facts, statements, and information presented are true and correct to the best of my knowledge and belief and have been compiled in accordance with CEQA criteria.

April 1, 2025

Todd A. Wirths, M.S., P.G. Date
Principal Paleontologist
California Professional Geologist No. 7588

VIII. REFERENCES

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Wirths, T.A. 2021. Paleontological Monitoring Report for the Ontario 432 Project, City of Ontario, San Bernardino County, California (TR 18929 and 18930). Unpublished consulting report for Landsea Homes, Irvine, California, by Brian F. Smith and Associates, Inc., Poway, California.

APPENDIX A

Qualifications of Key Personnel

Todd A. Wirths, MS, PG No. 7588

Principal Paleontologist

BFSA Environmental Services, a Perennial Company
14010 Poway Road • Suite A •
Phone: (858) 679-8218 • Fax: (858) 679-9896 • Email: twirths@bfsa.perennialenv.com

Education

Master of Science, Geological Sciences, San Diego State University, California **1995**

Bachelor of Arts, Earth Sciences, University of California, Santa Cruz **1992**

Professional Certifications

California Professional Geologist #7588, 2003
Riverside County Approved Paleontologist
San Diego County Qualified Paleontologist
Orange County Certified Paleontologist
OSHA HAZWOPER 40-hour trained; current 8-hour annual refresher

Professional Memberships

Board member, San Diego Geological Society
San Diego Association of Geologists; past President (2012) and Vice President (2011)
South Coast Geological Society
Southern California Paleontological Society

Experience

Mr. Wirths has more than a dozen years of professional experience as a senior-level paleontologist throughout southern California. He is also a certified California Professional Geologist. At BFSA, Mr. Wirths conducts on-site paleontological monitoring, trains and supervises junior staff, and performs all research and reporting duties for locations throughout Los Angeles, Ventura, San Bernardino, Riverside, Orange, San Diego, and Imperial Counties. Mr. Wirths was formerly a senior project manager conducting environmental investigations and remediation projects for petroleum hydrocarbon-impacted sites across southern California.

Selected Recent Reports

2019 *Paleontological Assessment for the 10575 Foothill Boulevard Project, City of Rancho Cucamonga, San Bernardino County, California*. Prepared for T&B Planning, Inc. Report on file at Brian F. Smith and Associates, Inc., Poway, California.

2019 *Paleontological Assessment for the MorningStar Marguerite Project, Mission Viejo, Orange County, California.* Prepared for T&B Planning. Report on file at Brian F. Smith and Associates, Inc., Poway, California.

2019 *Paleontological Monitoring Report for the Nimitz Crossing Project, City of San Diego.* Prepared for Voltaire 24, LP. Report on file at Brian F. Smith and Associates, Inc., Poway, California.

2019 *Paleontological Resource Impact Mitigation Program (PRIMP) for the Jack Rabbit Trail Logistics Center Project, City of Beaumont, Riverside County, California.* Prepared for JRT BP 1, LLC. Report on file at Brian F. Smith and Associates, Inc., Poway, California.

2020 *Paleontological Monitoring Report for the Oceanside Beachfront Resort Project, Oceanside, San California.* Prepared for S.D. Malkin Properties. Report on file at Brian F. Smith and Associates, Inc., Poway, California.

2020 *Paleontological Resource Impact Mitigation Program for the Nakase Project, Lake Forest, Orange County, San California.* Prepared for Glenn Lukos Associates, Inc. Report on file at Brian F. Smith and Associates, Inc., Poway, California.

2020 *Paleontological Resource Impact Mitigation Program for the Sunset Crossroads Project, Banning, Riverside County*. Prepared for NP Banning Industrial, LLC. Report on file at Brian F. Smith and Associates, Inc., Poway, California.

2020 *Paleontological Assessment for the Ortega Plaza Project, Lake Elsinore, Riverside County*. Prepared for Empire Design Group. Report on file at Brian F. Smith and Associates, Inc., Poway, California.

2020 *Paleontological Resource Record Search Update for the Green River Ranch III Project, Green River Ranch Specific Plan SP00-001, City of Corona, California*. Prepared for Western Realco. Report on file at Brian F. Smith and Associates, Inc., Poway, California.

2020 *Paleontological Assessment for the Cypress/Slover Industrial Center Project, City of Fontana, San Bernardino County, California*. Prepared for T&B Planning, Inc. Report on file at Brian F. Smith and Associates, Inc., Poway, California.

2020 *Paleontological Monitoring Report for the Imperial Landfill Expansion Project (Phase VI, Segment C-2), Imperial County, California*. Prepared for Republic Services, Inc. Report on file at Brian F. Smith and Associates, Inc., Poway, California.

2021 *Paleontological Assessment for the Manitou Court Logistics Center Project, City of Jurupa Valley, Riverside County, California*. Prepared for Link Industrial. Report on file at Brian F. Smith and Associates, Inc., Poway, California.

2021 *Paleontological Resource Impact Mitigation Program for the Del Oro (Tract 36852) Project, Menifee, Riverside County*. Prepared for D.R. Horton. Report on file at Brian F. Smith and Associates, Inc., Poway, California.

2021 *Paleontological Assessment for the Alessandro Corporate Center Project (Planning Case PR-2020-000519), City of Riverside, Riverside County, California*. Prepared for OZI Alessandro, LLC. Report on file at Brian F. Smith and Associates, Inc., Poway, California.

2021 *Paleontological Monitoring Report for the Boardwalk Project, La Jolla, City of San Diego*. Prepared for Project Management Advisors, Inc. Report on file at Brian F. Smith and Associates, Inc., Poway, California.

MEMORANDUM

URBAN CROSSROADS

DATE: March 28, 2025
TO: Dave Waters, Genstar Development Company/GDCI-13
FROM: Haseeb Qureshi, Shannon Wong
JOB NO: 15662-05 GHG Assessment

ESPERANZA SPECIFIC PLAN AMENDMENT GREENHOUSE GAS ASSESSMENT

Dave Waters,

Urban Crossroads, Inc. is pleased to submit the following Greenhouse Gas Assessment for Esperanza Specific Plan Amendment development (referred to as **Project**) to support the proposed Specific Plan Amendment (**SPA**), which is located on the northeast corner of Eucalyptus Avenue and Amherst Avenue in the City of Ontario. The purpose of this work effort is to determine if the Project would result in new or substantially different Greenhouse Gas Impacts than those considered and addressed in the Esperanza Specific Plan (**Approved Specific Plan**) Environmental Impact Report (EIR) and The Ontario Plan 2050 Supplemental EIR (SEIR).

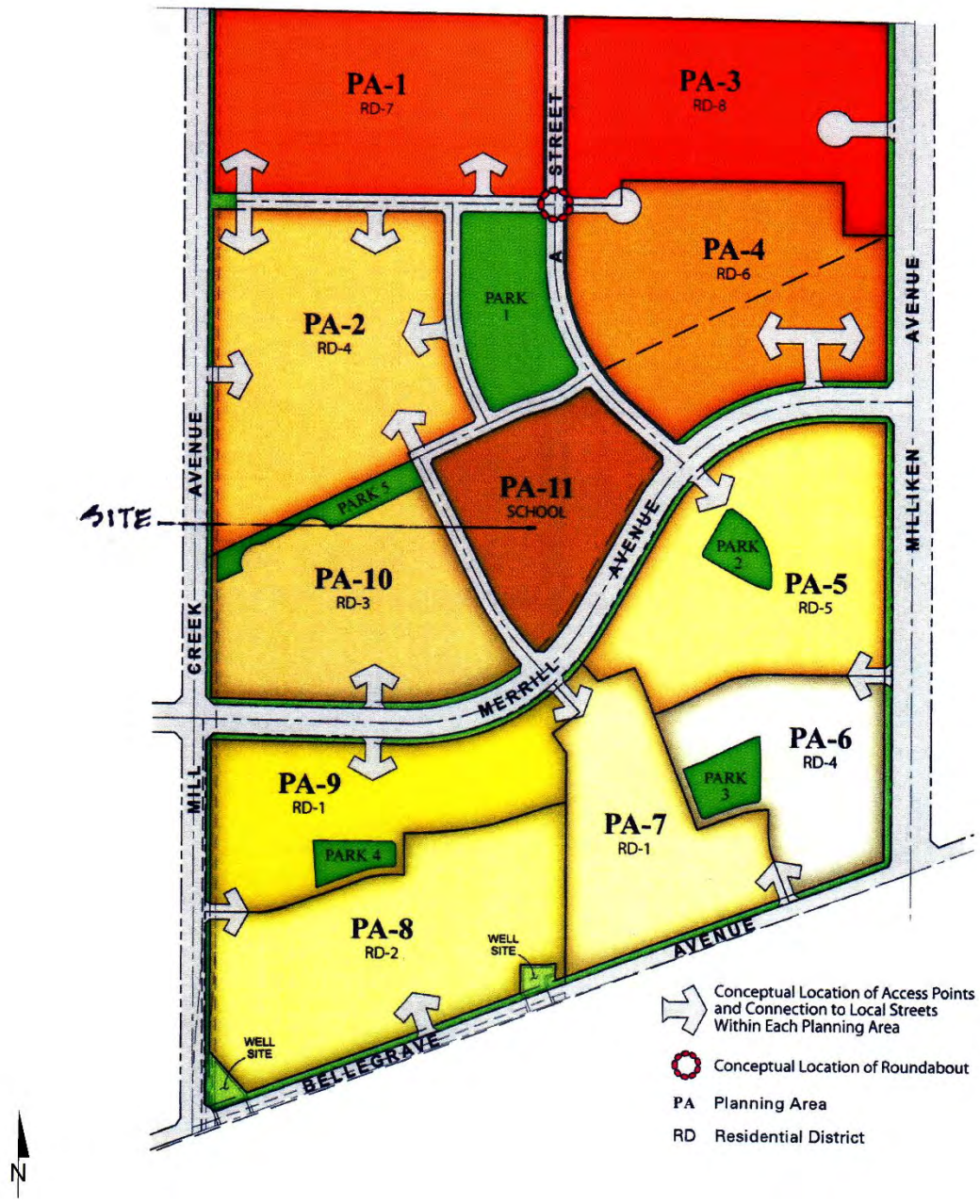
PROPOSED PROJECT

It is our understanding that the proposed Project is to consist of 161 multifamily residential dwelling units (with a density of approximately 16.1 dwelling units per net acre). The Project is located within the Esperanza Specific Plan. The original Specific Plan that was approved contemplated a 736-student elementary school within Planning Area 11. The land use will be updated from "School" to "MDR Medium Density Residential" consistent with the adjacent land use to the northeast. The Project is anticipated to be constructed in a single phase by the year 2029.

Exhibit 1 shows the preliminary site plan. For comparison purposes, Exhibit 2 shows the currently approved land use plan identifying Planning Area 11 with a school.

EXHIBIT 1: PRELIMINARY SITE PLAN

EXHIBIT 2: CURRENTLY APPROVED LAND USE PLAN



PROJECT GHG ANALYSIS

City of Ontario Community Climate Action Plan

The City of Ontario adopted the Community Climate Action Plan (CCAP) on December 16, 2014. The CAP contains further guidance on the City of Ontario's GHG Inventory reduction goals, policies, guidelines, and implementation programs. The purpose of the CAP is to provide guidance on how to analyze GHG emissions and determine significance during the CEQA review of proposed development projects within the City of Ontario (1). The CAP builds upon the Reduction Plan to address City-specific information and City-specific GHG reduction measures. To address the state's requirement to reduce GHG emissions, the City prepared its CAP with the goal of reducing GHG emissions within the City by 15% below 2008 levels by the year 2020. The City's target is consistent with the AB 32 target and ensures that the City of Ontario achieves GHG reductions locally that complement and are consistent with state efforts to reduce GHG emissions.

As part of the CAP, the City of Ontario published a guidance document titled "Greenhouse Gas Emissions, CEQA Thresholds and Screening Tables" (December 2014). As part of this guidance, the City determined that if GHG emissions of a given project exceeds 3,000 $MTCO_2e$/yr, then project emissions would need to be reduced by 25 percent when compared to year 2008 emissions levels. Alternatively, the project would need to achieve a minimum of 100 points pursuant to measures identified in the Screening Tables.

The Ontario Plan (TOP) 2050 includes an update to the City's Community Climate Action Plan (CCAP Update) which was adopted in 2014. The CCAP Update is a plan to reduce greenhouse gas (GHG) emissions and improve community resilience to hazardous conditions associated with climate change. The update to the CCAP includes updated emissions inventories; updated emissions forecasts; identifies GHG emissions reduction targets to achieve the GHG reduction goals of the City of Ontario consistent with Senate Bill 32, Executive Order S-03-05, and substantial progress toward the State's carbon neutrality goals of Executive Order B-55-18; and measures, that when quantified, achieve the GHG reduction targets for the City. As noted in The Ontario Plan 2050 Final Supplemental Environmental Impact Report (SCH No. 2021070364) certified by the City in 2022 (TOP 2050 SEIR), the measures included in the 2022 CCAP Update are not substantially different than that of the 2014 CCAP and therefore there is no change in the environmental impacts associated with the CCAP.

GHG IMPACTS

Standards of Significance

According to the CEQA Guidelines Appendix G thresholds, to determine whether impacts from GHG emissions are significant. Would the project:

- **Threshold 1**: Generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment?
- **Threshold 2**: Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of GHGs?

The evaluation of an impact under CEQA requires measuring data from a project against both existing conditions and a "threshold of significance." For establishing significance thresholds, the Office of

Planning and Research's amendments to the CEQA Guidelines Section 15064.7(c) state "[w]hen adopting thresholds of significance, a lead agency may consider thresholds of significance previously adopted or recommended by other public agencies, or recommended by experts, provided the decision of the lead agency to adopt such thresholds is supported by substantial evidence."

CEQA Guidelines Section 15064.4(a) further states, ". . . A lead agency shall have discretion to determine, in the context of a particular project, whether to: (1) Use a model or methodology to quantify greenhouse gas emissions resulting from a project, and which model or methodology to use . . .; or (2) Rely on a qualitative analysis or performance-based standards."

CEQA Guidelines Section 15064.4 provides that a lead agency should consider the following factors, among others, in assessing the significance of impacts from greenhouse gas emissions:

- **Consideration #1:** The extent to which the project may increase or reduce greenhouse gas emissions as compared to the existing environmental setting.
- **Consideration #2:** Whether the project emissions exceed a threshold of significance that the lead agency determines applies to the project.
- **Consideration #3:** The extent to which the project complies with regulations or requirements adopted to implement a statewide, regional, or local plan for the reduction or mitigation of greenhouse gas emissions. Such regulations or requirements must be adopted by the relevant public agency through a public review process and must reduce or mitigate the project's incremental contribution of greenhouse gas emissions. In determining the significance of impacts, the lead agency may consider a project's consistency with the State's long-term climate goals or strategies, provided that substantial evidence supports the agency's analysis of how those goals or strategies address the project's incremental contribution to climate change and its conclusion that the project's incremental contribution is not cumulatively considerable.

As noted above, the update to the CCAP includes updated emissions inventories; updated emissions forecasts; identifies GHG emissions reduction targets to achieve the GHG reduction goals of the City of Ontario consistent with Senate Bill 32, Executive Order S-03-05, and substantial progress toward the State's carbon neutrality goals of Executive Order B-55-18; and measures, that when quantified, achieve the GHG reduction targets for the City. As noted in the TOP EIR, the measures included in the 2022 update to the CCAP are not substantially different than that of the 2014 CCAP. Because the 2022 Update to the CCAP addresses GHG emissions reductions and is consistent with the requirements of AB 32, SB 32, and international efforts to reduce GHG emissions, Projects that comply with the CCAP Update would have a less than significant GHG impact.

PROJECT GHG EMISSIONS

The estimated GHG emissions for the Project are summarized in Table 1. The estimated GHG emissions include emissions from Carbon Dioxide (CO_2), Methane (CH_4), Nitrous Oxide (N_2O), and Refrigerants (R). As shown on Table 1, the Project would generate a total of approximately 2,238.00 $MTCO_2e$/yr.

TABLE 1: TOTAL PROJECT GHG EMISSIONS

Source	Emissions (MT/year)				
	CO_2	CH_4	N_2O	Refrigerants	Total CO_2e
Annual construction-related emissions amortized over 30 years	50.28	1.79E-03	1.40E-03	2.30E-02	50.77
Mobile Source	1,800.46	0.07	0.08	2.09	1,828.80
Area Source	41.21	0.00	0.00	0.00	41.26
Energy Source	260.76	0.02	0.00	0.00	261.84
Water	10.91	0.22	0.01	0.00	17.97
Waste	10.62	1.06	0.00	0.00	37.17
Refrigerants	0.00	0.00	0.00	0.18	0.18
Total CO_2e (All Sources)	**2,238.00**				

GHG IMPACT ANALYSIS

Would the Project have the potential to generate direct or indirect GHG emissions that would result in a significant impact on the environment?

Would the Project have the potential to conflict with any applicable plan, policy or regulation of an agency adopted for the purpose of reducing the emissions of GHGs?

The purpose of the 2022 CCAP Update is to provide guidance on how to analyze GHG emissions and determine significance during the CEQA review of proposed development projects within the City. Because the 2022 CCAP Update addresses GHG emissions reductions and is consistent with the requirements of AB 32, SB 32, and international efforts to reduce GHG emissions, compliance with the CAP Update fulfills the description of mitigation found in the State CEQA Guidelines.

The Project will implement Screening Table Measures providing for the required points pursuant to the City Screening Tables. As such, the Project would be consistent with the GHG Development Review Process' requirement to achieve the requisite number of points and thus the Project is considered to have a less than significant individual and cumulatively considerable impact on GHG emissions.

LEVEL OF SIGNIFICANCE BEFORE MITIGATION

Potentially Significant.

MM GHG-1

Project development proposals shall implement Screening Table Measures that achieve the requisite points per the City's Community Climate Action Plan (CCAP) Screening Tables. The City shall verify that Screening Table Measures achieving the requisite points are incorporated in development plans prior to the issuance of building permit(s) and/or site plans (as applicable). The City shall verify implementation of the selected Screening Table Measures prior to the issuance of Certificate(s) of Occupancy. At the discretion of the City, measures that provide GHG reductions equivalent to GHG emissions reductions achieved via the Screening Table Measures may be implemented.

LEVEL OF SIGNIFICANCE AFTER MITIGATION

Less than Significant

GREENHOUSE GAS CONCLUSION

Results of the assessment indicate that the Project is not anticipated to result in a significant impact during operational activities associated with greenhouse gas and with implementation of MM GHG-1 a less than significant impact is expected.

REFERENCES

1. **City of Ontario.** City of Ontario Climate Adaption Plan. [Online] 2014. https://www.ontarioca.gov/sites/default/files/Ontario-Files/Planning/Applications/Community%20Climate%20Action%20Plan.pdf.

ATTACHMENT A

CALEEMOD PROPOSED EMISSIONS MODEL OUTPUTS

15662 - Esperanza Specific Plan Amendment (Proposed) Detailed Report

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6.1. Climate Risk Summary

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6.3. Adjusted Climate Risk Scores

6.4. Climate Risk Reduction Measures

7. Health and Equity Details

7.1. CalEnviroScreen 4.0 Scores

7.2. Healthy Places Index Scores

7.3. Overall Health & Equity Scores

7.4. Health & Equity Measures

7.5. Evaluation Scorecard

7.6. Health & Equity Custom Measures

8. User Changes to Default Data

1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	15662 - Esperanza Specific Plan Amendment (Proposed)
Construction Start Date	8/3/2026
Operational Year	2029
Lead Agency	—
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	2.60
Precipitation (days)	18.8
Location	33.992352, -117.563101
County	San Bernardino-South Coast
City	Ontario
Air District	South Coast AQMD
Air Basin	South Coast
TAZ	5260
EDFZ	10
Electric Utility	Southern California Edison
Gas Utility	Southern California Gas
App Version	2022.1.1.29

1.2. Land Use Types

Land Use Subtype	Size	Unit	Lot Acreage	Building Area (sq ft)	Landscape Area (sq ft)	Special Landscape Area (sq ft)	Population	Description
Apartments Low Rise	161	Dwelling Unit	10.5	170,660	98,516	—	533	—

1.3. User-Selected Emission Reduction Measures by Emissions Sector

No measures selected

2. Emissions Summary

2.1. Construction Emissions Compared Against Thresholds

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Un/Mit.	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	4.65	3.91	34.7	32.3	0.06	1.77	5.90	7.67	1.62	2.74	4.37	—	7,052	7,052	0.29	0.14	6.00	7,082
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	29.5	29.0	30.1	32.4	0.06	1.38	2.95	4.33	1.27	1.05	2.32	—	7,029	7,029	0.28	0.17	0.17	7,058
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	3.27	3.22	7.98	14.6	0.02	0.36	1.16	1.43	0.33	0.35	0.68	—	3,239	3,239	0.11	0.10	1.85	3,274
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.60	0.59	1.46	2.66	< 0.005	0.06	0.21	0.26	0.06	0.06	0.12	—	536	536	0.02	0.02	0.31	542

2.2. Construction Emissions by Year, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Year	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily - Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2026	4.65	3.91	34.7	32.3	0.06	1.77	5.90	7.67	1.62	2.74	4.37	—	7,052	7,052	0.29	0.07	1.10	7,082

2027	1.90	1.60	11.0	22.1	0.03	0.37	1.64	2.01	0.34	0.39	0.73	—	4,644	4,644	0.16	0.14	6.00	4,697
2028	1.79	1.54	10.5	21.5	0.03	0.33	1.64	1.98	0.30	0.39	0.69	—	4,604	4,604	0.15	0.14	5.37	4,656
Daily - Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2026	4.13	3.47	30.1	29.8	0.06	1.38	2.95	4.33	1.27	1.05	2.32	—	7,029	7,029	0.28	0.15	0.17	7,058
2027	1.87	1.57	11.1	20.1	0.03	0.37	1.64	2.01	0.34	0.39	0.73	—	4,515	4,515	0.16	0.14	0.16	4,561
2028	1.76	1.51	10.5	19.7	0.03	0.33	1.64	1.98	0.30	0.39	0.69	—	4,478	4,478	0.16	0.14	0.14	4,524
2029	29.5	29.0	17.8	32.4	0.05	0.56	2.14	2.70	0.51	0.51	1.02	—	6,585	6,585	0.23	0.17	0.16	6,642
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2026	1.08	0.91	7.75	8.26	0.02	0.36	0.93	1.29	0.33	0.35	0.68	—	1,822	1,822	0.07	0.03	0.32	1,832
2027	1.34	1.12	7.98	14.6	0.02	0.27	1.16	1.43	0.24	0.28	0.52	—	3,239	3,239	0.11	0.10	1.85	3,274
2028	1.26	1.08	7.58	14.3	0.02	0.24	1.16	1.40	0.22	0.28	0.49	—	3,221	3,221	0.11	0.10	1.66	3,256
2029	3.27	3.22	2.19	4.05	0.01	0.07	0.27	0.34	0.06	0.06	0.13	—	829	829	0.03	0.02	0.34	837
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2026	0.20	0.17	1.41	1.51	< 0.005	0.06	0.17	0.23	0.06	0.06	0.12	—	302	302	0.01	< 0.005	0.05	303
2027	0.24	0.20	1.46	2.66	< 0.005	0.05	0.21	0.26	0.04	0.05	0.09	—	536	536	0.02	0.02	0.31	542
2028	0.23	0.20	1.38	2.62	< 0.005	0.04	0.21	0.26	0.04	0.05	0.09	—	533	533	0.02	0.02	0.28	539
2029	0.60	0.59	0.40	0.74	< 0.005	0.01	0.05	0.06	0.01	0.01	0.02	—	137	137	< 0.005	< 0.005	0.06	139

2.4. Operations Emissions Compared Against Thresholds

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Un/Mit.	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	9.18	8.44	7.52	53.4	0.14	0.35	11.3	11.7	0.34	2.88	3.22	77.0	17,534	17,611	8.40	0.57	33.0	18,023
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

1320

Unmit.	8.14	7.45	7.74	36.3	0.14	0.34	11.3	11.7	0.34	2.88	3.22	77.0	16,726	16,803	8.41	0.58	1.92	17,189
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	8.09	7.56	5.03	40.0	0.11	0.14	10.3	10.4	0.14	2.62	2.75	77.0	12,752	12,829	8.31	0.54	13.7	13,211
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	1.48	1.38	0.92	7.29	0.02	0.03	1.88	1.90	0.02	0.48	0.50	12.8	2,111	2,124	1.38	0.09	2.28	2,187

2.5. Operations Emissions by Sector, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Sector	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	4.00	3.51	4.09	42.8	0.12	0.07	11.3	11.4	0.07	2.88	2.95	—	12,491	12,491	0.46	0.52	31.9	12,689
Area	5.09	4.89	2.76	10.3	0.02	0.22	—	0.22	0.22	—	0.22	0.00	3,414	3,414	0.06	0.01	—	3,418
Energy	0.08	0.04	0.68	0.29	< 0.005	0.05	—	0.05	0.05	—	0.05	—	1,575	1,575	0.14	0.01	—	1,582
Water	—	—	—	—	—	—	—	—	—	—	—	12.9	53.1	65.9	1.32	0.03	—	109
Waste	—	—	—	—	—	—	—	—	—	—	—	64.2	0.00	64.2	6.41	0.00	—	225
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1.09	1.09
Total	9.18	8.44	7.52	53.4	0.14	0.35	11.3	11.7	0.34	2.88	3.22	77.0	17,534	17,611	8.40	0.57	33.0	18,023
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	3.80	3.31	4.39	34.9	0.11	0.07	11.3	11.4	0.07	2.88	2.95	—	11,708	11,708	0.46	0.54	0.83	11,880
Area	4.26	4.10	2.67	1.14	0.02	0.22	—	0.22	0.22	—	0.22	0.00	3,390	3,390	0.06	0.01	—	3,393
Energy	0.08	0.04	0.68	0.29	< 0.005	0.05	—	0.05	0.05	—	0.05	—	1,575	1,575	0.14	0.01	—	1,582
Water	—	—	—	—	—	—	—	—	—	—	—	12.9	53.1	65.9	1.32	0.03	—	109
Waste	—	—	—	—	—	—	—	—	—	—	—	64.2	0.00	64.2	6.41	0.00	—	225
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1.09	1321

Total	8.14	7.45	7.74	36.3	0.14	0.34	11.3	11.7	0.34	2.88	3.22	77.0	16,726	16,803	8.41	0.58	1.92	17,189
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	3.47	3.02	4.11	33.3	0.11	0.07	10.3	10.4	0.06	2.62	2.68	—	10,875	10,875	0.43	0.50	12.6	11,046
Area	4.54	4.50	0.24	6.35	< 0.005	0.02	—	0.02	0.02	—	0.02	0.00	249	249	0.01	< 0.005	—	249
Energy	0.08	0.04	0.68	0.29	< 0.005	0.05	—	0.05	0.05	—	0.05	—	1,575	1,575	0.14	0.01	—	1,582
Water	—	—	—	—	—	—	—	—	—	—	—	12.9	53.1	65.9	1.32	0.03	—	109
Waste	—	—	—	—	—	—	—	—	—	—	—	64.2	0.00	64.2	6.41	0.00	—	225
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1.09	1.09
Total	8.09	7.56	5.03	40.0	0.11	0.14	10.3	10.4	0.14	2.62	2.75	77.0	12,752	12,829	8.31	0.54	13.7	13,211
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.63	0.55	0.75	6.08	0.02	0.01	1.88	1.89	0.01	0.48	0.49	—	1,800	1,800	0.07	0.08	2.09	1,829
Area	0.83	0.82	0.04	1.16	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	0.00	41.2	41.2	< 0.005	< 0.005	—	41.3
Energy	0.01	0.01	0.12	0.05	< 0.005	0.01	—	0.01	0.01	—	0.01	—	261	261	0.02	< 0.005	—	262
Water	—	—	—	—	—	—	—	—	—	—	—	2.13	8.78	10.9	0.22	0.01	—	18.0
Waste	—	—	—	—	—	—	—	—	—	—	—	10.6	0.00	10.6	1.06	0.00	—	37.2
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.18	0.18
Total	1.48	1.38	0.92	7.29	0.02	0.03	1.88	1.90	0.02	0.48	0.50	12.8	2,111	2,124	1.38	0.09	2.28	2,187

3. Construction Emissions Details

3.1. Site Preparation (2026) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road	4.56	3.83	34.6	31.0	0.05	1.77	—	1.77	1.62	—	1.62	—	5,532	5,532	0.22	0.04	—	5,551
Dust From Material Movement	—	—	—	—	—	—	5.66	5.66	—	2.69	2.69	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.25	0.21	1.90	1.70	< 0.005	0.10	—	0.10	0.09	—	0.09	—	303	303	0.01	< 0.005	—	304
Dust From Material Movement	—	—	—	—	—	—	0.31	0.31	—	0.15	0.15	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.05	0.04	0.35	0.31	< 0.005	0.02	—	0.02	0.02	—	0.02	—	50.2	50.2	< 0.005	< 0.005	—	50.4
Dust From Material Movement	—	—	—	—	—	—	0.06	0.06	—	0.03	0.03	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.08	0.08	0.07	1.26	0.00	0.00	0.23	0.23	0.00	0.05	0.05	—	242	242	0.01	0.01	0.83	245
Vendor	< 0.005	< 0.005	0.03	0.02	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	30.3	30.3	< 0.005	< 0.005	0.08	31.9
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.05	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	12.3	12.3	< 0.005	< 0.005	0.02	12.5
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	1.66	1.66	< 0.005	< 0.005	< 0.005	1.74
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	2.04	2.04	< 0.005	< 0.005	< 0.005	2.07
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.28	0.28	< 0.005	< 0.005	< 0.005	0.29
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.3. Grading (2026) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	4.03	3.39	30.0	28.7	0.06	1.38	—	1.38	1.27	—	1.27	—	6,715	6,715	0.27	0.05	—	6,738

Dust From Material Movement	—	—	—	—	—	—	2.67	2.67	—	0.98	0.98	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	4.03	3.39	30.0	28.7	0.06	1.38	—	1.38	1.27	—	1.27	—	6,715	6,715	0.27	0.05	—	6,738
Dust From Material Movement	—	—	—	—	—	—	2.67	2.67	—	0.98	0.98	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.66	0.56	4.92	4.71	0.01	0.23	—	0.23	0.21	—	0.21	—	1,104	1,104	0.04	0.01	—	1,108
Dust From Material Movement	—	—	—	—	—	—	0.44	0.44	—	0.16	0.16	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.12	0.10	0.90	0.86	< 0.005	0.04	—	0.04	0.04	—	0.04	—	183	183	0.01	< 0.005	—	183

Dust From Material Movement	—	—	—	—	—	—	0.08	0.08	—	0.03	0.03	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.10	0.09	0.08	1.44	0.00	0.00	0.26	0.26	0.00	0.06	0.06	—	276	276	0.01	0.01	0.94	280
Vendor	0.01	< 0.005	0.07	0.04	< 0.005	< 0.005	0.02	0.02	< 0.005	< 0.005	0.01	—	60.7	60.7	< 0.005	0.01	0.16	63.7
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.09	0.08	0.09	1.09	0.00	0.00	0.26	0.26	0.00	0.06	0.06	—	253	253	< 0.005	0.01	0.02	256
Vendor	0.01	< 0.005	0.07	0.04	< 0.005	< 0.005	0.02	0.02	< 0.005	< 0.005	0.01	—	60.7	60.7	< 0.005	0.01	< 0.005	63.6
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.02	0.19	0.00	0.00	0.04	0.04	0.00	0.01	0.01	—	42.2	42.2	< 0.005	< 0.005	0.07	42.8
Vendor	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	9.97	9.97	< 0.005	< 0.005	0.01	10.5
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.03	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	6.99	6.99	< 0.005	< 0.005	0.01	7.08
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	1.65	1.65	< 0.005	< 0.005	< 0.005	1.73
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.5. Building Construction (2026) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.38	1.16	10.7	14.1	0.03	0.41	—	0.41	0.38	—	0.38	—	2,630	2,630	0.11	0.02	—	2,639
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.11	0.09	0.81	1.07	< 0.005	0.03	—	0.03	0.03	—	0.03	—	201	201	0.01	< 0.005	—	201
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.02	0.15	0.20	< 0.005	0.01	—	0.01	0.01	—	0.01	—	33.2	33.2	< 0.005	< 0.005	—	33.3
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	0.53	0.47	0.51	6.30	0.00	0.00	1.52	1.52	0.00	0.36	0.36	—	1,467	1,467	0.02	0.06	0.14	1,485
Vendor	0.04	0.01	0.51	0.27	< 0.005	0.01	0.13	0.14	0.01	0.04	0.04	—	455	455	0.03	0.07	0.03	477
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.04	0.04	0.04	0.51	0.00	0.00	0.11	0.11	0.00	0.03	0.03	—	114	114	< 0.005	< 0.005	0.18	115
Vendor	< 0.005	< 0.005	0.04	0.02	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	34.7	34.7	< 0.005	0.01	0.04	36.4
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.09	0.00	0.00	0.02	0.02	0.00	< 0.005	< 0.005	—	18.8	18.8	< 0.005	< 0.005	0.03	19.1
Vendor	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	5.75	5.75	< 0.005	< 0.005	0.01	6.03
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.7. Building Construction (2027) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.33	1.11	10.2	14.0	0.03	0.36	—	0.36	0.34	—	0.34	—	2,630	2,630	0.11	0.02	—	2,639
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	1.33	1.11	10.2	14.0	0.03	0.36	—	0.36	0.34	—	0.34	—	2,630	2,630	0.11	0.02	—	2,639
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.95	0.79	7.27	10.0	0.02	0.26	—	0.26	0.24	—	0.24	—	1,878	1,878	0.08	0.02	—	1,885
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.17	0.14	1.33	1.83	< 0.005	0.05	—	0.05	0.04	—	0.04	—	311	311	0.01	< 0.005	—	312
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.53	0.48	0.41	7.77	0.00	0.00	1.52	1.52	0.00	0.36	0.36	—	1,568	1,568	0.02	0.05	4.93	1,590
Vendor	0.04	0.01	0.47	0.26	< 0.005	0.01	0.13	0.14	0.01	0.04	0.04	—	446	446	0.03	0.07	1.07	468
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.50	0.45	0.46	5.85	0.00	0.00	1.52	1.52	0.00	0.36	0.36	—	1,438	1,438	0.02	0.05	0.13	1,455
Vendor	0.04	0.01	0.49	0.26	< 0.005	0.01	0.13	0.14	0.01	0.04	0.04	—	447	447	0.03	0.07	0.03	467
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.36	0.32	0.36	4.38	0.00	0.00	1.07	1.07	0.00	0.25	0.25	—	1,042	1,042	0.01	0.04	1.52	1,055
Vendor	0.03	0.01	0.35	0.18	< 0.005	< 0.005	0.09	0.10	< 0.005	0.03	0.03	—	319	319	0.02	0.05	0.33	334
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.07	0.06	0.07	0.80	0.00	0.00	0.20	0.20	0.00	0.05	0.05	—	172	172	< 0.005	0.01	0.25	175
Vendor	0.01	< 0.005	0.06	0.03	< 0.005	< 0.005	0.02	0.02	< 0.005	< 0.005	0.01	—	52.8	52.8	< 0.005	0.01	0.05	55.3
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.9. Building Construction (2028) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.28	1.07	9.66	14.0	0.03	0.33	—	0.33	0.30	—	0.30	—	2,630	2,630	0.11	0.02	—	2,639
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.28	1.07	9.66	14.0	0.03	0.33	—	0.33	0.30	—	0.30	—	2,630	2,630	0.11	0.02	—	2,639
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.92	0.77	6.92	10.1	0.02	0.23	—	0.23	0.21	—	0.21	—	1,884	1,884	0.08	0.02	—	1,890
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.17	0.14	1.26	1.83	< 0.005	0.04	—	0.04	0.04	—	0.04	—	312	312	0.01	< 0.005	—	313
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.47	0.46	0.40	7.20	0.00	0.00	1.52	1.52	0.00	0.36	0.36	—	1,538	1,538	0.02	0.05	4.42	1,559
Vendor	0.04	0.01	0.45	0.25	< 0.005	0.01	0.13	0.14	< 0.005	0.04	0.04	—	436	436	0.03	0.07	0.95	458
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.44	0.43	0.41	5.41	0.00	0.00	1.52	1.52	0.00	0.36	0.36	—	1,411	1,411	0.02	0.05	0.11	1,428
Vendor	0.04	0.01	0.47	0.25	< 0.005	0.01	0.13	0.14	< 0.005	0.04	0.04	—	436	436	0.03	0.07	0.02	457
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.31	0.31	0.32	4.11	0.00	0.00	1.07	1.07	0.00	0.25	0.25	—	1,025	1,025	0.01	0.04	1.37	1,038
Vendor	0.03	0.01	0.34	0.18	< 0.005	< 0.005	0.09	0.10	< 0.005	0.03	0.03	—	313	313	0.02	0.05	0.29	328
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	0.06	0.06	0.06	0.75	0.00	0.00	0.20	0.20	0.00	0.05	0.05	—	170	170	< 0.005	0.01	0.23	172
Vendor	0.01	< 0.005	0.06	0.03	< 0.005	< 0.005	0.02	0.02	< 0.005	< 0.005	0.01	—	51.7	51.7	< 0.005	0.01	0.05	54.2
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.11. Building Construction (2029) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.25	1.04	9.28	14.0	0.03	0.30	—	0.30	0.28	—	0.28	—	2,629	2,629	0.11	0.02	—	2,638
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.17	0.14	1.24	1.86	< 0.005	0.04	—	0.04	0.04	—	0.04	—	350	350	0.01	< 0.005	—	351
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.03	0.03	0.23	0.34	< 0.005	0.01	—	0.01	0.01	—	0.01	—	57.9	57.9	< 0.005	< 0.005	—	58.1

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.42	0.36	0.40	5.07	0.00	0.00	1.52	1.52	0.00	0.36	0.36	—	1,386	1,386	0.02	0.05	0.10	1,403
Vendor	0.04	0.01	0.45	0.24	< 0.005	< 0.005	0.13	0.13	< 0.005	0.04	0.04	—	425	425	0.03	0.06	0.02	445
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.06	0.05	0.05	0.71	0.00	0.00	0.20	0.20	0.00	0.05	0.05	—	187	187	< 0.005	0.01	0.23	189
Vendor	< 0.005	< 0.005	0.06	0.03	< 0.005	< 0.005	0.02	0.02	< 0.005	< 0.005	0.01	—	56.5	56.5	< 0.005	0.01	0.05	59.2
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.13	0.00	0.00	0.04	0.04	0.00	0.01	0.01	—	31.0	31.0	< 0.005	< 0.005	0.04	31.4
Vendor	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	9.36	9.36	< 0.005	< 0.005	0.01	9.80
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.13. Paving (2029) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Roa Equipment	0.80	0.67	6.46	9.92	0.01	0.24	—	0.24	0.22	—	0.22	—	1,511	1,511	0.06	0.01	—	1,516
Paving	0.00	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Roa d Equipm ent	0.09	0.07	0.71	1.09	< 0.005	0.03	—	0.03	0.02	—	0.02	—	166	166	0.01	< 0.005	—	166
Paving	0.00	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Roa d Equipm ent	0.02	0.01	0.13	0.20	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	27.4	27.4	< 0.005	< 0.005	—	27.5
Paving	0.00	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05	0.05	0.05	0.66	0.00	0.00	0.20	0.20	0.00	0.05	0.05	—	179	179	< 0.005	0.01	0.01	182
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	0.01	0.01	0.01	0.08	0.00	0.00	0.02	0.02	0.00	< 0.005	< 0.005	—	19.9	19.9	< 0.005	< 0.005	0.02	20.2
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	3.30	3.30	< 0.005	< 0.005	< 0.005	3.34
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.15. Architectural Coating (2029) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.17	0.14	1.06	1.48	< 0.005	0.02	—	0.02	0.02	—	0.02	—	178	178	0.01	< 0.005	—	179
Architectural Coatings	26.7	26.7	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.01	0.12	0.16	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	19.5	19.5	< 0.005	< 0.005	—	19.6

Architect Coatings	2.93	2.93	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.02	0.03	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	3.23	3.23	< 0.005	< 0.005	—	3.24
Architectural Coatings	0.53	0.53	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.08	0.07	0.08	1.01	0.00	0.00	0.30	0.30	0.00	0.07	0.07	—	277	277	< 0.005	0.01	0.02	281
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.12	0.00	0.00	0.03	0.03	0.00	0.01	0.01	—	30.8	30.8	< 0.005	< 0.005	0.04	31.2
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.02	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	5.10	5.10	< 0.005	< 0.005	0.01	5.17
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0

4. Operations Emissions Details

4.1. Mobile Emissions by Land Use

4.1.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Low Rise	4.00	3.51	4.09	42.8	0.12	0.07	11.3	11.4	0.07	2.88	2.95	—	12,491	12,491	0.46	0.52	31.9	12,689
Total	4.00	3.51	4.09	42.8	0.12	0.07	11.3	11.4	0.07	2.88	2.95	—	12,491	12,491	0.46	0.52	31.9	12,689
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Low Rise	3.80	3.31	4.39	34.9	0.11	0.07	11.3	11.4	0.07	2.88	2.95	—	11,708	11,708	0.46	0.54	0.83	11,880
Total	3.80	3.31	4.39	34.9	0.11	0.07	11.3	11.4	0.07	2.88	2.95	—	11,708	11,708	0.46	0.54	0.83	11,880
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Low Rise	0.63	0.55	0.75	6.08	0.02	0.01	1.88	1.89	0.01	0.48	0.49	—	1,800	1,800	0.07	0.08	2.09	1,829
Total	0.63	0.55	0.75	6.08	0.02	0.01	1.88	1.89	0.01	0.48	0.49	—	1,800	1,800	0.07	0.08	2.09	1,829

4.2. Energy

4.2.1. Electricity Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Low Rise	—	—	—	—	—	—	—	—	—	—	—	—	716	716	0.07	0.01	—	720
Total	—	—	—	—	—	—	—	—	—	—	—	—	716	716	0.07	0.01	—	720
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Low Rise	—	—	—	—	—	—	—	—	—	—	—	—	716	716	0.07	0.01	—	720
Total	—	—	—	—	—	—	—	—	—	—	—	—	716	716	0.07	0.01	—	720
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Low Rise	—	—	—	—	—	—	—	—	—	—	—	—	118	118	0.01	< 0.005	—	119
Total	—	—	—	—	—	—	—	—	—	—	—	—	118	118	0.01	< 0.005	—	119

4.2.3. Natural Gas Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Low Rise	0.08	0.04	0.68	0.29	< 0.005	0.05	—	0.05	0.05	—	0.05	—	859	859	0.08	< 0.005	—	862
Total	0.08	0.04	0.68	0.29	< 0.005	0.05	—	0.05	0.05	—	0.05	—	859	859	0.08	< 0.005	—	862

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Low Rise	0.08	0.04	0.68	0.29	< 0.005	0.05	—	0.05	0.05	—	0.05	—	859	859	0.08	< 0.005	—	862
Total	0.08	0.04	0.68	0.29	< 0.005	0.05	—	0.05	0.05	—	0.05	—	859	859	0.08	< 0.005	—	862
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Low Rise	0.01	0.01	0.12	0.05	< 0.005	0.01	—	0.01	0.01	—	0.01	—	142	142	0.01	< 0.005	—	143
Total	0.01	0.01	0.12	0.05	< 0.005	0.01	—	0.01	0.01	—	0.01	—	142	142	0.01	< 0.005	—	143

4.3. Area Emissions by Source

4.3.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Source	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hearths	0.31	0.16	2.67	1.14	0.02	0.22	—	0.22	0.22	—	0.22	0.00	3,390	3,390	0.06	0.01	—	3,393
Consumer Products	3.65	3.65	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.29	0.29	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	0.84	0.79	0.09	9.16	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	24.4	24.4	< 0.005	< 0.005	—	24.5
Total	5.09	4.89	2.76	10.3	0.02	0.22	—	0.22	0.22	—	0.22	0.00	3,414	3,414	0.06	0.01	—	

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hearths	0.31	0.16	2.67	1.14	0.02	0.22	—	0.22	0.22	—	0.22	0.00	3,390	3,390	0.06	0.01	—	3,393
Consumer Products	3.65	3.65	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.29	0.29	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	4.26	4.10	2.67	1.14	0.02	0.22	—	0.22	0.22	—	0.22	0.00	3,390	3,390	0.06	0.01	—	3,393
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hearths	< 0.005	< 0.005	0.03	0.01	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	0.00	38.4	38.4	< 0.005	< 0.005	—	38.5
Consumer Products	0.67	0.67	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.05	0.05	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	0.10	0.10	0.01	1.14	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	2.77	2.77	< 0.005	< 0.005	—	2.78
Total	0.83	0.82	0.04	1.16	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	0.00	41.2	41.2	< 0.005	< 0.005	—	41.3

4.4. Water Emissions by Land Use

4.4.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Low Rise	—	—	—	—	—	—	—	—	—	—	—	12.9	53.1	65.9	1.32	0.03	—	109
Total	—	—	—	—	—	—	—	—	—	—	—	12.9	53.1	65.9	1.32	0.03	—	109
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Low Rise	—	—	—	—	—	—	—	—	—	—	—	12.9	53.1	65.9	1.32	0.03	—	109
Total	—	—	—	—	—	—	—	—	—	—	—	12.9	53.1	65.9	1.32	0.03	—	109
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Low Rise	—	—	—	—	—	—	—	—	—	—	—	2.13	8.78	10.9	0.22	0.01	—	18.0
Total	—	—	—	—	—	—	—	—	—	—	—	2.13	8.78	10.9	0.22	0.01	—	18.0

4.5. Waste Emissions by Land Use

4.5.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Low Rise	—	—	—	—	—	—	—	—	—	—	—	64.2	0.00	64.2	6.41	0.00	—	225
Total	—	—	—	—	—	—	—	—	—	—	—	64.2	0.00	64.2	6.41	0.00	—	225

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Low Rise	—	—	—	—	—	—	—	—	—	—	—	64.2	0.00	64.2	6.41	0.00	—	225
Total	—	—	—	—	—	—	—	—	—	—	—	64.2	0.00	64.2	6.41	0.00	—	225
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Low Rise	—	—	—	—	—	—	—	—	—	—	—	10.6	0.00	10.6	1.06	0.00	—	37.2
Total	—	—	—	—	—	—	—	—	—	—	—	10.6	0.00	10.6	1.06	0.00	—	37.2

4.6. Refrigerant Emissions by Land Use

4.6.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Low Rise	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1.09	1.09
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1.09	1.09
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Low Rise	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1.09	1.09
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1.09	1.09
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Apartment Low Rise	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.18	0.18
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.18	0.18

4.7. Offroad Emissions By Equipment Type

4.7.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.8. Stationary Emissions By Equipment Type

4.8.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.9. User Defined Emissions By Equipment Type

4.9.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Vegetation	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.2. Above and Belowground Carbon Accumulation by Land Use Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Species	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

5. Activity Data

5.1. Construction Schedule

Phase Name	Phase Type	Start Date	End Date	Days Per Week	Work Days per Phase	Phase Description
Site Preparation	Site Preparation	8/3/2026	8/28/2026	5.00	20.0	10
Grading	Grading	8/31/2026	11/20/2026	5.00	60.0	30
Building Construction	Building Construction	11/23/2026	3/9/2029	5.00	600	300
Paving	Paving	1/15/2029	3/9/2029	5.00	40.0	20
Architectural Coating	Architectural Coating	1/15/2029	3/9/2029	5.00	40.0	20

5.2. Off-Road Equipment

5.2.1. Unmitigated

Phase Name	Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor
Site Preparation	Rubber Tired Dozers	Diesel	Average	3.00	8.00	367	0.40
Site Preparation	Crawler Tractors	Diesel	Average	4.00	8.00	87.0	0.43
Grading	Excavators	Diesel	Average	2.00	8.00	36.0	0.38
Grading	Graders	Diesel	Average	1.00	8.00	148	0.41
Grading	Rubber Tired Dozers	Diesel	Average	1.00	8.00	367	0.40
Grading	Scrapers	Diesel	Average	2.00	8.00	423	0.48
Grading	Crawler Tractors	Diesel	Average	2.00	8.00	87.0	0.43
Building Construction	Cranes	Diesel	Average	1.00	8.00	367	0.29
Building Construction	Forklifts	Diesel	Average	3.00	8.00	82.0	0.20
Building Construction	Generator Sets	Diesel	Average	1.00	8.00	14.0	0.74
Building Construction	Tractors/Loaders/Backhoes	Diesel	Average	3.00	8.00	84.0	0.37
Building Construction	Welders	Diesel	Average	1.00	8.00	46.0	0.45
Paving	Pavers	Diesel	Average	2.00	8.00	81.0	0.42

Paving	Paving Equipment	Diesel	Average	2.00	8.00	89.0	0.36
Paving	Rollers	Diesel	Average	2.00	8.00	36.0	0.38
Architectural Coating	Air Compressors	Diesel	Average	1.00	8.00	37.0	0.48

5.3. Construction Vehicles

5.3.1. Unmitigated

Phase Name	Trip Type	One-Way Trips per Day	Miles per Trip	Vehicle Mix
Site Preparation	—	—	—	—
Site Preparation	Worker	17.5	18.5	LDA,LDT1,LDT2
Site Preparation	Vendor	1.00	10.2	HHDT,MHDT
Site Preparation	Hauling	0.00	20.0	HHDT
Site Preparation	Onsite truck	—	—	HHDT
Grading	—	—	—	—
Grading	Worker	20.0	18.5	LDA,LDT1,LDT2
Grading	Vendor	2.00	10.2	HHDT,MHDT
Grading	Hauling	0.00	20.0	HHDT
Grading	Onsite truck	—	—	HHDT
Building Construction	—	—	—	—
Building Construction	Worker	116	18.5	LDA,LDT1,LDT2
Building Construction	Vendor	15.0	10.2	HHDT,MHDT
Building Construction	Hauling	0.00	20.0	HHDT
Building Construction	Onsite truck	—	—	HHDT
Paving	—	—	—	—
Paving	Worker	15.0	18.5	LDA,LDT1,LDT2
Paving	Vendor	—	10.2	HHDT,MHDT
Paving	Hauling	0.00	20.0	HHDT
Paving	Onsite truck	—	—	HHDT

Architectural Coating	—	—	—	—
Architectural Coating	Worker	23.2	18.5	LDA,LDT1,LDT2
Architectural Coating	Vendor	—	10.2	HHDT,MHDT
Architectural Coating	Hauling	0.00	20.0	HHDT
Architectural Coating	Onsite truck	—	—	HHDT

5.4. Vehicles

5.4.1. Construction Vehicle Control Strategies

Non-applicable. No control strategies activated by user.

5.5. Architectural Coatings

Phase Name	Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
Architectural Coating	345,587	115,196	0.00	0.00	—

5.6. Dust Mitigation

5.6.1. Construction Earthmoving Activities

Phase Name	Material Imported (cy)	Material Exported (cy)	Acres Graded (acres)	Material Demolished (sq. ft.)	Acres Paved (acres)
Site Preparation	—	—	70.0	0.00	—
Grading	—	—	240	0.00	—
Paving	0.00	0.00	0.00	0.00	—

5.6.2. Construction Earthmoving Control Strategies

Control Strategies Applied	Frequency (per day)	PM10 Reduction	PM2.5 Reduction
Water Exposed Area	3	74%	74%

5.7. Construction Paving

Land Use	Area Paved (acres)	% Asphalt
Apartments Low Rise	—	0%

5.8. Construction Electricity Consumption and Emissions Factors

kWh per Year and Emission Factor (lb/MWh)

Year	kWh per Year	CO2	CH4	N2O
2026	0.00	346	0.03	< 0.005
2027	0.00	346	0.03	< 0.005
2028	0.00	346	0.03	< 0.005
2029	0.00	346	0.03	< 0.005

5.9. Operational Mobile Sources

5.9.1. Unmitigated

Land Use Type	Trips/Weekday	Trips/Saturday	Trips/Sunday	Trips/Year	VMT/Weekday	VMT/Saturday	VMT/Sunday	VMT/Year
Apartments Low Rise	943	733	621	316,575	15,986	12,412	10,530	5,363,927

5.10. Operational Area Sources

5.10.1. Hearths

5.10.1.1. Unmitigated

Hearth Type	Unmitigated (number)
Apartments Low Rise	—
Wood Fireplaces	0
Gas Fireplaces	161

Propane Fireplaces	0
Electric Fireplaces	0
No Fireplaces	0

5.10.2. Architectural Coatings

Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
345586.5	115,196	0.00	0.00	—

5.10.3. Landscape Equipment

Season	Unit	Value
Snow Days	day/yr	0.00
Summer Days	day/yr	250

5.11. Operational Energy Consumption

5.11.1. Unmitigated

Electricity (kWh/yr) and CO2 and CH4 and N2O and Natural Gas (kBTU/yr)

Land Use	Electricity (kWh/yr)	CO2	CH4	N2O	Natural Gas (kBTU/yr)
Apartments Low Rise	754,406	346	0.0330	0.0040	2,681,706

5.12. Operational Water and Wastewater Consumption

5.12.1. Unmitigated

Land Use	Indoor Water (gal/year)	Outdoor Water (gal/year)
Apartments Low Rise	6,710,669	1,933,654

5.13. Operational Waste Generation

5.13.1. Unmitigated

Land Use	Waste (ton/year)	Cogeneration (kWh/year)
Apartments Low Rise	119	—

5.14. Operational Refrigeration and Air Conditioning Equipment

5.14.1. Unmitigated

Land Use Type	Equipment Type	Refrigerant	GWP	Quantity (kg)	Operations Leak Rate	Service Leak Rate	Times Serviced
Apartments Low Rise	Average room A/C & Other residential A/C and heat pumps	User Defined	750	< 0.005	2.50	2.50	10.0
Apartments Low Rise	Household refrigerators and/or freezers	R-134a	1,430	0.12	0.60	0.00	1.00

5.15. Operational Off-Road Equipment

5.15.1. Unmitigated

Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor

5.16. Stationary Sources

5.16.1. Emergency Generators and Fire Pumps

Equipment Type	Fuel Type	Number per Day	Hours per Day	Hours per Year	Horsepower	Load Factor

5.16.2. Process Boilers

Equipment Type	Fuel Type	Number	Boiler Rating (MMBtu/hr)	Daily Heat Input (MMBtu/day)	Annual Heat Input (MM

5.17. User Defined

Equipment Type	Fuel Type

5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres

5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

Biomass Cover Type	Initial Acres	Final Acres

5.18.2. Sequestration

5.18.2.1. Unmitigated

Tree Type	Number	Electricity Saved (kWh/year)	Natural Gas Saved (btu/year)

6. Climate Risk Detailed Report

6.1. Climate Risk Summary

Cal-Adapt midcentury 2040–2059 average projections for four hazards are reported below for your project location. These are under Representation Concentration Pathway (RCP) 8.5 which assumes GHG emissions will continue to rise strongly through 2050 and then plateau around 2100.

Climate Hazard	Result for Project Location	Unit
Temperature and Extreme Heat	19.8	annual days of extreme heat
Extreme Precipitation	3.10	annual days with precipitation above 20 mm

Sea Level Rise	—	meters of inundation depth
Wildfire	6.78	annual hectares burned

Temperature and Extreme Heat data are for grid cell in which your project are located. The projection is based on the 98th historical percentile of daily maximum/minimum temperatures from observed historical data (32 climate model ensemble from Cal-Adapt, 2040–2059 average under RCP 8.5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Extreme Precipitation data are for the grid cell in which your project are located. The threshold of 20 mm is equivalent to about ¾ an inch of rain, which would be light to moderate rainfall if received over a full day or heavy rain if received over a period of 2 to 4 hours. Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Sea Level Rise data are for the grid cell in which your project are located. The projections are from Radke et al. (2017), as reported in Cal-Adapt (Radke et al., 2017, CEC-500-2017-008), and consider inundation location and depth for the San Francisco Bay, the Sacramento-San Joaquin River Delta and California coast resulting different increments of sea level rise coupled with extreme storm events. Users may select from four scenarios to view the range in potential inundation depth for the grid cell. The four scenarios are: No rise, 0.5 meter, 1.0 meter, 1.41 meters
Wildfire data are for the grid cell in which your project are located. The projections are from UC Davis, as reported in Cal-Adapt (2040–2059 average under RCP 8.5), and consider historical data of climate, vegetation, population density, and large (> 400 ha) fire history. Users may select from four model simulations to view the range in potential wildfire probabilities for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warmer/drier (HadGEM2-ES), Cooler/wetter (CNRM-CM5), Average conditions (CanESM2), Range of different rainfall and temperature possibilities (MIROC5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

6.2. Initial Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	2	0	0	N/A
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	1	0	0	N/A
Wildfire	1	0	0	N/A
Flooding	N/A	N/A	N/A	N/A
Drought	N/A	N/A	N/A	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	0	0	0	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores do not include implementation of climate risk reduction measures.

6.3. Adjusted Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	2	1	1	3

Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	1	1	1	2
Wildfire	1	1	1	2
Flooding	N/A	N/A	N/A	N/A
Drought	N/A	N/A	N/A	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	1	1	1	2

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores include implementation of climate risk reduction measures.

6.4. Climate Risk Reduction Measures

7. Health and Equity Details

7.1. CalEnviroScreen 4.0 Scores

The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Exposure Indicators	—
AQ-Ozone	77.1
AQ-PM	93.4
AQ-DPM	57.1
Drinking Water	100.0
Lead Risk Housing	17.5
Pesticides	84.9
Toxic Releases	67.6
Traffic	18.1
Effect Indicators	—

CleanUp Sites	80.3
Groundwater	98.1
Haz Waste Facilities/Generators	86.6
Impaired Water Bodies	87.0
Solid Waste	98.9
Sensitive Population	—
Asthma	16.5
Cardio-vascular	29.1
Low Birth Weights	49.0
Socioeconomic Factor Indicators	—
Education	52.9
Housing	59.3
Linguistic	68.9
Poverty	35.4
Unemployment	36.4

7.2. Healthy Places Index Scores

The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Economic	—
Above Poverty	73.60451687
Employed	6.274862056
Median HI	76.55588349
Education	—
Bachelor's or higher	64.85307327
High school enrollment	100
Preschool enrollment	66.93186193
Transportation	—

Auto Access	63.41588605
Active commuting	24.5989991
Social	—
2-parent households	66.95752598
Voting	70.69164635
Neighborhood	—
Alcohol availability	97.0101373
Park access	52.77813422
Retail density	10.02181445
Supermarket access	6.557166688
Tree canopy	8.238162453
Housing	—
Homeownership	60.78532016
Housing habitability	61.41408957
Low-inc homeowner severe housing cost burden	71.53856025
Low-inc renter severe housing cost burden	18.38829719
Uncrowded housing	64.30129603
Health Outcomes	—
Insured adults	73.78416528
Arthritis	95.7
Asthma ER Admissions	84.6
High Blood Pressure	97.7
Cancer (excluding skin)	89.7
Asthma	34.7
Coronary Heart Disease	98.7
Chronic Obstructive Pulmonary Disease	94.6
Diagnosed Diabetes	96.0
Life Expectancy at Birth	75.7

Cognitively Disabled	56.3
Physically Disabled	69.8
Heart Attack ER Admissions	68.4
Mental Health Not Good	54.9
Chronic Kidney Disease	97.1
Obesity	68.0
Pedestrian Injuries	19.6
Physical Health Not Good	86.2
Stroke	97.8
Health Risk Behaviors	—
Binge Drinking	28.2
Current Smoker	59.6
No Leisure Time for Physical Activity	76.7
Climate Change Exposures	—
Wildfire Risk	0.0
SLR Inundation Area	0.0
Children	9.0
Elderly	91.7
English Speaking	35.1
Foreign-born	48.1
Outdoor Workers	88.5
Climate Change Adaptive Capacity	—
Impervious Surface Cover	78.1
Traffic Density	21.6
Traffic Access	23.0
Other Indices	—
Hardship	45.2
Other Decision Support	—

2016 Voting	74.7

7.3. Overall Health & Equity Scores

Metric	Result for Project Census Tract
CalEnviroScreen 4.0 Score for Project Location (a)	72.0
Healthy Places Index Score for Project Location (b)	55.0
Project Located in a Designated Disadvantaged Community (Senate Bill 535)	No
Project Located in a Low-Income Community (Assembly Bill 1550)	No
Project Located in a Community Air Protection Program Community (Assembly Bill 617)	No

a: The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.
b: The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

7.4. Health & Equity Measures

No Health & Equity Measures selected.

7.5. Evaluation Scorecard

Health & Equity Evaluation Scorecard not completed.

7.6. Health & Equity Custom Measures

No Health & Equity Custom Measures created.

8. User Changes to Default Data

Screen	Justification
Land Use	Taken from site plan
Operations: Vehicle Data	Trip characteristics based on information provided in the Traffic Analysis
Operations: Hearths	SCAQMD Rule 445 no wood burning devices. Wood burning devices added to gas devices.
Operations: Refrigerants	Beginning 1 January 2025, all new air conditioning equipment may not use refrigerants with a GWP of 750 or greater.

Construction: Construction Phases	Based on client provided data, construction schedule to begin Q3 2026 and completed Q1 2029 Building Construction, Paving, and Architectural Coating overlap to present a conservative analysis
Construction: Off-Road Equipment	T/L/B replaced with Crawler Tractor to accurately calculate disturbance for Site Preparation and Grading phases. Standard 8 hours work days
Construction: Trips and VMT	Vendor Trips adjusted based on CalEEMod defaults for Building Construction and number of days for Site Preparation, Grading, and Building Construction

Phase I Environmental Site Assessment

10.02-Acre Site at Northeast Corner of Amherst and Eucalyptus Avenues
Ontario, California 91761
Assessor Parcel Number (APN): 1073-101-05

GDC Investments, LP/GDC Investments 13
c/o Dave Waters, Vice President
12770 El Camino Real, Suite 220
San Diego, California 92130
(858) 523-9055

SCS ENGINEERS

Project No. 01225043.00 | March 14, 2025

3900 Kilroy Airport Way, Suite 300
Long Beach, California 90806
(562) 426-9544

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EXECUTIVE SUMMARY

SCS Engineers (SCS) was retained by GDC Investments to prepare a Phase I Environmental Site Assessment (Phase I ESA) of a 10.02-acre site located at the northeast corner of Amherst Avenue and Eucalyptus Avenue, Ontario, California (the "Subject Property" or "Property"). This assessment was performed in conformance with 40 CFR 312, Standards for Conducting All Appropriate Inquiries, and in general conformance with ASTM E1527-21.

The Property is located on the northeastern side of Amherst Avenue, immediately north of the intersection with Eucalyptus Avenue. According to tax assessor information reviewed, it is 10.02 acres and is currently undeveloped, vacant land.

Based on the historical records reviewed, SCS identified no historical structures on the Property. It was undeveloped or agricultural land from at least 1902 through 2012. A row of trees functioning as a windbreak (likely eucalyptus trees) extended north-south across the eastern portion of the Property. Around 2016, grading activities were first visible on the eastern portion of the Property, associated with activities on the adjoining site to the east. Following 2016, much more extensive grading occurred and in 2020, hundreds of soil stockpiles were visible on the central and northern portions of the Property. The appearance of the stockpile coincided with the grading and paving of the adjoining streets and SCS considers it likely that the soil was from sites with similar history (undeveloped and/or agricultural land). Further grading occurred in 2021, which likely resulted in the export or blending of that that stockpiled soil. Since 2021, the Property has remained vacant and undeveloped, with relative low points at the northwestern and southeastern corners.

The Property was vacant and undeveloped at the time of the site inspection. A chain-link fence surrounds the Property with gate access in the northeastern corner. The Property is covered in low, grassy vegetation and bare soil, with small amounts of wind-blown trash observed on the outer edges of the Property (against the fence). A depression likely due to former grading activities was observed in the northwestern portion of the Property. Rumble grates were also noted in the northeastern corner. A sloped area was observed on the southeastern boundary of the Property. A storm drain was noted in the southwestern corner of the Property.

Regulatory database information identified no known and suspected contamination sites in the area surrounding the Property. Based on a review of the available information, it is unlikely that any of these sites has negatively affected the environmental condition of the Property.

Conclusions

In summary, SCS performed a Phase I ESA of a 10.02-acre site located at the northeast corner of Amherst Avenue and Eucalyptus Avenue, Ontario, California, in conformance with the scope and limitations of 40 CFR 312 and ASTM E1527-21. Any exceptions or deviations are described in Section 8 of this report.

In the opinion of the Environmental Professional, this assessment has revealed no recognized environmental conditions, controlled recognized environmental conditions, or significant data gaps in connection with the Property. Further investigation is not recommended.

1 INTRODUCTION

SCS Engineers (SCS) was retained by GDC Investments (the "User") to prepare a Phase I Environmental Site Assessment (Phase I ESA) of a 10.02-acre site located at the northeast corner of Amherst Avenue and Eucalyptus Avenue, Ontario, California (the "Subject Property" or "Property"). A location map for the Property is presented as **Figure 1** in **Appendix A**. This assessment was performed in conformance with 40 CFR 312, Standards for Conducting All Appropriate Inquiries (AAI), and in general conformance with ASTM International (ASTM) E1527-21.

PURPOSE

This Phase I ESA is intended to constitute appropriate inquiry into the previous ownership and uses of the Property, as required to support the assertion of the innocent landowner, contiguous property owner, and/or bona fide prospective purchaser defenses to liability (collectively, the landowner liability protections, or LLPs) under the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA, a.k.a. Superfund), as amended by the Superfund Amendments and Reauthorization Act of 1986 (SARA), and the Small Business Liability Relief and Brownfields Revitalization Act of 2002.

The purpose of this investigation was to identify conditions indicative of the presence of hazardous substances as defined in CERCLA Section 101, and petroleum products, in, on, or at the Subject Property due to a release, likely release, or material threat of a future release to the environment.

If known or suspected contamination is identified, a User seeking to maintain LLPs has responsibilities in addition to completion of an AAI-compliant Phase I ESA. These "continuing obligations" include taking "appropriate care" and "reasonable steps" with respect to known or suspected releases of hazardous substances or petroleum products during the term of property ownership. In addition to these requirements under federal law, there are different requirements under state law with respect to liability protections. If warranted, SCS can provide support for clients with continuing obligations, as appropriate.

SCOPE OF SERVICES

This Phase I ESA is based on:

- Interviews with past and/or present owners, operators, and/or occupants of the Property.
- Reviews of federal, tribal, state, and local government records.
- Visual inspection of the Subject Property and adjoining sites performed on February 27, 2025.
- Review of historical Property use information (topographic maps, aerial photographs, fire insurance maps, previous environmental reports, etc.).
- Commonly known or reasonably ascertainable information about the Property (e.g., interviews with appropriate regulatory agency personnel, review of readily available agency files and documents, interviews with other knowledgeable persons, etc.).
- Degree of obviousness of the presence or likely presence of releases or threatened releases of hazardous substances or petroleum products at the Subject Property and the ability to detect releases or threatened releases by appropriate investigation.
- Information provided as a result of the additional inquiries conducted by the User.

- Review of environmental liens, if provided or authorized to obtain by the User.

SPECIAL TERMS AND CONDITIONS

This Phase I ESA for the 10.02-acre site at the northeast corner of Amherst Avenue and Eucalyptus Avenue, located in Ontario, California, has been prepared specifically for GDC Investments. The report has been prepared in accordance with the care and skill generally exercised by reputable professionals, under similar circumstances, in this or similar localities. No other warranty, express or implied, is made as to the professional opinions presented herein.

No other party, known or unknown to SCS, is intended as a beneficiary of this report. Third parties use this report at their own risk. SCS assumes no liability of any kind with respect to such use. Third party reliance letters may be issued on request to SCS subject to approval of GDC Investments and payment to SCS of a fee for such letters.

LIMITATIONS AND ASSUMPTIONS

The assessment focuses on releases and threatened releases of hazardous substances or petroleum products that could be considered a recognized environmental condition (REC) and/or a liability due to their possible presence in significant concentrations (e.g., above acceptable limits set by applicable regulatory authorities) or due to the potential for contaminant migration through exposure pathways (e.g., soil vapor migration or groundwater ingestion). Materials that may contain substances not currently deemed hazardous by the U.S. Environmental Protection Agency (U.S. EPA) or the California Environmental Protection Agency (CalEPA) were not considered as part of this study.

Unless specifically included in our scope of services, formal surveys for asbestos-containing materials (ACMs), lead-based paint (LBP), water supply plumbing, mold, indoor air quality, and similar matters are not part of this assessment. SCS did not evaluate the Subject Property for compliance with land use, zoning, wetlands, or similar laws. This report is not intended to be an environmental compliance audit.

Hazardous substances naturally occurring in plants, soils, and rocks (e.g., heavy metals, naturally occurring asbestos, radon, etc.) are not typically considered in a Phase I ESA. Similarly, construction debris (e.g., discarded concrete, asphalt, etc.) is not considered a concern unless observations suggest that hazardous substances are likely to be present in significant concentrations.

Unless otherwise noted, sampling and laboratory analyses of soil, water, air, building materials, or other media, were not performed as part of this investigation. Positive identification of hazardous substances can only be accomplished through sampling and appropriate laboratory analysis.

SCS assumes no responsibility for the accuracy of information obtained from, compiled by, or provided by third-party sources, including regulatory agency listings. SCS assumes that information collected during this Phase I ESA is accurate and correct, unless SCS determines that reliable information exists to the contrary or the information is obviously inaccurate. Additional information subsequently provided, discovered, or produced may alter findings or conclusions made in this Phase I ESA report. Unless warranted, information collected has not been independently validated as part of this assessment. SCS is not responsible for consequences or conditions arising from facts that were not fully disclosed to SCS during the assessment.

PHASE I ESA VIABILITY

This Phase I ESA is based on conditions at the time the individual elements of the report were completed. A Phase I ESA that meets or exceeds the requirements of ASTM E1527-21 and 40 CFR 312 is presumed to be viable when it is conducted within 180 days of the date of the intended transaction (acquisition, lease, refinance, etc.). The completion dates for the Phase I ESA components with a 180-day shelf life are identified below.

Component of Phase I ESA with Shelf Life Requirement	Completion Date
Interviews	March 7, 2025
Review of Governmental and Historical Records	February 25, 2025
Visual Inspection	February 27, 2025
Declaration of Environmental Professional	March 14, 2025
Environmental Lien Search	Not provided by User

2 GENERAL SITE CHARACTERISTICS

SUBJECT PROPERTY LOCATION

The Property is located on the northeastern side of Amherst Avenue, immediately north of the intersection with Eucalyptus Avenue. It has been assigned San Bernardino County tax assessor parcel number (APN) 1073-101-05. An APN map is provided as **Figure 2** in **Appendix A**.

GENERAL SUBJECT PROPERTY DESCRIPTION

According to tax assessor information reviewed, the Property is 10.02 acres. It is currently undeveloped, vacant land.

ADJOINING SITE USE

- Northwest – Chatham Street immediately adjoins the Property to the northwest. Vacant lots are located across the street to the northwest.
- Northeast – Clifton Avenue immediately adjoins the Property to the northeast. Newly constructed townhomes and private roads are located across the street to the northeast.
- Southeast – Eucalyptus Avenue immediately adjoins the Property to the southeast. Multiple residential homes are located across the street to the southeast.
- Southwest – South Amherst Avenue immediately adjoins the Property to the southwest. Multiple residential homes are located across the street to the southwest.

PHYSICAL SETTING

Physiographic Setting

According to the U.S. Geological Survey (USGS), Corona North, California 7.5-minute topographic maps (**Appendix C**), the Property is located in the eastern portion of San Bernardino County at an

elevation of 713 feet above mean sea level. Site topography is generally flat with a slight regional slope to the south.

Geologic Characteristics

The Property is located within the Chino Basin, which is underlain by Pleistocene and Recent Age alluvial and terrace deposits. Younger alluvium varies in thickness from a few feet at the northern portion of the basin to more than 100 feet in the southern portion. Older alluvium can be more than 1,100 feet in thickness, and averages 500 feet in thickness across the basin.

Hydrogeologic Characteristics

According to Bulletin 118 - California's Groundwater of the California Department of Water Resources (CDWR), the Upper Santa Ana Valley Subbasin underlies the City of Ontario and is bounded by the Rialto-Colton Fault to the east. The Santa Ana Valley Subbasin sediment units include Holocene and Upper Pleistocene alluvium. According to information reviewed on the State Water Resource Control Board (SWRCB) GeoTracker website for a the Exelsior Farms leaking underground storage tank (LUST) case located at 7401 Hamner Avenue (approximately 3,000 feet southeast of the Property), in 2003, first groundwater was reported to be approximately 25 feet below ground surface (bgs) and flow direction was reported to be to the west. Based on its proximity and comparable elevation, first groundwater is likely at a similar depth beneath the Property. Groundwater flow direction likely follows the regional surface topography to the south, potentially with a westerly component.

3 SITE RECONNAISSANCE

Maddie Peterson of SCS conducted a reconnaissance of the Property and surrounding area on February 27, 2025. An aerial image showing the Property is provided as **Figure 3** in **Appendix A**. Photographs taken during the site reconnaissance are included in **Appendix B**.

GENERAL SITE INFORMATION

The Property was vacant and undeveloped at the time of the site inspection. A chain-link fence surrounds the Property with gate access in the northeastern corner. The Property is covered in low, grassy vegetation and bare soil, with wind-blown trash observed on the outer edges of the Property (up against the fence). A depression likely due to former grading activities was observed in the northwestern portion of the Property. Rumble grates were also noted in the northeastern corner.

A sloped area was observed on the southeastern boundary of the Property. A storm drain was noted in the southwestern corner of the Property.

POTABLE WATER SUPPLY

Drinking water is not currently supplied to the Property.

SEWAGE DISPOSAL SYSTEM

Sanitary wastewater is not currently generated at the Property.

PROCESS WASTEWATER

No industrial wastewater is generated on the Property.

HAZARDOUS SUBSTANCES AND PETROLEUM PRODUCTS

No hazardous substances or hazardous wastes were observed at the Property.

STORAGE TANKS

No evidence (fill ports, vent lines, or dispensers) of underground storage tanks (USTs) was observed on the Property. No aboveground storage tanks (ASTs) were observed on the Property.

ELECTRICAL EQUIPMENT (POLYCHLORINATED BIPHENYLS)

One dry-type transformer was found on the northeastern side of the Property.

ELEVATORS AND OTHER HYDRAULIC EQUIPMENT

No elevators or other hydraulic equipment were observed at the Property.

PITS, PONDS, OR LAGOONS

No pits, ponds, or lagoons were observed at the Property.

WELLS

No water supply wells or groundwater monitoring wells were observed on the Property or in the immediately surrounding area.

NATURAL DRAINAGE

Natural waterways are not currently located on the Property. Stormwater runoff from the Property flows to a stormwater drain found on the southwestern corner of the Property or the adjoining streets.

SOLID WASTE DUMPING, LANDFILLING, OR SUSPECTED FILL MATERIAL

No indication of solid waste dumping, landfilling or buried material was observed during the site reconnaissance.

VISUAL INSPECTION OF ADJOINING SITES

SCS viewed the adjoining sites from the Property and/or publicly accessible areas (e.g., public roadways, etc.). No obvious evidence of a REC or indications of contamination (e.g. remediation equipment, staining, USTs, etc.), were observed on adjoining sites during the site inspection.

4 INTERVIEWS

An Owner Questionnaire was provided to and completed by the owner of the Property, Mr. David Waters, and is included in **Appendix F**. Mr. Waters has owned the Property since 2010. Mr. Waters indicated that there have been no underground storage tanks, no knowledge of spills or releases to the Property, and the site was historically associated with a dairy farm but had ceased operations in the early 2000's (a reference to the historically adjoining dairy to the north). The site was graded around 2018 but no other site improvements were installed.

5 HISTORICAL RESEARCH

Site history was evaluated from the following sources:

- Historical aerial photographs provided by Environmental Data Resources (EDR; February 25, 2025).
- USGS topographic maps provided by EDR (February 25, 2025).
- A search was made of EDR-Sanborn fire insurance map collection and no maps of the Property were found (February 25, 2025).
- A city directory review report provided by EDR (February 25, 2025).
- As the Property has never before been developed with structures, no building permit information was identified. SCS searched the City of Ontario Department of Building and Safety online records database using the APN number and identified no records.

Copies of aerial photographs, topographic maps, and city directories are included in **Appendix C**.

Year	Description	Source
1897	The Property and adjoining sites were shown to be unmapped.	Topographic map
1900	The Property and adjoining sites were shown to be unmapped.	Topographic map
1902	The Property and adjoining sites were shown to be undeveloped land.	Topographic map
1903	The Property and adjoining sites were shown to be unmapped.	Topographic map
1931	The Property was undeveloped or agricultural land, with a row of trees crossing the eastern side north-south, likely functioning as a windbreak. Agricultural fields were noted on the adjoining sites to the northwest, southwest, southeast, and southwest.	Aerial photo
1938	No significant changes from the 1931 aerial photo were noted. A portion of the southern corner of the Property was not photographed. Agricultural fields were noted on the adjoining sites to the northwest, southwest, northeast and southeast. Portions of the adjoining site to the southwest and southeast were not photographed.	Aerial photo
1941	The Property and adjoining sites were shown to be unmapped.	Topographic map
1942	The Property and adjoining sites were shown to be undeveloped land. An unnamed road was noted to the south of the Property.	Topographic map
1944 and 1947	The Property was shown to be undeveloped land with a road depicted on the southwestern corner of the Property.	Topographic map

1948	The Property was agricultural, planted with row crops.	Aerial photo
1953	No significant changes from the 1948 aerial photo were noted on the Property or adjoining sites.	Topographic map and Aerial photo
1954	The Property and adjoining sites appeared to be unmapped.	Topographic map
1966	The Property appeared to be undeveloped land, with a trail running centrally through the Property. The previous unnamed road, known currently as Eucalyptus Avenue, was shown to the south of the Property.	Topographic map
1967	No significant changes from the 1953 aerial photo or 1966 topographic map were noted on the Property. A dirt path was noted separating the agricultural fields on the adjoining site to the southwest. The adjoining site to the northeast appeared to be graded.	Topographic map and Aerial photo
1973	The Property was shown to be an agricultural. The adjoining sites to the southwest and south were shown to be agricultural, with a structure noted on the adjoining site to the southwest. Long rectangular structures were depicted on the adjoining site to the northwest.	Topographic map
1975	The Property remained agricultural land. A new residential structure was noted on the adjoining site to the southwest. A dairy farm with feeding troughs and a central milking area was visible on the adjoining site to the northwest. Furrer L A was listed as an occupant on the adjoining site to the southeast under historical address 11121 Eucalyptus Avenue. Sherwin Westra was listed as an occupant on the adjoining site to the southwest under historical address 11022 Eucalyptus Avenue from 1975 to 1985. Jake J Westra was listed as an occupant on the adjoining site to the southwest under historical address 11060 Eucalyptus Avenue from 1975 to 1995.	Topographic map, Aerial photo, and City directory
1976	The Property and adjoining sites were shown to be unmapped.	Topographic map
1981	No significant changes from the 1975 topographic map were noted on the Property.	Topographic map
1985	No significant changes from the 1975 aerial photo were noted on the Property or adjoining sites. Diana Furrer was listed as an occupant on the adjoining site to the southeast under historical address 11121 Eucalyptus Avenue.	Aerial photo and City directory
1989	No significant changes from the 1985 aerial photo were noted on the Property or adjoining sites.	Aerial photo

1990	No significant changes from the 1989 aerial photo were noted on the Property or adjoining sites. The Furniture Shop and Irrer LA were listed as occupants on the adjoining site to the southeast under historical address 11121 Eucalyptus Avenue. Calvin Westra was listed as an occupant on the adjoining site to the southwest under historical address 11022 Eucalyptus Avenue from 1990 to 1995.	Aerial photo and City directory
1992	Harvey Hettinga was listed as an occupant on the adjoining site to the southeast under historical address 11101 Eucalyptus Avenue from 1992 to 1995.	City directory
1994	No significant changes from the 1990 aerial photo were noted on the Property or adjoining sites.	Aerial photo
1995	Pete Hettinga was listed as an occupant on the adjoining site to the southeast under historical address 11101 Eucalyptus Avenue from 1995 to 2000. Weirama Philip & Sandy were listed as occupants on the adjoining site to the southeast under historical address 11121 Eucalyptus Avenue.	City directory
2000	Hettinga Harvey Milk was listed as an occupant on the adjoining site to the southeast under historical address 11101 Eucalyptus Avenue.	City directory
2002	No significant changes from the 1994 aerial photo were noted on the Property or adjoining sites.	Aerial photo
2005	Wheelin and Deelin was listed as an occupant on the adjoining site to the southeast under historical address 11101 Eucalyptus Avenue.	City directory
2006	No significant changes from the 2002 aerial photo were noted on the Property or adjoining sites.	Aerial photo
2009	The agricultural field and vegetation on the Property was removed. The Property appeared to be graded. The adjoining site to the southwest appeared to be graded.	Aerial photo
2010	Occupant Unknown was listed as an occupant on the adjoining site to the southeast under historical address 11101 Eucalyptus Avenue.	City directory
2012	The 2012 topographic map does not include Site-specific details. The western side of the Property was fallow agricultural land. The eastern side of the Property was still part of agricultural field, separated by a dirt path that runs north to south, where the windbreak trees were historically located.	Topographic map and Aerial photo
2015	The 2015 topographic map does not include Site-specific details.	Topographic map
2016	The Property was undeveloped land and no longer appeared to be used for agriculture purposes. Grading activities were visible on the eastern portion of the Property, associated with additional grading activities offsite to the east.	Aerial photo

	With the exception of grading to the east-southeast, no other significant changes were noted on the adjoining sites.	
2018	The 2018 topographic map does not include Site-specific details.	Topographic map
2020	The Property had been much more extensively graded, with a depression filled with rainwater on its northwestern side. Hundreds of soil stockpiles were present on the central and north-central portions of the Property. Eucalyptus Avenue was developed in its current configuration to the southeast of the Property. Amherst Avenue was newly paved to the southwest of the Property. Residential homes were under developed across the streets to the southwest and southeast.	Aerial photo
2021 and 2022	The 2021 topographic map does not include Site-specific details. Google Earth aerial photographs showed that Property was further graded and the stockpiles present in the 2020 aerial photo were no longer visible. They were either removed from the Property or blended into it during further onsite grading. Additional residential development on adjoining sites was visible.	Topographic map and Google Earth aerial photos
2023	No significant changes from the 2020 aerial photo was noted on the Property. The dairy farm on the adjoining site to the northwest was removed. Grading activities were observed on the adjoining sites to the northwest and the northeast. Multiple residential homes were developed on the adjoining sites to the southwest and southeast.	Google Earth aerial photo
2024	The Property remains undeveloped land that appeared to be graded. Residential homes were constructed on the adjoining sites to the northwest and northeast. A small park is located on the adjoining site to the northwest.	Google Earth aerial photo

SUBJECT PROPERTY HISTORICAL USE SUMMARY

Based on the historical records reviewed, SCS identified no historical structures on the Property. It was undeveloped or agricultural land from at least 1902 through 2012. A row of trees functioning as a windbreak (likely eucalyptus trees) extended north-south across the eastern portion of the Property. Around 2016, grading activities were first visible on the eastern portion of the Property, associated with activities on the adjoining site to the east. Following 2016, much more extensive grading occurred and in 2020, hundreds of soil stockpiles were visible on the central and northern portions of the Property. The appearance of the stockpile coincided with the grading and paving of the adjoining streets and SCS considers it likely that the soil was from sites with similar history (undeveloped and/or agricultural land). Further grading occurred in 2021, which likely resulted in the export or blending of that that stockpiled soil. Since 2021, the Property has remained vacant and undeveloped, with relative low points at the northwestern and southeastern corners.

The existence of past agricultural activities on the Property and in adjacent areas indicates a potential for pesticide and/or heavy metal (associated with dusting powders) contamination. In SCS's experience, it is not uncommon to find trace levels of pesticides in soils at former agricultural areas in Southern California. However, these trace concentrations are rarely cause for environmental concern. Additionally, Department of Toxic Substances Control (DTSC) has issued an Interim Guidance for Sampling Agricultural Properties (DTSC, August 7, 2008) which states that the guidance "does not apply to disturbed land, such as, land that has been graded in preparation for construction, areas where imported soil has been brought in, or any other activity that would redistribute or impact the soil, other than normal agricultural practices, such as disking and plowing." It is our opinion that, given the extensive grading that has occurred at the Property and without specific evidence of bulk pesticide storage or mismanagement on the Property, past use for agricultural purposes does not represent a significant environmental concern and collection and analysis of soil samples for pesticides is unwarranted.

HISTORICAL USE OF ADJOINING SITES

The adjoining sites were undeveloped from at least 1902 to 1931. Between the 1930s and early 2000s, they were primarily used for agriculture. Around 1973, a dairy farm was established on the adjoining site to the northwest, and a structure was observed on the adjoining site to the southwest. The sites continued as agricultural land until at least 2016, when the adjoining sites to the southwest, northeast, and southeast appeared to be graded. The dairy farm remained operational on the northwest site until approximately 2022. In 2023, new residential homes were built on the adjoining sites to the southwest and southeast, followed by additional residential construction on the northwest and northeast sites in 2024.

6 RECORD REVIEW

PREVIOUS ENVIRONMENTAL REPORTS

The User provided the following two previous environmental reports to SCS:

- David J. Tanner & Associates, Inc., January 9, 2003. Phase I Environmental Site Assessment, Assesors Parcel No's 0128-252-03, 05, 05, 0128-332-01, 02, 03 & 04, City of Ontario, California.

- LGC Geo-Environmental, Inc., August 26, 2014. Updated Methane Site Assessment for the Proposed "Esperanza West" Residential Development, Located at the Northeast Corner of Cleveland Avenue and Bellgrave Avenue, APN's 0218-332-11 and 0218-252-17, City of Ontario, San Bernardino County, California.

The Tanner & Associates 2003 Phase I ESA was prepared for Forecast PPI and covered a much larger land area (139 acres) extending from Mill Creek Avenue to the west to Hamner Avenue to the east, and from Bellegrave Avenue to the south to what is now Chatham Avenue to the north. Tanner & Associated identified multiple residences (with suspected lead-based paint and asbestos), diesel fuel tanks, diesel pumps, a few 55-gallon drums, diesel farm equipment, animal carcasses, unauthorized dumping (primarily south of Eucalyptus Avenue), etc. None of these features appears to have been related to the Subject Property of the current Phase I ESA. The report concluded that there was no obvious evidence of a REC.

The Methane report included coverage of the Property, but identified only areas to the south of Eucalyptus Avenue as areas associated with historical Dairy operations that might have potential

methane gas. SCS concurs with this conclusion. SCS identified no evidence that the Property was historically used for dairy operations.

REGULATORY AGENCY RECORDS

Local regulatory agencies and other sources were reviewed in an effort to identify any known or suspected contamination sites or incidents of hazardous waste storage or disposal, which might have resulted in soil and/or groundwater contamination, or volatile organic compound (VOC) vapor migration to the Subject Property. Generally, this includes records for the Property and adjacent parcels, although relevant information for other sites of possible interest in the area (up to one mile) may also be included. Within the City of Ontario, the San Bernardino County Fire Department (SBCFD) generally acts as the lead enforcement agency for UST compliance. If a tank has leaked and groundwater contamination is suspected, the Santa Ana Regional Water Quality Control Board (SARWQCB) generally becomes the lead agency in supervising contaminant characterization and cleanup.

California Environmental Protection Agency

The Property is not a listed site on the California Environmental Protection Agency (CalEPA) Regulated Site Portal website (**Appendix D**).

Santa Ana Regional Water Quality Control Board

The Property does not appear as a listed site on the State Water Resources Control Board (SWRCB) GeoTracker website. Recent SARWQCB case files, if any, would be listed on this website (**Appendix D**).

A request to review SARWQCB files was submitted and no files were found for the APN associated with the Property (**Appendix D**).

Department of Toxic Substances Control

The Property does not appear as a listed site on the California Department of Toxic Substances Control (DTSC) EnviroStor website. Recent DTSC case files, if any, would be listed on this website (**Appendix D**).

A request to review DTSC files was submitted and no files were found for the APN associated with the Property (**Appendix D**).

South Coast Air Quality Management District

The Property does not appear as a listed facility on the South Coast Air Quality Management District (AQMD) online Facility INformation Detail (FIND) website (**Appendix D**).

San Bernardino County Fire Department Files

Since the Property has never been developed and has no history of activities of concern, a request for records was not submitted to the SBCFD.

San Bernardino County Department of Environmental Health

A request to review San Bernardino County Department of Environmental Health (SBCDEH) files were submitted and no files were found for the APN associated with the Property. (**Appendix D**).

California Department of Conservation, Geologic Energy Management Division

Available oil and gas well maps from the California Department of Conservation, Geologic Energy Management Division (CalGEM) were reviewed to identify oil and gas wells on the Property or in the nearby area. According to the CalGEM Well Finder online database, the Property is not located within the boundaries of a delineated oil and gas field.

A map showing the location of the Property relative to nearby oil and gas wells is provided in **Appendix D**. One oil and gas production well was drilled approximately 0.77 miles to the southeast of the Property. It is identified as a dry, plugged well. No other oil or gas wells were identified within one mile of the Property. Based on the available information, no significant environmental impacts to the Property are anticipated from oil and gas wells.

National Pipeline Mapping System

SCS reviewed the National Pipeline Mapping System (NPMS) website for the Property and surrounding area to identify any hazardous materials pipelines. The NPMS is a geographic information system (GIS) created by the U.S. Department of Transportation, Pipeline and Hazardous Materials Safety Administration (PHMSA), and Office of Pipeline Safety (OPS) in cooperation with other federal and state governmental agencies and the pipeline industry. The NPMS consists of geospatial data, attribute data, public contact information, and metadata pertaining to the interstate and intrastate hazardous liquid trunklines and hazardous liquid low-stress lines, as well as gas transmission pipelines, liquefied natural gas (LNG) plants, and hazardous liquid breakout tanks (tanks that receive and store liquids transported by pipeline) jurisdictional to PHMSA. The nominal accuracy of geospatial data in the NPMS is +/-500 feet. The NPMS does not contain information on interconnects, pump and compressor stations, valves, direction of flow, capacity, throughput, or operating pressure. In addition, distribution and gathering pipelines are not included in the NPMS.

The NPMS is built from data submitted by pipeline, LNG plant, and breakout tank facility operators. Since 2002, transmission pipeline and LNG plant facility operators are required to submit mapping information to the NPMS and to update their submissions annually. Breakout tank operators are able to submit data to the NPMS on a voluntary basis.

Based on review of the NPMS website, one West Coast Terminals pipeline (Pipeline ID No.: 1825) is located along Edison Avenue that was permanently abandoned in 1957, approximately 0.33 miles to the north of the Property (**Appendix D**). The website does not contain any information about releases from these pipelines. Based on the available information, no negative environmental affects to the Property are anticipated from these pipelines.

DATABASE SEARCH

A database search for sites listed on various federal, state, tribal, and local databases in the area around the Property was obtained from EDR (February 25, 2025). A description of each of the databases searched is included in the report, which is attached as **Appendix E**. Among the databases

included in the EDR report are NPL (federal, tribal, and state-equivalent), proposed and delisted NPL, CORRACTS (RCRA facilities subject to corrective actions), hazardous waste sites identified for investigation or remediation (SEMS [Superfund Enterprise Management System, formerly known as CERCLIS], State CERCLIS, VCP, Brownfields, etc.), LUST, sites with engineering controls, former CERCLIS (NFRAP), RCRA and state hazardous waste generators, ERNS, SWLF, USTs, and Toxic Pits.

Review of these records satisfies all requirements as set forth in 40 CFR Section 312.26 (b) and (c) with regard to the review of federal, tribal, and state government records of databases of such government records and local government records and databases of such records pertaining to both the Property and the nearby or adjoining properties. Further, the search distances for each particular database are as specified in 40 CFR 312.26 and ASTM E1527-21.

Any known or suspected contaminated sites included on these lists within 0.25 miles of the Property are discussed in the following text. As a general rule, sites beyond 0.25 miles are not anticipated to impact a site significantly. Any sites beyond 0.25 miles with a high potential to impact the Property are also discussed. Please note: the distances and directions listed in this report have been field verified and might not always match those in the EDR report.

Sites such as TSD facilities, hazardous waste generators, HAZNET, FINDS, SQGs, LQGs, USTs, HIST UST, RCRA violations, and TRIS facilities with toxic chemical releases (generally in accordance with permitting requirements - into the air, water, or land as reported under SARA Title III) use or store hazardous materials and thus may pose a potential problem in the event of a spill or leak. However, unless these sites also appear in an agency list of contaminated sites, there is no evidence of any problems at this time. Therefore, sites on these lists will not be discussed unless on or in close proximity to the Property.

Please refer to **Appendix E** for further information on these sites.

Property Listings

The Subject Property is not listed in any of the databases searched by EDR.

Adjoining Site Listings

The adjoining sites are not listed in any of the databases searched by EDR.

Other Database Sites

The EDR report provides a summary table of regulatory database sites within specified distances of the Property, including standard environmental records, additional environmental records, high risk historical records, and recovered governmental records. This summary table is provided beginning on Page 4 of the EDR report (**Appendix E**).

Several sites located within 0.25 miles of the Property are listed in databases associated with known releases of hazardous substances such as LUST, UST FINDER RELEASE, and ENVIROSTOR, but are located relatively cross- or downgradient, or based on case status and/or distance are not anticipated to negatively affect the environmental condition of the Property. Several sites located within 0.25 miles also appear in databases not typically associated with documented releases, such as Cortese, Hist Cortese, CERS, ENF, San Bern Co. Permit, WDS, CIWQS, PFAS, SCH, and Notify 65. Based on a review of the database information, none of these sites are known to have any contamination at this time; therefore, none are anticipated to have negatively affected the

environmental condition of the Property. None of the sites situated beyond 0.25 miles are anticipated to have impacted the Property.

Unmappable or Orphan Sites

Three unmappable sites were identified in the EDR report. Unmappable sites cannot be plotted due to inaccurate or incomplete addresses. Based on review of the provided data, including the estimated locations of the unmappable sites in relation to the Property, it appears unlikely that the unmappable sites have adversely affected the environmental condition of the Property.

7 USER PROVIDED INFORMATION

The following information is the responsibility of the User (40 CFR 312.22) and is addressed in a questionnaire provided to the User and attached to this report as **Appendix F**:

- Identification of environmental cleanup liens against the Subject Property.
- Specialized knowledge or experience of the User.
- The relationship of the purchase price to the fair market value of the Subject Property.

A User Questionnaire was completed by Mr. David Waters and is included in **Appendix F**. The provided information is discussed below.

TITLE RECORDS

No title report was provided to SCS for review.

ENVIRONMENTAL LIENS OR ACTIVITY AND USE LIMITATIONS

No information regarding environmental liens or activity and use limitations was provided to SCS. No environmental liens or activity/use limitations were identified by SCS during the course of this assessment.

SPECIALIZED KNOWLEDGE OR EXPERIENCE

As described above, Mr. Waters indicated specialized knowledge of the Property in which the Property was historically a dairy farm operation, however, this appears to be a reference to its relationship with a much larger land area. Mr. Waters indicated that the dairy operations ceased sometime in the early 2000s, prior to their ownership. During their ownership the site was graded along with the surrounding land, however, no improvements other than those currently in place on the perimeter were installed. No other specialized knowledge regarding RECs or other environmental issues that could materially impact the current or future use of the Subject Property or have an impact on the current real estate transaction was noted by Mr. Waters.

VALUATION REDUCTION FOR ENVIRONMENTAL ISSUES

Mr. Waters is not aware of any environmental issues that would dimmish the Property value. No other property valuation information was provided to SCS.

8 DATA GAPS AND DEVIATIONS

Certain other limitations could affect the accuracy and completeness of this report, as follows:

- Site Access Limitations – None.
- Physical Obstructions to Observations – None.
- Outstanding Information Requests – None.
- Historical Data Sources Failure – SCS attempted to review the referenced historical sources (i.e., aerial photographs, topographic maps, city directories, etc.) in a minimum of five-year increments. Breaches in the sequence of reviewed sources are due to the limitations of the referenced collections. Based on the available information, this is not considered a significant data gap.
- Other Limitations – None.

9 FINDINGS AND OPINIONS

Based on the scope of work performed, SCS finds the following:

SCS was retained by GDC Investments to prepare a Phase I ESA of a 10.02-acre site located at the northeast corner of Amherst Avenue and Eucalyptus Avenue, Ontario, California (the "Subject Property" or "Property"). This assessment was performed in conformance with 40 CFR 312, Standards for Conducting All Appropriate Inquiries, and in general conformance with ASTM E1527-21.

The Property is located on the northeastern side of Amherst Avenue, immediately north of the intersection with Eucalyptus Avenue. According to tax assessor information reviewed, it is 10.02 acres and is currently undeveloped, vacant land.

Based on the historical records reviewed, SCS identified no historical structures on the Property. It was undeveloped or agricultural land from at least 1902 through 2012. A row of trees functioning as a windbreak (likely eucalyptus trees) extended north-south across the eastern portion of the Property. Around 2016, grading activities were first visible on the eastern portion of the Property, associated with activities on the adjoining site to the east. Following 2016, much more extensive grading occurred and in 2020, hundreds of soil stockpiles were visible on the central and northern portions of the Property. The appearance of the stockpile coincided with the grading and paving of the adjoining streets and SCS considers it likely that the soil was from sites with similar history (undeveloped and/or agricultural land). Further grading occurred in 2021, which likely resulted in the export or blending of that that stockpiled soil. Since 2021, the Property has remained vacant and undeveloped, with relative low points at the northwestern and southeastern corners.

The Property was vacant and undeveloped at the time of the site inspection. A chain-link fence surrounds the Property with gate access in the northeastern corner. The Property is covered in low, grassy vegetation and bare soil, with small amounts of wind-blown trash observed on the outer edges of the Property (against the fence). A depression likely due to former grading activities was observed in the northwestern portion of the Property. Rumble grates were also noted in the northeastern corner. A sloped area was observed on the southeastern boundary of the Property. A storm drain was noted in the southwestern corner of the Property.

Regulatory database information identified no known and suspected contamination sites in the area surrounding the Property. Based on a review of the available information, it is unlikely that any of these sites has negatively affected the environmental condition of the Property.

10 CONCLUSIONS

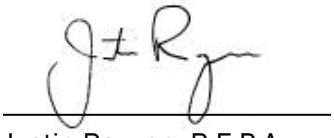
In summary, SCS performed a Phase I ESA of the property located at the 10.02-acre site at the northeast corner of Amherst Avenue and Eucalyptus Avenue, located in Ontario, California, in conformance with the scope and limitations of 40 CFR 312 and ASTM E1527-21. Any exceptions or deviations are described in Section 8 of this report.

In the opinion of the Environmental Professional, this assessment has revealed no recognized environmental conditions, controlled recognized environmental conditions, or significant data gaps in connection with the Property. Further investigation is not recommended.

11 DECLARATION OF ENVIRONMENTAL PROFESSIONAL

This Phase I ESA report for the property located at the 10.02-acre site at the northeast corner of Amherst Avenue and Eucalyptus Avenue, Ontario, California dated March 14, 2024, was prepared by Maddie Peterson and reviewed by Justin Rauzon.

I declare that, to the best of my professional knowledge and belief, I meet the definition of Environmental Professional as defined in §312.10 of 40 CFR 312. I have the specific qualifications based on education, training, and experience to assess a property of the nature, history, and setting of the subject property. I have developed and performed the all appropriate inquiries in conformance with the standards and practices set forth in 40 CFR Part 312. The resume for the individual below is included in **Appendix G.**



Justin Rauzon, R.E.P.A.
Senior Project Manager
SCS ENGINEERS

12 REFERENCES

ASTM International, November 1, 2021. Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process, Designation: E1527-21.

California Department of Conservation, Geologic Energy Management Division (CalGEM) Website: http://www.conservation.ca.gov/dog/Pages/Index.aspx.

California Department of Health Services (CDHS), Updated February 2016. *California Indoor Radon Test Results*: https://www.cdph.ca.gov/Programs/CEH/DRSEM/CDPH%20Document%20Library/EMB/Radon/Radon%20Test%20Results.pdf

California Department of Toxic Substance Control (DTSC) EnviroStor Website: https://www.envirostor.dtsc.ca.gov/public/.

California Department of Water Resources (CDWR), Groundwater Basin Boundary Assessment Tool (BBAT), Updated February 11, 2019. https://gis.water.ca.gov/app/bbat/

California Department of Water Resources (CDWR), Reprinted April 1988. *Planned Utilization of the Ground Water Basins of the Coastal Plain of Los Angeles County*. Bulletin No. 104.

California Department of Water Resources (CDWR), Updated 2003. South Coast Hydrologic Region, Los Angeles Subregion. Bulletin No. 118.

California Environmental Protection Agency (CalEPA), Site Portal Website: https://siteportal.calepa.ca.gov/nsite/.

California Environmental Protection Agency, State Water Resources Control Board (SWRCB), GeoTracker Website: http://geotracker.waterboards.ca.gov/.

City of Ontario Department of Building and Safety Public Records Portal Website: https://aca-prod.accela.com/ONT/Cap/CapHome.aspx?module=Building&TabName=Building

David J. Tanner & Associates, Inc., January 9, 2003. Phase I Environmental Site Assessment, Assesors Parcel No's 0128-252-03, 05, 05, 0128-332-01, 02, 03 & 04, City of Ontario, California.

Environmental Data Resources, Inc. (EDR), www.edrnet.com, (800) 352-0050.

Federal Register, The Daily Journal of the United States Government, December 15, 2022. Environmental Protection Agency, 40 CFR Part 312, Standards and Practices for All Appropriate Inquiry. Volume 87, No. 240. Action: Final Rule.

LGC Geo-Environmental, Inc., August 26, 2014. Updated Methane Site Assessment for the Proposed "Esperanza West" Residential Development, Located at the Northeast Corner of Cleveland Avenue and Bellgrave Avenue, APN's 0218-332-11 and 0218-252-17, City of Ontario, San Bernardino County, California.

National Pipeline Mapping System (NPMS) Website: https://www.npms.phmsa.dot.gov/PublicViewer/.

San Benardino County Department of Environmental Health, 385 N. Arrowhead Avenue, San Bernardino, California 92415. (888) 818-8988.

Santa Ana Regional Water Quality Control Board (SARWQCB). 3737 Main Street, Suite 500, Riverside, California 92501, (951) 782-4130.

South Coast Air Quality Management District (AQMD), Facility INformation Detail (FIND) website: http://www3.aqmd.gov/webappl/fim/prog/search.aspx.

United States Geological Survey (USGS), 1975. Corona North, California 7.5 Minute Topographic Map.

13 GLOSSARY

AAI – All Appropriate Inquiry

AUL – Activity and Use Limitations

BER – Business environmental risk. As defined in ASTM E1527-21, a risk which can have a material environmental or environmentally-driven impact on the business associated with the current or planned use of commercial real estate, not necessarily related to those environmental issues required to be investigated in the ASTM E1527-21 practice.

BTEX – Benzene, toluene, ethylbenzene, and total xylenes

CERCLA – Comprehensive, Environmental Response, Compensation, and Liability Act

CERCLIS – Comprehensive Environmental Response, Compensation, and Liability Information System

CFR – Code of Federal Regulations

CORRACTS – Corrective Action Against Responsible Parties at a RCRA site

CREC – Controlled Recognized Environmental Condition. As defined in ASTM E1527-21, a recognized environmental condition affecting the subject property that has been addressed to the satisfaction of the applicable regulatory authority, or authorities with hazardous substances or petroleum products allowed to remain in place subject to implementation of required controls (for example, activity use limitations, or other property use limitations).

De Minimis Condition – A condition related to a release that generally does not present a threat to human health or the environment and that generally would not be the subject of an enforcement action if brought to the attention of appropriate governmental agencies. A condition determined to be a *de minimis condition* is not a recognized environmental condition nor a controlled recognized environmental condition.

DTSC – California EPA Department of Toxic Substances Control

EDR – Environmental Data Resources, Inc.

ERNS – Emergency Response Notification System

ESA – Environmental Site Assessment

FINDS – Facility Index System

HAZNET – California EPA Hazardous Waste Facility and Manifest Data

HREC – Historical Recognized Environmental Condition. As defined in ASTM E1527-21, a previous release of hazardous substances or petroleum products affecting the subject property that has been addressed to the satisfaction of the applicable regulatory authority or authorities and meeting unrestricted use criteria established by the applicable regulatory authority or

authorities without subjecting the subject property to any controls (for example, activity use limitations or other property use limitations).

LQG – Large Quantity Hazardous Waste Generator

LUST – Leaking Underground Storage Tank

MCL – Maximum contaminant level

MTBE – Methyl-tert-butyl-ether

NFA – No Further Action determination

NFRAP – No Further Remedial Action Planned

NPL – National Priority List (Superfund)

PAHs – Polynuclear aromatic hydrocarbons

PCBs – Polychlorinated biphenyls

RCRA – Resource Conservation and Recovery Act

RCRIS – Resource Conservation and Recovery Information System

REC – Recognized environmental condition. As defined by ASTM E1527-21, a REC means (1) the presence of hazardous substances or petroleum products in, on, or at the subject property due to a release to the environment; (2) the likely presence of hazardous substances or petroleum products in, on, or at the subject property due to a release or likely release to the environment; or (3) the presence of hazardous substances or petroleum products in, on, or at the subject property under conditions that pose a material threat of a future release to the environment. A *de minimis condition* is not a recognized environmental condition.

ROD – Record of Decision

RBSLs – Risk-based Screening Levels

RSLs – Regional Screening Levels

RWQCB -- Regional Water Quality Control Board

SARA – Superfund Amendments and Reauthorization Act

SLIC -- Spills, Leaks, Investigations, and Cleanups database

SQG – Small Quantity Hazardous Waste Generator

SWIS – Solid Waste Information System

SWLF – Solid Waste Facility/Landfills

TPH – Total Petroleum Hydrocarbons

TRIS – Toxic Release Inventory System

TSD – Treatment, Storage, and/or Disposal Facility

User – As defined in ASTM E1527-21, the party seeking to use Practice E1527 to complete an environmental site assessment of the subject property.

U.S. EPA – United States Environmental Protection Agency

USGS – United States Geologic Survey

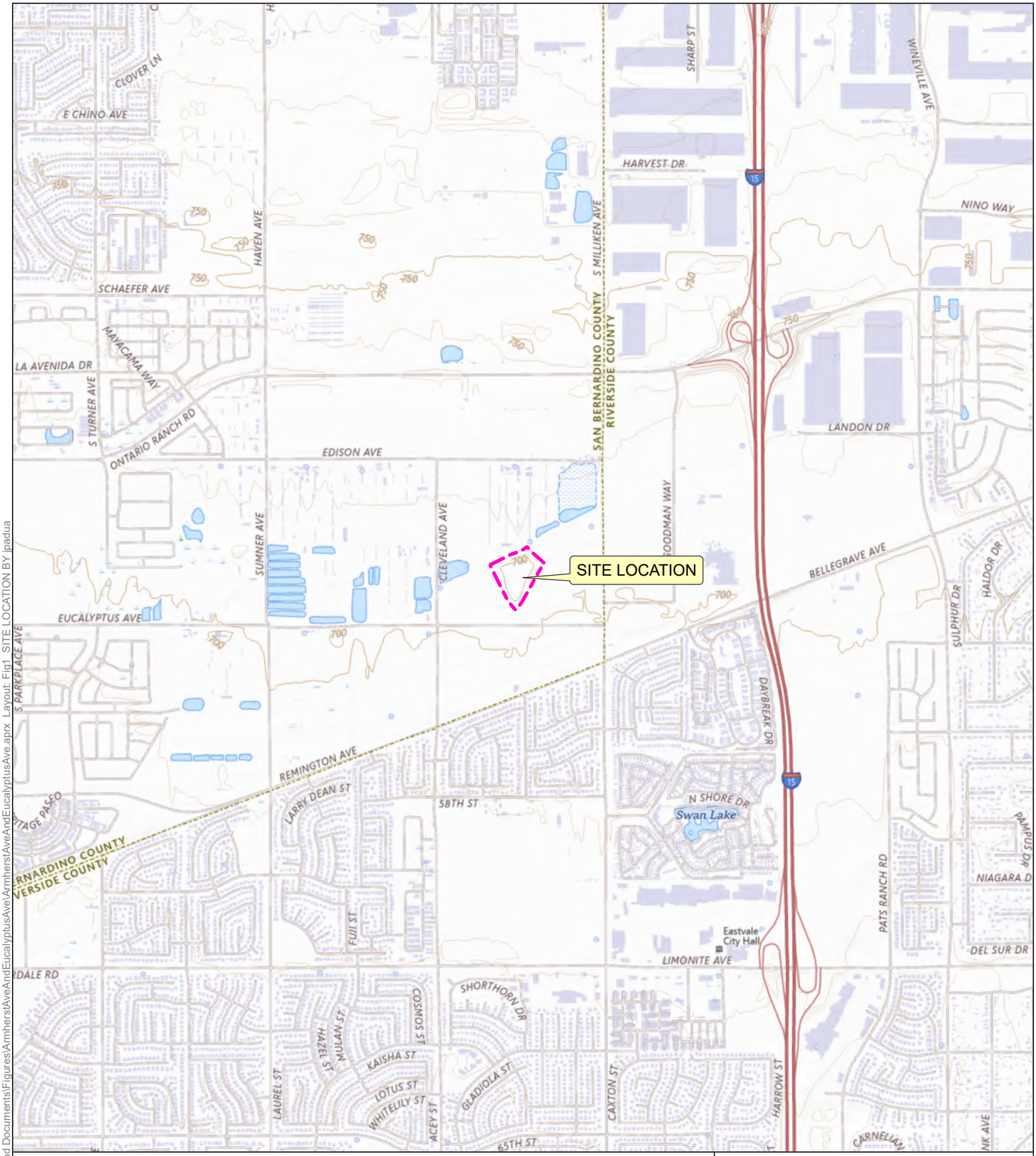
UST – Underground Storage Tank

VCP – Voluntary Cleanup Program

VOCs – Volatile organic compounds

Appendix A

Figures 1 through 3



Legend

Approximate Site Boundary

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Feet

1 inch = 2,000 feet

Site Location Map

NE Corner of Amherst Avenue and Eucalyptus Avenue
Ontario, California
Project No. 01225043.00

Figure 1	Feb 2025

SCS ENGINEERS 1388

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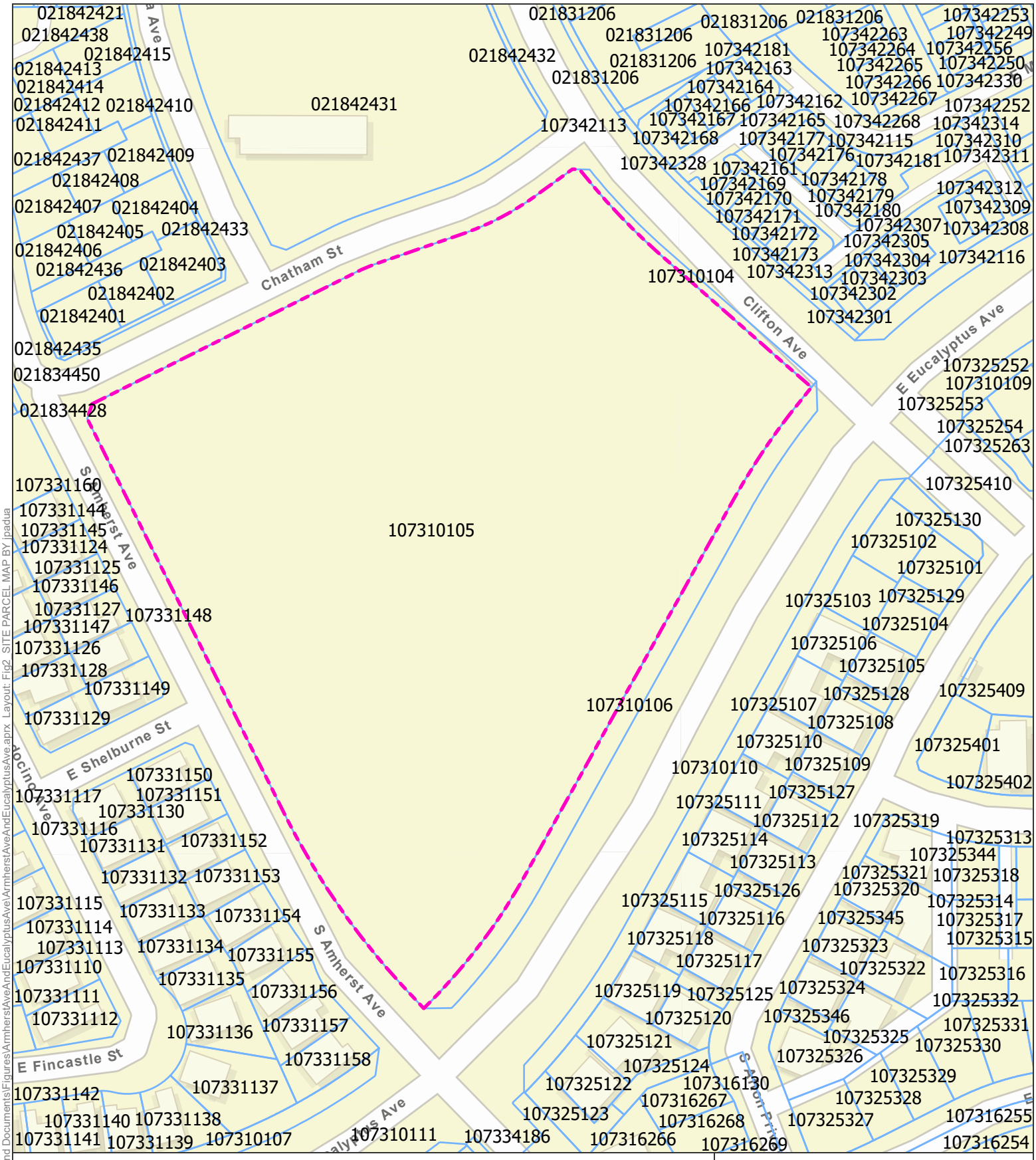
USGS The National Map: National Boundaries Dataset, 3DEP Elevation Program, Geographic Names Information System, National Hydrography Dataset, National Land Cover Database, National Structures Dataset,



Legend

- Approximate Site Boundary
- San Bernardino County Parcels

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1 inch = 150 feet

Parcel Map

NE Corner of Amherst Avenue and Eucalyptus Avenue Ontario, California
Project No. 01225043.00

Figure 2	Feb 2025

SCS ENGINEERS 1389

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Esri Community Maps Contributors, County of Riverside, County of San Bernardino, California State Parks, © OpenStreetMap, Microsoft, Esri, TomTom, Garmin, SafeGraph, GeoTechnologies, Inc, METI/NASA, USGS,

Legend

Approximate Site Boundary

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Feet

1 inch = 150 feet

Existing Site Conditions

NE Corner of Amherst Avenue and Eucalyptus Avenue
Ontario, California
Project No. 01225043.00

Figure 3	Feb 2025

SCS ENGINEERS 1390

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USGS The National Map: National Transportation Dataset; U.S. Census Bureau – TIGER/Line; U.S. Forest Service. Data Refreshed January, 2025., Maxar

Appendix B

Photographs

Photo 1: View of Property from the intersection of Eucalyptus Avenue and Amherst Avenue.

Photo 2: View of the Property from the southwest looking east.

Photo 3: View of the northwestern side of the Property looking south.

Photo 4: View of the southeastern side of the Property along Eucalyptus Avenue.

Photo 5: View of the northeastern corner of the Property near the intersection of Clifton Avenue and Chatham Street.

Photo 6: View of electrical box on the southeastern corner of the Property.

Photo 7: View of electrical boxes and dry-type transformer found on the southeastern side of the Property along Clifton Avenue.

Photo 8: Rumble grates found on the northeastern corner of the Property.

Photo 10: View of storm drain found on the southwestern corner of the Property.

Photo 11: View of adjacent park to the northwest.

Photo 12: View of adjacent residential homes to the northwest.

Photo 13: View of adjacent residential homes along Amherst Avenue to the southwest.

Photo 14: View of adjacent park near the intersection of Amherst Avenue and Chatham Street.

Photo 15: View of adjacent homes across the street from Eucalyptus Avenue to the southeast.

Photo 16: View of intersection of Amherst Avenue and Eucalyptus Avenue.

Appendix C

Historical Property and Adjoining Site Use Information

Not Reported

Not Reported

Ontario, CA 91761

Inquiry Number: 7908232.8

February 25, 2025

The EDR Aerial Photo Decade Package

6 Armstrong Road, 4th floor
Shelton, CT 06484
Toll Free: 800.352.0050
www.edrnet.com

EDR Aerial Photo Decade Package

02/25/25

Site Name:

Not Reported
Not Reported
Ontario, CA 91761
EDR Inquiry # 7908232.8

Client Name:

SCS Engineers
3900 Kilroy Airport Way
Long Beach, CA 90806
Contact: Jose William Padua

Environmental Data Resources, Inc. (EDR) Aerial Photo Decade Package is a screening tool designed to assist environmental professionals in evaluating potential liability on a target property resulting from past activities. EDR's professional researchers provide digitally reproduced historical aerial photographs, and when available, provide one photo per decade.

Search Results:

Year	Scale	Details	Source
2020	1"=500'	Flight Year: 2020	USDA/NAIP
2016	1"=500'	Flight Year: 2016	USDA/NAIP
2012	1"=500'	Flight Year: 2012	USDA/NAIP
2009	1"=500'	Flight Year: 2009	USDA/NAIP
2006	1"=500'	Flight Year: 2006	USDA/NAIP
2002	1"=500'	Acquisition Date: January 01, 2002	USGS/DOQQ
1994	1"=500'	Acquisition Date: June 01, 1994	USGS/DOQQ
1990	1"=500'	Flight Date: August 29, 1990	USDA
1989	1"=500'	Flight Date: August 03, 1989	USDA
1985	1"=500'	Flight Date: July 28, 1985	USDA
1975	1"=500'	Flight Date: August 01, 1975	USGS
1967	1"=500'	Flight Date: May 15, 1967	USDA
1953	1"=500'	Flight Date: February 02, 1953	USDA
1948	1"=500'	Flight Date: July 10, 1948	USGS
1938	1"=500'	Flight Date: June 14, 1938	USDA
1931	1"=500'	Flight Date: September 18, 1931	FAIR

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INQUIRY #: 7908232.8
YEAR: 2020
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EDR

INQUIRY #: 7908232.8
YEAR: 2016
= 500'
N
EDR

INQUIRY #: 7908232.8

YEAR: 2012

= 500'

N

EDR

1405

INQUIRY #: 7908232.8
YEAR: 2009
= 500'
N
EDR

INQUIRY #: 7908232.8
YEAR: 2006
= 500'
N
EDR

INQUIRY #: 7908232.8

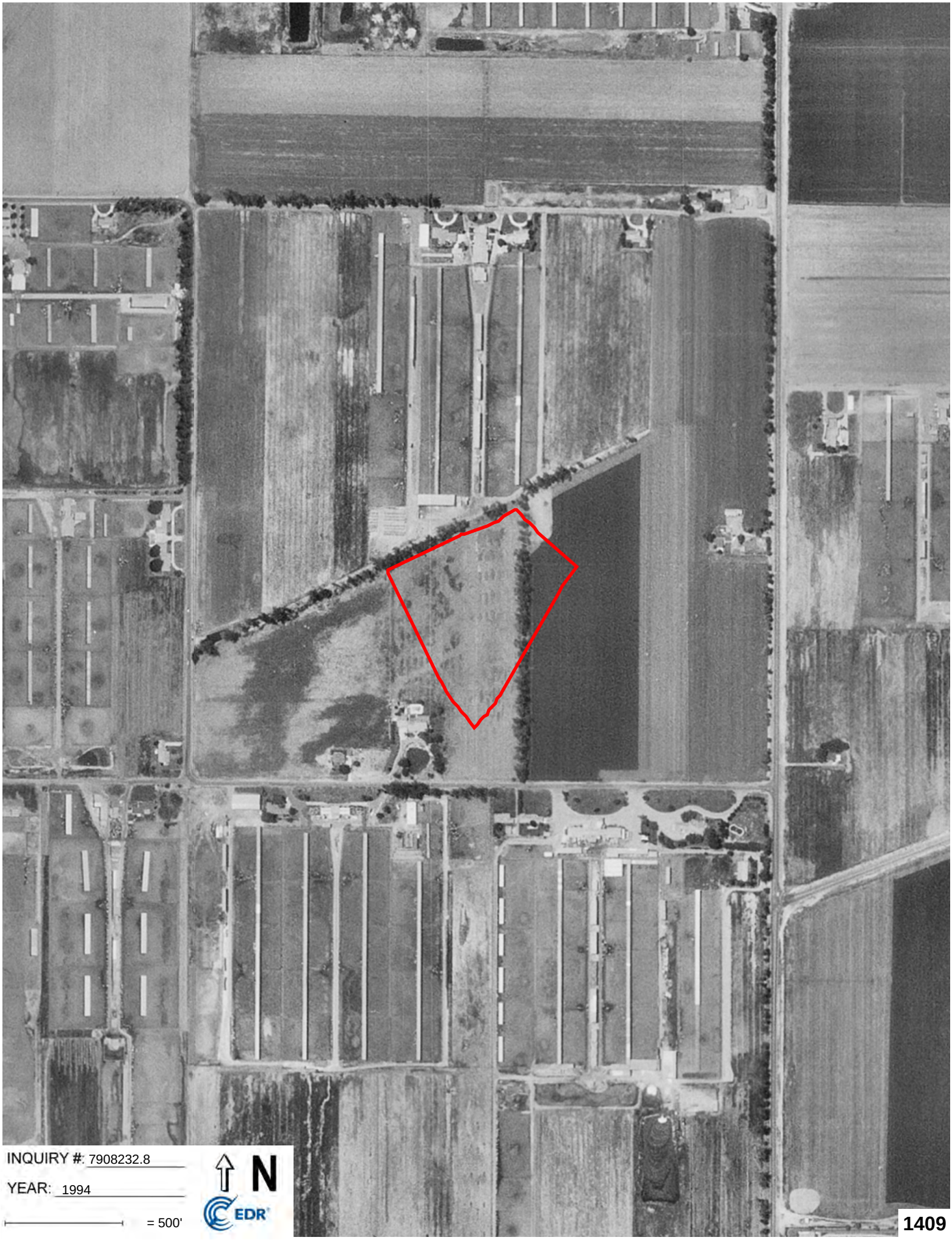
YEAR: 2002

= 500'

N

EDR

1408



INQUIRY #: 7908232.8

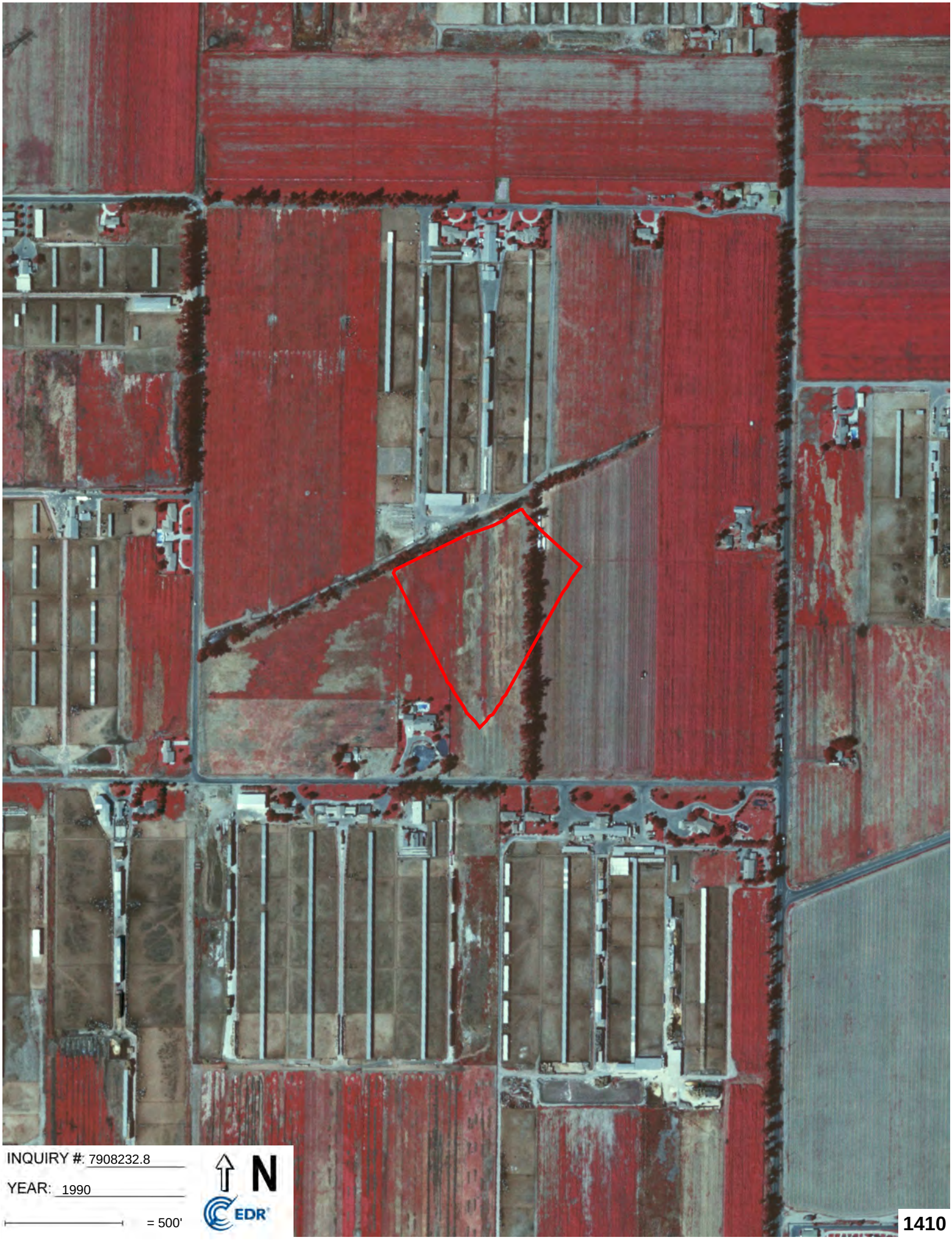
YEAR: 1994

= 500'

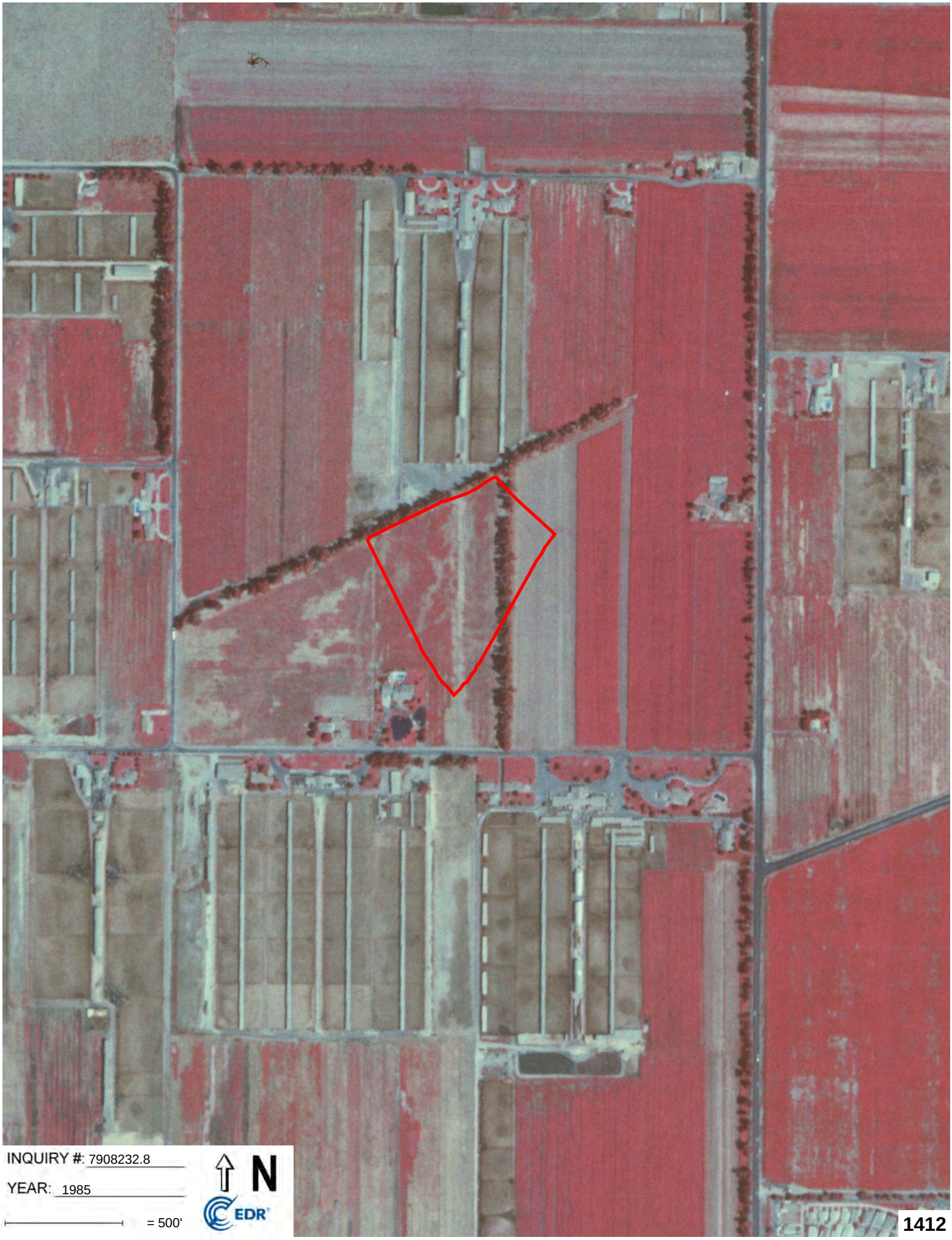
N

EDR

1409


INQUIRY #: 7908232.8
YEAR: 1990
= 500'
N
EDR

INQUIRY #: 7908232.8
YEAR: 1989
= 500'
N
EDR


INQUIRY #: 7908232.8
YEAR: 1985
= 500'
N
EDR

INQUIRY #: 7908232.8

YEAR: 1975

= 500'

N

EDR

1413

INQUIRY #: 7908232.8

YEAR: 1967

= 500'

N

EDR

1414

INQUIRY #: 7908232.8

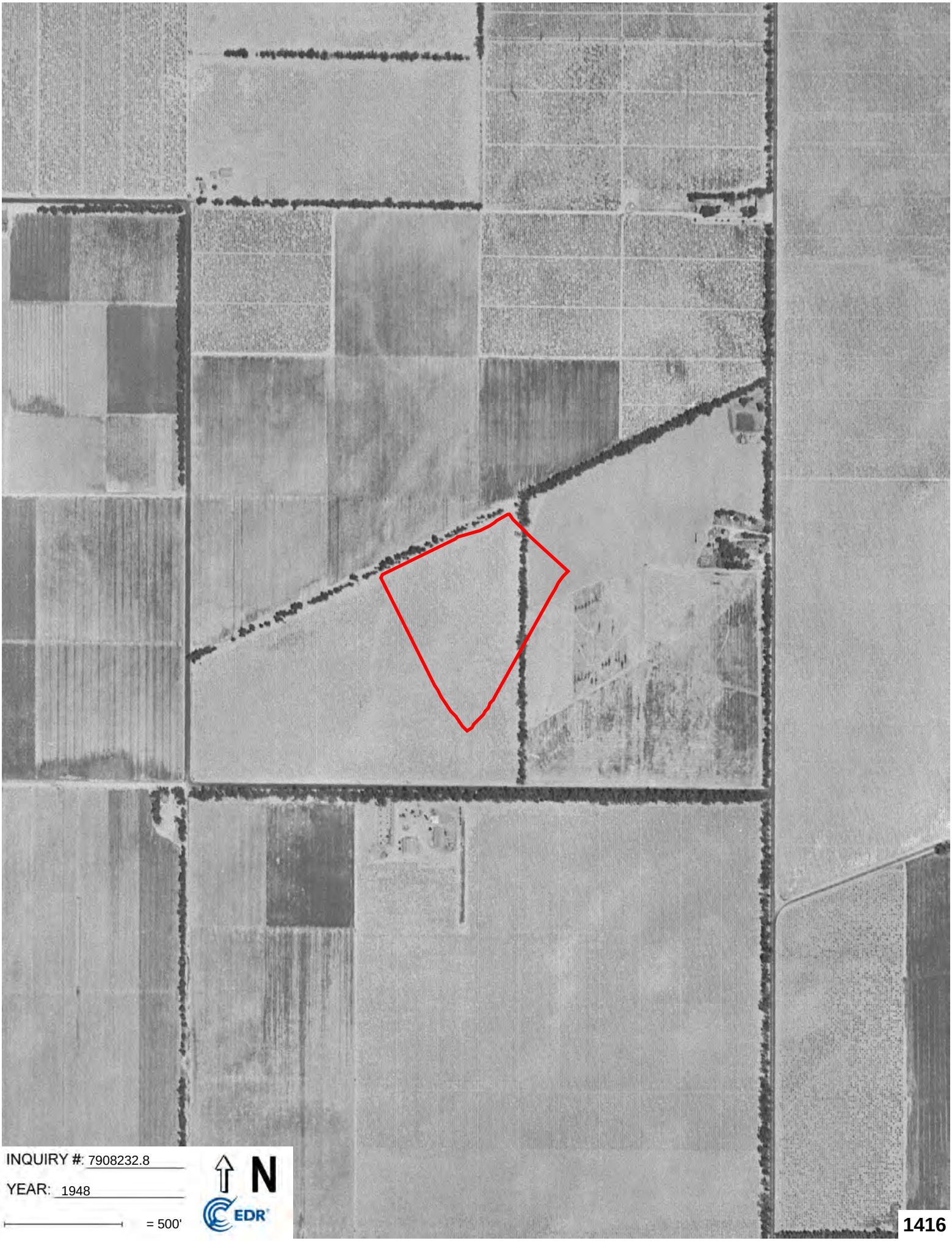
YEAR: 1953

= 500'

N

EDR

1415



INQUIRY #: 7908232.8

YEAR: 1948

= 500'

N

EDR

INQUIRY #: 7908232.8

YEAR: 1938

= 500'

N

EDR

INQUIRY #: 7908232.8

YEAR: 1931

= 500'

N

EDR

1418

Not Reported
Not Reported
Ontario, CA 91761

Inquiry Number: 7908232.5
February 25, 2025

The EDR-City Directory Abstract

Environmental Data Resources Inc
6 Armstrong Road
Shelton, CT 06484
800.352.0050
www.edrnet.com

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Thank you for your business.
Please contact EDR at 1-800-352-0050
with any questions or comments.

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EXECUTIVE SUMMARY

DESCRIPTION

Environmental Data Resources, Inc.'s (EDR) City Directory Abstract is a screening tool designed to assist environmental professionals in evaluating potential liability on a target property resulting from past activities. EDR's City Directory Abstract includes a search and abstract of available city directory data. For each address, the directory lists the name of the corresponding occupant at approximately five year intervals.

Business directories including city, cross reference and telephone directories were reviewed, if available, at approximately five year intervals for the years spanning 1922 through current. This report compiles information gathered in this review by geocoding the latitude and longitude of properties identified and gathering information about properties within 1320 feet of the target property.

Summary information obtained is provided in the text of this report.

RECORD SOURCES

The EDR City Directory Report accesses a variety of business directory sources, including Haines, InfoUSA, Polk, Cole, Bresser, and Stewart. Listings marked as EDR Digital Archive access Cole and InfoUSA records. The various directory sources enhance and complement each other to provide a more thorough and accurate report.

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RESEARCH SUMMARY

The following research sources were consulted in the preparation of this report. An "X" indicates where information was identified in the source and provided in this report.

Year	Source	TP	Adjoining	Text Abstract	Source Image
2020	EDR Digital Archive	-	X	X	-
2017	Cole Information	-	X	X	-
2014	Cole Information	-	X	X	-
2010	Cole Information	-	X	X	-
2008	Haines Company, Inc.	-	X	X	-
2005	Cole Information	-	X	X	-
2003	Haines & Co Publishers	-	X	X	-
2002	Cole Information Services	-	-	-	-
2000	Cole Information	-	X	X	-
1996	GTE	-	-	-	-
1995	Cole Information	-	X	X	-
	GTE Directories	-	X	X	-
1992	Cole Information	-	X	X	-
1991	GTE California Incorporated	-	-	-	-
1990	GTE	-	X	X	-
1985	GTE	-	X	X	-

EXECUTIVE SUMMARY

Year	Source	TP	Adjoining	Text Abstract	Source Image
1981	General Telephone Company of California	-	-	-	-
1980	GTE General Telephone Company of California	-	X	X	-
1975	GTE Directories	-	X	X	-
1970	General Telephone Company of California	-	X	X	-
1965	GTE	-	-	-	-
1964	Luskey Brothers & Co	-	-	-	-
1961	Luskey Brothers& Co Publishers	-	-	-	-
1960	Luskey Brothers & Co Publishers	-	-	-	-
1956	General Telephone Company Publishers	-	-	-	-
1955	Luskey Brothers Co Publishers	-	-	-	-
1951	Los Angeles Directory Co Publishers	-	-	-	-
1950	The Pacific Telephone and Telegraph Co	-	-	-	-
1949	San Bernardino Directory Co. Publishers	-	-	-	-
1946	Los Angeles Directory Company Publishers	-	-	-	-
1945	Southern Califronia Telephone Company	-	-	-	-
1942	San Bernardino Directory Co Publisher	-	-	-	-
1941	Associated Telephone Company Limited	-	-	-	-
1940	Los Angeles Directory Co.	-	-	-	-
1938	Los Angeles Directory Co.	-	-	-	-
1936	San Bernardino Directory Co Publisher	-	-	-	-
1934	Los Angeles Directory Co.	-	-	-	-
1931	Los Angeles Directory Co.	-	-	-	-
1930	San Bernardino Directory Co Publisher	-	-	-	-
1926	Los Angeles Directory Co.	-	-	-	-
1923	Los Angeles Directory Company	-	-	-	-
1922	R.L. Polk & Co Publishers	-	-	-	-

FINDINGS

TARGET PROPERTY INFORMATION

ADDRESS

Not Reported
Ontario, CA 91761

FINDINGS DETAIL

Target Property research detail.

FINDINGS

ADJOINING PROPERTY DETAIL

The following Adjoining Property addresses were researched for this report. Detailed findings are provided for each address.

CLEVELAND AVE

14320 CLEVELAND AVE

Year	Uses	Source
2008	CHACON M	Haines Company, Inc.
1995	Douma Herman	GTE Directories
1990	Douma Herman	GTE
1985	DOUMA HERMAN	GTE
1980	DOUMA HERMAN	GTE General Telephone Company of California
1975	Douma Herman	GTE Directories

14350 CLEVELAND AVE

Year	Uses	Source
1995	Douma Fred A	GTE Directories
1990	Douma Fred A	GTE
1985	DOUMA FRED A	GTE
1980	DOUMA FRED	GTE General Telephone Company of California
1975	Douma Fred A	GTE Directories

14482 CLEVELAND AVE

Year	Uses	Source
2008	LEININGER James	Haines Company, Inc.
1985	DOUMA MICHAEL J	GTE

CLEVELAND ST

14320 CLEVELAND ST

Year	Uses	Source
1995	OCCUPANT UNKNOWNN	Cole Information

FINDINGS

14330 CLEVELAND ST

Year	*Uses*	*Source*
1995	DOUMA, HERMANS B	Cole Information

14350 CLEVELAND ST

Year	*Uses*	*Source*
1995	DOUMA, FRED A	Cole Information

14482 CLEVELAND ST

Year	*Uses*	*Source*
1992	ATTEMA, RODNEY	Cole Information

E EUCALYPTUS AVE

10753 E EUCALYPTUS AVE

Year	*Uses*	*Source*
2005	WILLIAM PENICKS	Cole Information
2000	OCCUPANT UNKNOWN	Cole Information
1995	HILL, KURT	Cole Information

10869 E EUCALYPTUS AVE

Year	*Uses*	*Source*
2005	BRENDA GUILHERME	Cole Information
2000	VYFHUIZEN MELINDA & CASE	Cole Information
1995	VYFHUIZEN, CASE	Cole Information
1992	VYFHUIZEN, CASE	Cole Information

11009 E EUCALYPTUS AVE

Year	*Uses*	*Source*
2000	JOHN WESTRA	Cole Information
	WESTRA DAIRY FARMS	Cole Information
1995	WESTRA, JOHN	Cole Information
	WESTRA DAIRY FARMS	Cole Information
1992	WESTRA, JOHN	Cole Information
	WESTRA DAIRY FARMS	Cole Information

FINDINGS

11022 E EUCALYPTUS AVE

Year	Uses	Source
2000	CALVIN WESTRA	Cole Information
1995	WESTRA, CALVIN	Cole Information
1992	WESTRA, CALVIN	Cole Information

11023 E EUCALYPTUS AVE

Year	Uses	Source
2000	OCCUPANT UNKNOWN	Cole Information

11060 E EUCALYPTUS AVE

Year	Uses	Source
2010	MICHELLE GRIEPSMA	Cole Information
2005	MICHELLE GRIEPSMA	Cole Information
2000	JAKE WESTRA	Cole Information
1995	WESTRA, JAKE J	Cole Information
1992	WESTRA, JAKE J	Cole Information

11101 E EUCALYPTUS AVE

Year	Uses	Source
2010	OCCUPANT UNKNOWN	Cole Information
2005	WHEELIN AND DEELIN	Cole Information
	WHEELIN & DEELIN	Cole Information
2000	PETE HETTINGA	Cole Information
	HETTINGA HARVEY MILK	Cole Information
1995	HETTINGA, PETE	Cole Information
	HARVEY HETTINGA	Cole Information
1992	HETTINGA HARVEY	Cole Information

11111 E EUCALYPTUS AVE

Year	Uses	Source
2014	OCCUPANT UNKNOWN	Cole Information
2010	OCCUPANT UNKNOWN	Cole Information
2005	OCCUPANT UNKNOWN	Cole Information
2000	HARVEY HETTINGA	Cole Information
	ANA MEDEL	Cole Information

Year	Uses	Source
2000	RUBEN LEDESMA	Cole Information
	JURUPA FEEDERS	Cole Information
	HETTINGA HARVEY MILK	Cole Information
1995	HETTINGIA, PETER	Cole Information
	HETTINGA, HARVEY	Cole Information
	JIMENEZ, IGNACIO	Cole Information
	SHAFFER, JOEY J	Cole Information
1992	HETTINGIA, PETER	Cole Information
	BALDERRAMA, ENRIQUE	Cole Information
	HETTINGA, HARVEY	Cole Information
	ORTIZ, ANTONIO	Cole Information

11121 E EUCALYPTUS AVE

Year	Uses	Source
2010	OCCUPANT UNKNOWN	Cole Information
2000	IGNACIO JIMENEZ	Cole Information
1995	WIERSMA, PHILLIP	Cole Information
1992	FURRER, LOUIS A	Cole Information

EUCALYPTS AVE

11009 EUCALYPTS AVE

Year	Uses	Source
1990	Westra Jake J Dairy	GTE

EUCALYPTUS AVE

10869 EUCALYPTUS AVE

Year	Uses	Source
2003	DEVRIES Case	Haines & Co Publishers
1995	Vyfhu Lten Melinda	GTE Directories
1985	DE HAAN LARRY	GTE
1980	DE HAAN LARRY	GTE General Telephone Company of California

FINDINGS

11008 EUCALYPTUS AVE

Year	*Uses*	*Source*
1995	WESTRA DAIRY FARMS	GTE Directories

11009 EUCALYPTUS AVE

Year	*Uses*	*Source*
2003	XXXX	Haines & Co Publishers
1995	Westra John	GTE Directories
1990	Westra John	GTE
1985	WESTRA JAKE J DAIRY	GTE
	WESTRA JOHN	GTE
1980	+NWESTRA JAKE J DAIRY	GTE General Telephone Company of California
	WESTRA JOHN	GTE General Telephone Company of California
1975	Westra Jake J Dairy	GTE Directories
	Westra John	GTE Directories
1970	WESTRA JOHN	General Telephone Company of California

11022 EUCALYPTUS AVE

Year	*Uses*	*Source*
1995	Westra Calvin	GTE Directories
1990	Westra Calvin	GTE
1985	WESTRA CALVIN	GTE
1980	WESTRA SHERWIN	GTE General Telephone Company of California
1975	Westra Sherwin	GTE Directories

11060 EUCALYPTUS AVE

Year	*Uses*	*Source*
1995	Westra Jake J	GTE Directories
1990	Westra Jake J	GTE
1985	WESTRA JAKE J	GTE
1980	WESTRA JAKE J	GTE General Telephone Company of California
1975	Westra Jake J	GTE Directories

FINDINGS

11101 EUCALYPTUS AVE

Year	*Uses*	*Source*
2003	HETTINGA HARVEY	Haines & Co Publishers
	HETTINGA Pete	Haines & Co Publishers
	HETTINGA Peter	Haines & Co Publishers
1995	Hettinga Pete	GTE Directories
	HETTINGA HARVEY	GTE Directories
1990	Hettinga Harvey milk	GTE
	Ofc	GTE
	Hettinga Pete	GTE
1985	HETTINGA PETE	GTE
	HETTINGA HARVEY	GTE
1980	HETTINGA PETE	GTE General Telephone Company of California
	HETTINGA HARVEY	GTE General Telephone Company of California

11111 EUCALYPTUS AVE

Year	*Uses*	*Source*
2003	HETTINGA Harvey	Haines & Co Publishers
1995	JURUPA FEEDERS	GTE Directories
	HettInga H	GTE Directories
	A HettInga Peter	GTE Directories
1985	HETTINGA H	GTE
	SWIHART TIM	GTE
1980	HETTINGA H	GTE General Telephone Company of California
	VANNAH KAREN	GTE General Telephone Company of California
	1/2 JONES TERRY	GTE General Telephone Company of California
1975	Romberg Delmer	GTE Directories

11121 EUCALYPTUS AVE

Year	*Uses*	*Source*
2003	JIMENEZ Ignaclo	Haines & Co Publishers
1995	Wierama Philip & Sandy	GTE Directories

Year	Uses	Source
1990	Furniture Shop The	GTE
	Irrer LA	GTE
1985	FURRER DIANA	GTE
1975	Furrer L A	GTE Directories

MILLIKEN AVE

14328 MILLIKEN AVE

Year	Uses	Source
2003	COFFMAN Carol	Haines & Co Publishers

S CLEVELAND AVE

14320 S CLEVELAND AVE

Year	Uses	Source
2017	PAUL BARROWMAN	Cole Information
	CHINO VALLEY YOUNG LIFE	Cole Information
2014	M CHACON	Cole Information
2010	M CHACON	Cole Information
2005	M CHACON	Cole Information
1995	OCCUPANT UNKNOWNN	Cole Information
1992	DOUMA, HERMAN	Cole Information

14330 S CLEVELAND AVE

Year	Uses	Source
2017	GORDON HAY INCDAIRY 2	Cole Information
2014	GORDON HAY INCDAIRY 2	Cole Information

14350 S CLEVELAND AVE

Year	Uses	Source
2020	JAMIE SCRIVNER	EDR Digital Archive
2017	JAMIE SCRIVNER	Cole Information
2014	REBECCA DURAN	Cole Information
2010	BEN DURAN	Cole Information
2005	OCCUPANT UNKNOWN	Cole Information
1992	DOUMA, FRED A	Cole Information

FINDINGS

14482 S CLEVELAND AVE

Year	*Uses*	*Source*
2017	PETER KUHL	Cole Information
2014	PETER KUHL	Cole Information
2010	OCCUPANT UNKNOWN	Cole Information
2005	JAMES LEININGER	Cole Information
1995	ECHEVERRIA, ISABELL R	Cole Information

S MILLIKEN AVE

14328 S MILLIKEN AVE

Year	*Uses*	*Source*
2005	CAROL COFFMAN	Cole Information
2000	OCCUPANT UNKNOWN	Cole Information

FINDINGS

ADJOINING PROPERTY: ADDRESSES NOT IDENTIFIED IN RESEARCH SOURCE

The following Adjoining Property addresses were researched for this report, and the addresses were not identified in research source.

Address Researched	Address Not Identified in Research Source
10753 E EUCALYPTUS AVE	2020, 2017, 2014, 2010, 2008, 2003, 2002, 1996, 1992, 1991, 1990, 1985, 1981, 1980, 1975, 1970, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
10869 E EUCALYPTUS AVE	2020, 2017, 2014, 2010, 2008, 2003, 2002, 1996, 1991, 1990, 1985, 1981, 1980, 1975, 1970, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
10869 EUCALYPTUS AVE	2020, 2017, 2014, 2010, 2008, 2005, 2002, 2000, 1996, 1992, 1991, 1990, 1981, 1975, 1970, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
11008 EUCALYPTUS AVE	2020, 2017, 2014, 2010, 2008, 2005, 2003, 2002, 2000, 1996, 1992, 1991, 1990, 1985, 1981, 1980, 1975, 1970, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
11009 E EUCALYPTUS AVE	2020, 2017, 2014, 2010, 2008, 2005, 2003, 2002, 1996, 1991, 1990, 1985, 1981, 1980, 1975, 1970, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
11009 EUCALYPTS AVE	2020, 2017, 2014, 2010, 2008, 2005, 2003, 2002, 2000, 1996, 1995, 1992, 1991, 1985, 1981, 1980, 1975, 1970, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
11009 EUCALYPTUS AVE	2020, 2017, 2014, 2010, 2008, 2005, 2002, 2000, 1996, 1992, 1991, 1981, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
11022 E EUCALYPTUS AVE	2020, 2017, 2014, 2010, 2008, 2005, 2003, 2002, 1996, 1991, 1990, 1985, 1981, 1980, 1975, 1970, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
11022 EUCALYPTUS AVE	2020, 2017, 2014, 2010, 2008, 2005, 2003, 2002, 2000, 1996, 1992, 1991, 1981, 1970, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
11023 E EUCALYPTUS AVE	2020, 2017, 2014, 2010, 2008, 2005, 2003, 2002, 1996, 1995, 1992, 1991, 1990, 1985, 1981, 1980, 1975, 1970, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
11060 E EUCALYPTUS AVE	2020, 2017, 2014, 2008, 2003, 2002, 1996, 1991, 1990, 1985, 1981, 1980, 1975, 1970, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
11060 EUCALYPTUS AVE	2020, 2017, 2014, 2010, 2008, 2005, 2003, 2002, 2000, 1996, 1992, 1991, 1981, 1970, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
11101 E EUCALYPTUS AVE	2020, 2017, 2014, 2008, 2003, 2002, 1996, 1991, 1990, 1985, 1981, 1980, 1975, 1970, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922

FINDINGS

Address Researched	Address Not Identified in Research Source
11101 EUCALYPTUS AVE	2020, 2017, 2014, 2010, 2008, 2005, 2002, 2000, 1996, 1992, 1991, 1981, 1975, 1970, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
11111 E EUCALYPTUS AVE	2020, 2017, 2008, 2003, 2002, 1996, 1991, 1990, 1985, 1981, 1980, 1975, 1970, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
11111 EUCALYPTUS AVE	2020, 2017, 2014, 2010, 2008, 2005, 2002, 2000, 1996, 1992, 1991, 1990, 1981, 1970, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
11121 E EUCALYPTUS AVE	2020, 2017, 2014, 2008, 2005, 2003, 2002, 1996, 1991, 1990, 1985, 1981, 1980, 1975, 1970, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
11121 EUCALYPTUS AVE	2020, 2017, 2014, 2010, 2008, 2005, 2002, 2000, 1996, 1992, 1991, 1981, 1980, 1970, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
14320 CLEVELAND AVE	2020, 2017, 2014, 2010, 2005, 2003, 2002, 2000, 1996, 1992, 1991, 1981, 1970, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
14320 CLEVELAND ST	2020, 2017, 2014, 2010, 2008, 2005, 2003, 2002, 2000, 1996, 1992, 1991, 1990, 1985, 1981, 1980, 1975, 1970, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
14320 S CLEVELAND AVE	2020, 2008, 2003, 2002, 2000, 1996, 1991, 1990, 1985, 1981, 1980, 1975, 1970, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
14328 MILLIKEN AVE	2020, 2017, 2014, 2010, 2008, 2005, 2002, 2000, 1996, 1995, 1992, 1991, 1990, 1985, 1981, 1980, 1975, 1970, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
14328 S MILLIKEN AVE	2020, 2017, 2014, 2010, 2008, 2003, 2002, 1996, 1995, 1992, 1991, 1990, 1985, 1981, 1980, 1975, 1970, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
14330 CLEVELAND ST	2020, 2017, 2014, 2010, 2008, 2005, 2003, 2002, 2000, 1996, 1992, 1991, 1990, 1985, 1981, 1980, 1975, 1970, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
14330 S CLEVELAND AVE	2020, 2010, 2008, 2005, 2003, 2002, 2000, 1996, 1995, 1992, 1991, 1990, 1985, 1981, 1980, 1975, 1970, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
14350 CLEVELAND AVE	2020, 2017, 2014, 2010, 2008, 2005, 2003, 2002, 2000, 1996, 1992, 1991, 1981, 1970, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
14350 CLEVELAND ST	2020, 2017, 2014, 2010, 2008, 2005, 2003, 2002, 2000, 1996, 1992, 1991, 1990, 1985, 1981, 1980, 1975, 1970, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
14350 S CLEVELAND AVE	2008, 2003, 2002, 2000, 1996, 1995, 1991, 1990, 1985, 1981, 1980, 1975, 1970, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922

FINDINGS

Address Researched	Address Not Identified in Research Source
14482 CLEVELAND AVE	2020, 2017, 2014, 2010, 2005, 2003, 2002, 2000, 1996, 1995, 1992, 1991, 1990, 1981, 1980, 1975, 1970, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
14482 CLEVELAND ST	2020, 2017, 2014, 2010, 2008, 2005, 2003, 2002, 2000, 1996, 1995, 1991, 1990, 1985, 1981, 1980, 1975, 1970, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
14482 S CLEVELAND AVE	2020, 2008, 2003, 2002, 2000, 1996, 1992, 1991, 1990, 1985, 1981, 1980, 1975, 1970, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922

TARGET PROPERTY: ADDRESS NOT IDENTIFIED IN RESEARCH SOURCE

The following Target Property addresses were researched for this report, and the addresses were not identified in the research source.

Address Researched	Address Not Identified in Research Source
Not Reported	2020, 2017, 2014, 2010, 2008, 2005, 2003, 2002, 2000, 1996, 1995, 1992, 1991, 1990, 1985, 1981, 1980, 1975, 1970, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922

Not Reported

Not Reported

Ontario, CA 91761

Inquiry Number: 7908232.4

February 25, 2025

EDR Historical Topo Map Report

with QuadMatch™

6 Armstrong Road, 4th floor
Shelton, CT 06484
Toll Free: 800.352.0050
www.edrnet.com

EDR Historical Topo Map Report

02/25/25

Site Name:	Client Name:
Not Reported	SCS Engineers
Not Reported	3900 Kilroy Airport Way
Ontario, CA 91761	Long Beach, CA 90806
EDR Inquiry # 7908232.4	Contact: Jose William Padua

EDR Topographic Map Library has been searched by EDR and maps covering the target property location as provided by SCS Engineers were identified for the years listed below. EDR's Historical Topo Map Report is designed to assist professionals in evaluating potential liability on a target property resulting from past activities. EDRs Historical Topo Map Report includes a search of a collection of public and private color historical topographic maps, dating back to the late 1800s.

Search Results:		*Coordinates:*	
P.O.#	01225043.00 T1	**Latitude:**	33.992206 33° 59' 32" North
Project:	Armherst Ave & Eucalyptus Av	**Longitude:**	-117.562857 -117° 33' 46" West
		UTM Zone:	Zone 11 North
		UTM X Meters:	448016.31
		UTM Y Meters:	3761434.55
		Elevation:	713.00' above sea level

Maps Provided:

2022, 2021	1966, 1967	1900
2018	1954	1897
2015	1953, 1954	
2012	1944, 1947	
1981	1942	
1976	1941	
1975	1903	
1973	1902	

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Topo Sheet Key

This EDR Topo Map Report is based upon the following USGS topographic map sheets.

2022, 2021 Source Sheets

Corona North
2022
7.5-minute, 24000

Guasti
2021
7.5-minute, 24000

2018 Source Sheets

Corona North
2018
7.5-minute, 24000

Guasti
2018
7.5-minute, 24000

2015 Source Sheets

Corona North
2015
7.5-minute, 24000

Guasti
2015
7.5-minute, 24000

2012 Source Sheets

Corona North
2012
7.5-minute, 24000

Guasti
2012
7.5-minute, 24000

Topo Sheet Key

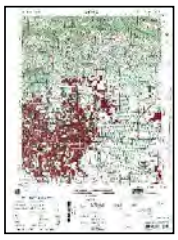
This EDR Topo Map Report is based upon the following USGS topographic map sheets.

1981 Source Sheets

Guasti
1981
7.5-minute, 24000
Aerial Photo Revised 1978

Corona North
1981
7.5-minute, 24000
Aerial Photo Revised 1978

1976 Source Sheets



ONTARIO
1976
15-minute, 50000

1975 Source Sheets

Corona North
1975
7.5-minute, 24000
Aerial Photo Revised 1975

1973 Source Sheets

Corona North
1973
7.5-minute, 24000
Aerial Photo Revised 1973

Guasti
1973
7.5-minute, 24000
Aerial Photo Revised 1973

Topo Sheet Key

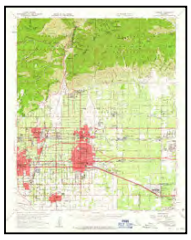
This EDR Topo Map Report is based upon the following USGS topographic map sheets.

1966, 1967 Source Sheets

Guasti
1966
7.5-minute, 24000
Aerial Photo Revised 1966

Corona North
1967
7.5-minute, 24000
Aerial Photo Revised 1966

1954 Source Sheets



Ontario
1954
15-minute, 62500
Aerial Photo Revised 1952

1953, 1954 Source Sheets

Guasti
1953
7.5-minute, 24000
Aerial Photo Revised 1952

Corona North
1954
7.5-minute, 24000
Aerial Photo Revised 1952

1944, 1947 Source Sheets

CUCAMONGA
1944
15-minute, 50000

CORONA
1947
15-minute, 50000

Topo Sheet Key

This EDR Topo Map Report is based upon the following USGS topographic map sheets.

1942 Source Sheets

Corona and Vicinity
1942
7.5-minute, 31680

1941 Source Sheets

GUASTI VICINITY
1941
7.5-minute, 31680

1903 Source Sheets

Cucamonga
1903
15-minute, 62500

1902 Source Sheets

Corona
1902
30-minute, 125000

Topo Sheet Key

This EDR Topo Map Report is based upon the following USGS topographic map sheets.

1900 Source Sheets

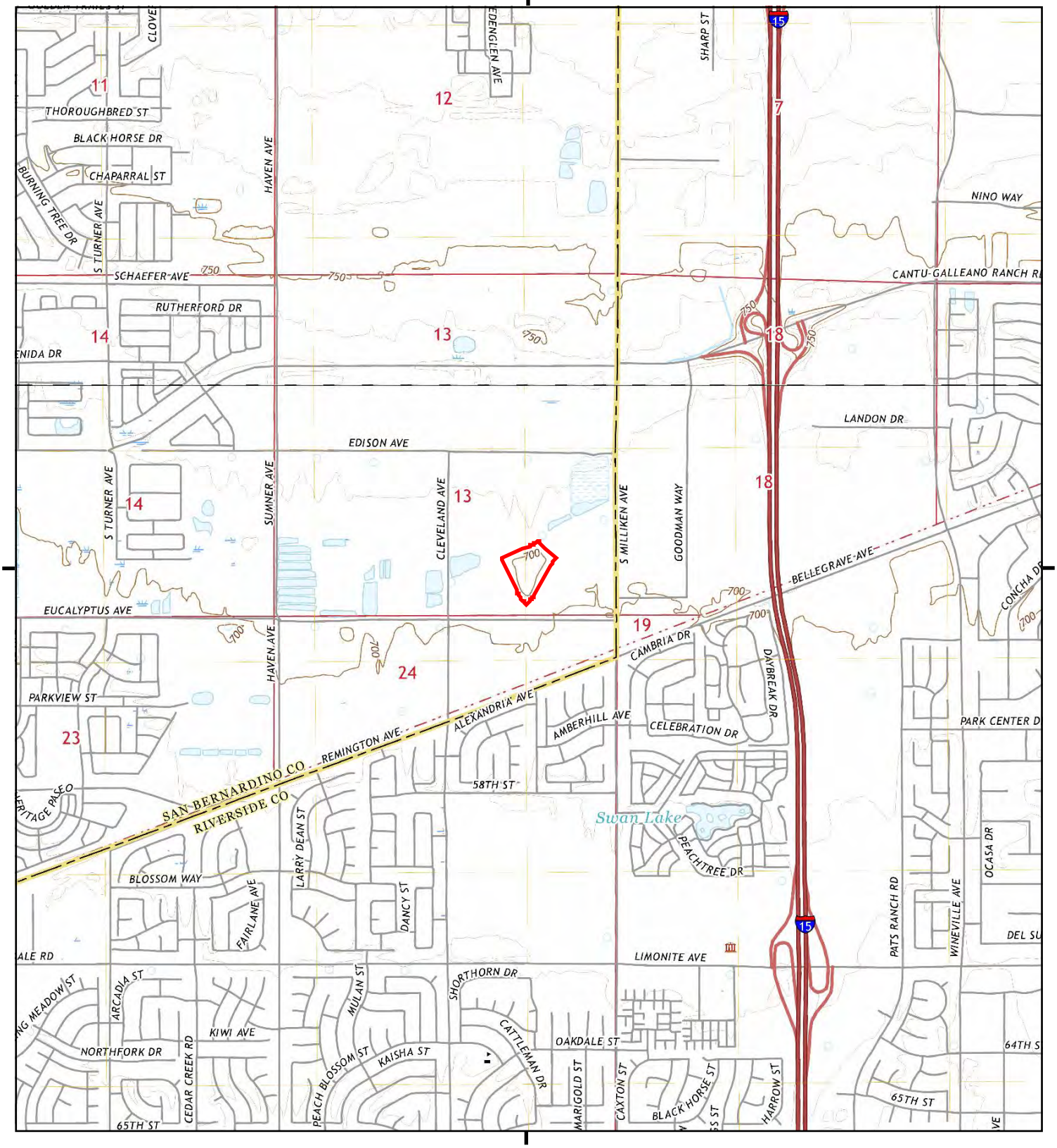
Cucamonga
1900
15-minute, 62500

1897 Source Sheets

Cucamonga
1897
15-minute, 62500

Historical Topo Map

2022, 2021



This report includes information from the following map sheet(s).

0 Miles 0.25 0.5 1 1.5

NW N NE
W E
SW S SE

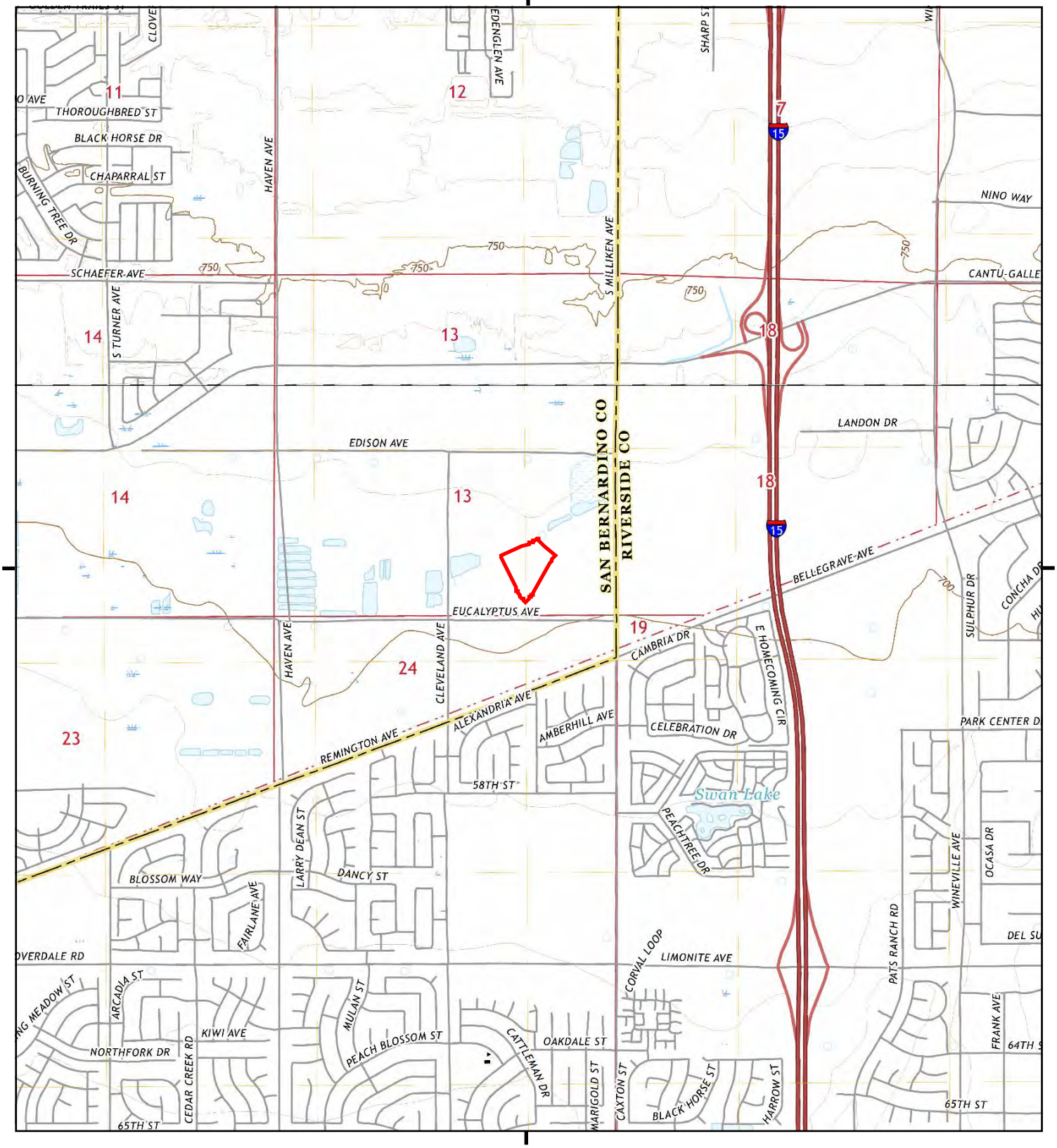
TP, Corona North, 2022, 7.5-minute
N, Guasti, 2021, 7.5-minute

SITE NAME: Not Reported
ADDRESS: Not Reported
Ontario, CA 91761
CLIENT: SCS Engineers

N

Historical Topo Map

2018



This report includes information from the following map sheet(s).

0 Miles 0.25 0.5 1 1.5

NW N NE
W E
SW S SE

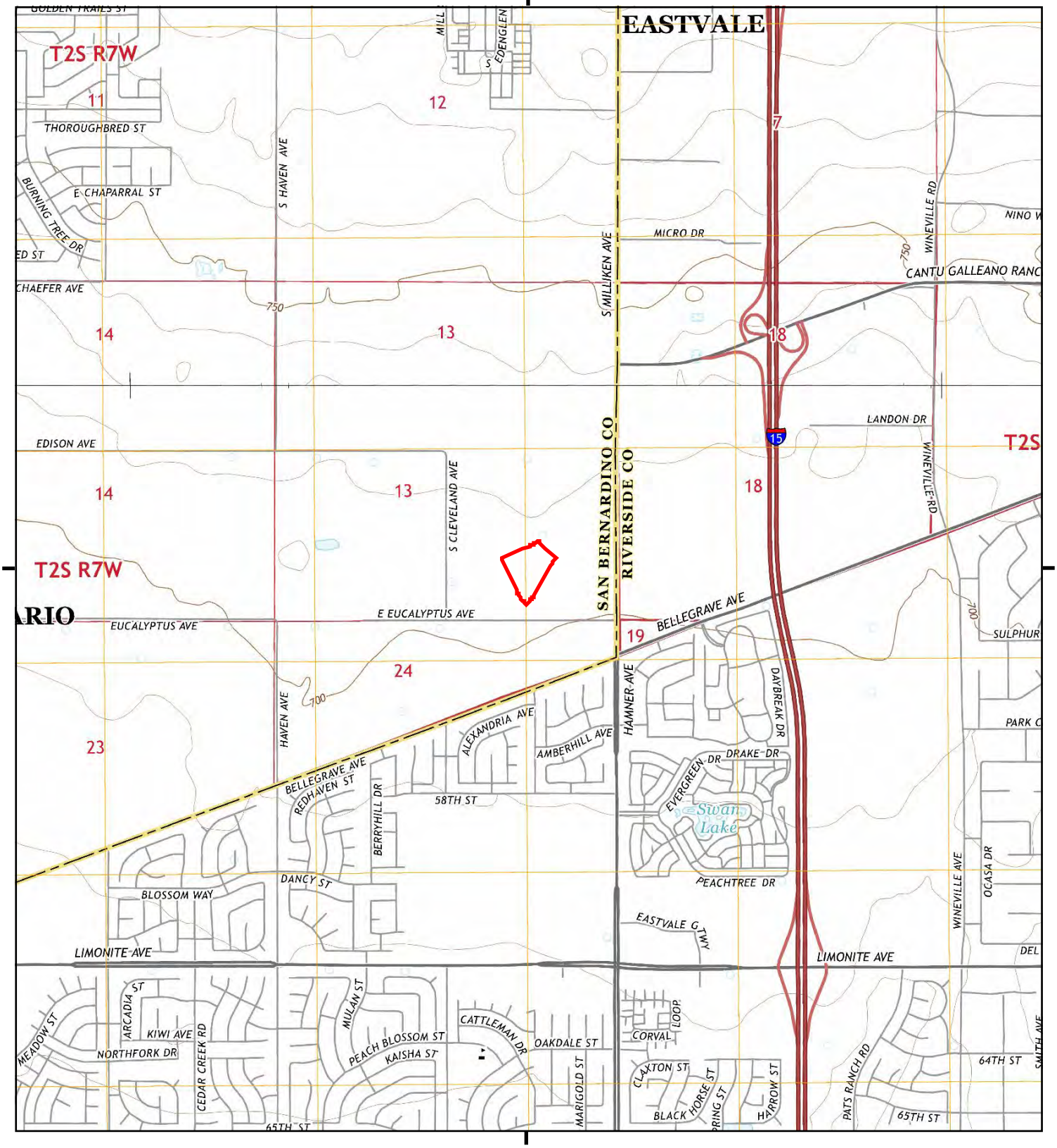
TP, Corona North, 2018, 7.5-minute
N, Guasti, 2018, 7.5-minute

SITE NAME: Not Reported
ADDRESS: Not Reported
Ontario, CA 91761
CLIENT: SCS Engineers

N

Historical Topo Map

2015



This report includes information from the following map sheet(s).

0 Miles 0.25 0.5 1 1.5

NW N NE
W E
SW S SE

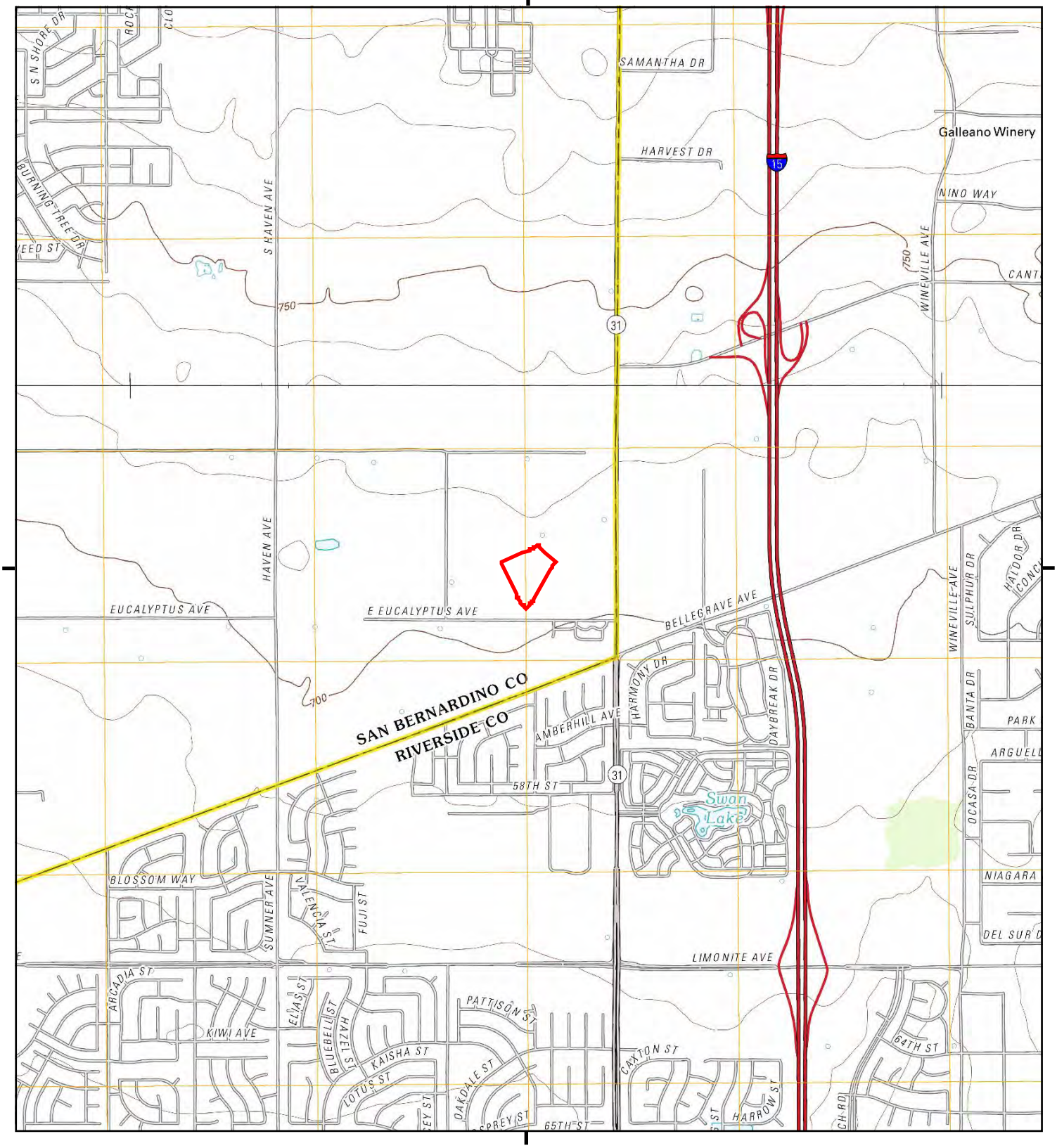
TP, Corona North, 2015, 7.5-minute
N, Guasti, 2015, 7.5-minute

SITE NAME: Not Reported
ADDRESS: Not Reported
Ontario, CA 91761
CLIENT: SCS Engineers

N

Historical Topo Map

2012



This report includes information from the following map sheet(s).

0 Miles 0.25 0.5 1 1.5

NW N NE
W E
SW S SE

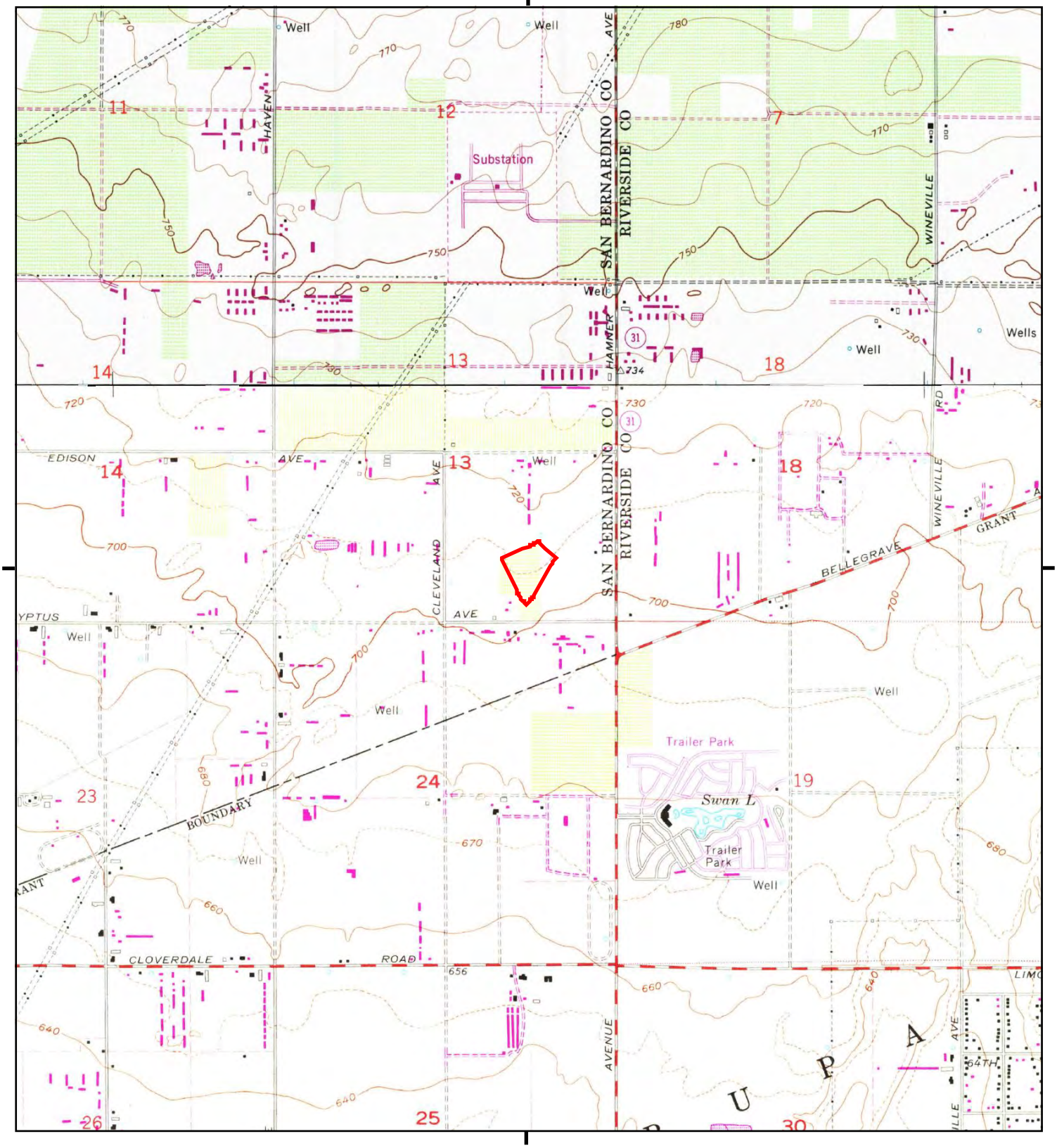
TP, Corona North, 2012, 7.5-minute
N, Guasti, 2012, 7.5-minute

SITE NAME: Not Reported
ADDRESS: Not Reported
Ontario, CA 91761
CLIENT: SCS Engineers

N

Historical Topo Map

1981



This report includes information from the following map sheet(s).

0 Miles 0.25 0.5 1 1.5

NW N NE
W E
SW S SE

TP, Corona North, 1981, 7.5-minute
N, Guasti, 1981, 7.5-minute

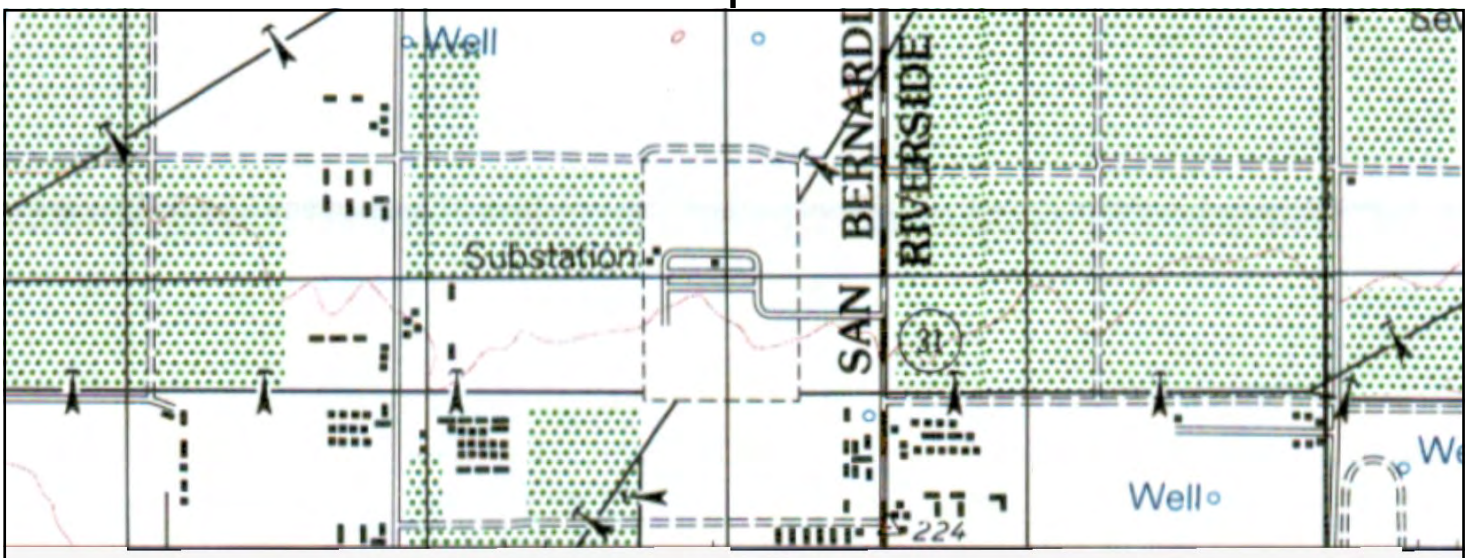
SITE NAME: Not Reported
ADDRESS: Not Reported
Ontario, CA 91761
CLIENT: SCS Engineers

N

7908232 - 4

Historical Topo Map

1976



UNMAPPED

This report includes information from the following map sheet(s).

0 Miles 0.25 0.5 1 1.5

NW N NE
W E
SW S SE

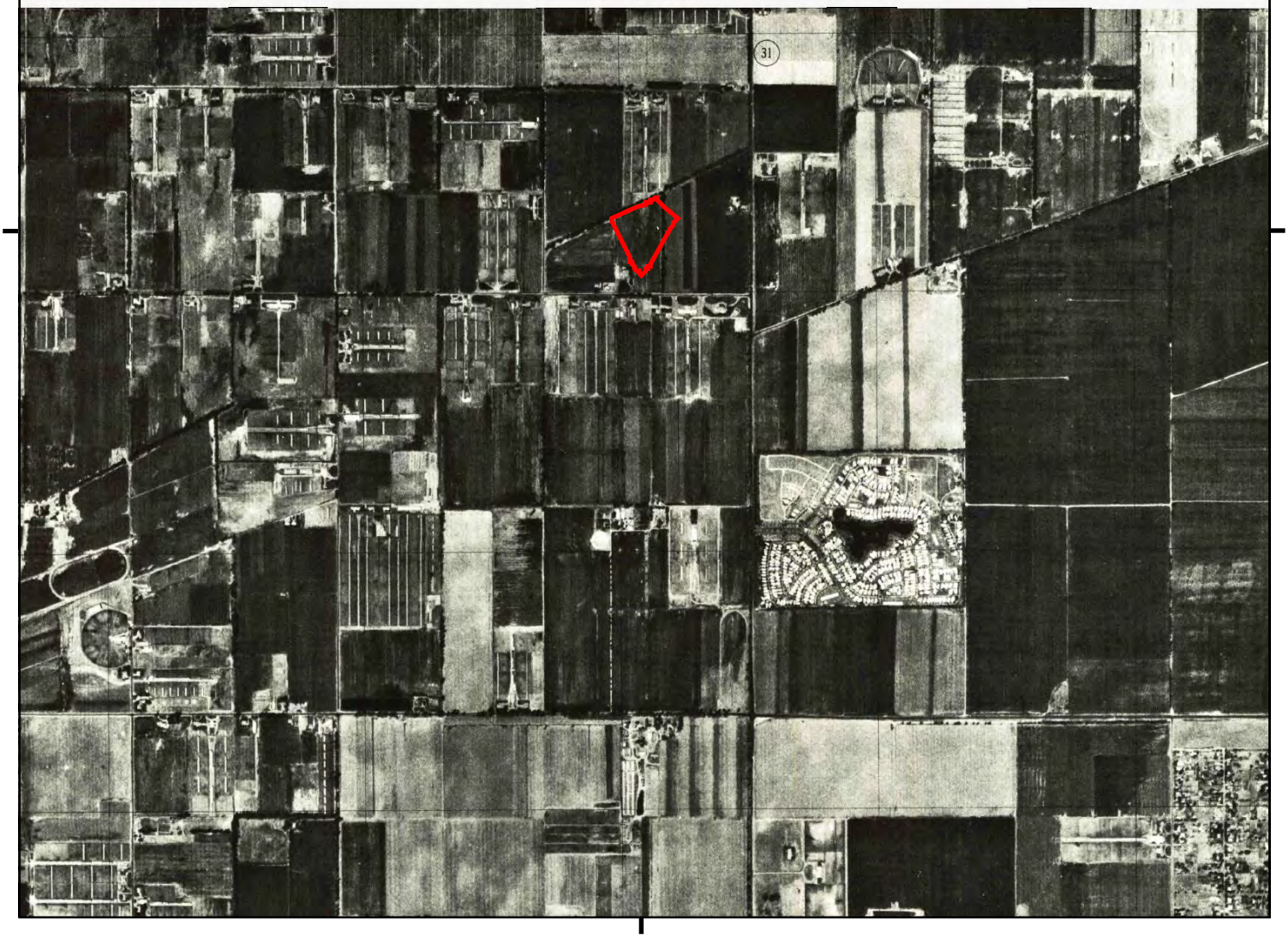
N, ONTARIO, 1976, 15-minute

SITE NAME: Not Reported
ADDRESS: Not Reported
Ontario, CA 91761
CLIENT: SCS Engineers

N

Historical Topo Map

1975



This report includes information from the following map sheet(s).

0 Miles 0.25 0.5 1 1.5

NW N NE
W E
SW S SE

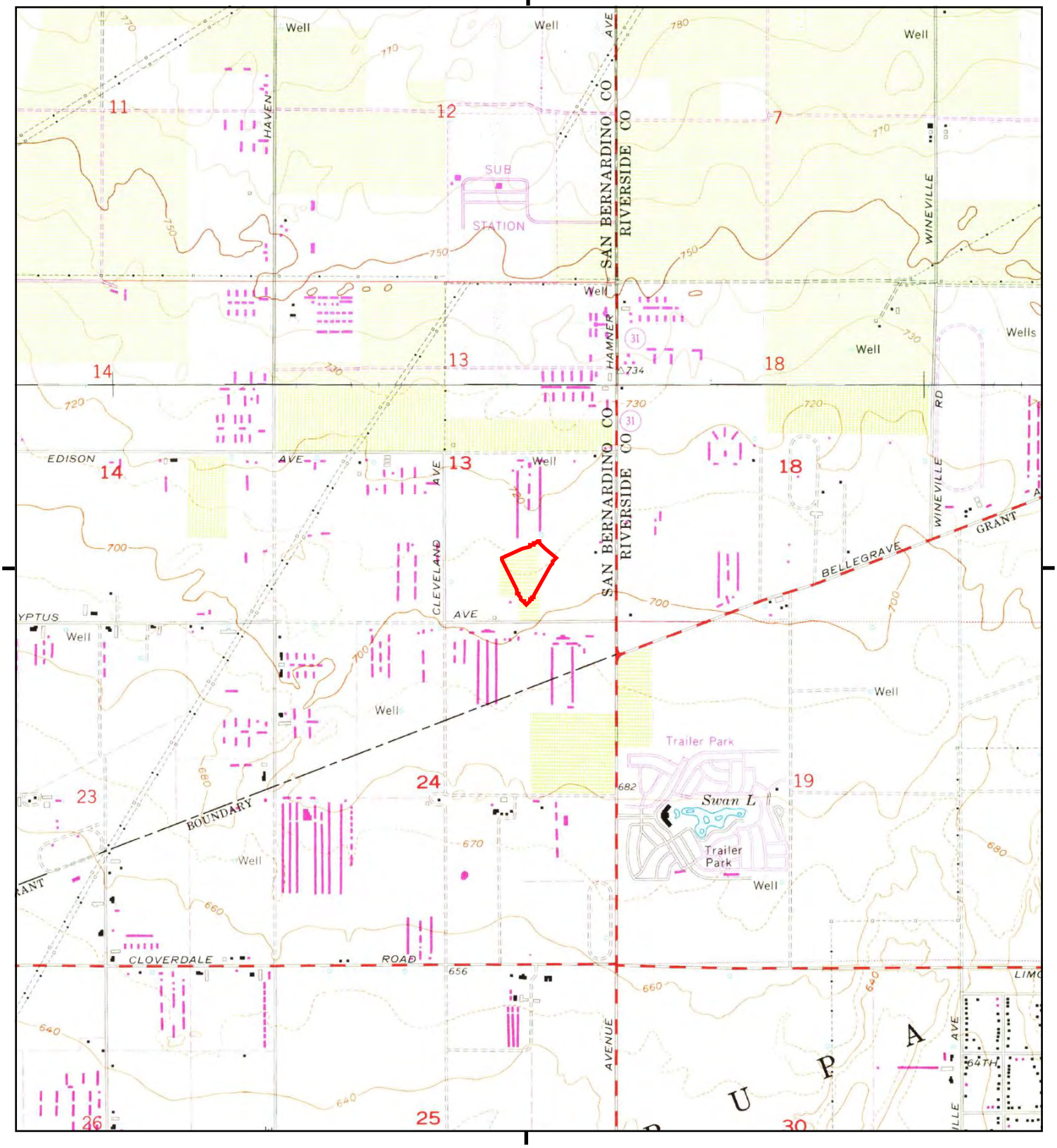
TP, Corona North, 1975, 7.5-minute

SITE NAME: Not Reported
ADDRESS: Not Reported
Ontario, CA 91761
CLIENT: SCS Engineers

N

Historical Topo Map

1973



This report includes information from the following map sheet(s).

0 Miles 0.25 0.5 1 1.5

NW N NE
W E
SW S SE

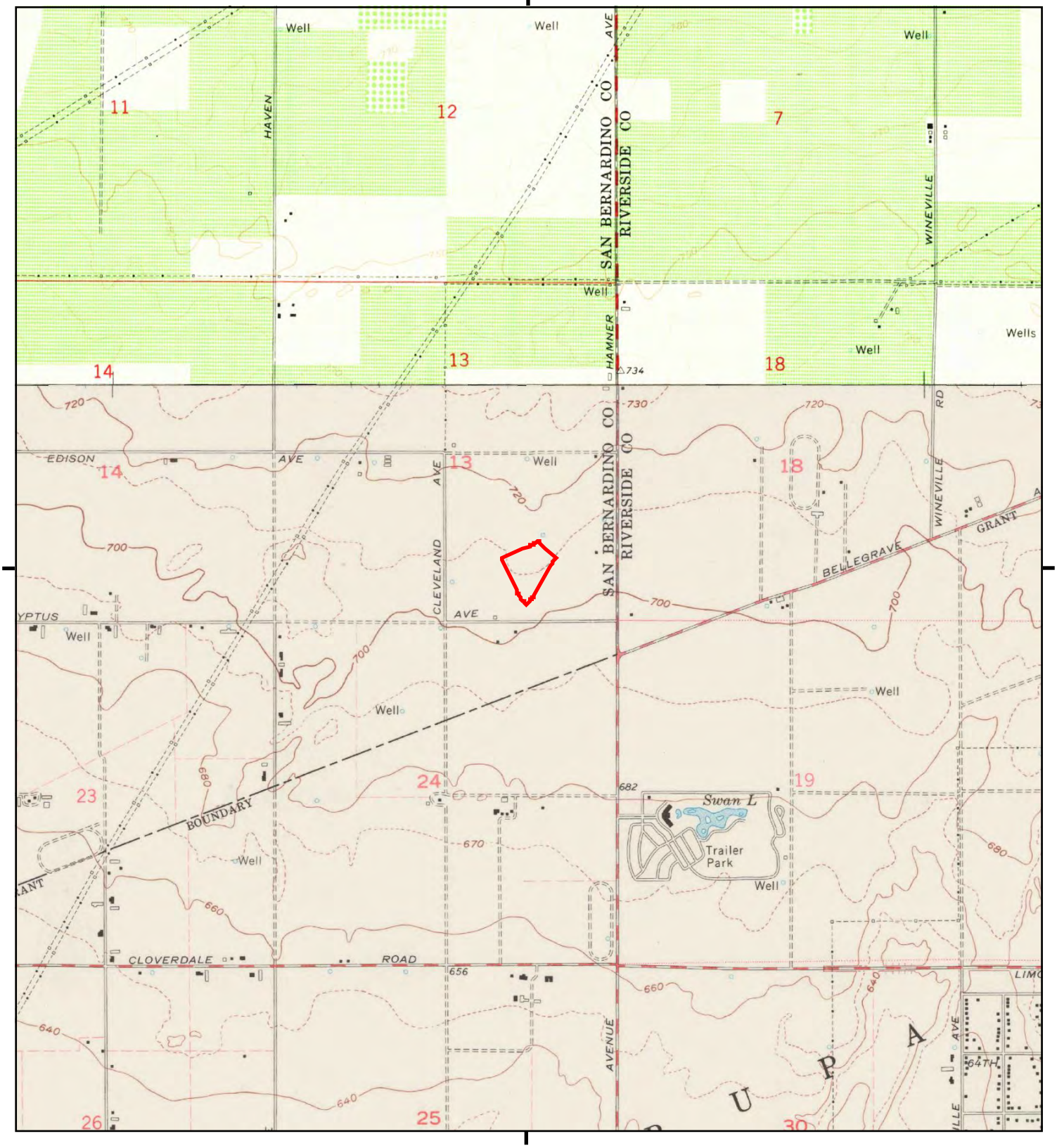
TP, Corona North, 1973, 7.5-minute
N, Guasti, 1973, 7.5-minute

SITE NAME: Not Reported
ADDRESS: Not Reported
Ontario, CA 91761
CLIENT: SCS Engineers

N

Historical Topo Map

1966, 1967



This report includes information from the following map sheet(s).

0 Miles 0.25 0.5 1 1.5

NW N NE
W E
SW S SE

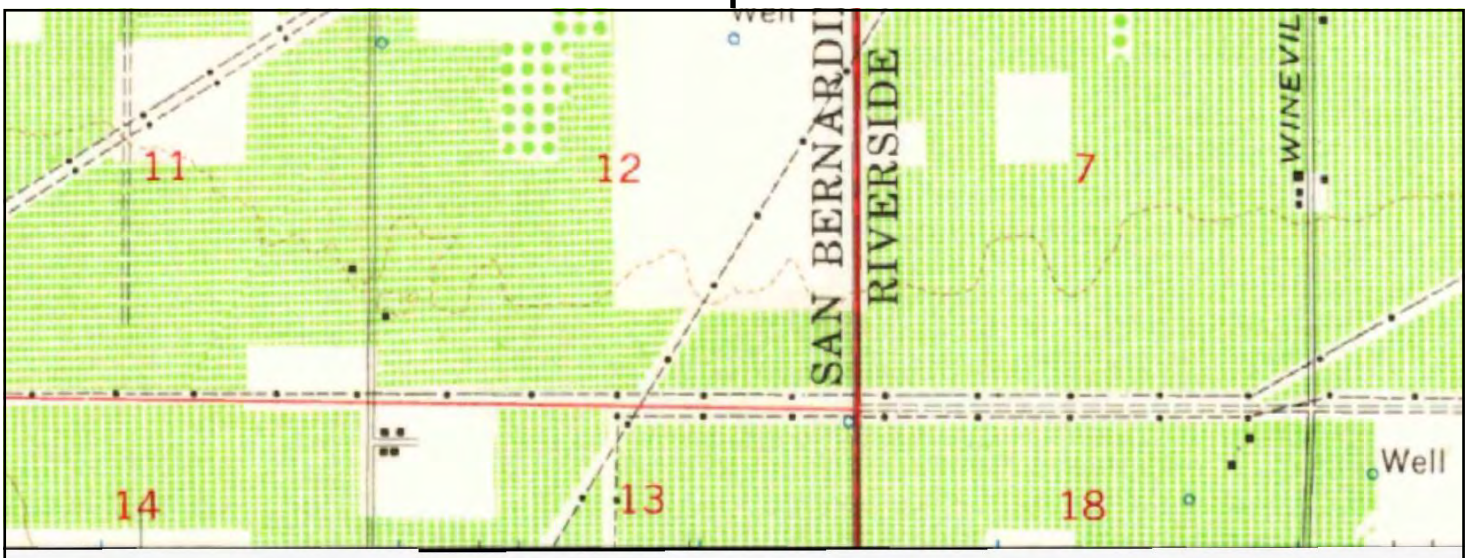
TP, Corona North, 1967, 7.5-minute
N, Guasti, 1966, 7.5-minute

SITE NAME: Not Reported
ADDRESS: Not Reported
Ontario, CA 91761
CLIENT: SCS Engineers

N

Historical Topo Map

1954



UNMAPPED

This report includes information from the following map sheet(s).

0 Miles 0.25 0.5 1 1.5

NW N NE
W E
SW S SE

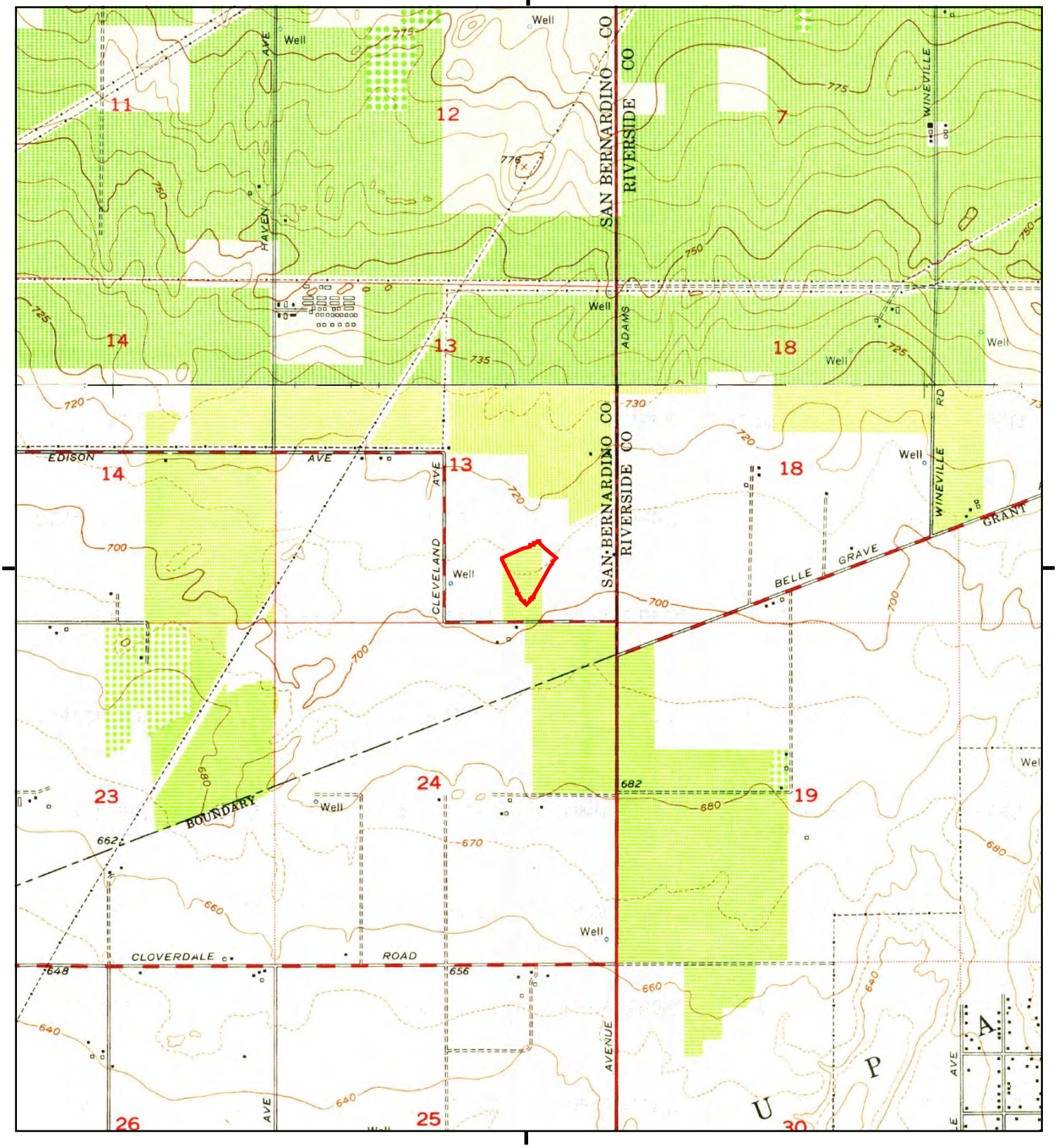
N, Ontario, 1954, 15-minute

SITE NAME: Not Reported
ADDRESS: Not Reported
Ontario, CA 91761
CLIENT: SCS Engineers

N

Historical Topo Map

1953, 1954



This report includes information from the following map sheet(s).

0 Miles 0.25 0.5 1 1.5

NW N NE
W E
SW S SE

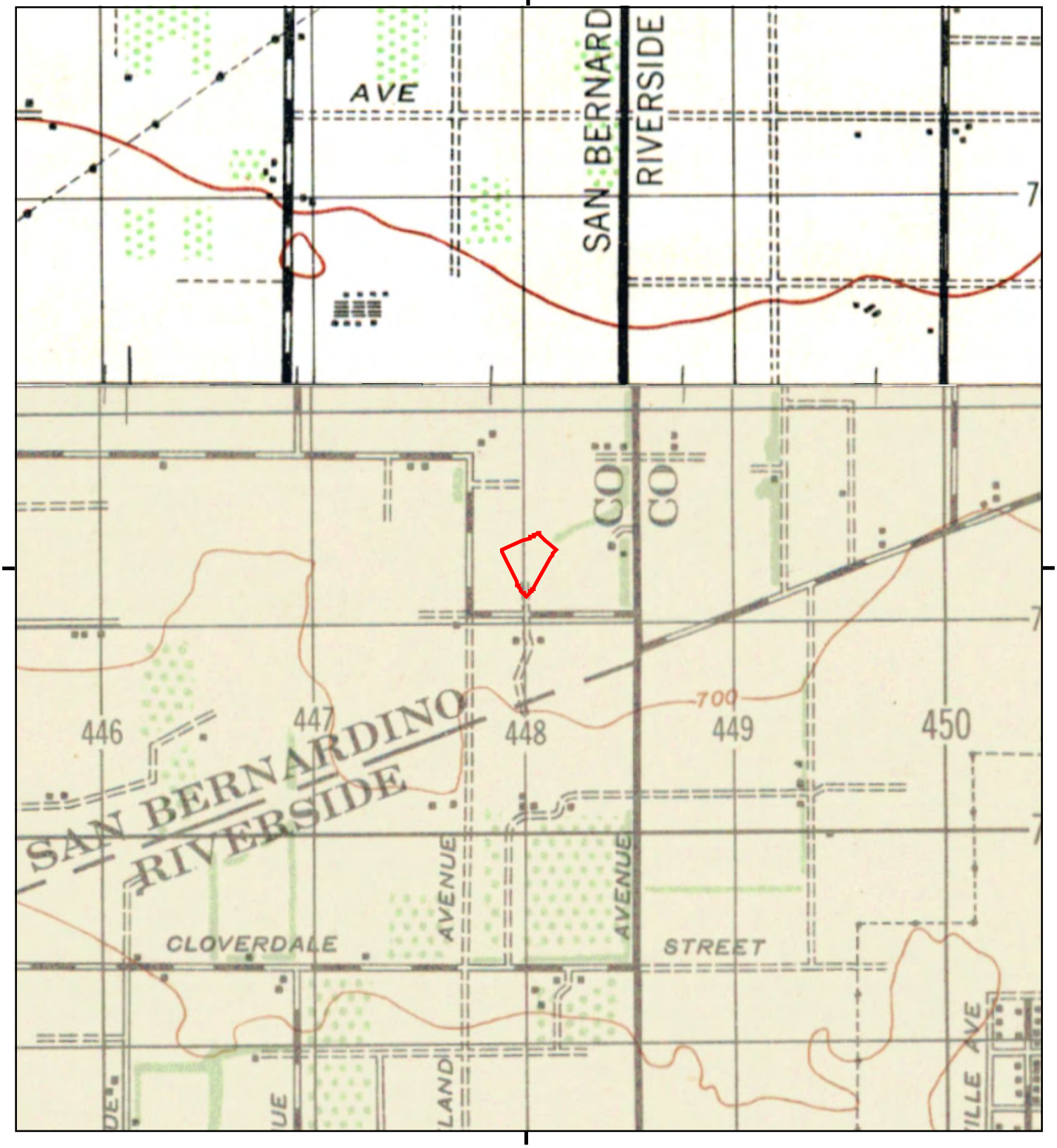
TP, Corona North, 1954, 7.5-minute
N, Guasti, 1953, 7.5-minute

SITE NAME: Not Reported
ADDRESS: Not Reported
Ontario, CA 91761
CLIENT: SCS Engineers

N

Historical Topo Map

1944, 1947



This report includes information from the following map sheet(s).

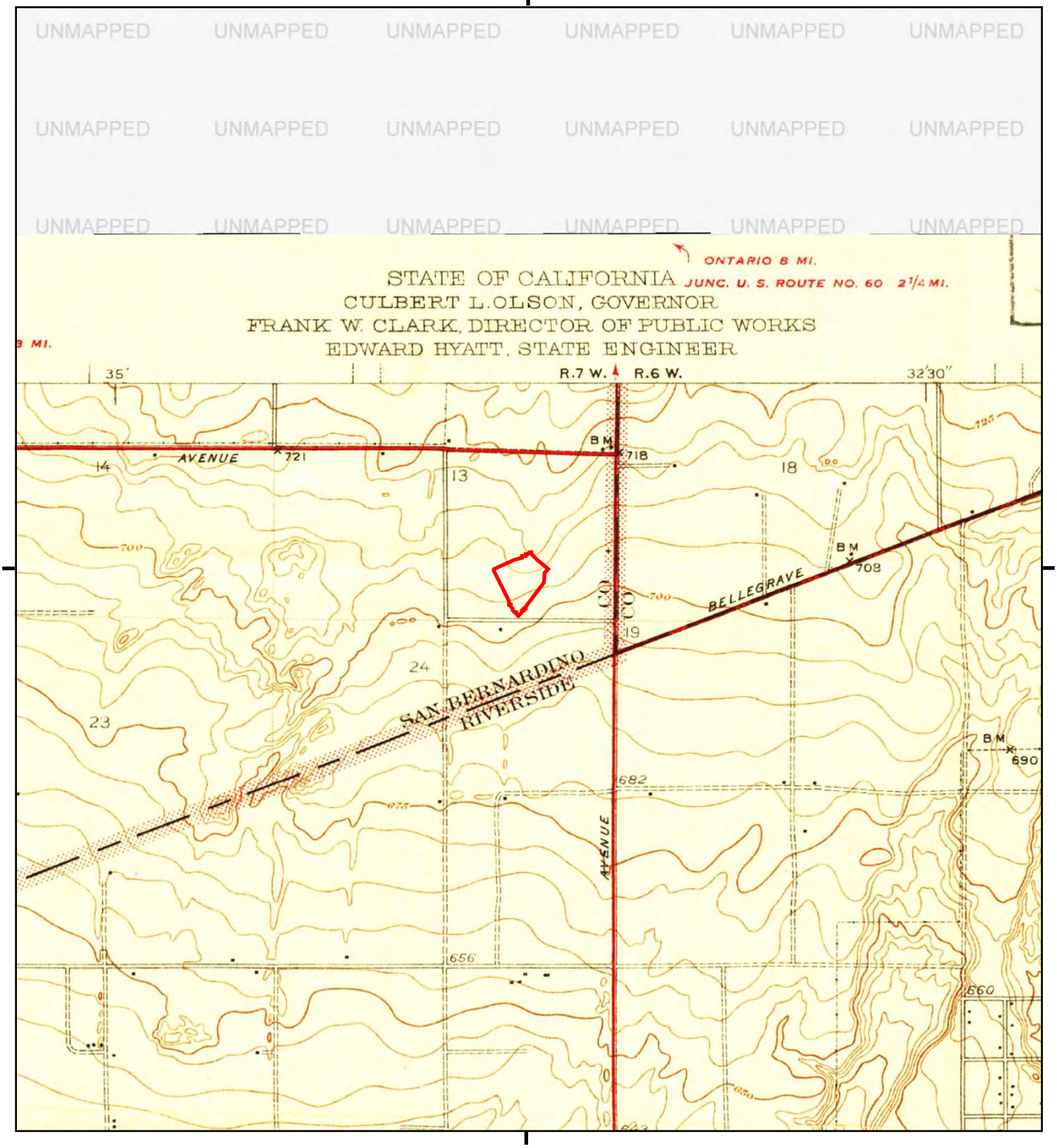
0 Miles 0.25 0.5 1 1.5

NW N NE
W E
SW S SE

TP, CORONA, 1947, 15-minute
N, CUCAMONGA, 1944, 15-minute

SITE NAME: Not Reported
ADDRESS: Not Reported
Ontario, CA 91761
CLIENT: SCS Engineers

N



This report includes information from the following map sheet(s).

0 Miles 0.25 0.5 1 1.5

NW N NE
W E
SW S SE

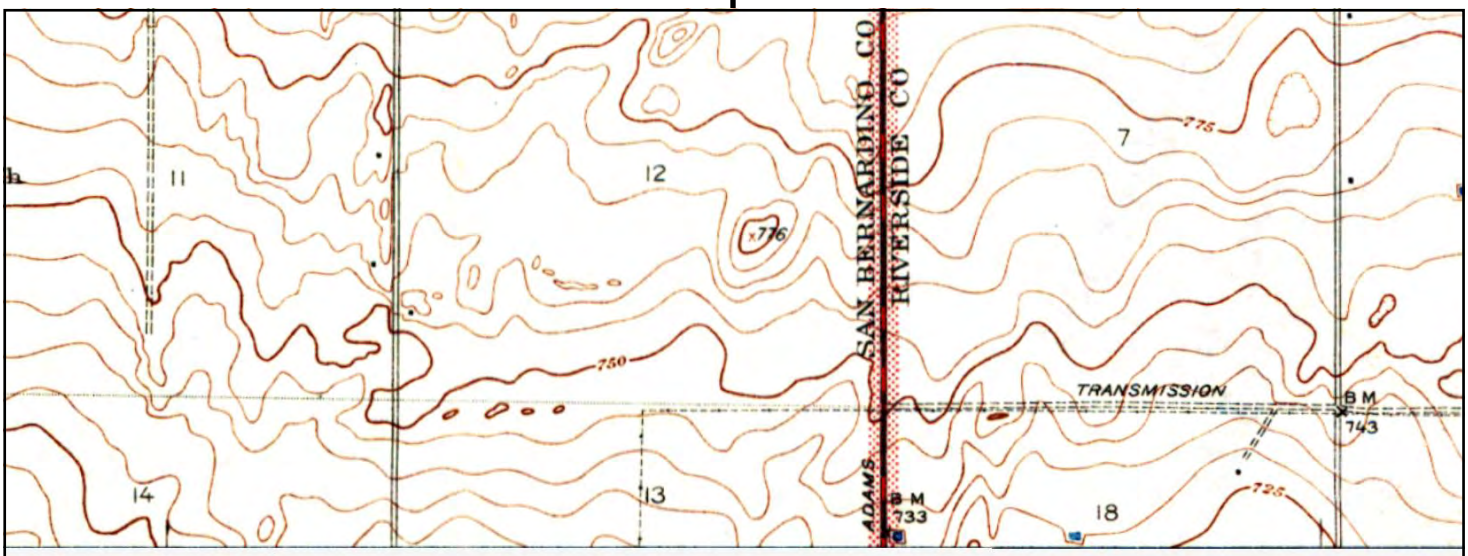
TP, Corona and Vicinity, 1942, 7.5-minute

SITE NAME: Not Reported
ADDRESS: Not Reported
Ontario, CA 91761
CLIENT: SCS Engineers

N

Historical Topo Map

1941



UNMAPPED

This report includes information from the following map sheet(s).

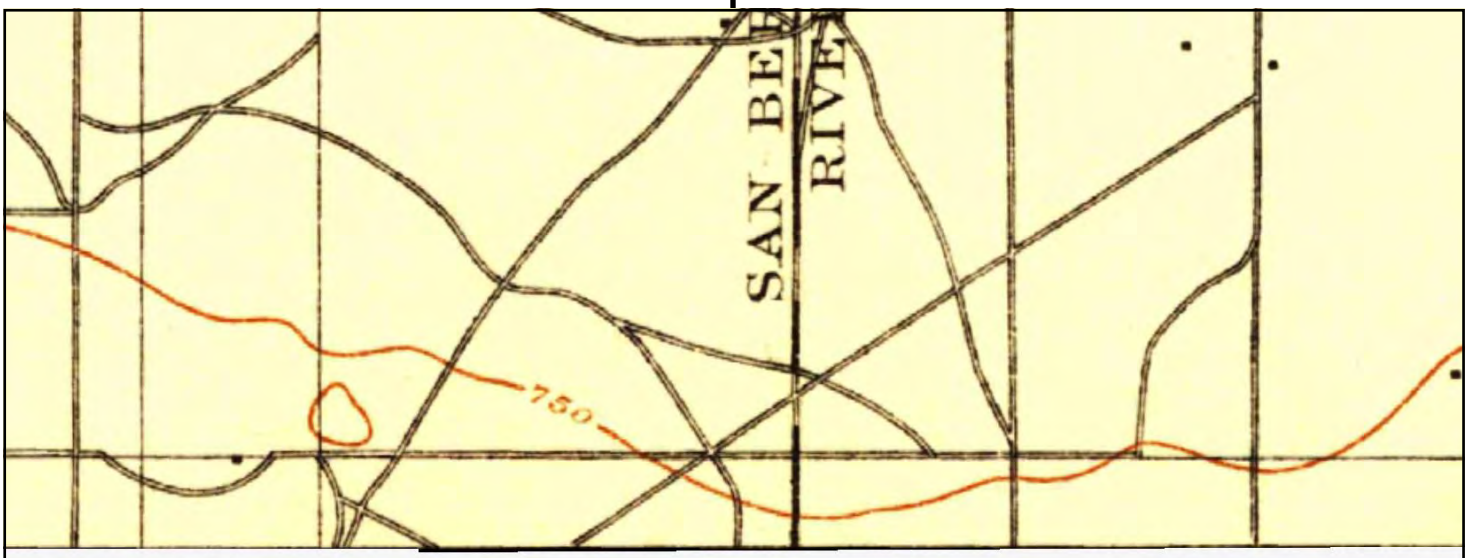
0 Miles 0.25 0.5 1 1.5

NW N NE
W E
SW S SE

N, GUASTI VICINITY, 1941, 7.5-minute

SITE NAME: Not Reported
ADDRESS: Not Reported
Ontario, CA 91761
CLIENT: SCS Engineers

N



UNMAPPED

This report includes information from the following map sheet(s).

0 Miles 0.25 0.5 1 1.5

NW N NE
W E
SW S SE

N, Cucamonga, 1903, 15-minute

SITE NAME: Not Reported
ADDRESS: Not Reported
Ontario, CA 91761
CLIENT: SCS Engineers

N

UNMAPPED UNMAPPED UNMAPPED UNMAPPED UNMAPPED UNMAPPED
UNMAPPED UNMAPPED UNMAPPED UNMAPPED UNMAPPED UNMAPPED
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This report includes information from the following map sheet(s).

0 Miles 0.25 0.5 1 1.5

NW N NE
W E
SW S SE

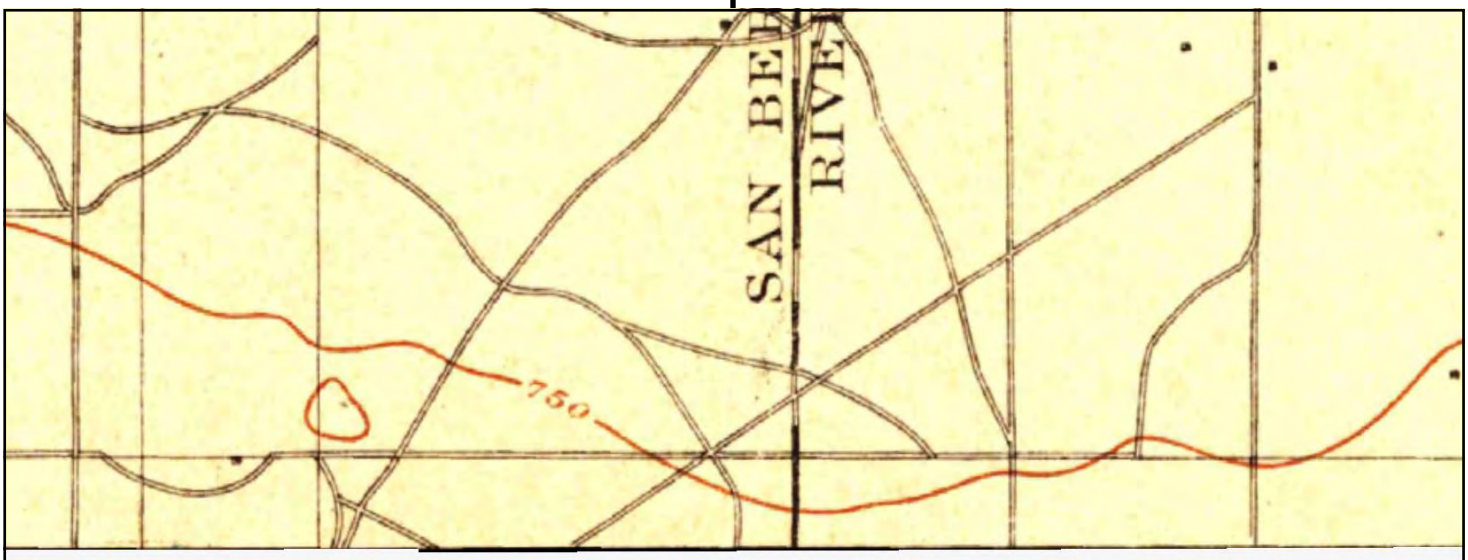
TP, Corona, 1902, 30-minute

SITE NAME: Not Reported
ADDRESS: Not Reported
Ontario, CA 91761
CLIENT: SCS Engineers

N

Historical Topo Map

1900



UNMAPPED

This report includes information from the following map sheet(s).

0 Miles 0.25 0.5 1 1.5

NW N NE
W E
SW S SE

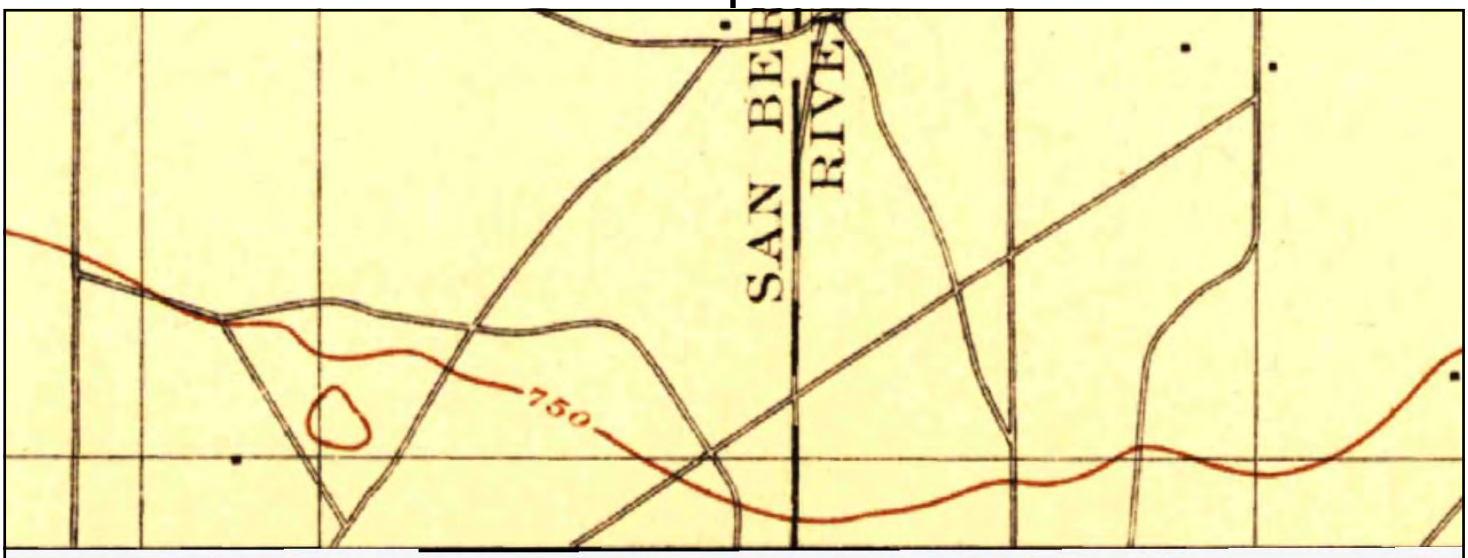
N, Cucamonga, 1900, 15-minute

SITE NAME: Not Reported
ADDRESS: Not Reported
Ontario, CA 91761
CLIENT: SCS Engineers

N

Historical Topo Map

1897



UNMAPPED

This report includes information from the following map sheet(s).

0 Miles 0.25 0.5 1 1.5

NW N NE
W E
SW S SE

N, Cucamonga, 1897, 15-minute

SITE NAME: Not Reported
ADDRESS: Not Reported
Ontario, CA 91761
CLIENT: SCS Engineers

N

Not Reported

Not Reported

Ontario, CA 91761

Inquiry Number: 7908232.3

February 25, 2025

Certified Sanborn® Map Report

6 Armstrong Road, 4th floor
Shelton, CT 06484
Toll Free: 800.352.0050
www.edrnet.com

Certified Sanborn® Map Report

02/25/25

Site Name:	Client Name:
Not Reported	SCS Engineers
Not Reported	3900 Kilroy Airport Way
Ontario, CA 91761	Long Beach, CA 90806
EDR Inquiry # 7908232.3	Contact: Jose William Padua

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The Sanborn Library is continually enhanced with newly identified map archives. This report accesses all maps in the collection as of the day this report was generated.

Certified Sanborn Results:

Certification # 3ADF-461D-86D6

PO # 01225043.00 T1

Project Armherst Ave & Eucalyptus Ave

UNMAPPED PROPERTY

This report certifies that the complete holdings of the Sanborn Library, LLC collection have been searched based on client supplied target property information, and fire insurance maps covering the target property were not found.

Sanborn® Library search results

Certification #: 3ADF-461D-86D6

The Sanborn Library includes more than 1.2 million fire insurance maps from Sanborn, Bromley, Perris & Browne, Hopkins, Barlow and others which track historical property usage in approximately 12,000 American cities and towns. Collections searched:

- ☑ Library of Congress
- ☑ University Publications of America
- ☑ EDR Private Collection

The Sanborn Library LLC Since 1866™

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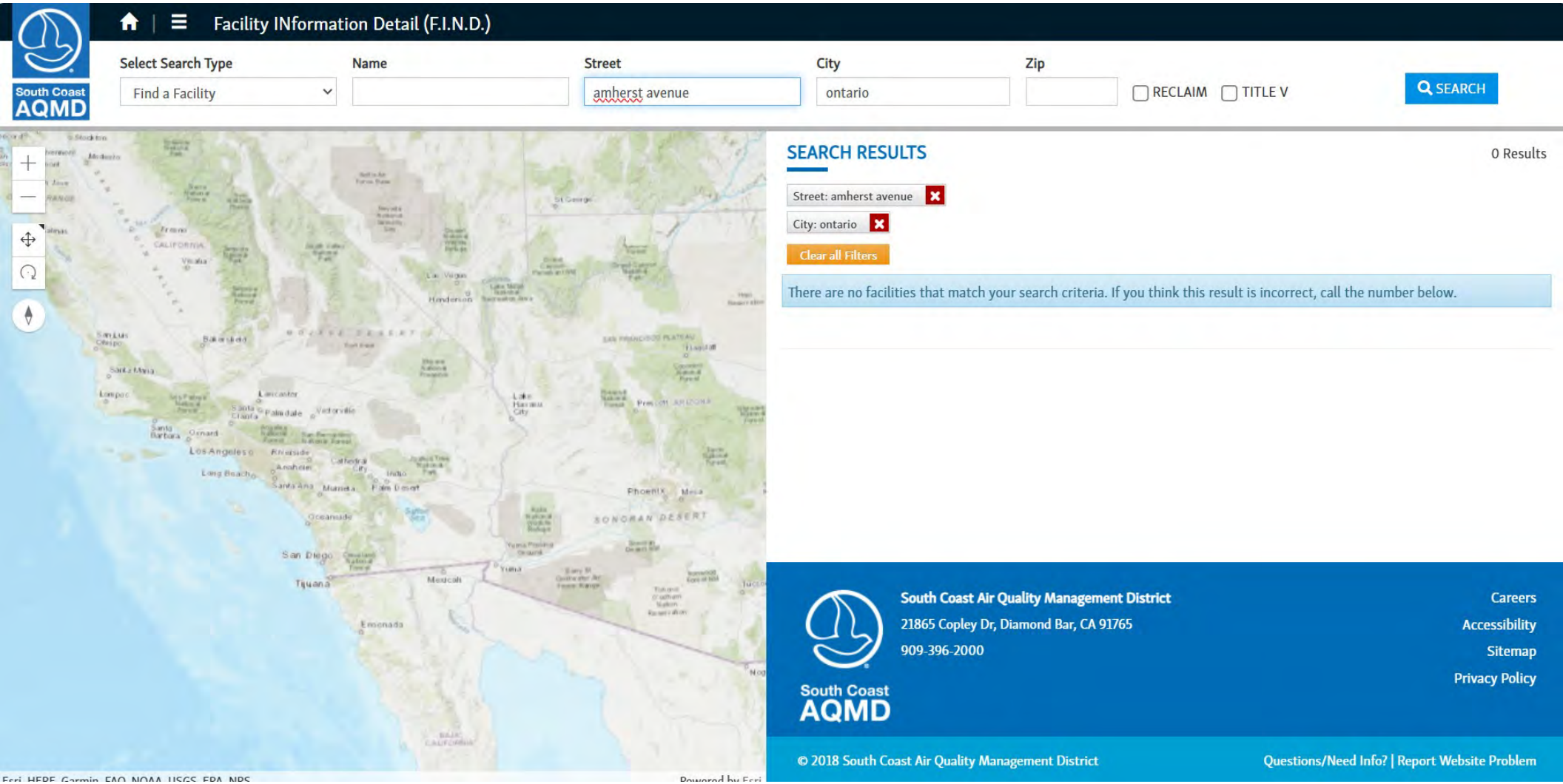
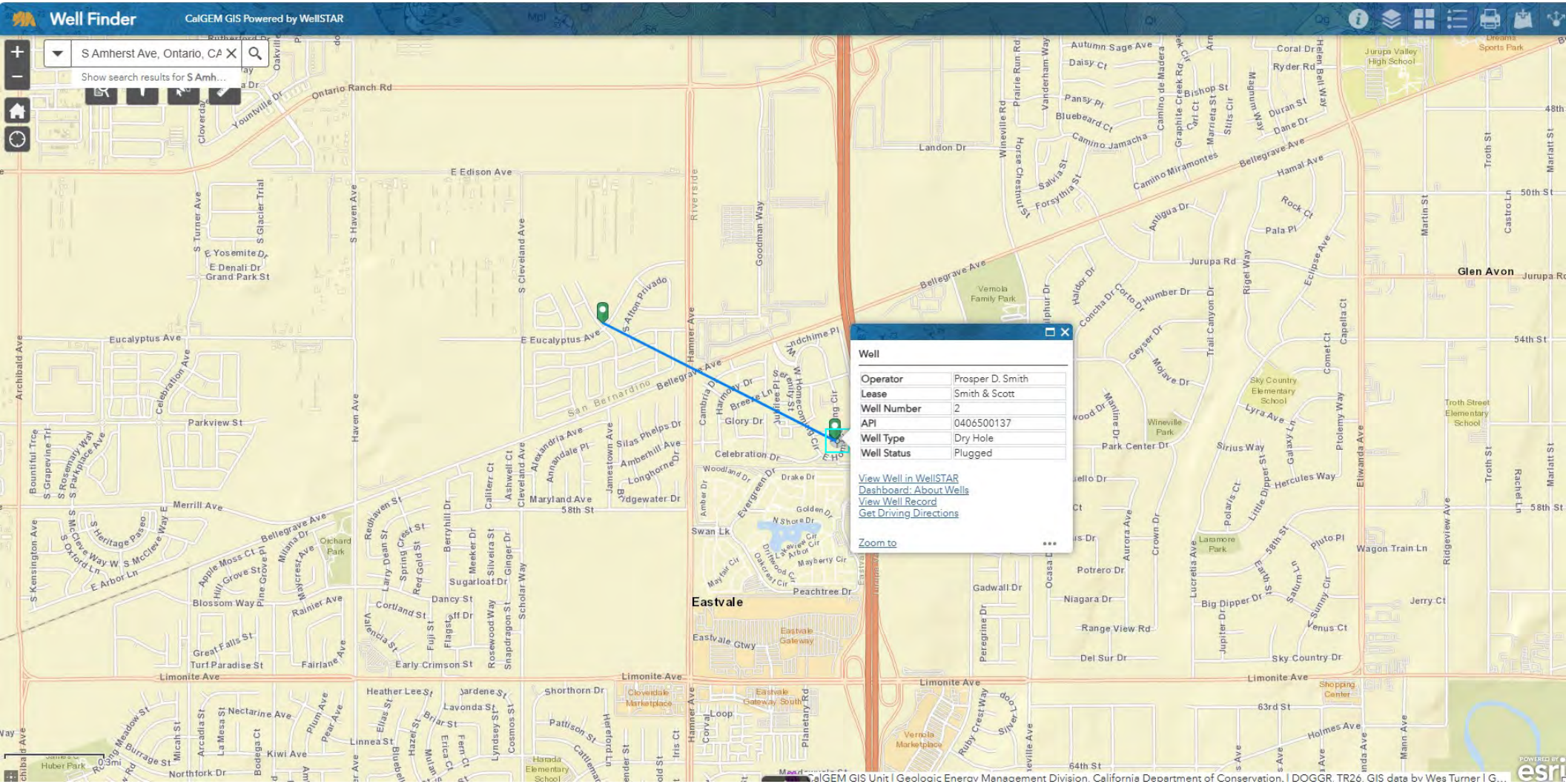
Appendix D

Regulatory Agency Review Information


Facility INformation Detail (F.I.N.D.)
Select Search Type
Find a Facility
Name
Street
amherst avenue
City
ontario
Zip
RECLAIM
TITLE V
SEARCH
SEARCH RESULTS
0 Results
Street: amherst avenue
City: ontario
Clear all Filters
There are no facilities that match your search criteria. If you think this result is incorrect, call the number below.
South Coast Air Quality Management District
21865 Copley Dr, Diamond Bar, CA 91765
909-396-2000
Careers
Accessibility
Sitemap
Privacy Policy
© 2018 South Coast Air Quality Management District
Questions/Need Info? | Report Website Problem

CalEPA
CalEPA Regulated Site Portal
s amherst ave, ontario
18 sites found
Did you mean:
S Amherst Ave, Ontario, CA 91761
Rynsburger Farms
10785 EDISON
ONTARIO CA 91761
Gordon Dairy #2
14482 CLEVELAND
ONTARIO CA 91761
Echeverrea & Sons Dairy #2
14330 CLEVELAND
ONTARIO CA 91761
Carlos Echeverria & Sons Dairy
14330 CLEVELAND
ONTARIO CA 91761
WESTRA DAIRY FARMS
11009 EUCALYPTUS AVE
ONTARIO CA 91710
Esperanza
EDISON AVENUE AND SCHOLAR WAY
ONTARIO CA 91761
S Cleveland Ave
Hamner Ave
Goodman Way
E Eucalyptus Ave
Bellegrave Ave
500 ft


Well Finder
CalGEM GIS Powered by WellSTAR
S Amherst Ave, Ontario, CA
Show search results for S Amh...
Well
Operator Prosper D. Smith
Lease Smith & Scott
Well Number 2
API 0406500137
Well Type Dry Hole
Well Status Plugged
View Well in WellSTAR Dashboard: About Wells
View Well Record
Get Driving Directions
Zoom to
Eastvale
Glen Avon
Ontario Ranch Rd
E Edison Ave
Eucalyptus Ave
Bellegrave Ave
Limonite Ave
Jurupa Rd
Landon Dr
Peachtree Dr
Swan Lk
Vernola Family Park
Cloverdale Marketplace
Eastvale Gateway
Eastvale Gateway South
Harada Elementary School
Sky Country Elementary School
Troth Street Elementary School
Laramore Park
Wineville Park
Jurupa Valley High School
Dreams Sports Park
Huber Park
Orchard Park
Shopping Center
CalGEM GIS Unit | Geologic Energy Management Division, California Department of Conservation, | DOGGR, TR26, GIS data by Wes Turner | G...
esri

Department of Toxic Substances Control

Yana Garcia
Secretary for
Environmental Protection

Katherine M. Butler, MPH, Director
5796 Corporate Avenue
Cypress, California 90630
https://dtsc.ca.gov/

Gavin Newsom
Governor

February 24, 2025

Maddie Peterson
SCS Engineers
Mpeterson@scsengineers.com

PR4-022425-03

Dear Requestor:

On Jan 24, 2025, the Department of Toxic Substances Control (DTSC) received your email requesting records under the Public Records Act. After a thorough review of our files, *no site records* were found pertaining to the sites/facilities referenced below.

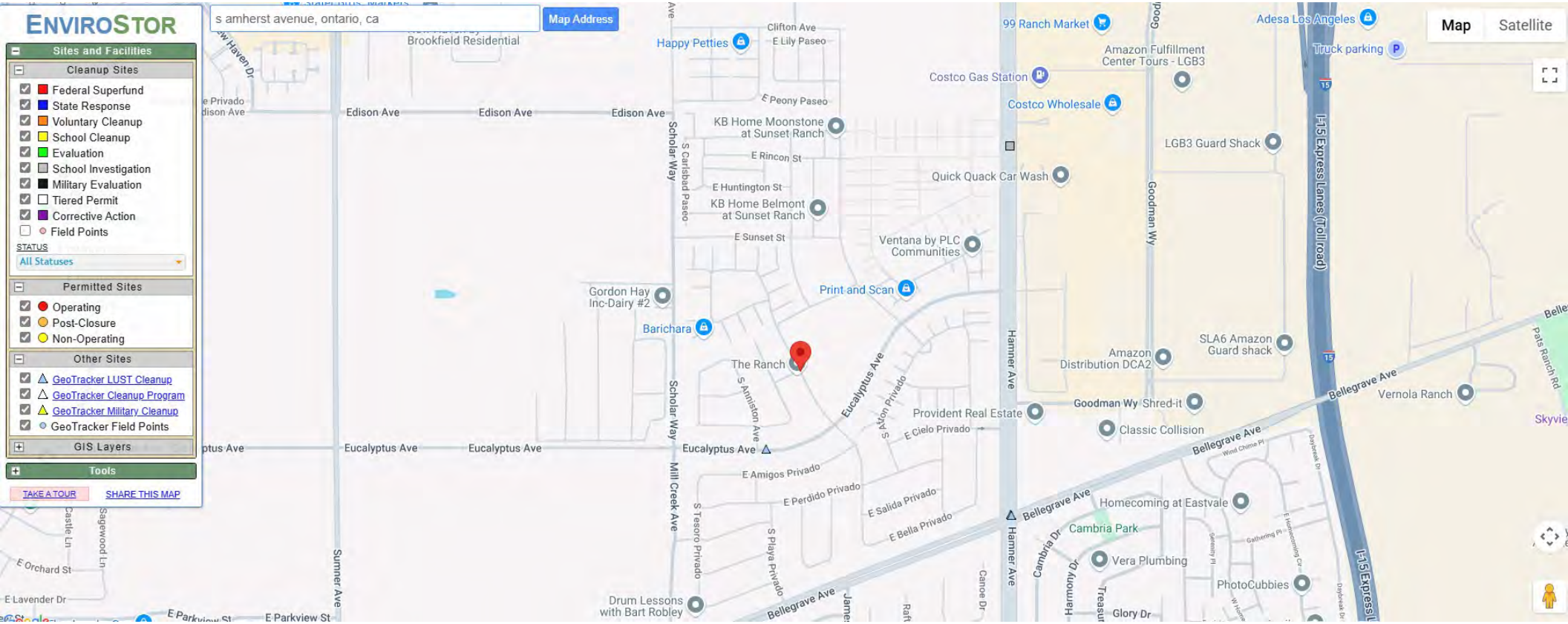
1073-101-05 Ontario

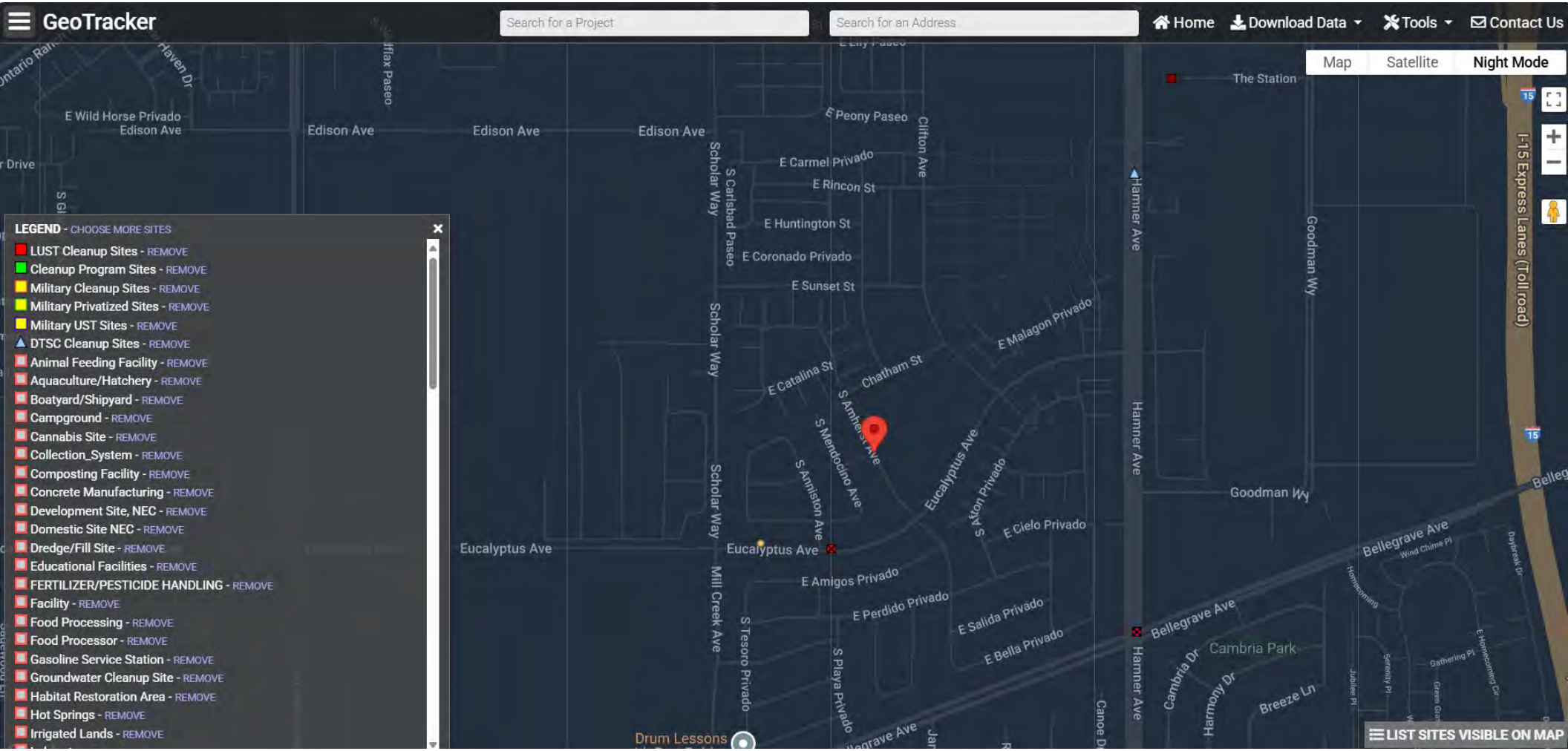
We were unable to locate an address in the county database using the APNs provided and we are unable to search our records using APNs as our databases do not include this information.

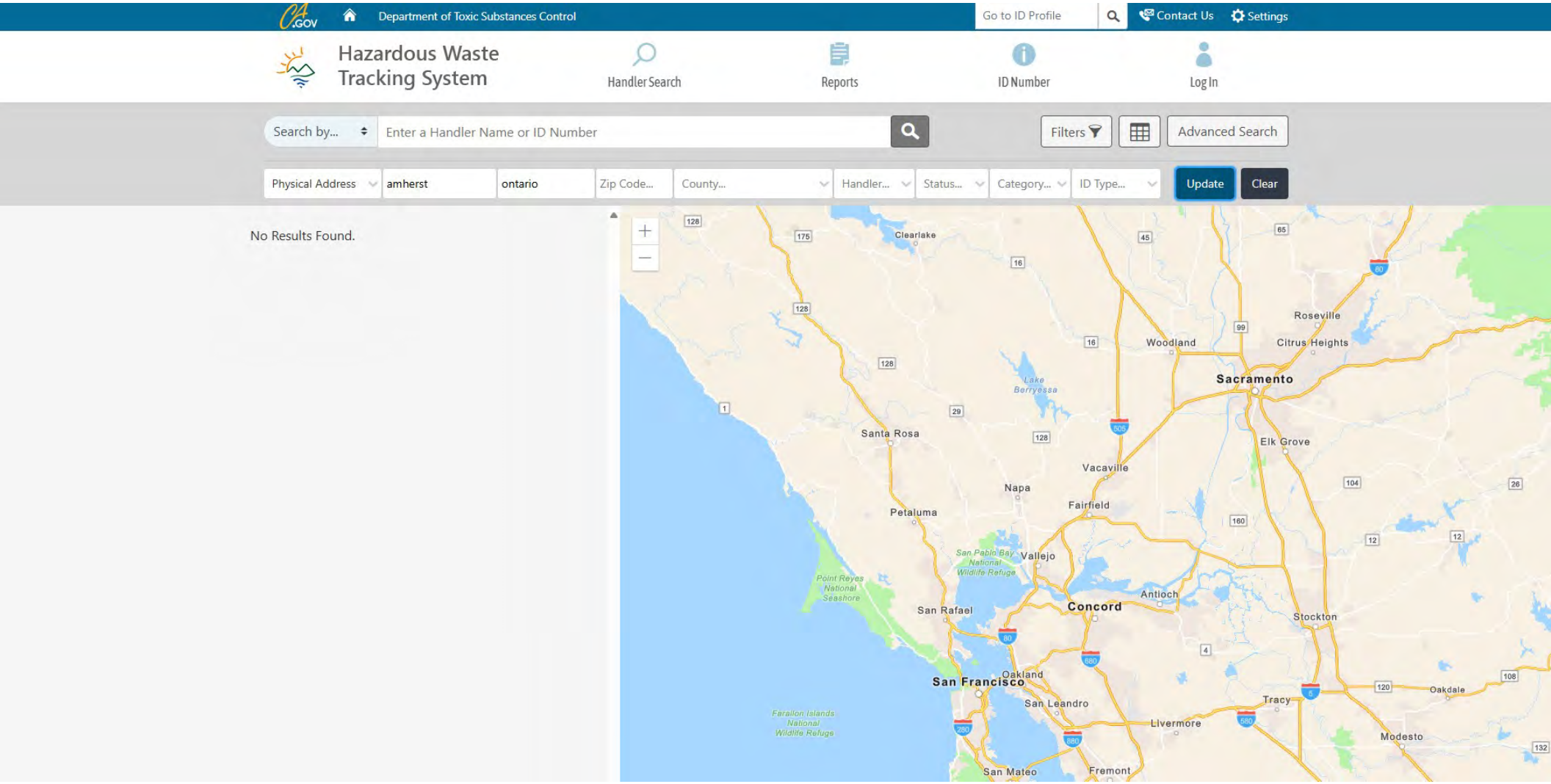
A large number of our records are available on EnviroStor, an online database that provides non-confidential, public access to DTSCs data management system. It tracks our cleanup, permitting, enforcement, and investigation efforts at hazardous waste facilities and sites with known or suspected contamination issues. EnviroStor is available 24/7, 365 days a year. The data reflects the latest updates as they are entered in the system. Access it from your computer or smartphone, the local library – anywhere Internet access is available. Just go to www.envirostor.dtsc.ca.gov. You'll find a step-by-step tour of EnviroStor under the "How to Use EnviroStor" menu on the website.

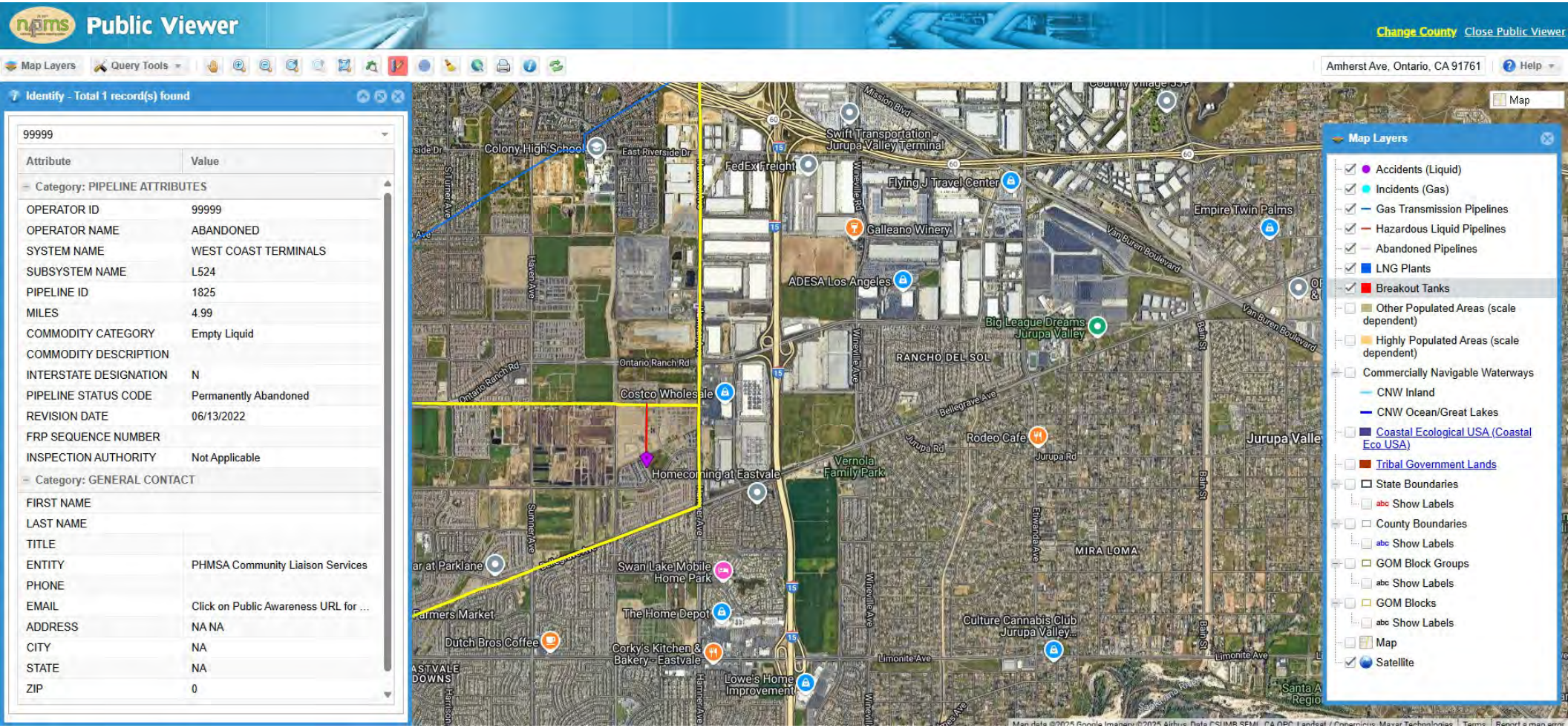
If you have any questions or would like further information regarding your request, please contact me at 714.484.5336 or via email at jone.barrio@dtsc.ca.gov .

Sincerely,
Jone Barrio
Jone Barrio
Regional Records Coordinator


ENVIROSTOR
s amherst avenue, ontario, ca
Map Address
Sites and Facilities
Cleanup Sites
Federal Superfund
State Response
Voluntary Cleanup
School Cleanup
Evaluation
School Investigation
Military Evaluation
Tiered Permit
Corrective Action
Field Points
STATUS
All Statuses
Permitted Sites
Operating
Post-Closure
Non-Operating
Other Sites
GeoTracker LUST Cleanup
GeoTracker Cleanup Program
GeoTracker Military Cleanup
GeoTracker Field Points
GIS Layers
Tools
TAKE A TOUR
SHARE THIS MAP
Map
Satellite
Brookfield Residential
Happy Petties
Clifton Ave
E Lily Paseo
99 Ranch Market
Amazon Fulfillment Center Tours - LGB3
Adesa Los Angeles
Truck parking
Costco Gas Station
Costco Wholesale
E Peony Paseo
KB Home Moonstone at Sunset Ranch
LGB3 Guard Shack
E Rincon St
Quick Quack Car Wash
E Huntington St
KB Home Belmont at Sunset Ranch
E Sunset St
Ventana by PLC Communities
Print and Scan
Gordon Hay Inc-Dairy #2
Barichara
The Ranch
SLA6 Amazon Guard shack
Amazon Distribution DCA2
Goodman Wy Shred-it
Provident Real Estate
E Cielo Privado
Classic Collision
Vernola Ranch
Homecoming at Eastvale
Cambria Park
Vera Plumbing
PhotoCubbies
Drum Lessons with Bart Robley
Edison Ave
Eucalyptus Ave
Bellegrave Ave
Scholar Way
Mill Creek Ave
Hamner Ave
Goodman Wy
I-15 Express Lanes (Tolliroad)
E Amigos Privado
E Perdido Privado
E Salida Privado
E Bella Privado
S Tesoro Privado
S Playa Privado
S Anniston Ave
S Alton Privado
Cambria Dr
Harmony Dr
Canoe Dr
Glory Dr
Sumner Ave
E Orchard St
E Lavender Dr
E Parkview St
Castle Ln
Sagewood Ln
Pats Ranch Rd
Skyvie


GeoTracker
Search for a Project
Search for an Address
Home
Download Data
Tools
Contact Us
Map
Satellite
Night Mode
LEGEND - CHOOSE MORE SITES
LUST Cleanup Sites - REMOVE
Cleanup Program Sites - REMOVE
Military Cleanup Sites - REMOVE
Military Privatized Sites - REMOVE
Military UST Sites - REMOVE
DTSC Cleanup Sites - REMOVE
Animal Feeding Facility - REMOVE
Aquaculture/Hatchery - REMOVE
Boatyard/Shipyard - REMOVE
Campground - REMOVE
Cannabis Site - REMOVE
Collection_System - REMOVE
Composting Facility - REMOVE
Concrete Manufacturing - REMOVE
Development Site, NEC - REMOVE
Domestic Site NEC - REMOVE
Dredge/Fill Site - REMOVE
Educational Facilities - REMOVE
FERTILIZER/PESTICIDE HANDLING - REMOVE
Facility - REMOVE
Food Processing - REMOVE
Food Processor - REMOVE
Gasoline Service Station - REMOVE
Groundwater Cleanup Site - REMOVE
Habitat Restoration Area - REMOVE
Hot Springs - REMOVE
Irrigated Lands - REMOVE
E Wild Horse Privado
Edison Ave
Edison Ave
Edison Ave
Edison Ave
E Peony Paseo
Clifton Ave
E Carmel Privado
E Rincon St
E Huntington St
E Coronado Privado
E Sunset St
Scholar Way
S Carlsbad Paseo
Scholar Way
Scholar Way
Mill Creek Ave
E Malagon Privado
E Catalina St
Chatham St
S Amherst Ave
S Mendocino Ave
S Anniston Ave
Eucalyptus Ave
S Alton Privado
E Cielo Privado
Eucalyptus Ave
Eucalyptus Ave
E Amigos Privado
E Perdido Privado
E Salida Privado
E Bella Privado
S Tesoro Privado
S Playa Privado
Hamner Ave
Hamner Ave
Hamner Ave
Goodman Wy
Goodman Wy
The Station
I-15 Express Lanes (Toll road)
Bellegrave Ave
Bellegrave Ave
Bellegrave Ave
Cambria Dr
Cambria Park
Harmony Dr
Breeze Ln
Drum Lessons
LIST SITES VISIBLE ON MAP


Department of Toxic Substances Control
Go to ID Profile
Contact Us
Settings
Hazardous Waste Tracking System
Handler Search
Reports
ID Number
Log In
Search by...
Enter a Handler Name or ID Number
Filters
Advanced Search
Physical Address
amherst
ontario
Zip Code...
County...
Handler...
Status...
Category...
ID Type...
Update
Clear
No Results Found.
Clearlake
Roseville
Woodland
Citrus Heights
Sacramento
Lake Berryessa
Santa Rosa
Elk Grove
Vacaville
Napa
Fairfield
Petaluma
Vallejo
San Pablo Bay National Wildlife Refuge
Point Reyes National Seashore
Antioch
Concord
San Rafael
Stockton
Oakland
San Francisco
San Leandro
Tracy
Oakdale
Farallon Islands National Wildlife Refuge
Livermore
Modesto
San Mateo
Fremont


Public Viewer
Change County
Close Public Viewer
Map Layers
Query Tools
Amherst Ave, Ontario, CA 91761
Help
Identify - Total 1 record(s) found
99999
Attribute
Value
Category: PIPELINE ATTRIBUTES
OPERATOR ID 99999
OPERATOR NAME ABANDONED
SYSTEM NAME WEST COAST TERMINALS
SUBSYSTEM NAME L524
PIPELINE ID 1825
MILES 4.99
COMMODITY CATEGORY Empty Liquid
COMMODITY DESCRIPTION
INTERSTATE DESIGNATION N
PIPELINE STATUS CODE Permanently Abandoned
REVISION DATE 06/13/2022
FRP SEQUENCE NUMBER
INSPECTION AUTHORITY Not Applicable
Category: GENERAL CONTACT
FIRST NAME
LAST NAME
TITLE
ENTITY PHMSA Community Liaison Services
PHONE
EMAIL Click on Public Awareness URL for ...
ADDRESS NA NA
CITY NA
STATE NA
ZIP 0
Map Layers
Accidents (Liquid)
Incidents (Gas)
Gas Transmission Pipelines
Hazardous Liquid Pipelines
Abandoned Pipelines
LNG Plants
Breakout Tanks
Other Populated Areas (scale dependent)
Highly Populated Areas (scale dependent)
Commercially Navigable Waterways
CNW Inland
CNW Ocean/Great Lakes
Coastal Ecological USA (Coastal Eco USA)
Tribal Government Lands
State Boundaries
Show Labels
County Boundaries
Show Labels
GOM Block Groups
Show Labels
GOM Blocks
Show Labels
Map
Satellite
Colony High School
Swift Transportation - Jurupa Valley Terminal
FedEx Freight
Flying J Travel Center
Galleano Winery
Empire Twin Palms
ADESA Los Angeles
Big League Dreams Jurupa Valley
RANCHO DEL SOL
Costco Wholesale
Rodeo Cafe
Vernola Family Park
Homecoming at Eastvale
Swan Lake Mobile Home Park
The Home Depot
Culture Cannabis Club Jurupa Valley...
Dutch Bros Coffee
Corky's Kitchen & Bakery - Eastvale
Lowe's Home Improvement
MIRA LOMA
Jurupa Valle
Mission Blvd
East Riverside Dr
Van Buren Boulevard
Ontario Ranch Rd
Bellegrave Ave
Jurupa Rd
Limonite Ave
Hamner Ave
Wineville Ave
Etiwanda Ave
Bain St
Haven Ave
Turner Ave
Sumner Ave

Search for Records

Enter information below to search the City's recording database. Records can be searched for by entering any of the following information:

- Record Number
- Parcel Number
- Address (Work Location)

Search results, if any, will display at the bottom of the page. Details can be viewed by clicking on the Record Number link within the search list.

General Search

Record Number:

Parcel No.:
1073-101-05

Street No.:
From - To

Direction: --Select--

Street Name:

Street Type: --Select--

Unit Type: --Select--

Unit No.:

Search | Clear

Notice:
Your search returned no results. Please modify your search criteria and try again.

Peterson, Maddie

From: WB-RB8-FileReview8 <FileReview8@waterboards.ca.gov>
Sent: Monday, February 24, 2025 9:49 AM
To: Peterson, Maddie
Cc: Hutchens, Ashley
Subject: RE: Records Request

This email originated from outside of SCS Engineers. Do not click links or open attachments unless you recognize the sender and know the content is safe.

Good morning,

Unfortunately, we do not use APNs or cross streets to maintain our files. We only use facility names and/or physical address numbers to locate files. If you can provide a numerical address or facility name, we can carry out your request.

If we can be of further assistance, please do not hesitate to contact us again.

Thank you,
File Review Desk
3737 Main St. Suite 500
Riverside, CA 92501

From: Peterson, Maddie <MPeterson@scsengineers.com>
Sent: Monday, February 24, 2025 9:38 AM
To: WB-RB8-FileReview8 <FileReview8@waterboards.ca.gov>
Cc: Hutchens, Ashley <AHutchens@SCSEngineers.com>
Subject: Records Request

Caution: External Email. Use caution when clicking links or opening attachments. When in doubt, contact DIT or use the Phish Alert Button.

Hello,

We are requesting any and all information for the following parcel in Ontario, CA.:

- **APN#: 1073-101-05**

Thank you,

Please note that we have a new Suite # as of 2/10/25.

Maddie Peterson
Staff Professional
SCS Engineers
3900 Kilroy Airport Way, **#300**
Long Beach, CA 90806

Office (562) 426-9544 x2914
Cell (562) 355-6956
MPeterson@scsengineers.com

Peterson, Maddie

From: San Bernardino County Public Records <messages@nextrequest.com>
Sent: Monday, February 24, 2025 2:13 PM
To: Peterson, Maddie
Subject: Your San Bernardino County public records request #25-5396 has been closed.

This email originated from outside of SCS Engineers. Do not click links or open attachments unless you recognize the sender and know the content is safe.

-- Attach a non-image file and/or reply ABOVE THIS LINE with a message, and it will be sent to staff on this request. --

San Bernardino County Public Records

Record request #25-5396 has been closed. The closure reason supplied was:

Hello,
Environmental Health Services does not have the type of record (s) you have requested. Please submit your request to the San Bernardino County Fire Protection District. Go to their website at https://sbcfire.org/publicrecords/ for more information.
Thank you,
Raul Robles
OA IV

View Request 25-5396

https://sanbernardinocounty.nextrequest.com/requests/25-5396

Questions about your request? Reply to this email or sign in to contact staff at San Bernardino County.

Technical support: See our help page

Appendix E

EDR Database Report Information

Not Reported
Not Reported
Ontario, CA 91761

Inquiry Number: 07908232.2r
February 25, 2025

The EDR Radius Map™ Report with GeoCheck®

6 Armstrong Road, 4th floor
Shelton, CT 06484
Toll Free: 800.352.0050
www.edrnet.com

TABLE OF CONTENTS

SECTION	PAGE
Executive Summary	ES1
Overview Map	2
Detail Map	3
Map Findings Summary	4
Map Findings	9
Orphan Summary	36
Government Records Searched/Data Currency Tracking	GR-1

GEOCHECK ADDENDUM

Physical Setting Source Addendum	A-1
Physical Setting Source Summary	A-2
Physical Setting SSURGO Soil Map	A-5
Physical Setting Source Map	A-9
Physical Setting Source Map Findings	A-11
Physical Setting Source Records Searched	PSGR-1

Thank you for your business.
Please contact EDR at 1-800-352-0050
with any questions or comments.

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EXECUTIVE SUMMARY

A search of available environmental records was conducted by Environmental Data Resources, Inc (EDR). The report was designed to assist parties seeking to meet the search requirements of EPA's Standards and Practices for All Appropriate Inquiries (40 CFR Part 312), the ASTM Standard Practice for Environmental Site Assessments (E1527 - 21), the ASTM Standard Practice for Environmental Site Assessments for Forestland or Rural Property (E2247 - 16), the ASTM Standard Practice for Limited Environmental Due Diligence: Transaction Screen Process (E1528 - 22) or custom requirements developed for the evaluation of environmental risk associated with a parcel of real estate.

TARGET PROPERTY INFORMATION

ADDRESS

NOT REPORTED
ONTARIO, CA 91761

COORDINATES

Latitude (North):	33.9922060 - 33° 59' 31.94''
Longitude (West):	117.5628570 - 117° 33' 46.28''
Universal Tranverse Mercator:	Zone 11
UTM X (Meters):	448015.2
UTM Y (Meters):	3761240.2
Elevation:	713 ft. above sea level

USGS TOPOGRAPHIC MAP ASSOCIATED WITH TARGET PROPERTY

Target Property Map:	50005749 CORONA NORTH, CA
Version Date:	2022
North Map:	50005338 GUASTI, CA
Version Date:	2021

AERIAL PHOTOGRAPHY IN THIS REPORT

Portions of Photo from:	20200423
Source:	USDA

MAPPED SITES SUMMARY

Target Property Address:
NOT REPORTED
ONTARIO, CA 91761

Click on Map ID to see full detail.

MAP ID	SITE NAME	ADDRESS	DATABASE ACRONYMS	RELATIVE ELEVATION	DIST (ft. & mi.) DIRECTION
A1	WESTRA DAIRY FARMS	11009 EUCALYPTUS AVE	UST FINDER RELEASE	Lower	583, 0.110, SW
A2	WESTRA DAIRY FARMS	11009 EUCALYPTUS AVE	LUST, Cortese, HIST CORTESE, CERS	Lower	583, 0.110, SW
3	MILK MAID DAIRY	10869 EUCALYPTUS AVE	ENF, San Bern. Co. Permit, WDS, CIWQS	Lower	1005, 0.190, SW
4	WELL II-3		PFAS	Lower	1207, 0.229, South
5	PROPOSED K-8 SCHOOL	5240 AND 5380 HAMNER	ENVIROSTOR, SCH	Lower	1512, 0.286, SE
6	CHAFFEY HIGH SCHOOL	EDISON AVENUE / HAVE	ENVIROSTOR, SCH	Higher	3893, 0.737, WNW
7	SWAN LAKE TEXACO	5800 HAMMER AVENUE	Notify 65	Lower	4268, 0.808, SE

EXECUTIVE SUMMARY

TARGET PROPERTY SEARCH RESULTS

The target property was not listed in any of the databases searched by EDR.

DATABASES WITH NO MAPPED SITES

No mapped sites were found in EDR's search of available ("reasonably ascertainable ") government records either on the target property or within the search radius around the target property for the following databases:

STANDARD ENVIRONMENTAL RECORDS

Lists of Federal NPL (Superfund) sites

NPL ---- National Priority List
Proposed NPL ---- Proposed National Priority List Sites
NPL LIENS ---- Federal Superfund Liens

Lists of Federal Delisted NPL sites

Delisted NPL ---- National Priority List Deletions

Lists of Federal sites subject to CERCLA removals and CERCLA orders

FEDERAL FACILITY ---- Federal Facility Site Information listing
SEMS ---- Superfund Enterprise Management System

Lists of Federal CERCLA sites with NFRAP

SEMS-ARCHIVE ---- Superfund Enterprise Management System Archive

Lists of Federal RCRA facilities undergoing Corrective Action

CORRACTS ---- Corrective Action Report

Lists of Federal RCRA TSD facilities

RCRA-TSDF ---- RCRA - Treatment, Storage and Disposal

Lists of Federal RCRA generators

RCRA-LQG ---- RCRA - Large Quantity Generators
RCRA-SQG ---- RCRA - Small Quantity Generators
RCRA-VSQG ---- RCRA - Very Small Quantity Generators (Formerly Conditionally Exempt Small Quantity Generators)

Federal institutional controls / engineering controls registries

LUCIS ---- Land Use Control Information System

US ENG CONTROLS Engineering Controls Sites List
US INST CONTROLS Institutional Controls Sites List

Federal ERNS list

ERNS Emergency Response Notification System

Lists of state- and tribal (Superfund) equivalent sites

RESPONSE State Response Sites

Lists of state and tribal landfills and solid waste disposal facilities

SWF/LF Solid Waste Information System

Lists of state and tribal leaking storage tanks

INDIAN LUST Leaking Underground Storage Tanks on Indian Land
CPS-SLIC Statewide SLIC Cases

Lists of state and tribal registered storage tanks

FEMA UST Underground Storage Tank Listing
UST Active UST Facilities
AST Aboveground Petroleum Storage Tank Facilities
INDIAN UST Underground Storage Tanks on Indian Land

Lists of state and tribal voluntary cleanup sites

INDIAN VCP Voluntary Cleanup Priority Listing
VCP Voluntary Cleanup Program Properties

Lists of state and tribal brownfield sites

BROWNFIELDS Considered Brownfieds Sites Listing

ADDITIONAL ENVIRONMENTAL RECORDS

Local Brownfield lists

US BROWNFIELDS A Listing of Brownfields Sites

Local Lists of Landfill / Solid Waste Disposal Sites

WMUDS/SWAT Waste Management Unit Database
SWRCY Recycler Database
HAULERS Registered Waste Tire Haulers Listing
INDIAN ODI Report on the Status of Open Dumps on Indian Lands
ODI Open Dump Inventory
DEBRIS REGION 9 Torres Martinez Reservation Illegal Dump Site Locations
IHS OPEN DUMPS Open Dumps on Indian Land

Local Lists of Hazardous waste / Contaminated Sites

US HIST CDL Delisted National Clandestine Laboratory Register

HIST Cal-Sites	Historical Calsites Database
SCH	School Property Evaluation Program
CDL	Clandestine Drug Labs
Toxic Pits	Toxic Pits Cleanup Act Sites
CERS HAZ WASTE	California Environmental Reporting System Hazardous Waste
US CDL	National Clandestine Laboratory Register

Local Lists of Registered Storage Tanks

SWEEPS UST	SWEEPS UST Listing
HIST UST	Hazardous Substance Storage Container Database
CERS TANKS	California Environmental Reporting System (CERS) Tanks
CA FID UST	Facility Inventory Database

Local Land Records

LIENS	Environmental Liens Listing
LIENS 2	CERCLA Lien Information
DEED	Deed Restriction Listing

Records of Emergency Release Reports

HMIRS	Hazardous Materials Information Reporting System
CHMIRS	California Hazardous Material Incident Report System
LDS	Land Disposal Sites Listing
MCS	Military Cleanup Sites Listing
SPILLS 90	SPILLS 90 data from FirstSearch

Other Ascertainable Records

RCRA NonGen / NLR	RCRA - Non Generators / No Longer Regulated
FUDS	Formerly Used Defense Sites
DOD	Department of Defense Sites
SCRD DRYCLEANERS	State Coalition for Remediation of Drycleaners Listing
US FIN ASSUR	Financial Assurance Information
EPA WATCH LIST	EPA WATCH LIST
2020 COR ACTION	2020 Corrective Action Program List
TSCA	Toxic Substances Control Act
TRIS	Toxic Chemical Release Inventory System
SSTS	Section 7 Tracking Systems
ROD	Records Of Decision
RMP	Risk Management Plans
RAATS	RCRA Administrative Action Tracking System
PRP	Potentially Responsible Parties
PADS	PCB Activity Database System
ICIS	Integrated Compliance Information System
FTTS	FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)
MLTS	Material Licensing Tracking System
COAL ASH DOE	Steam-Electric Plant Operation Data
COAL ASH EPA	Coal Combustion Residues Surface Impoundments List
PCB TRANSFORMER	PCB Transformer Registration Database
RADINFO	Radiation Information Database
HIST FTTS	FIFRA/TSCA Tracking System Administrative Case Listing
DOT OPS	Incident and Accident Data

CONSENT	Superfund (CERCLA) Consent Decrees
INDIAN RESERV	Indian Reservations
FUSRAP	Formerly Utilized Sites Remedial Action Program
UMTRA	Uranium Mill Tailings Sites
LEAD SMELTERS	Lead Smelter Sites
US AIRS	Aerometric Information Retrieval System Facility Subsystem
US MINES	Mines Master Index File
MINES MRDS	Mineral Resources Data System
ABANDONED MINES	Abandoned Mines
FINDS	Facility Index System/Facility Registry System
ECHO	Enforcement & Compliance History Information
DOCKET HWC	Hazardous Waste Compliance Docket Listing
UXO	Unexploded Ordnance Sites
FUELS PROGRAM	EPA Fuels Program Registered Listing
PFAS NPL	Superfund Sites with PFAS Detections Information
PFAS FEDERAL SITES	Federal Sites PFAS Information
PFAS TRIS	List of PFAS Added to the TRI
PFAS TSCA	PFAS Manufacture and Imports Information
PFAS RCRA MANIFEST	PFAS Transfers Identified In the RCRA Database Listing
PFAS ATSDR	PFAS Contamination Site Location Listing
PFAS WQP	Ambient Environmental Sampling for PFAS
PFAS PROJECT	NORTHEASTERN UNIVERSITY PFAS PROJECT
PFAS NPDES	Clean Water Act Discharge Monitoring Information
PFAS ECHO	Facilities in Industries that May Be Handling PFAS Listing
PFAS ECHO FIRE TRAIN	Facilities in Industries that May Be Handling PFAS Listing
PFAS PT 139 AIRPORT	All Certified Part 139 Airports PFAS Information Listing
AQUEOUS FOAM NRC	Aqueous Foam Related Incidents Listing
BIOSOLIDS	ICIS-NPDES Biosolids Facility Data
UST FINDER	UST Finder Database
E MANIFEST	Hazardous Waste Electronic Manifest System
AQUEOUS FOAM	Former Fire Training Facility Assessments Listing
CA BOND EXP. PLAN	Bond Expenditure Plan
CHROME PLATING	Chrome Plating Facilities Listing
CUPA Listings	CUPA Resources List
DRYCLEANERS	Cleaner Facilities
EMI	Emissions Inventory Data
ENF	Enforcement Action Listing
Financial Assurance	Financial Assurance Information Listing
ICE	Inspection, Compliance and Enforcement
HWP	EnviroStor Permitted Facilities Listing
HWT	Registered Hazardous Waste Transporter Database
HWTS	Hazardous Waste Tracking System
HAZNET	Facility and Manifest Data
MINES	Mines Site Location Listing
MWMP	Medical Waste Management Program Listing
NPDES	NPDES Permits Listing
PEST LIC	Pesticide Regulation Licenses Listing
PROC	Certified Processors Database
HAZMAT	Hazardous Material Facilities
UIC	UIC Listing
UIC GEO	UIC GEO (GEOTRACKER)
WASTEWATER PITS	Oil Wastewater Pits Listing
WDS	Waste Discharge System
WIP	Well Investigation Program Case List
MILITARY PRIV SITES	MILITARY PRIV SITES (GEOTRACKER)

EXECUTIVE SUMMARY

PROJECT ---- PROJECT (GEOTRACKER)
WDR ---- Waste Discharge Requirements Listing
CIWQS ---- California Integrated Water Quality System
CERS ---- CERS
NON-CASE INFO ---- NON-CASE INFO (GEOTRACKER)
OTHER OIL GAS ---- OTHER OIL & GAS (GEOTRACKER)
PROD WATER PONDS ---- PROD WATER PONDS (GEOTRACKER)
SAMPLING POINT ---- SAMPLING POINT (GEOTRACKER)
WELL STIM PROJ ---- Well Stimulation Project (GEOTRACKER)

EDR HIGH RISK HISTORICAL RECORDS

EDR Exclusive Records

EDR MGP ---- EDR Proprietary Manufactured Gas Plants
EDR Hist Auto ---- EDR Exclusive Historical Auto Stations
EDR Hist Cleaner ---- EDR Exclusive Historical Cleaners

EDR RECOVERED GOVERNMENT ARCHIVES

Exclusive Recovered Govt. Archives

RGA LF ---- Recovered Government Archive Solid Waste Facilities List
RGA LUST ---- Recovered Government Archive Leaking Underground Storage Tank

SURROUNDING SITES: SEARCH RESULTS

Surrounding sites were identified in the following databases.

Elevations have been determined from the USGS Digital Elevation Model and should be evaluated on a relative (not an absolute) basis. Relative elevation information between sites of close proximity should be field verified. Sites with an elevation equal to or higher than the target property have been differentiated below from sites with an elevation lower than the target property.
Page numbers and map identification numbers refer to the EDR Radius Map report where detailed data on individual sites can be reviewed.

Sites listed in ***bold italics*** are in multiple databases.

Unmappable (orphan) sites are not considered in the foregoing analysis.

STANDARD ENVIRONMENTAL RECORDS

Lists of state- and tribal hazardous waste facilities

ENVIROSTOR: The Department of Toxic Substances Control's (DTSC's) Site Mitigation and Brownfields Reuse Program's (SMBRP's) EnviroStor database identifes sites that have known contamination or sites for which there may be reasons to investigate further. The database includes the following site types: Federal Superfund sites (National Priorities List (NPL)); State Response, including Military Facilities and State Superfund; Voluntary Cleanup; and School sites. EnviroStor provides similar information to the information that was available in CalSites, and provides additional site information, including, but not limited to, identification of formerly-contaminated properties that have been released for reuse, properties where environmental deed restrictions have been recorded to prevent inappropriate land uses, and risk

characterization information that is used to assess potential impacts to public health and the environment at contaminated sites.

A review of the ENVIROSTOR list, as provided by EDR, and dated 10/21/2024 has revealed that there are 2 ENVIROSTOR sites within approximately 1 mile of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
CHAFFEY HIGH SCHOOL	***EDISON AVENUE / HAVE***	***WNW 1/2 - 1 (0.737 mi.)***	***6***	***31***
Facility Id: 36000007				
Status: No Further Action				

Lower Elevation	Address	Direction / Distance	Map ID	Page
PROPOSED K-8 SCHOOL	***5240 AND 5380 HAMNER***	***SE 1/4 - 1/2 (0.286 mi.)***	***5***	***27***
Facility Id: 60000409				
Status: No Further Action				

Lists of state and tribal leaking storage tanks

LUST: Leaking Underground Storage Tank (LUST) Sites included in GeoTracker. GeoTracker is the Water Boards data management system for sites that impact, or have the potential to impact, water quality in California, with emphasis on groundwater.

A review of the LUST list, as provided by EDR, has revealed that there is 1 LUST site within approximately 0.5 miles of the target property.

Lower Elevation	Address	Direction / Distance	Map ID	Page
WESTRA DAIRY FARMS	***11009 EUCALYPTUS AVE***	***SW 0 - 1/8 (0.110 mi.)***	***A2***	***9***
Database: LUST REG 8, Date of Government Version: 02/14/2005				
Database: LUST, Date of Government Version: 08/28/2024				
Status: Completed - Case Closed				
Facility Status: Case Closed				
Global Id: T0607100611				
Global ID: T0607100611				

ADDITIONAL ENVIRONMENTAL RECORDS

Other Ascertainable Records

UST FINDER RELEASE: US EPA's UST Finder data is a national composite of leaking underground storage tanks. This data contains information about, and locations of, leaking underground storage tanks. Data was collected from state sources and standardized into a national profile by EPA's Office of Underground Storage Tanks, Office of Research and Development, and the Association of State and Territorial Solid Waste Management Officials.

A review of the UST FINDER RELEASE list, as provided by EDR, and dated 06/08/2023 has revealed that there is 1 UST FINDER RELEASE site within approximately 0.5 miles of the target property.

Lower Elevation	Address	Direction / Distance	Map ID	Page
WESTRA DAIRY FARMS	11009 EUCALYPTUS AVE	SW 0 - 1/8 (0.110 mi.)	A1	9

PFAS: A listing of PFAS sites included in the Envirostor and GeoTracker databases. Locations of potential sources of per - and polyfluoroalkyl substances (PFAS). This does not mean that PFAS has been produced, used, or discharged at these sites.

A review of the PFAS list, as provided by EDR, and dated 12/02/2024 has revealed that there is 1 PFAS site within approximately 0.25 miles of the target property.

Lower Elevation	Address	Direction / Distance	Map ID	Page
WELL II-3		S 1/8 - 1/4 (0.229 mi.)	4	19

Cortese: The sites for the list are designated by the State Water Resource Control Board (LUST), the Integrated Waste Board (SWF/LS), and the Department of Toxic Substances Control (Cal-Sites).

A review of the Cortese list, as provided by EDR, and dated 09/16/2024 has revealed that there is 1 Cortese site within approximately 0.5 miles of the target property.

Lower Elevation	Address	Direction / Distance	Map ID	Page
WESTRA DAIRY FARMS	***11009 EUCALYPTUS AVE***	***SW 0 - 1/8 (0.110 mi.)***	***A2***	***9***
Cleanup Status: COMPLETED - CASE CLOSED				

HIST CORTESE: The sites for the list are designated by the State Water Resource Control Board [LUST], the Integrated Waste Board [SWF/LS], and the Department of Toxic Substances Control [CALSITES]. This listing is no longer updated by the state agency.

A review of the HIST CORTESE list, as provided by EDR, and dated 04/01/2001 has revealed that there is 1 HIST CORTESE site within approximately 0.5 miles of the target property.

Lower Elevation	Address	Direction / Distance	Map ID	Page
WESTRA DAIRY FARMS	***11009 EUCALYPTUS AVE***	***SW 0 - 1/8 (0.110 mi.)***	***A2***	***9***
Reg Id: 083603584T				

San Bern. Co. Permit: San Bernardino County Fire Department Hazardous Materials Division.

A review of the San Bern. Co. Permit list, as provided by EDR, and dated 08/13/2024 has revealed that there is 1 San Bern. Co. Permit site within approximately 0.25 miles of the target property.

Lower Elevation	Address	Direction / Distance	Map ID	Page
MILK MAID DAIRY	***10869 EUCALYPTUS AVE***	***SW 1/8 - 1/4 (0.190 mi.)***	***3***	***13***
Facility Status: INACTIVE				
Facility Id: FA0000570				

Notify 65: Listings of all Proposition 65 incidents reported to counties by the State Water Resources Control Board and the Regional Water Quality Control Board. This database is no longer updated by the reporting agency.

A review of the Notify 65 list, as provided by EDR, and dated 09/05/2024 has revealed that there is 1 Notify 65 site within approximately 1 mile of the target property.

EXECUTIVE SUMMARY

Lower Elevation	Address	Direction / Distance	Map ID	Page
SWAN LAKE TEXACO	5800 HAMMER AVENUE	SE 1/2 - 1 (0.808 mi.)	7	35

EXECUTIVE SUMMARY

Due to poor or inadequate address information, the following sites were not mapped. Count: 3 records.

Site Name	Database(s)
NOT PROVIDED	HMIRS
SO CAL GAS/ONTARIO MGP	EDR MGP
MILLIKEN SANITARY LANDFILL	ENVIROSTOR

OVERVIEW MAP - 07908232.2R

Target Property
Sites at elevations higher than or equal to the target property
Sites at elevations lower than the target property
Manufactured Gas Plants
National Priority List Sites
Dept. Defense Sites

0 1/4 1/2 1 Miles

Indian Reservations BIA
County Boundary
Power transmission lines
Pipelines
Special Flood Hazard Area (1%)
0.2% Annual Chance Flood Hazard
National Wetland Inventory
State Wetlands

Areas of Concern

This report includes Interactive Map Layers to display and/or hide map information. The legend includes only those icons for the default map view.

SITE NAME:	Not Reported	CLIENT:	SCS Engineers
ADDRESS:	Not Reported Ontario CA 91761	CONTACT:	Jose William Padua
		INQUIRY #:	07908232.2r
LAT/LONG:	33.992206 / 117.562857	DATE:	February 25, 2025 1:27 pm

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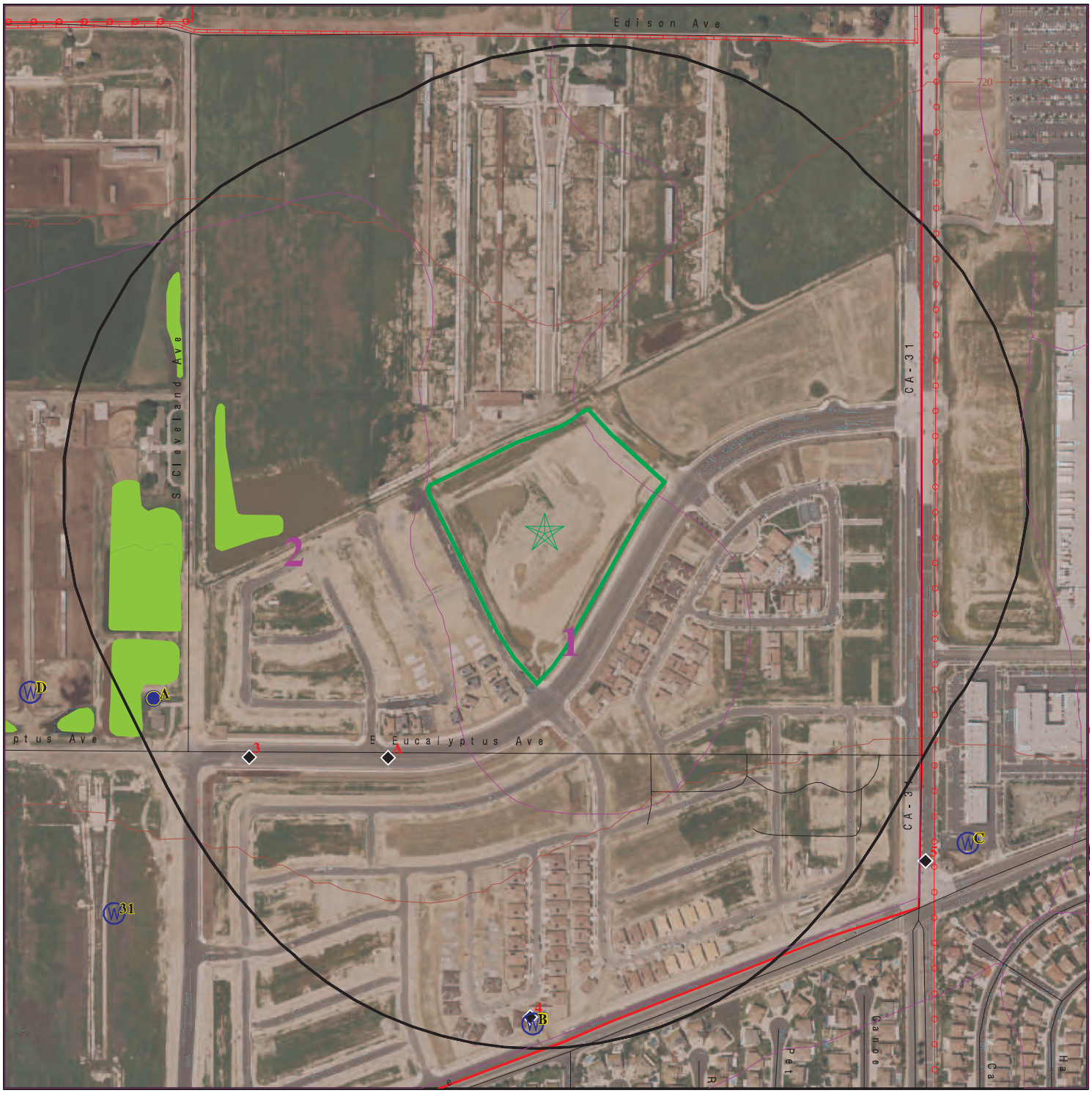
DETAIL MAP - 07908232.2R



- Target Property
- Sites at elevations higher than or equal to the target property
- Sites at elevations lower than the target property
- Manufactured Gas Plants
- Sensitive Receptors
- National Priority List Sites
- Dept. Defense Sites

0 1/16 1/8 1/4 Miles

- Indian Reservations BIA
- County Boundary
- Power transmission lines
- Pipelines
- Special Flood Hazard Area (1%)
- 0.2% Annual Chance Flood Hazard
- National Wetland Inventory
- State Wetlands
- Areas of Concern

This report includes Interactive Map Layers to display and/or hide map information. The legend includes only those icons for the default map view.

SITE NAME:	Not Reported	CLIENT:	SCS Engineers
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LAT/LONG:	33.992206 / 117.562857	DATE:	February 25, 2025 1:27 pm

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MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
STANDARD ENVIRONMENTAL RECORDS								
Lists of Federal NPL (Superfund) sites								
NPL	1.000		0	0	0	0	NR	0
Proposed NPL	1.000		0	0	0	0	NR	0
NPL LIENS	1.000		0	0	0	0	NR	0
Lists of Federal Delisted NPL sites								
Delisted NPL	1.000		0	0	0	0	NR	0
Lists of Federal sites subject to CERCLA removals and CERCLA orders								
FEDERAL FACILITY	0.500		0	0	0	NR	NR	0
SEMS	0.500		0	0	0	NR	NR	0
Lists of Federal CERCLA sites with NFRAP								
SEMS-ARCHIVE	0.500		0	0	0	NR	NR	0
Lists of Federal RCRA facilities undergoing Corrective Action								
CORRACTS	1.000		0	0	0	0	NR	0
Lists of Federal RCRA TSD facilities								
RCRA-TSDF	0.500		0	0	0	NR	NR	0
Lists of Federal RCRA generators								
RCRA-LQG	0.250		0	0	NR	NR	NR	0
RCRA-SQG	0.250		0	0	NR	NR	NR	0
RCRA-VSQG	0.250		0	0	NR	NR	NR	0
Federal institutional controls / engineering controls registries								
LUCIS	0.500		0	0	0	NR	NR	0
US ENG CONTROLS	0.500		0	0	0	NR	NR	0
US INST CONTROLS	0.500		0	0	0	NR	NR	0
Federal ERNS list								
ERNS	TP		NR	NR	NR	NR	NR	0
Lists of state- and tribal (Superfund) equivalent sites								
RESPONSE	1.000		0	0	0	0	NR	0
Lists of state- and tribal hazardous waste facilities								
ENVIROSTOR	1.000		0	0	1	1	NR	2
Lists of state and tribal landfills and solid waste disposal facilities								
SWF/LF	0.500		0	0	0	NR	NR	0

MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
Lists of state and tribal leaking storage tanks								
LUST	0.500		1	0	0	NR	NR	1
INDIAN LUST	0.500		0	0	0	NR	NR	0
CPS-SLIC	0.500		0	0	0	NR	NR	0
Lists of state and tribal registered storage tanks								
FEMA UST	0.250		0	0	NR	NR	NR	0
UST	0.250		0	0	NR	NR	NR	0
AST	0.250		0	0	NR	NR	NR	0
INDIAN UST	0.250		0	0	NR	NR	NR	0
Lists of state and tribal voluntary cleanup sites								
INDIAN VCP	0.500		0	0	0	NR	NR	0
VCP	0.500		0	0	0	NR	NR	0
Lists of state and tribal brownfield sites								
BROWNFIELDS	0.500		0	0	0	NR	NR	0
ADDITIONAL ENVIRONMENTAL RECORDS								
Local Brownfield lists								
US BROWNFIELDS	0.500		0	0	0	NR	NR	0
Local Lists of Landfill / Solid Waste Disposal Sites								
WMUDS/SWAT	0.500		0	0	0	NR	NR	0
SWRCY	0.500		0	0	0	NR	NR	0
HAULERS	TP		NR	NR	NR	NR	NR	0
INDIAN ODI	0.500		0	0	0	NR	NR	0
ODI	0.500		0	0	0	NR	NR	0
DEBRIS REGION 9	0.500		0	0	0	NR	NR	0
IHS OPEN DUMPS	0.500		0	0	0	NR	NR	0
Local Lists of Hazardous waste / Contaminated Sites								
US HIST CDL	TP		NR	NR	NR	NR	NR	0
HIST Cal-Sites	1.000		0	0	0	0	NR	0
SCH	0.250		0	0	NR	NR	NR	0
CDL	TP		NR	NR	NR	NR	NR	0
Toxic Pits	1.000		0	0	0	0	NR	0
CERS HAZ WASTE	0.250		0	0	NR	NR	NR	0
US CDL	TP		NR	NR	NR	NR	NR	0
Local Lists of Registered Storage Tanks								
SWEEPS UST	0.250		0	0	NR	NR	NR	0
HIST UST	0.250		0	0	NR	NR	NR	0
CERS TANKS	0.250		0	0	NR	NR	NR	0
CA FID UST	0.250		0	0	NR	NR	NR	0
Local Land Records								
LIENS	TP		NR	NR	NR	NR	NR	0

MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
LIENS 2	TP		NR	NR	NR	NR	NR	0
DEED	0.500		0	0	0	NR	NR	0
Records of Emergency Release Reports								
HMIRS	TP		NR	NR	NR	NR	NR	0
CHMIRS	TP		NR	NR	NR	NR	NR	0
LDS	TP		NR	NR	NR	NR	NR	0
MCS	TP		NR	NR	NR	NR	NR	0
SPILLS 90	TP		NR	NR	NR	NR	NR	0
Other Ascertainable Records								
RCRA NonGen / NLR	0.250		0	0	NR	NR	NR	0
FUDS	1.000		0	0	0	0	NR	0
DOD	1.000		0	0	0	0	NR	0
SCRD DRYCLEANERS	0.500		0	0	0	NR	NR	0
US FIN ASSUR	TP		NR	NR	NR	NR	NR	0
EPA WATCH LIST	TP		NR	NR	NR	NR	NR	0
2020 COR ACTION	0.250		0	0	NR	NR	NR	0
TSCA	TP		NR	NR	NR	NR	NR	0
TRIS	TP		NR	NR	NR	NR	NR	0
SSTS	TP		NR	NR	NR	NR	NR	0
ROD	1.000		0	0	0	0	NR	0
RMP	TP		NR	NR	NR	NR	NR	0
RAATS	TP		NR	NR	NR	NR	NR	0
PRP	TP		NR	NR	NR	NR	NR	0
PADS	TP		NR	NR	NR	NR	NR	0
ICIS	TP		NR	NR	NR	NR	NR	0
FTTS	TP		NR	NR	NR	NR	NR	0
MLTS	TP		NR	NR	NR	NR	NR	0
COAL ASH DOE	TP		NR	NR	NR	NR	NR	0
COAL ASH EPA	0.500		0	0	0	NR	NR	0
PCB TRANSFORMER	TP		NR	NR	NR	NR	NR	0
RADINFO	TP		NR	NR	NR	NR	NR	0
HIST FTTS	TP		NR	NR	NR	NR	NR	0
DOT OPS	TP		NR	NR	NR	NR	NR	0
CONSENT	1.000		0	0	0	0	NR	0
INDIAN RESERV	1.000		0	0	0	0	NR	0
FUSRAP	1.000		0	0	0	0	NR	0
UMTRA	0.500		0	0	0	NR	NR	0
LEAD SMELTERS	TP		NR	NR	NR	NR	NR	0
US AIRS	TP		NR	NR	NR	NR	NR	0
US MINES	0.250		0	0	NR	NR	NR	0
MINES MRDS	0.250		0	0	NR	NR	NR	0
ABANDONED MINES	0.250		0	0	NR	NR	NR	0
FINDS	TP		NR	NR	NR	NR	NR	0
ECHO	TP		NR	NR	NR	NR	NR	0
DOCKET HWC	TP		NR	NR	NR	NR	NR	0
UXO	1.000		0	0	0	0	NR	0
FUELS PROGRAM	0.250		0	0	NR	NR	NR	0
PFAS NPL	0.250		0	0	NR	NR	NR	0
PFAS FEDERAL SITES	0.250		0	0	NR	NR	NR	0

MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
PFAS TRIS	0.250		0	0	NR	NR	NR	0
PFAS TSCA	0.250		0	0	NR	NR	NR	0
PFAS RCRA MANIFEST	0.250		0	0	NR	NR	NR	0
PFAS ATSDR	0.250		0	0	NR	NR	NR	0
PFAS WQP	0.250		0	0	NR	NR	NR	0
PFAS PROJECT	0.250		0	0	NR	NR	NR	0
PFAS NPDES	0.250		0	0	NR	NR	NR	0
PFAS ECHO	0.250		0	0	NR	NR	NR	0
PFAS ECHO FIRE TRAIN	0.250		0	0	NR	NR	NR	0
PFAS PT 139 AIRPORT	0.250		0	0	NR	NR	NR	0
AQUEOUS FOAM NRC	0.250		0	0	NR	NR	NR	0
BIOSOLIDS	TP		NR	NR	NR	NR	NR	0
UST FINDER	0.250		0	0	NR	NR	NR	0
UST FINDER RELEASE	0.500		1	0	0	NR	NR	1
E MANIFEST	0.250		0	0	NR	NR	NR	0
PFAS	0.250		0	1	NR	NR	NR	1
AQUEOUS FOAM	0.250		0	0	NR	NR	NR	0
CA BOND EXP. PLAN	1.000		0	0	0	0	NR	0
CHROME PLATING	0.500		0	0	0	NR	NR	0
Cortese	0.500		1	0	0	NR	NR	1
CUPA Listings	0.250		0	0	NR	NR	NR	0
DRYCLEANERS	0.250		0	0	NR	NR	NR	0
EMI	TP		NR	NR	NR	NR	NR	0
ENF	TP		NR	NR	NR	NR	NR	0
Financial Assurance	TP		NR	NR	NR	NR	NR	0
ICE	TP		NR	NR	NR	NR	NR	0
HIST CORTESE	0.500		1	0	0	NR	NR	1
HWP	1.000		0	0	0	0	NR	0
HWT	0.250		0	0	NR	NR	NR	0
HWTS	TP		NR	NR	NR	NR	NR	0
HAZNET	TP		NR	NR	NR	NR	NR	0
MINES	0.250		0	0	NR	NR	NR	0
MWMP	0.250		0	0	NR	NR	NR	0
NPDES	TP		NR	NR	NR	NR	NR	0
San Bern. Co. Permit	0.250		0	1	NR	NR	NR	1
PEST LIC	TP		NR	NR	NR	NR	NR	0
PROC	0.500		0	0	0	NR	NR	0
Notify 65	1.000		0	0	0	1	NR	1
HAZMAT	0.250		0	0	NR	NR	NR	0
UIC	TP		NR	NR	NR	NR	NR	0
UIC GEO	TP		NR	NR	NR	NR	NR	0
WASTEWATER PITS	0.500		0	0	0	NR	NR	0
WDS	TP		NR	NR	NR	NR	NR	0
WIP	0.250		0	0	NR	NR	NR	0
MILITARY PRIV SITES	TP		NR	NR	NR	NR	NR	0
PROJECT	TP		NR	NR	NR	NR	NR	0
WDR	TP		NR	NR	NR	NR	NR	0
CIWQS	TP		NR	NR	NR	NR	NR	0
CERS	TP		NR	NR	NR	NR	NR	0
NON-CASE INFO	TP		NR	NR	NR	NR	NR	0
OTHER OIL GAS	TP		NR	NR	NR	NR	NR	0

MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
PROD WATER PONDS	TP		NR	NR	NR	NR	NR	0
SAMPLING POINT	TP		NR	NR	NR	NR	NR	0
WELL STIM PROJ	TP		NR	NR	NR	NR	NR	0
EDR HIGH RISK HISTORICAL RECORDS								
EDR Exclusive Records								
EDR MGP	1.000		0	0	0	0	NR	0
EDR Hist Auto	0.125		0	NR	NR	NR	NR	0
EDR Hist Cleaner	0.125		0	NR	NR	NR	NR	0
EDR RECOVERED GOVERNMENT ARCHIVES								
Exclusive Recovered Govt. Archives								
RGA LF	TP		NR	NR	NR	NR	NR	0
RGA LUST	TP		NR	NR	NR	NR	NR	0
- Totals --		0	4	2	1	2	0	9

NOTES:

TP = Target Property

NR = Not Requested at this Search Distance

Sites may be listed in more than one database

A1
SW
< 1/8
0.110 mi.
583 ft.

WESTRA DAIRY FARMS
11009 EUCALYPTUS AVE
ONTARIO, CA 91710

Site 1 of 2 in cluster A

UST FINDER RELEASE **1029130553**
N/A

Relative:
Lower

Actual:
705 ft.

UST FINDER RELEASE:

Object ID:	69782
Facility ID:	Not reported
Lust ID:	CAT0607100611
Name:	WESTRA DAIRY FARMS
Address:	11009 EUCALYPTUS AVE
City,State,Zip:	ONTARIO, CA 91710
Address Match Type:	PointAddress
Reported Date:	Not reported
Status:	No Further Action
Substance:	Not reported
Population within 1500ft:	74
Domestic Wells within 1500ft:	17
Land Use:	Non-Developed
Within SPA:	No
SPA PWS Facility ID:	Not reported
SPA Water Type:	Not reported
SPA Facility Type:	Not reported
SPA HUC12:	Not reported
Within WHPA:	Yes
WHPA PWS Facility ID:	CA3601027_38435
WHPA Water Type:	GW - Ground water
WHPA Facility Type:	WL - Well
WHPA HUC12:	180702030705
Within 100yr Floodplain:	No
Tribe:	Not reported
EPA Region:	9
NFA Letter 1:	Not reported
NFA Letter 2:	Not reported
NFA Letter 3:	Not reported
NFA Letter 4:	Not reported
Closed With Residual Contaminate:	Not reported
Coordinate Source:	Geocode
X Coord:	-117.56512
Y Coord:	33.98997
Latitude:	33.98997
Longitude:	-117.565119999999

A2
SW
< 1/8
0.110 mi.
583 ft.

WESTRA DAIRY FARMS
11009 EUCALYPTUS AVE
ONTARIO, CA 91710

Site 2 of 2 in cluster A

LUST **S104405158**
Cortese **N/A**
HIST CORTESE
CERS

Relative:
Lower

Actual:
705 ft.

LUST:

Name:	WESTRA DAIRY FARMS
Address:	11009 EUCALYPTUS AVE
City,State,Zip:	ONTARIO, CA 91710
Lead Agency:	SAN BERNARDINO COUNTY
Case Type:	LUST Cleanup Site

Geo Track:

Global Id:	T0607100611
Latitude:	33.9899846

WESTRA DAIRY FARMS (Continued) **S104405158**

Longitude:	-117.5646824
Status:	Completed - Case Closed
Status Date:	04/24/2000
Case Worker:	JC
RB Case Number:	083603584T
Local Agency:	SAN BERNARDINO COUNTY
File Location:	Local Agency
Local Case Number:	99123
Potential Media Affect:	Soil
Potential Contaminants of Concern:	Diesel
EPA Region:	9
Coordinate Source:	Google Geocode
Cuf Case:	NO
Quantity Released Gallons:	Not reported
Begin Date:	07/28/1999
Leak Reported Date:	09/13/1999
How Discovered:	Tank Closure
How Discovered Description:	Not reported
Discharge Source:	Other
Discharge Cause:	Unknown
Stop Method:	Not reported
Stop Description:	Not reported
No Further Action Date:	04/24/2000
CA Water Watershed Name:	Santa Ana River - Middle Santa Ana River - Chino (Split) (801.21)
Dwr Groundwater Subbasin Name:	Upper Santa Ana Valley - Chino (8-002.01)
Disadvantaged Community:	Not reported
CA Enviroscreen 3 Score:	76-80%
CA Enviroscreen 4 Score:	70-75%
Military DOD Site:	No
Facility Project Subtype:	Not reported
RWQCB Region:	SANTA ANA RWQCB (REGION 8)
Site History:	Not reported

LUST:

Global Id:	T0607100611
Contact Type:	Local Agency Caseworker - Primary Caseworker
Contact Name:	JACKSON CRUTSINGER
Organization Name:	SAN BERNARDINO COUNTY
Address:	620 SOUTH E STREET
City:	SAN BERNARDINO
Email:	jcrutsinger@sbcfire.org
Phone Number:	Not reported

LUST:

Global Id:	T0607100611
Action Type:	Other
Date:	09/13/1999
Action:	Leak Reported
Global Id:	T0607100611
Action Type:	Other
Date:	07/28/1999
Action:	Leak Stopped
Global Id:	T0607100611
Action Type:	ENFORCEMENT
Date:	04/24/2000

WESTRA DAIRY FARMS (Continued) **S104405158**

Action: Closure/No Further Action Letter

Global Id: T0607100611
Action Type: Other
Date: 07/28/1999
Action: Leak Discovery

LUST:
Global Id: T0607100611
Status: Open - Case Begin Date
Status Date: 07/28/1999

Global Id: T0607100611
Status: Open - Site Assessment
Status Date: 09/13/1999

Global Id: T0607100611
Status: Completed - Case Closed
Status Date: 04/24/2000

LUST REG 8:

Name:	WESTRA DAIRY FARMS
Address:	11009 EUCALYPTUS AVE
City:	ONTARIO
Region:	8
County:	San Bernardino
Regional Board:	Santa Ana Region
Facility Status:	Case Closed
Case Number:	083603584T
Local Case Num:	99123
Case Type:	Soil only
Substance:	Diesel
Qty Leaked:	Not reported
Abate Method:	Not reported
Cross Street:	MILLIKEN AVE
Enf Type:	CLOS
Funding:	Not reported
How Discovered:	Tank Closure
How Stopped:	Not reported
Leak Cause:	UNK
Leak Source:	UNK
Global ID:	T0607100611
How Stopped Date:	7/28/1999
Enter Date:	12/17/1999
Date Confirmation of Leak Began:	9/13/1999
Date Preliminary Assessment Began:	Not reported
Discover Date:	7/28/1999
Enforcement Date:	Not reported
Close Date:	4/24/2000
Date Prelim Assessment Workplan Submitted:	Not reported
Date Pollution Characterization Began:	Not reported
Date Remediation Plan Submitted:	Not reported
Date Remedial Action Underway:	Not reported
Date Post Remedial Action Monitoring:	Not reported
Enter Date:	12/17/1999

WESTRA DAIRY FARMS (Continued) **S104405158**

GW Qualifies:	Not reported
Soil Qualifies:	Not reported
Operator:	Not reported
Facility Contact:	Not reported
Interim:	Not reported
Oversite Program:	LUST
Latitude:	33.989863
Longitude:	-117.560839
MTBE Date:	Not reported
Max MTBE GW:	Not reported
MTBE Concentration:	0
Max MTBE Soil:	Not reported
MTBE Fuel:	0
MTBE Tested:	Not Required to be Tested.
MTBE Class:	*
Staff:	NOM
Staff Initials:	JC3
Lead Agency:	Local Agency
Local Agency:	36000L
Hydr Basin #:	UPPER SANTA ANA VALL
Beneficial:	Not reported
Priority:	Not reported
Cleanup Fund Id:	Not reported
Work Suspended:	No

Summary: Not reported

CORTESE:

Name:	WESTRA DAIRY FARMS
Address:	11009 EUCALYPTUS AVE
City,State,Zip:	ONTARIO, CA 91710
Region:	CORTESE
Envirostor Id:	Not reported
Global ID:	T0607100611
Site/Facility Type:	LUST CLEANUP SITE
Cleanup Status:	COMPLETED - CASE CLOSED
Status Date:	Not reported
Site Code:	Not reported
Latitude:	Not reported
Longitude:	Not reported
Owner:	Not reported
Enf Type:	Not reported
Swat R:	Not reported
Flag:	active
Order No:	Not reported
Waste Discharge System No:	Not reported
Effective Date:	Not reported
Region 2:	Not reported
WID Id:	Not reported
Solid Waste Id No:	Not reported
Waste Management Uit Name:	Not reported
File Name:	Active Open

HIST CORTESE:

edr_fname:	WESTRA DAIRY FARMS
edr_fadd1:	11009
City,State,Zip:	ONTARIO, CA 91710

WESTRA DAIRY FARMS (Continued) **S104405158**

Region: CORTESE
Facility County Code: 36
Reg By: LTNKA
Reg Id: 083603584T

CERS:
Name: WESTRA DAIRY FARMS
Address: 11009 EUCALYPTUS AVE
City,State,Zip: ONTARIO, CA 91710
Site ID: 879549
CERS ID: T0607100611
CERS Description: Leaking Underground Storage Tank Cleanup Site

Affiliation:
Affiliation Type Desc: Local Agency Caseworker
Entity Name: JACKSON CRUTSINGER - SAN BERNARDINO COUNTY
Entity Title: Not reported
Affiliation Address: 620 SOUTH E STREET
Affiliation City: SAN BERNARDINO
Affiliation State: CA
Affiliation Country: Not reported
Affiliation Zip: Not reported
Affiliation Phone: ,

3
SW
1/8-1/4
0.190 mi.
1005 ft.

MILK MAID DAIRY **S102006045**
10869 EUCALYPTUS AVE **N/A**
ONTARIO, CA 91761

ENF
San Bern. Co. Permit
WDS
CIWQS

Relative:
Lower

Actual:
703 ft.

ENF:
Name: MILK MAID DAIRY
Address: 10869 EUCALYPTUS AVE
City,State,Zip: ONTARIO, CA
Region: 8
Facility Id: 258915
Agency Name: Case De Vries Case Vythuizen
Place Type: Growing
Place Subtype: Animal Feeding
Facility Type: Agricultural
Agency Type: Privately-Owned Business
Of Agencies: 1
Place Latitude: Not reported
Place Longitude: Not reported
SIC Code 1: Not reported
SIC Desc 1: Not reported
SIC Code 2: Not reported
SIC Desc 2: Not reported
SIC Code 3: Not reported
SIC Desc 3: Not reported
NAICS Code 1: Not reported
NAICS Desc 1: Not reported
NAICS Code 2: Not reported
NAICS Desc 2: Not reported
NAICS Code 3: Not reported
NAICS Desc 3: Not reported
Of Places: 1

MILK MAID DAIRY (Continued) **S102006045**

Source Of Facility:	Reg Meas
Design Flow:	0.0001
Threat To Water Quality:	2
Complexity:	C
Pretreatment:	X - Facility is not a POTW
Facility Waste Type:	Solid wastes, NEC
Facility Waste Type 2:	Stormwater runoff
Facility Waste Type 3:	Not reported
Facility Waste Type 4:	Not reported
Program:	ANIWSTCOWS
Program Category1:	ANIMALWASTE
Program Category2:	NPDESWW
# Of Programs:	1
WDID:	8 365420001
Reg Measure Id:	211667
Reg Measure Type:	Enrollee
Region:	8
Order #:	99-011
Npdes# CA#:	CAG018001
Major-Minor:	Not reported
Npdes Type:	Not reported
Reclamation:	N - No
Dredge Fill Fee:	Not reported
301H:	Not reported
Application Fee Amt Received:	Not reported
Status:	Historical
Status Date:	03/18/2014
Effective Date:	10/06/1972
Expiration/Review Date:	Not reported
Termination Date:	09/08/2000
WDR Review - Amend:	Not reported
WDR Review - Revise/Renew:	Not reported
WDR Review - Rescind:	Not reported
WDR Review - No Action Required:	Not reported
WDR Review - Pending:	Not reported
WDR Review - Planned:	Not reported
Status Enrollee:	Y
Individual/General:	I
Fee Code:	Not reported
Direction/Voice:	Passive
Enforcement Id(EID):	223411
Region:	8
Order / Resolution Number:	91-100
Enforcement Action Type:	Clean-up and Abatement Order
Effective Date:	07/09/1991
Adoption/Issuance Date:	Not reported
Achieve Date:	1/1/1994
Termination Date:	Not reported
ACL Issuance Date:	Not reported
EPL Issuance Date:	Not reported
Status:	Historical
Title:	Enforcement - 8 365420001
Description:	TIME SCHEDULE FOR DEVELOPMENT AND IMPLEMENTATION OF A WASTE MANAGEMENT PLAN
Program:	NPDNONMUNIPRCS
Latest Milestone Completion Date:	1/1/1994
# Of Programs1:	1

MILK MAID DAIRY (Continued) **S102006045**

Total Assessment Amount:	0
Initial Assessed Amount:	0
Liability $ Amount:	0
Project $ Amount:	0
Liability $ Paid:	0
Project $ Completed:	0
Total $ Paid/Completed Amount:	0

Name:	MILK MAID DAIRY
Address:	10869 EUCALYPTUS AVE
City,State,Zip:	ONTARIO, CA
Region:	8
Facility Id:	258915
Agency Name:	Case De Vries Case Vythuizen
Place Type:	Growing
Place Subtype:	Animal Feeding
Facility Type:	Agricultural
Agency Type:	Privately-Owned Business
# Of Agencies:	1
Place Latitude:	Not reported
Place Longitude:	Not reported
SIC Code 1:	Not reported
SIC Desc 1:	Not reported
SIC Code 2:	Not reported
SIC Desc 2:	Not reported
SIC Code 3:	Not reported
SIC Desc 3:	Not reported
NAICS Code 1:	Not reported
NAICS Desc 1:	Not reported
NAICS Code 2:	Not reported
NAICS Desc 2:	Not reported
NAICS Code 3:	Not reported
NAICS Desc 3:	Not reported
# Of Places:	1
Source Of Facility:	Reg Meas
Design Flow:	0.0001
Threat To Water Quality:	2
Complexity:	C
Pretreatment:	X - Facility is not a POTW
Facility Waste Type:	Solid wastes, NEC
Facility Waste Type 2:	Stormwater runoff
Facility Waste Type 3:	Not reported
Facility Waste Type 4:	Not reported
Program:	ANIWSTCOWS
Program Category1:	ANIMALWASTE
Program Category2:	NPDESWW
# Of Programs:	1
WDID:	8 365420001
Reg Measure Id:	211667
Reg Measure Type:	Enrollee
Region:	8
Order #:	99-011
Npdes# CA#:	CAG018001
Major-Minor:	Not reported
Npdes Type:	Not reported
Reclamation:	N - No
Dredge Fill Fee:	Not reported

MILK MAID DAIRY (Continued) **S102006045**

301H:	Not reported
Application Fee Amt Received:	Not reported
Status:	Historical
Status Date:	03/18/2014
Effective Date:	10/06/1972
Expiration/Review Date:	Not reported
Termination Date:	09/08/2000
WDR Review - Amend:	Not reported
WDR Review - Revise/Renew:	Not reported
WDR Review - Rescind:	Not reported
WDR Review - No Action Required:	Not reported
WDR Review - Pending:	Not reported
WDR Review - Planned:	Not reported
Status Enrollee:	Y
Individual/General:	I
Fee Code:	Not reported
Direction/Voice:	Passive
Enforcement Id(EID):	223087
Region:	8
Order / Resolution Number:	LT940705
Enforcement Action Type:	Clean-up and Abatement Order
Effective Date:	07/05/1994
Adoption/Issuance Date:	Not reported
Achieve Date:	Not reported
Termination Date:	Not reported
ACL Issuance Date:	Not reported
EPL Issuance Date:	Not reported
Status:	Historical
Title:	Enforcement - 8 365420001
Description:	RESCINDS CAO 91-100
Program:	NPDNONMUNIPRCS
Latest Milestone Completion Date:	Not reported
# Of Programs1:	1
Total Assessment Amount:	0
Initial Assessed Amount:	0
Liability $ Amount:	0
Project $ Amount:	0
Liability $ Paid:	0
Project $ Completed:	0
Total $ Paid/Completed Amount:	0

San Bern. Co. Permit:

Name:	MILK MAID DAIRY RANCH
Address:	10869 EUCALYPTUS AVE
City,State,Zip:	ONTARIO, CA 91761
Region:	SAN BERNARDINO
Facility ID:	FA0000570
Owner:	SCI ONTARIO VENTURES LLC
Permit Number:	PT0008765
Permit Category:	SPECIAL HANDLER
Facility Status:	INACTIVE
Expiration Date:	04/30/1997

Name:	MILK MAID DAIRY RANCH
Address:	10869 EUCALYPTUS AVE
City,State,Zip:	ONTARIO, CA 91761
Region:	SAN BERNARDINO

MILK MAID DAIRY (Continued) **S102006045**

Facility ID: FA0000570
Owner: SCI ONTARIO VENTURES LLC
Permit Number: PT0008766
Permit Category: SPECIAL GENERATOR
Facility Status: INACTIVE
Expiration Date: 04/30/1997

WDS:

Name:	GORZEMAN HEIFER RANCH - EUCALY
Address:	10869 EUCALYPTUS
City:	ONTARIO
Facility ID:	Santa Ana River 365899001
Facility Type:	Agricultural - Facility that treats and/or disposes of the wastes associated with confined and concentrated animal feeding, confined animal feeding, confined animal holding, confined and concentrated aquatic animal production facilities, and aquaculture. the treatment and/or disposal of agricultural return water is included in this category.
Facility Status:	Active - Any facility with a continuous or seasonal discharge that is under Waste Discharge Requirements.
NPDES Number:	CAG018001 The 1st 2 characters designate the state. The remaining 7 are assigned by the Regional Board
Subregion:	8
Facility Telephone:	9099476295
Facility Contact:	GLENN GORZEMAN
Agency Name:	GORZEMAN GLENN
Agency Address:	13948 WALKER AVENUE
Agency City,St,Zip:	CHINO 91710
Agency Contact:	GLENN GORZEMAN
Agency Telephone:	9099476295
Agency Type:	Private
SIC Code:	241
SIC Code 2:	Not reported
Primary Waste Type:	Designated/Influent or Solid Wastes that pose a significant threat to water quality because of their high concentrations (E.G., BOD, Hardness, TRF, Chloride). 'Manageable' hazardous wastes (E.G., inorganic salts and heavy metals) are included in this category.
Primary Waste:	STORMS
Waste Type2:	D
Waste2:	Stormwater Runoff
Primary Waste Type:	Designated/Influent or Solid Wastes that pose a significant threat to water quality because of their high concentrations (E.G., BOD, Hardness, TRF, Chloride). 'Manageable' hazardous wastes (E.G., inorganic salts and heavy metals) are included in this category.
Secondary Waste:	Solid Wastes
Secondary Waste Type:	Designated/Influent or Solid Wastes that pose a significant threat to water quality because of their high concentrations (E.G., BOD, Hardness, TRF, Chloride). 'Manageable' hazardous wastes (E.G., inorganic salts and heavy metals) are included in this category.
Design Flow:	0
Baseline Flow:	0
Reclamation:	No reclamation requirements associated with this facility.
POTW:	The facility is not a POTW.
Treat To Water:	Moderate Threat to Water Quality. A violation could have a major adverse impact on receiving biota, can cause aesthetic impairment to a significant human population, or render unusable a potential domestic or municipal water supply. Awsthetic impairment would include nuisance

MILK MAID DAIRY (Continued) **S102006045**

from a waste treatment facility.
Complexity: Category C - Facilities having no waste treatment systems, such as cooling water dischargers or thosewho must comply through best management practices, facilities with passive waste treatment and disposal systems, such as septic systems with subsurface disposal, or dischargers having waste storage systems with land disposal such as dairy waste ponds.

CIWQS:

Name:	Milk Maid Dairy
Address:	10869 EUCALYPTUS AVE
City,State,Zip:	ONTARIO, CA 91761
Agency:	Case De Vries Case Vythuizen
Agency Address:	10869 Eucalyptus Avenue, Ontario, CA 91761
Place/Project Type:	Animal Feeding Facility
SIC/NAICS:	Not reported
Region:	8
Program:	ANIWSTCOWS, ANIWSTOTH
Regulatory Measure Status:	Historical
Regulatory Measure Type:	WDR
Order Number:	72-072
WDID:	8 365420001
NPDES Number:	Not reported
Adoption Date:	10/06/1972
Effective Date:	10/06/1972
Termination Date:	Not reported
Expiration/Review Date:	10/03/1987
Design Flow:	0.0001
Major/Minor:	Not reported
Complexity:	C
TTWQ:	2
Enforcement Actions within 5 years:	0
Violations within 5 years:	0
Latitude:	Not reported
Longitude:	Not reported

Name:	Milk Maid Dairy
Address:	10869 EUCALYPTUS AVE
City,State,Zip:	ONTARIO, CA 91761
Agency:	Case De Vries Case Vythuizen
Agency Address:	10869 E Eucalyptus Ave, Ontario, CA 91761
Place/Project Type:	Industrial - Fluid Milk
SIC/NAICS:	2026
Region:	8
Program:	INDSTW
Regulatory Measure Status:	Terminated
Regulatory Measure Type:	Storm water industrial
Order Number:	2014-0057-DWQ
WDID:	8 36I000086
NPDES Number:	CAS000001
Adoption Date:	Not reported
Effective Date:	03/07/1994
Termination Date:	03/14/2000
Expiration/Review Date:	Not reported
Design Flow:	Not reported
Major/Minor:	Not reported
Complexity:	Not reported

MILK MAID DAIRY (Continued) **S102006045**

TTWQ:	Not reported
Enforcement Actions within 5 years:	0
Violations within 5 years:	0
Latitude:	Not reported
Longitude:	Not reported
Name:	Gorzeman Heifer Ranch - Eucaly
Address:	10869 EUCALYPTUS
City,State,Zip:	ONTARIO, CA 91761
Agency:	Gorzeman, Glenn
Agency Address:	13948 Walker Avenue, Ontario, CA 91762
Place/Project Type:	Animal Feeding Facility
SIC/NAICS:	241
Region:	8
Program:	ANIWSTCOWS
Regulatory Measure Status:	Historical
Regulatory Measure Type:	Enrollee
Order Number:	99-011
WDID:	8 365899001
NPDES Number:	CAG018001
Adoption Date:	Not reported
Effective Date:	02/25/2003
Termination Date:	02/07/2006
Expiration/Review Date:	Not reported
Design Flow:	0
Major/Minor:	Not reported
Complexity:	C
TTWQ:	2
Enforcement Actions within 5 years:	0
Violations within 5 years:	0
Latitude:	Not reported
Longitude:	Not reported

4
South
1/8-1/4
0.229 mi.
1207 ft.

WELL II-3 **PFAS** **S127520103**
N/A

JURUPA VALLEY, CA

Relative:
Lower

Actual:
694 ft.

PFAS:

Name:	WELL II-3
Address:	Not reported
City,State,Zip:	JURUPA VALLEY, CA
Envirostor ID:	Not reported
Program Type:	Not reported
Status:	Not reported
Status Date:	Not reported
Enviroscreen Score:	Not reported
Site Code:	Not reported
Global ID:	W0603310083
Facility Region:	Not reported
Lead Agency:	Not reported
Case worker:	Not reported
Local Agency:	Not reported
Location Case Number:	Not reported
File Location:	Not reported
Potential Contaminants of Concern:	Not reported
Potential Media Affected:	Not reported

WELL II-3 (Continued) **S127520103**

Site History: Not reported

Begin Date: Not reported
RB Case Number: Not reported
source_type: All PFAS Chemicals
Location ID: CA3310083_004_004
Matrix: Liquid
Chemical: 11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid
Qualifier: <
Value: 2
Reporting Limit: 2
Detection Limit: Not reported
Lab Notes: Not reported
Quarterly Running Annual Average: Not reported
Units: NG/L
Date: 10/7/2020
Field Pt Class: PUBW
Site Use: Drinking Water Wells
Site Type: DDW Well
Latitude: 33.987366
Longitude: -117.563031
Geo Tracker URL: Not reported

Name: WELL II-3
Address: Not reported
City,State,Zip: JURUPA VALLEY, CA
Envirostor ID: Not reported
Program Type: Not reported
Status: Not reported
Status Date: Not reported
Enviroscreen Score: Not reported
Site Code: Not reported
Global ID: W0603310083
Facility Region: Not reported
Lead Agency: Not reported
Case worker: Not reported
Local Agency: Not reported
Location Case Number: Not reported
File Location: Not reported
Potential Contaminants of Concern: Not reported
Potential Media Affected: Not reported
Site History: Not reported

Begin Date: Not reported
RB Case Number: Not reported
source_type: All PFAS Chemicals
Location ID: CA3310083_004_004
Matrix: Liquid
Chemical: 11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid
Qualifier: <
Value: 2
Reporting Limit: 2
Detection Limit: Not reported
Lab Notes: Not reported
Quarterly Running Annual Average: Not reported
Units: NG/L
Date: 4/2/2021

WELL II-3 (Continued) **S127520103**

Field Pt Class:	PUBW
Site Use:	Drinking Water Wells
Site Type:	DDW Well
Latitude:	33.987366
Longitude:	-117.563031
Geo Tracker URL:	Not reported

Name:	WELL II-3
Address:	Not reported
City,State,Zip:	JURUPA VALLEY, CA
Envirostor ID:	Not reported
Program Type:	Not reported
Status:	Not reported
Status Date:	Not reported
Enviroscreen Score:	Not reported
Site Code:	Not reported
Global ID:	W0603310083
Facility Region:	Not reported
Lead Agency:	Not reported
Case worker:	Not reported
Local Agency:	Not reported
Location Case Number:	Not reported
File Location:	Not reported
Potential Contaminants of Concern:	Not reported
Potential Media Affected:	Not reported
Site History:	Not reported

Begin Date:	Not reported
RB Case Number:	Not reported
source_type:	All PFAS Chemicals
Location ID:	CA3310083_004_004
Matrix:	Liquid
Chemical:	11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid
Qualifier:	<
Value:	2
Reporting Limit:	2
Detection Limit:	Not reported
Lab Notes:	Not reported
Quarterly Running Annual Average:	Not reported
Units:	NG/L
Date:	4/29/2022
Field Pt Class:	PUBW
Site Use:	Drinking Water Wells
Site Type:	DDW Well
Latitude:	33.987366
Longitude:	-117.563031
Geo Tracker URL:	Not reported

Name:	WELL II-3
Address:	Not reported
City,State,Zip:	JURUPA VALLEY, CA
Envirostor ID:	Not reported
Program Type:	Not reported
Status:	Not reported
Status Date:	Not reported
Enviroscreen Score:	Not reported
Site Code:	Not reported

WELL II-3 (Continued) **S127520103**

Global ID:	W0603310083
Facility Region:	Not reported
Lead Agency:	Not reported
Case worker:	Not reported
Local Agency:	Not reported
Location Case Number:	Not reported
File Location:	Not reported
Potential Contaminants of Concern:	Not reported
Potential Media Affected:	Not reported
Site History:	Not reported
Begin Date:	Not reported
RB Case Number:	Not reported
source_type:	All PFAS Chemicals
Location ID:	CA3310083_004_004
Matrix:	Liquid
Chemical:	2,3,3,3-tetrafluoro-2-(1,1,2,2,3,3,3-heptafluoropropoxy) propanoic acid
Qualifier:	<
Value:	1.8
Reporting Limit:	1.8
Detection Limit:	Not reported
Lab Notes:	Not reported
Quarterly Running Annual Average:	Not reported
Units:	NG/L
Date:	4/3/2024
Field Pt Class:	PUBW
Site Use:	Drinking Water Wells
Site Type:	DDW Well
Latitude:	33.987366
Longitude:	-117.563031
Geo Tracker URL: Not reported	
Name:	WELL II-3
Address:	Not reported
City,State,Zip:	JURUPA VALLEY, CA
Envirostor ID:	Not reported
Program Type:	Not reported
Status:	Not reported
Status Date:	Not reported
Enviroscreen Score:	Not reported
Site Code:	Not reported
Global ID:	W0603310083
Facility Region:	Not reported
Lead Agency:	Not reported
Case worker:	Not reported
Local Agency:	Not reported
Location Case Number:	Not reported
File Location:	Not reported
Potential Contaminants of Concern:	Not reported
Potential Media Affected:	Not reported
Site History:	Not reported
Begin Date:	Not reported
RB Case Number:	Not reported
source_type:	All PFAS Chemicals
Location ID:	CA3310083_004_004

WELL II-3 (Continued) **S127520103**

Matrix:	Liquid
Chemical:	2,3,3,3-tetrafluoro-2-(1,1,2,2,3,3,3-heptafluoropropoxy) propanoic acid
Qualifier:	<
Value:	2
Reporting Limit:	2
Detection Limit:	Not reported
Lab Notes:	Not reported
Quarterly Running Annual Average:	Not reported
Units:	NG/L
Date:	1/19/2023
Field Pt Class:	PUBW
Site Use:	Drinking Water Wells
Site Type:	DDW Well
Latitude:	33.987366
Longitude:	-117.563031
Geo Tracker URL:	Not reported

Name:	WELL II-3
Address:	Not reported
City,State,Zip:	JURUPA VALLEY, CA
Envirostor ID:	Not reported
Program Type:	Not reported
Status:	Not reported
Status Date:	Not reported
Enviroscreen Score:	Not reported
Site Code:	Not reported
Global ID:	W0603310083
Facility Region:	Not reported
Lead Agency:	Not reported
Case worker:	Not reported
Local Agency:	Not reported
Location Case Number:	Not reported
File Location:	Not reported
Potential Contaminants of Concern:	Not reported
Potential Media Affected:	Not reported
Site History:	Not reported

Begin Date:	Not reported
RB Case Number:	Not reported
source_type:	All PFAS Chemicals
Location ID:	CA3310083_004_004
Matrix:	Liquid
Chemical:	2,3,3,3-tetrafluoro-2-(1,1,2,2,3,3,3-heptafluoropropoxy) propanoic acid
Qualifier:	<
Value:	2
Reporting Limit:	2
Detection Limit:	Not reported
Lab Notes:	Not reported
Quarterly Running Annual Average:	Not reported
Units:	NG/L
Date:	1/7/2021
Field Pt Class:	PUBW
Site Use:	Drinking Water Wells
Site Type:	DDW Well
Latitude:	33.987366

WELL II-3 (Continued) **S127520103**

Longitude: -117.563031
Geo Tracker URL: Not reported

Name: WELL II-3
Address: Not reported
City,State,Zip: JURUPA VALLEY, CA
Envirostor ID: Not reported
Program Type: Not reported
Status: Not reported
Status Date: Not reported
Enviroscreen Score: Not reported
Site Code: Not reported
Global ID: W0603310083
Facility Region: Not reported
Lead Agency: Not reported
Case worker: Not reported
Local Agency: Not reported
Location Case Number: Not reported
File Location: Not reported
Potential Contaminants of Concern: Not reported
Potential Media Affected: Not reported
Site History: Not reported

Begin Date: Not reported
RB Case Number: Not reported
source_type: All PFAS Chemicals
Location ID: CA3310083_004_004
Matrix: Liquid
Chemical: 2,3,3,3-tetrafluoro-2-(1,1,2,2,3,3,3-heptafluoropropoxy) propanoic acid
Qualifier: <
Value: 2
Reporting Limit: 2
Detection Limit: Not reported
Lab Notes: Not reported
Quarterly Running Annual Average: Not reported
Units: NG/L
Date: 4/29/2022
Field Pt Class: PUBW
Site Use: Drinking Water Wells
Site Type: DDW Well
Latitude: 33.987366
Longitude: -117.563031
Geo Tracker URL: Not reported

Name: WELL II-3
Address: Not reported
City,State,Zip: JURUPA VALLEY, CA
Envirostor ID: Not reported
Program Type: Not reported
Status: Not reported
Status Date: Not reported
Enviroscreen Score: Not reported
Site Code: Not reported
Global ID: W0603310083
Facility Region: Not reported
Lead Agency: Not reported

WELL II-3 (Continued) **S127520103**

Case worker: Not reported
Local Agency: Not reported
Location Case Number: Not reported
File Location: Not reported
Potential Contaminants of Concern: Not reported
Potential Media Affected: Not reported
Site History: Not reported

Begin Date: Not reported
RB Case Number: Not reported
source_type: All PFAS Chemicals
Location ID: CA3310083_004_004
Matrix: Liquid
Chemical: 4,8-Dioxa-3H-perfluorononanoic acid
Qualifier: <
Value: 0.6
Reporting Limit: 0.6
Detection Limit: Not reported
Lab Notes: Not reported
Quarterly Running Annual Average: Not reported
Units: NG/L
Date: 7/22/2022
Field Pt Class: PUBW
Site Use: Drinking Water Wells
Site Type: DDW Well
Latitude: 33.987366
Longitude: -117.563031
Geo Tracker URL: Not reported

Name: WELL II-3
Address: Not reported
City,State,Zip: JURUPA VALLEY, CA
Envirostor ID: Not reported
Program Type: Not reported
Status: Not reported
Status Date: Not reported
Enviroscreen Score: Not reported
Site Code: Not reported
Global ID: W0603310083
Facility Region: Not reported
Lead Agency: Not reported
Case worker: Not reported
Local Agency: Not reported
Location Case Number: Not reported
File Location: Not reported
Potential Contaminants of Concern: Not reported
Potential Media Affected: Not reported
Site History: Not reported

Begin Date: Not reported
RB Case Number: Not reported
source_type: All PFAS Chemicals
Location ID: CA3310083_004_004
Matrix: Liquid
Chemical: 4,8-Dioxa-3H-perfluorononanoic acid
Qualifier: <
Value: 1.8

WELL II-3 (Continued) **S127520103**

Reporting Limit:	1.8
Detection Limit:	Not reported
Lab Notes:	Not reported
Quarterly Running Annual Average:	Not reported
Units:	NG/L
Date:	4/3/2024
Field Pt Class:	PUBW
Site Use:	Drinking Water Wells
Site Type:	DDW Well
Latitude:	33.987366
Longitude:	-117.563031
Geo Tracker URL:	Not reported

Name:	WELL II-3
Address:	Not reported
City,State,Zip:	JURUPA VALLEY, CA
Envirostor ID:	Not reported
Program Type:	Not reported
Status:	Not reported
Status Date:	Not reported
Enviroscreen Score:	Not reported
Site Code:	Not reported
Global ID:	W0603310083
Facility Region:	Not reported
Lead Agency:	Not reported
Case worker:	Not reported
Local Agency:	Not reported
Location Case Number:	Not reported
File Location:	Not reported
Potential Contaminants of Concern:	Not reported
Potential Media Affected:	Not reported
Site History:	Not reported

Begin Date:	Not reported
RB Case Number:	Not reported
source_type:	All PFAS Chemicals
Location ID:	CA3310083_004_004
Matrix:	Liquid
Chemical:	4,8-Dioxa-3H-perfluorononanoic acid
Qualifier:	<
Value:	2
Reporting Limit:	2
Detection Limit:	Not reported
Lab Notes:	Not reported
Quarterly Running Annual Average:	Not reported
Units:	NG/L
Date:	1/19/2023
Field Pt Class:	PUBW
Site Use:	Drinking Water Wells
Site Type:	DDW Well
Latitude:	33.987366
Longitude:	-117.563031
Geo Tracker URL:	Not reported

Name:	WELL II-3
Address:	Not reported
City,State,Zip:	JURUPA VALLEY, CA

WELL II-3 (Continued) **S127520103**

Envirostor ID:	Not reported
Program Type:	Not reported
Status:	Not reported
Status Date:	Not reported
Enviroscreen Score:	Not reported
Site Code:	Not reported
Global ID:	W0603310083
Facility Region:	Not reported
Lead Agency:	Not reported
Case worker:	Not reported
Local Agency:	Not reported
Location Case Number:	Not reported
File Location:	Not reported
Potential Contaminants of Concern:	Not reported
Potential Media Affected:	Not reported
Site History:	Not reported
Begin Date:	Not reported
RB Case Number:	Not reported
source_type:	All PFAS Chemicals
Location ID:	CA3310083_004_004
Matrix:	Liquid
Chemical:	4,8-Dioxa-3H-perfluorononanoic acid
Qualifier:	<
Value:	2
Reporting Limit:	2
Detection Limit:	Not reported
Lab Notes:	Not reported
Quarterly Running Annual Average:	Not reported
Units:	NG/L
Date:	1/7/2021
Field Pt Class:	PUBW
Site Use:	Drinking Water Wells
Site Type:	DDW Well
Latitude:	33.987366
Longitude:	-117.563031
Geo Tracker URL:	Not reported

Click this hyperlink while viewing on your computer to access
345 additional CA PFAS: record(s) in the EDR Site Report.

5
SE
1/4-1/2
0.286 mi.
1512 ft.

PROPOSED K-8 SCHOOL NO. 2
5240 AND 5380 HAMNER AVENUE
MIRA LOMA, CA 91752

ENVIROSTOR SCH **S108054398 N/A**

Relative:
Lower

Actual:
697 ft.

ENVIROSTOR:

Name:	PROPOSED K-8 SCHOOL NO. 2
Address:	5240 AND 5380 HAMNER AVENUE
City,State,Zip:	MIRA LOMA, CA 91752
Facility ID:	60000409
Status:	No Further Action
Status Date:	02/23/2007
Site Code:	404718
Site Type:	School Investigation
Site Type Detailed:	School
Acres:	16

PROPOSED K-8 SCHOOL NO. 2 (Continued) **S108054398**

NPL: NO
Regulatory Agencies: SMBRP
Lead Agency: SMBRP
Program Manager: Not reported
Supervisor: Shahir Haddad
Division Branch: Southern California Schools & Brownfields Outreach
Assembly: 58
Senate: 31
Special Program: Not reported
Restricted Use: NO
Site Mgmt Req: NONE SPECIFIED
Funding: School District
Latitude: 33.99648
Longitude: -117.5583
APN: 160-020-006, 160-020-007
Past Use: AGRICULTURAL - ROW CROPS
Potential COC: Arsenic Chlordane DDD DDE DDT Lead Methane
Confirmed COC: 30001-NO 30004-NO 30006-NO 30007-NO 30008-NO 30013-NO 30015-NO
Potential Description: SOIL
Alias Name: 160-020-006
Alias Type: APN
Alias Name: 160-020-007
Alias Type: APN
Alias Name: 404718
Alias Type: Project Code (Site Code)
Alias Name: 60000409
Alias Type: Envirostor ID Number

Completed Info:
Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Cost Recovery Closeout Memo
Completed Date: 02/23/2007
Comments: CRU memo for the site was completed.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Site Inspections/Visit (Non LUR)
Completed Date: 10/18/2006
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Environmental Oversight Agreement
Completed Date: 09/26/2006
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Site Inspections/Visit (Non LUR)
Completed Date: 10/25/2006
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Site Inspections/Visit (Non LUR)
Completed Date: 10/27/2006
Comments: Not reported

PROPOSED K-8 SCHOOL NO. 2 (Continued) **S108054398**

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Site Inspections/Visit (Non LUR)
Completed Date: 11/15/2006
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Preliminary Endangerment Assessment Workplan
Completed Date: 11/02/2006
Comments: Conditional approval letter for the investigation was sent out to the District and their consultant.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Preliminary Endangerment Assessment Report
Completed Date: 02/23/2007
Comments: PEA Report for the site was approved and no further action determination was rendered.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Other Report
Completed Date: 02/06/2007
Comments: Not reported

Future Area Name: Not reported
Future Sub Area Name: Not reported
Future Document Type: Not reported
Future Due Date: Not reported
Schedule Area Name: Not reported
Schedule Sub Area Name: Not reported
Schedule Document Type: Not reported
Schedule Due Date: Not reported
Schedule Revised Date: Not reported

SCH:

Name: PROPOSED K-8 SCHOOL NO. 2
Address: 5240 AND 5380 HAMNER AVENUE
City,State,Zip: MIRA LOMA, CA 91752
Facility ID: 60000409
Site Type: School Investigation
Site Type Detail: School
Site Mgmt. Req.: NONE SPECIFIED
Acres: 16
National Priorities List: NO
Cleanup Oversight Agencies: SMBRP
Lead Agency: SMBRP
Lead Agency Description: DTSC - Site Cleanup Program
Project Manager: Not reported
Supervisor: Shahir Haddad
Division Branch: Southern California Schools & Brownfields Outreach
Site Code: 404718
Assembly: 58
Senate: 31
Special Program Status: Not reported

PROPOSED K-8 SCHOOL NO. 2 (Continued) **S108054398**

Status: No Further Action
Status Date: 02/23/2007
Restricted Use: NO
Funding: School District
Latitude: 33.99648
Longitude: -117.5583
APN: 160-020-006, 160-020-007
Past Use: AGRICULTURAL - ROW CROPS
Potential COC: Arsenic, Chlordane, DDD, DDE, DDT, Lead, Methane
Confirmed COC: 30001-NO, 30004-NO, 30006-NO, 30007-NO, 30008-NO, 30013-NO, 30015-NO
Potential Description: SOIL
Alias Name: 160-020-006
Alias Type: APN
Alias Name: 160-020-007
Alias Type: APN
Alias Name: 404718
Alias Type: Project Code (Site Code)
Alias Name: 60000409
Alias Type: Envirostor ID Number

Completed Info:

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Cost Recovery Closeout Memo
Completed Date: 02/23/2007
Comments: CRU memo for the site was completed.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Site Inspections/Visit (Non LUR)
Completed Date: 10/18/2006
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Environmental Oversight Agreement
Completed Date: 09/26/2006
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Site Inspections/Visit (Non LUR)
Completed Date: 10/25/2006
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Site Inspections/Visit (Non LUR)
Completed Date: 10/27/2006
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Site Inspections/Visit (Non LUR)
Completed Date: 11/15/2006
Comments: Not reported

Completed Area Name: PROJECT WIDE

PROPOSED K-8 SCHOOL NO. 2 (Continued) **S108054398**

Completed Sub Area Name:	Not reported
Completed Document Type:	Preliminary Endangerment Assessment Workplan
Completed Date:	11/02/2006
Comments:	Conditional approval letter for the investigation was sent out to the District and their consultant.
Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Preliminary Endangerment Assessment Report
Completed Date:	02/23/2007
Comments:	PEA Report for the site was approved and no further action determination was rendered.
Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Other Report
Completed Date:	02/06/2007
Comments:	Not reported
Future Area Name:	Not reported
Future Sub Area Name:	Not reported
Future Document Type:	Not reported
Future Due Date:	Not reported
Schedule Area Name:	Not reported
Schedule Sub Area Name:	Not reported
Schedule Document Type:	Not reported
Schedule Due Date:	Not reported
Schedule Revised Date:	Not reported

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6 **CHAFFEY HIGH SCHOOL NO. 10** **ENVIROSTOR** **S106665372**
WNW **EDISON AVENUE / HAVEN AVENUE** **SCH** **N/A**
1/2-1 **ONTARIO, CA 91710**
0.737 mi.
3893 ft.

Relative:
Higher

Actual:
724 ft.

ENVIROSTOR:

Name:	CHAFFEY HIGH SCHOOL NO. 10
Address:	EDISON AVENUE / HAVEN AVENUE
City,State,Zip:	ONTARIO, CA 91710
Facility ID:	36000007
Status:	No Further Action
Status Date:	06/06/2007
Site Code:	404573
Site Type:	School Investigation
Site Type Detailed:	School
Acres:	58
NPL:	NO
Regulatory Agencies:	SMBRP
Lead Agency:	SMBRP
Program Manager:	Not reported
Supervisor:	Shahir Haddad
Division Branch:	Southern California Schools & Brownfields Outreach
Assembly:	53
Senate:	22
Special Program:	Voluntary Agreement - Standard Voluntary Agreement
Restricted Use:	NO
Site Mgmt Req:	NONE SPECIFIED
Funding:	School District

CHAFFEY HIGH SCHOOL NO. 10 (Continued) **S106665372**

Latitude: 33.9957
Longitude: -117.5867
APN: NONE SPECIFIED
Past Use: * UNKNOWN
Potential COC: Chlordane DDD DDE DDT Toxaphene TPH-diesel Dieldrin Heptachlor
Confirmed COC: Toxaphene TPH-diesel Dieldrin Heptachlor Chlordane DDD DDE DDT
Potential Description: SOIL
Alias Name: CHAFFEY JOINT UNION SCHOOL DISTRICT
Alias Type: Alternate Name
Alias Name: CHAFFEY JUSD-PROPOSED CHAFFEY HS 10
Alias Type: Alternate Name
Alias Name: 404573
Alias Type: Project Code (Site Code)
Alias Name: 36000007
Alias Type: Envirostor ID Number

Completed Info:
Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Environmental Oversight Agreement
Completed Date: 10/13/2004
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Site Inspections/Visit (Non LUR)
Completed Date: 09/08/2005
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Cost Recovery Closeout Memo
Completed Date: 07/25/2006
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Preliminary Endangerment Assessment Report
Completed Date: 07/03/2006
Comments: DTSC issued a No Further Action determination based on a Preliminary Environmental Assessment Report.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Preliminary Endangerment Assessment Report
Completed Date: 06/06/2007
Comments: DTSC received notice on 5/25/2007, that site boundaries had changed. Based on a site visit on 5/23/2007, and information provided, DTSC issued a No Further Action determination for the additional site areas.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Preliminary Endangerment Assessment Workplan
Completed Date: 01/18/2006
Comments: Field Work Scheduled for 1/12/06 and 1/13/06

Completed Area Name: PROJECT WIDE

CHAFFEY HIGH SCHOOL NO. 10 (Continued) **S106665372**

Completed Sub Area Name:	Not reported
Completed Document Type:	Cost Recovery Closeout Memo
Completed Date:	08/16/2012
Comments:	Closeout memo for Revised PEA Determination re: change in Site boundaries; NFA
Future Area Name:	Not reported
Future Sub Area Name:	Not reported
Future Document Type:	Not reported
Future Due Date:	Not reported
Schedule Area Name:	Not reported
Schedule Sub Area Name:	Not reported
Schedule Document Type:	Not reported
Schedule Due Date:	Not reported
Schedule Revised Date:	Not reported

SCH:

Name:	CHAFFEY HIGH SCHOOL NO. 10
Address:	EDISON AVENUE / HAVEN AVENUE
City,State,Zip:	ONTARIO, CA 91710
Facility ID:	36000007
Site Type:	School Investigation
Site Type Detail:	School
Site Mgmt. Req.:	NONE SPECIFIED
Acres:	58
National Priorities List:	NO
Cleanup Oversight Agencies:	SMBRP
Lead Agency:	SMBRP
Lead Agency Description:	DTSC - Site Cleanup Program
Project Manager:	Not reported
Supervisor:	Shahir Haddad
Division Branch:	Southern California Schools & Brownfields Outreach
Site Code:	404573
Assembly:	53
Senate:	22
Special Program Status:	Voluntary Agreement - Standard Voluntary Agreement
Status:	No Further Action
Status Date:	06/06/2007
Restricted Use:	NO
Funding:	School District
Latitude:	33.9957
Longitude:	-117.5867
APN:	NONE SPECIFIED
Past Use:	* UNKNOWN
Potential COC:	Chlordane, DDD, DDE, DDT, Toxaphene, TPH-diesel, Dieldrin, Heptachlor Not reported
Confirmed COC:	Toxaphene, TPH-diesel, Dieldrin, Heptachlor, Chlordane, DDD, DDE, DDT Not reported
Potential Description:	SOIL
Alias Name:	CHAFFEY JOINT UNION SCHOOL DISTRICT
Alias Type:	Alternate Name
Alias Name:	CHAFFEY JUSD-PROPOSED CHAFFEY HS 10
Alias Type:	Alternate Name
Alias Name:	404573
Alias Type:	Project Code (Site Code)
Alias Name:	36000007

CHAFFEY HIGH SCHOOL NO. 10 (Continued) **S106665372**

Alias Type: Envirostor ID Number

Completed Info:

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Environmental Oversight Agreement
Completed Date: 10/13/2004
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Site Inspections/Visit (Non LUR)
Completed Date: 09/08/2005
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Cost Recovery Closeout Memo
Completed Date: 07/25/2006
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Preliminary Endangerment Assessment Report
Completed Date: 07/03/2006
Comments: DTSC issued a No Further Action determination based on a Preliminary Environmental Assessment Report.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Preliminary Endangerment Assessment Report
Completed Date: 06/06/2007
Comments: DTSC received notice on 5/25/2007, that site boundaries had changed. Based on a site visit on 5/23/2007, and information provided, DTSC issued a No Further Action determination for the additional site areas.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Preliminary Endangerment Assessment Workplan
Completed Date: 01/18/2006
Comments: Field Work Scheduled for 1/12/06 and 1/13/06

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Cost Recovery Closeout Memo
Completed Date: 08/16/2012
Comments: Closeout memo for Revised PEA Determination re: change in Site boundaries; NFA

Future Area Name: Not reported
Future Sub Area Name: Not reported
Future Document Type: Not reported
Future Due Date: Not reported
Schedule Area Name: Not reported
Schedule Sub Area Name: Not reported
Schedule Document Type: Not reported
Schedule Due Date: Not reported

CHAFFEY HIGH SCHOOL NO. 10 (Continued) **S106665372**

Schedule Revised Date: Not reported

7
SE
1/2-1
0.808 mi.
4268 ft.

SWAN LAKE TEXACO **Notify 65** **S100178727**
5800 HAMMER AVENUE **N/A**
MIRA LOMA, CA 91752

Relative:
Lower

Actual:
677 ft.

NOTIFY 65:

Name:	SWAN LAKE TEXACO
Address:	5800 HAMMER AVENUE
City,State,Zip:	MIRA LOMA, CA 91752-1558
Date Reported:	Not reported
Staff Initials:	Not reported
Board File Number:	Not reported
Facility Type:	Not reported
Discharge Date:	Not reported
Issue Date:	Not reported
Incident Description:	Not reported
Global ID:	Not reported
Status:	Not reported

Count: 3 records. ORPHAN SUMMARY

City	EDR ID	Site Name	Site Address	Zip	Database(s)
ONTARIO	1009508586	SO CAL GAS/ONTARIO MGP	CORNER OF CAMPUS, MARTLAND, MO	91761	EDR MGP
ONTARIO	S101481941	MILLIKEN SANITARY LANDFILL	INTERSECTION: MILLIKEN AVE & M	91761	ENVIROSTOR
ONTARIO	2024013994	NOT PROVIDED	NOT PROVIDED	91761	HMIRS

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

To maintain currency of the following federal and state databases, EDR contacts the appropriate governmental agency on a monthly or quarterly basis, as required.

Number of Days to Update: Provides confirmation that EDR is reporting records that have been updated within 90 days from the date the government agency made the information available to the public.

STANDARD ENVIRONMENTAL RECORDS

Lists of Federal NPL (Superfund) sites

NPL: National Priority List

National Priorities List (Superfund). The NPL is a subset of CERCLIS and identifies over 1,200 sites for priority cleanup under the Superfund Program. NPL sites may encompass relatively large areas. As such, EDR provides polygon coverage for over 1,000 NPL site boundaries produced by EPA's Environmental Photographic Interpretation Center (EPIC) and regional EPA offices.

Date of Government Version: 12/19/2024
Date Data Arrived at EDR: 01/02/2025
Date Made Active in Reports: 01/21/2025
Number of Days to Update: 19

Source: EPA
Telephone: N/A
Last EDR Contact: 02/03/2025
Next Scheduled EDR Contact: 04/07/2025
Data Release Frequency: Quarterly

NPL Site Boundaries

Sources:

EPA's Environmental Photographic Interpretation Center (EPIC)
Telephone: 202-564-7333

EPA Region 1
Telephone 617-918-1143

EPA Region 3
Telephone 215-814-5418

EPA Region 4
Telephone 404-562-8033

EPA Region 5
Telephone 312-886-6686

EPA Region 6
Telephone: 214-655-6659

EPA Region 7
Telephone: 913-551-7247

EPA Region 8
Telephone: 303-312-6774

EPA Region 9
Telephone: 415-947-4246

EPA Region 10
Telephone 206-553-8665

Proposed NPL: Proposed National Priority List Sites

A site that has been proposed for listing on the National Priorities List through the issuance of a proposed rule in the Federal Register. EPA then accepts public comments on the site, responds to the comments, and places on the NPL those sites that continue to meet the requirements for listing.

Date of Government Version: 12/19/2024
Date Data Arrived at EDR: 01/02/2025
Date Made Active in Reports: 01/21/2025
Number of Days to Update: 19

Source: EPA
Telephone: N/A
Last EDR Contact: 02/03/2025
Next Scheduled EDR Contact: 04/07/2025
Data Release Frequency: Quarterly

NPL LIENS: Federal Superfund Liens

Federal Superfund Liens. Under the authority granted the USEPA by CERCLA of 1980, the USEPA has the authority to file liens against real property in order to recover remedial action expenditures or when the property owner received notification of potential liability. USEPA compiles a listing of filed notices of Superfund Liens.

Date of Government Version: 10/15/1991
Date Data Arrived at EDR: 02/02/1994
Date Made Active in Reports: 03/30/1994
Number of Days to Update: 56

Source: EPA
Telephone: 202-564-4267
Last EDR Contact: 08/15/2011
Next Scheduled EDR Contact: 11/28/2011
Data Release Frequency: No Update Planned

Lists of Federal Delisted NPL sites

Delisted NPL: National Priority List Deletions

The National Oil and Hazardous Substances Pollution Contingency Plan (NCP) establishes the criteria that the EPA uses to delete sites from the NPL. In accordance with 40 CFR 300.425.(e), sites may be deleted from the NPL where no further response is appropriate.

Date of Government Version: 12/19/2024
Date Data Arrived at EDR: 01/02/2025
Date Made Active in Reports: 01/21/2025
Number of Days to Update: 19

Source: EPA
Telephone: N/A
Last EDR Contact: 02/04/2025
Next Scheduled EDR Contact: 04/07/2025
Data Release Frequency: Quarterly

Lists of Federal sites subject to CERCLA removals and CERCLA orders

FEDERAL FACILITY: Federal Facility Site Information listing

A listing of National Priority List (NPL) and Base Realignment and Closure (BRAC) sites found in the Comprehensive Environmental Response, Compensation and Liability Information System (CERCLIS) Database where EPA Federal Facilities Restoration and Reuse Office is involved in cleanup activities.

Date of Government Version: 11/20/2024
Date Data Arrived at EDR: 12/18/2024
Date Made Active in Reports: 12/20/2024
Number of Days to Update: 2

Source: Environmental Protection Agency
Telephone: 703-603-8704
Last EDR Contact: 12/18/2024
Next Scheduled EDR Contact: 04/07/2025
Data Release Frequency: Varies

SEMS: Superfund Enterprise Management System

SEMS (Superfund Enterprise Management System) tracks hazardous waste sites, potentially hazardous waste sites, and remedial activities performed in support of EPA's Superfund Program across the United States. The list was formerly know as CERCLIS, renamed to SEMS by the EPA in 2015. The list contains data on potentially hazardous waste sites that have been reported to the USEPA by states, municipalities, private companies and private persons, pursuant to Section 103 of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA). This dataset also contains sites which are either proposed to or on the National Priorities List (NPL) and the sites which are in the screening and assessment phase for possible inclusion on the NPL.

Date of Government Version: 12/19/2024
Date Data Arrived at EDR: 01/02/2025
Date Made Active in Reports: 01/21/2025
Number of Days to Update: 19

Source: EPA
Telephone: 800-424-9346
Last EDR Contact: 02/03/2025
Next Scheduled EDR Contact: 04/21/2025
Data Release Frequency: Quarterly

Lists of Federal CERCLA sites with NFRAP

SEMS-ARCHIVE: Superfund Enterprise Management System Archive

SEMS-ARCHIVE (Superfund Enterprise Management System Archive) tracks sites that have no further interest under the Federal Superfund Program based on available information. The list was formerly known as the CERCLIS-NFRAP, renamed to SEMS ARCHIVE by the EPA in 2015. EPA may perform a minimal level of assessment work at a site while it is archived if site conditions change and/or new information becomes available. Archived sites have been removed and archived from the inventory of SEMS sites. Archived status indicates that, to the best of EPA's knowledge, assessment at a site has been completed and that EPA has determined no further steps will be taken to list the site on the National Priorities List (NPL), unless information indicates this decision was not appropriate or other considerations require a recommendation for listing at a later time. The decision does not necessarily mean that there is no hazard associated with a given site; it only means that. based upon available information, the location is not judged to be potential NPL site.

Date of Government Version: 12/19/2024
Date Data Arrived at EDR: 01/02/2025
Date Made Active in Reports: 01/21/2025
Number of Days to Update: 19

Source: EPA
Telephone: 800-424-9346
Last EDR Contact: 02/03/2025
Next Scheduled EDR Contact: 04/21/2025
Data Release Frequency: Quarterly

Lists of Federal RCRA facilities undergoing Corrective Action

CORRACTS: Corrective Action Report

CORRACTS identifies hazardous waste handlers with RCRA corrective action activity.

Date of Government Version: 09/16/2024
Date Data Arrived at EDR: 09/17/2024
Date Made Active in Reports: 12/06/2024
Number of Days to Update: 80

Source: EPA
Telephone: 800-424-9346
Last EDR Contact: 02/19/2025
Next Scheduled EDR Contact: 03/31/2025
Data Release Frequency: Quarterly

Lists of Federal RCRA TSD facilities

RCRA-TSDF: RCRA - Treatment, Storage and Disposal

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Transporters are individuals or entities that move hazardous waste from the generator offsite to a facility that can recycle, treat, store, or dispose of the waste. TSDFs treat, store, or dispose of the waste.

Date of Government Version: 09/16/2024
Date Data Arrived at EDR: 09/17/2024
Date Made Active in Reports: 12/06/2024
Number of Days to Update: 80

Source: Environmental Protection Agency
Telephone: (415) 495-8895
Last EDR Contact: 02/19/2025
Next Scheduled EDR Contact: 03/31/2025
Data Release Frequency: Quarterly

Lists of Federal RCRA generators

RCRA-LQG: RCRA - Large Quantity Generators

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Large quantity generators (LQGs) generate over 1,000 kilograms (kg) of hazardous waste, or over 1 kg of acutely hazardous waste per month.

Date of Government Version: 09/16/2024
Date Data Arrived at EDR: 09/17/2024
Date Made Active in Reports: 12/06/2024
Number of Days to Update: 80

Source: Environmental Protection Agency
Telephone: (415) 495-8895
Last EDR Contact: 02/19/2025
Next Scheduled EDR Contact: 03/31/2025
Data Release Frequency: Quarterly

RCRA-SQG: RCRA - Small Quantity Generators

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Small quantity generators (SQGs) generate between 100 kg and 1,000 kg of hazardous waste per month.

Date of Government Version: 09/16/2024
Date Data Arrived at EDR: 09/17/2024
Date Made Active in Reports: 12/06/2024
Number of Days to Update: 80

Source: Environmental Protection Agency
Telephone: (415) 495-8895
Last EDR Contact: 02/19/2025
Next Scheduled EDR Contact: 03/31/2025
Data Release Frequency: Quarterly

RCRA-VSQG: RCRA - Very Small Quantity Generators (Formerly Conditionally Exempt Small Quantity Generators)

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Very small quantity generators (VSQGs) generate less than 100 kg of hazardous waste, or less than 1 kg of acutely hazardous waste per month.

Date of Government Version: 09/16/2024
Date Data Arrived at EDR: 09/17/2024
Date Made Active in Reports: 12/06/2024
Number of Days to Update: 80

Source: Environmental Protection Agency
Telephone: (415) 495-8895
Last EDR Contact: 02/19/2025
Next Scheduled EDR Contact: 03/31/2025
Data Release Frequency: Quarterly

Federal institutional controls / engineering controls registries

LUCIS: Land Use Control Information System

LUCIS contains records of land use control information pertaining to the former Navy Base Realignment and Closure properties.

Date of Government Version: 11/11/2024
Date Data Arrived at EDR: 11/25/2024
Date Made Active in Reports: 02/18/2025
Number of Days to Update: 85

Source: Department of the Navy
Telephone: 843-820-7326
Last EDR Contact: 02/20/2025
Next Scheduled EDR Contact: 05/19/2025
Data Release Frequency: Varies

US ENG CONTROLS: Engineering Controls Sites List

A listing of sites with engineering controls in place. Engineering controls include various forms of caps, building foundations, liners, and treatment methods to create pathway elimination for regulated substances to enter environmental media or effect human health.

Date of Government Version: 11/04/2024
Date Data Arrived at EDR: 11/15/2024
Date Made Active in Reports: 02/11/2025
Number of Days to Update: 88

Source: Environmental Protection Agency
Telephone: 703-603-0695
Last EDR Contact: 02/18/2025
Next Scheduled EDR Contact: 12/02/2024
Data Release Frequency: Varies

US INST CONTROLS: Institutional Controls Sites List

A listing of sites with institutional controls in place. Institutional controls include administrative measures, such as groundwater use restrictions, construction restrictions, property use restrictions, and post remediation care requirements intended to prevent exposure to contaminants remaining on site. Deed restrictions are generally required as part of the institutional controls.

Date of Government Version: 11/04/2024
Date Data Arrived at EDR: 11/15/2024
Date Made Active in Reports: 02/11/2025
Number of Days to Update: 88

Source: Environmental Protection Agency
Telephone: 703-603-0695
Last EDR Contact: 02/18/2025
Next Scheduled EDR Contact: 06/02/2025
Data Release Frequency: Varies

Federal ERNS list

ERNS: Emergency Response Notification System

Emergency Response Notification System. ERNS records and stores information on reported releases of oil and hazardous substances.

Date of Government Version: 12/03/2024
Date Data Arrived at EDR: 12/11/2024
Date Made Active in Reports: 02/18/2025
Number of Days to Update: 69

Source: National Response Center, United States Coast Guard
Telephone: 202-267-2180
Last EDR Contact: 12/11/2024
Next Scheduled EDR Contact: 03/31/2025
Data Release Frequency: Quarterly

Lists of state- and tribal (Superfund) equivalent sites

RESPONSE: State Response Sites

Identifies confirmed release sites where DTSC is involved in remediation, either in a lead or oversight capacity. These confirmed release sites are generally high-priority and high potential risk.

Date of Government Version: 10/21/2024
Date Data Arrived at EDR: 10/22/2024
Date Made Active in Reports: 01/10/2025
Number of Days to Update: 80

Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 01/22/2025
Next Scheduled EDR Contact: 05/05/2025
Data Release Frequency: Quarterly

Lists of state- and tribal hazardous waste facilities

ENVIROSTOR: EnviroStor Database

The Department of Toxic Substances Control's (DTSC's) Site Mitigation and Brownfields Reuse Program's (SMBRP's) EnviroStor database identifes sites that have known contamination or sites for which there may be reasons to investigate further. The database includes the following site types: Federal Superfund sites (National Priorities List (NPL)); State Response, including Military Facilities and State Superfund; Voluntary Cleanup; and School sites. EnviroStor provides similar information to the information that was available in CalSites, and provides additional site information, including, but not limited to, identification of formerly-contaminated properties that have been released for reuse, properties where environmental deed restrictions have been recorded to prevent inappropriate land uses, and risk characterization information that is used to assess potential impacts to public health and the environment at contaminated sites.

Date of Government Version: 10/21/2024
Date Data Arrived at EDR: 10/22/2024
Date Made Active in Reports: 01/10/2025
Number of Days to Update: 80

Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 01/22/2025
Next Scheduled EDR Contact: 05/05/2025
Data Release Frequency: Quarterly

Lists of state and tribal landfills and solid waste disposal facilities

SWF/LF (SWIS): Solid Waste Information System

Active, Closed and Inactive Landfills. SWF/LF records typically contain an inve ntory of solid waste disposal facilities or landfills. These may be active or i nactive facilities or open dumps that failed to meet RCRA Section 4004 criteria for solid waste landfills or disposal sites.

Date of Government Version: 11/04/2024
Date Data Arrived at EDR: 11/06/2024
Date Made Active in Reports: 01/31/2025
Number of Days to Update: 86

Source: Department of Resources Recycling and Recovery
Telephone: 916-341-6320
Last EDR Contact: 02/04/2025
Next Scheduled EDR Contact: 05/19/2025
Data Release Frequency: Quarterly

Lists of state and tribal leaking storage tanks

LUST REG 1: Active Toxic Site Investigation

Del Norte, Humboldt, Lake, Mendocino, Modoc, Siskiyou, Sonoma, Trinity counties. For more current information, please refer to the State Water Resources Control Board's LUST database.

Date of Government Version: 02/01/2001
Date Data Arrived at EDR: 02/28/2001
Date Made Active in Reports: 03/29/2001
Number of Days to Update: 29

Source: California Regional Water Quality Control Board North Coast (1)
Telephone: 707-570-3769
Last EDR Contact: 08/01/2011
Next Scheduled EDR Contact: 11/14/2011
Data Release Frequency: No Update Planned

LUST REG 2: Fuel Leak List

Leaking Underground Storage Tank locations. Alameda, Contra Costa, Marin, Napa, San Francisco, San Mateo, Santa Clara, Solano, Sonoma counties.

Date of Government Version: 09/30/2004
Date Data Arrived at EDR: 10/20/2004
Date Made Active in Reports: 11/19/2004
Number of Days to Update: 30

Source: California Regional Water Quality Control Board San Francisco Bay Region (2)
Telephone: 510-622-2433
Last EDR Contact: 09/19/2011
Next Scheduled EDR Contact: 01/02/2012
Data Release Frequency: No Update Planned

LUST REG 3: Leaking Underground Storage Tank Database

Leaking Underground Storage Tank locations. Monterey, San Benito, San Luis Obispo, Santa Barbara, Santa Cruz counties.

Date of Government Version: 05/19/2003
Date Data Arrived at EDR: 05/19/2003
Date Made Active in Reports: 06/02/2003
Number of Days to Update: 14

Source: California Regional Water Quality Control Board Central Coast Region (3)
Telephone: 805-542-4786
Last EDR Contact: 07/18/2011
Next Scheduled EDR Contact: 10/31/2011
Data Release Frequency: No Update Planned

LUST REG 5: Leaking Underground Storage Tank Database

Leaking Underground Storage Tank locations. Alameda, Alpine, Amador, Butte, Colusa, Contra Costa, Calveras, El Dorado, Fresno, Glenn, Kern, Kings, Lake, Lassen, Madera, Mariposa, Merced, Modoc, Napa, Nevada, Placer, Plumas, Sacramento, San Joaquin, Shasta, Solano, Stanislaus, Sutter, Tehama, Tulare, Tuolumne, Yolo, Yuba counties.

Date of Government Version: 07/01/2008
Date Data Arrived at EDR: 07/22/2008
Date Made Active in Reports: 07/31/2008
Number of Days to Update: 9

Source: California Regional Water Quality Control Board Central Valley Region (5)
Telephone: 916-464-4834
Last EDR Contact: 07/01/2011
Next Scheduled EDR Contact: 10/17/2011
Data Release Frequency: No Update Planned

LUST REG 7: Leaking Underground Storage Tank Case Listing

Leaking Underground Storage Tank locations. Imperial, Riverside, San Diego, Santa Barbara counties.

Date of Government Version: 02/26/2004
Date Data Arrived at EDR: 02/26/2004
Date Made Active in Reports: 03/24/2004
Number of Days to Update: 27

Source: California Regional Water Quality Control Board Colorado River Basin Region (7)
Telephone: 760-776-8943
Last EDR Contact: 08/01/2011
Next Scheduled EDR Contact: 11/14/2011
Data Release Frequency: No Update Planned

LUST REG 8: Leaking Underground Storage Tanks

California Regional Water Quality Control Board Santa Ana Region (8). For more current information, please refer to the State Water Resources Control Board's LUST database.

Date of Government Version: 02/14/2005
Date Data Arrived at EDR: 02/15/2005
Date Made Active in Reports: 03/28/2005
Number of Days to Update: 41

Source: California Regional Water Quality Control Board Santa Ana Region (8)
Telephone: 909-782-4496
Last EDR Contact: 08/15/2011
Next Scheduled EDR Contact: 11/28/2011
Data Release Frequency: No Update Planned

LUST REG 9: Leaking Underground Storage Tank Report
Orange, Riverside, San Diego counties. For more current information, please refer to the State Water Resources Control Board's LUST database.

Date of Government Version: 03/01/2001
Date Data Arrived at EDR: 04/23/2001
Date Made Active in Reports: 05/21/2001
Number of Days to Update: 28
Source: California Regional Water Quality Control Board San Diego Region (9)
Telephone: 858-637-5595
Last EDR Contact: 09/26/2011
Next Scheduled EDR Contact: 01/09/2012
Data Release Frequency: No Update Planned

LUST REG 6V: Leaking Underground Storage Tank Case Listing
Leaking Underground Storage Tank locations. Inyo, Kern, Los Angeles, Mono, San Bernardino counties.

Date of Government Version: 06/07/2005
Date Data Arrived at EDR: 06/07/2005
Date Made Active in Reports: 06/29/2005
Number of Days to Update: 22
Source: California Regional Water Quality Control Board Victorville Branch Office (6)
Telephone: 760-241-7365
Last EDR Contact: 09/12/2011
Next Scheduled EDR Contact: 12/26/2011
Data Release Frequency: No Update Planned

LUST: Leaking Underground Fuel Tank Report (GEOTRACKER)
Leaking Underground Storage Tank (LUST) Sites included in GeoTracker. GeoTracker is the Water Boards data management system for sites that impact, or have the potential to impact, water quality in California, with emphasis on groundwater.

Date of Government Version: 08/28/2024
Date Data Arrived at EDR: 08/28/2024
Date Made Active in Reports: 08/30/2024
Number of Days to Update: 2
Source: State Water Resources Control Board
Telephone: see region list
Last EDR Contact: 02/24/2025
Next Scheduled EDR Contact: 03/17/2025
Data Release Frequency: Quarterly

LUST REG 6L: Leaking Underground Storage Tank Case Listing
For more current information, please refer to the State Water Resources Control Board's LUST database.

Date of Government Version: 09/09/2003
Date Data Arrived at EDR: 09/10/2003
Date Made Active in Reports: 10/07/2003
Number of Days to Update: 27
Source: California Regional Water Quality Control Board Lahontan Region (6)
Telephone: 530-542-5572
Last EDR Contact: 09/12/2011
Next Scheduled EDR Contact: 12/26/2011
Data Release Frequency: No Update Planned

LUST REG 4: Underground Storage Tank Leak List
Los Angeles, Ventura counties. For more current information, please refer to the State Water Resources Control Board's LUST database.

Date of Government Version: 09/07/2004
Date Data Arrived at EDR: 09/07/2004
Date Made Active in Reports: 10/12/2004
Number of Days to Update: 35
Source: California Regional Water Quality Control Board Los Angeles Region (4)
Telephone: 213-576-6710
Last EDR Contact: 09/06/2011
Next Scheduled EDR Contact: 12/19/2011
Data Release Frequency: No Update Planned

INDIAN LUST R1: Leaking Underground Storage Tanks on Indian Land
A listing of leaking underground storage tank locations on Indian Land.

Date of Government Version: 05/07/2024
Date Data Arrived at EDR: 05/30/2024
Date Made Active in Reports: 08/28/2024
Number of Days to Update: 90
Source: EPA Region 1
Telephone: 617-918-1313
Last EDR Contact: 01/16/2025
Next Scheduled EDR Contact: 04/28/2025
Data Release Frequency: Varies

INDIAN LUST R10: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in Alaska, Idaho, Oregon and Washington.

Date of Government Version: 05/07/2024
Date Data Arrived at EDR: 05/30/2024
Date Made Active in Reports: 08/28/2024
Number of Days to Update: 90

Source: EPA Region 10
Telephone: 206-553-2857
Last EDR Contact: 01/16/2025
Next Scheduled EDR Contact: 04/28/2025
Data Release Frequency: Varies

INDIAN LUST R4: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in Florida, Mississippi and North Carolina.

Date of Government Version: 05/07/2024
Date Data Arrived at EDR: 05/30/2024
Date Made Active in Reports: 08/28/2024
Number of Days to Update: 90

Source: EPA Region 4
Telephone: 404-562-8677
Last EDR Contact: 01/16/2025
Next Scheduled EDR Contact: 04/28/2025
Data Release Frequency: Varies

INDIAN LUST R6: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in New Mexico and Oklahoma.

Date of Government Version: 05/07/2024
Date Data Arrived at EDR: 05/30/2024
Date Made Active in Reports: 08/28/2024
Number of Days to Update: 90

Source: EPA Region 6
Telephone: 214-665-6597
Last EDR Contact: 01/16/2025
Next Scheduled EDR Contact: 04/28/2025
Data Release Frequency: Varies

INDIAN LUST R5: Leaking Underground Storage Tanks on Indian Land
Leaking underground storage tanks located on Indian Land in Michigan, Minnesota and Wisconsin.

Date of Government Version: 04/11/2024
Date Data Arrived at EDR: 05/30/2024
Date Made Active in Reports: 08/28/2024
Number of Days to Update: 90

Source: EPA, Region 5
Telephone: 312-886-7439
Last EDR Contact: 01/16/2025
Next Scheduled EDR Contact: 04/28/2025
Data Release Frequency: Varies

INDIAN LUST R9: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in Arizona, California, New Mexico and Nevada

Date of Government Version: 05/07/2024
Date Data Arrived at EDR: 05/30/2024
Date Made Active in Reports: 08/28/2024
Number of Days to Update: 90

Source: Environmental Protection Agency
Telephone: 415-972-3372
Last EDR Contact: 01/16/2025
Next Scheduled EDR Contact: 04/28/2025
Data Release Frequency: Varies

INDIAN LUST R7: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in Iowa, Kansas, and Nebraska

Date of Government Version: 05/07/2024
Date Data Arrived at EDR: 05/30/2024
Date Made Active in Reports: 08/28/2024
Number of Days to Update: 90

Source: EPA Region 7
Telephone: 913-551-7003
Last EDR Contact: 01/16/2025
Next Scheduled EDR Contact: 04/28/2025
Data Release Frequency: Varies

INDIAN LUST R8: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in Colorado, Montana, North Dakota, South Dakota, Utah and Wyoming.

Date of Government Version: 05/07/2024
Date Data Arrived at EDR: 05/30/2024
Date Made Active in Reports: 08/28/2024
Number of Days to Update: 90

Source: EPA Region 8
Telephone: 303-312-6271
Last EDR Contact: 01/16/2025
Next Scheduled EDR Contact: 04/28/2025
Data Release Frequency: Varies

CPS-SLIC: Statewide SLIC Cases (GEOTRACKER)
Cleanup Program Sites (CPS; also known as Site Cleanups [SC] and formerly known as Spills, Leaks, Investigations, and Cleanups [SLIC] sites) included in GeoTracker. GeoTracker is the Water Boards data management system for sites that impact, or have the potential to impact, water quality in California, with emphasis on groundwater.

Date of Government Version: 08/28/2024
Date Data Arrived at EDR: 08/28/2024
Date Made Active in Reports: 08/29/2024
Number of Days to Update: 1
Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 02/24/2025
Next Scheduled EDR Contact: 03/17/2025
Data Release Frequency: Varies

SLIC REG 1: Active Toxic Site Investigations
The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 04/03/2003
Date Data Arrived at EDR: 04/07/2003
Date Made Active in Reports: 04/25/2003
Number of Days to Update: 18
Source: California Regional Water Quality Control Board, North Coast Region (1)
Telephone: 707-576-2220
Last EDR Contact: 08/01/2011
Next Scheduled EDR Contact: 11/14/2011
Data Release Frequency: No Update Planned

SLIC REG 2: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing
The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 09/30/2004
Date Data Arrived at EDR: 10/20/2004
Date Made Active in Reports: 11/19/2004
Number of Days to Update: 30
Source: Regional Water Quality Control Board San Francisco Bay Region (2)
Telephone: 510-286-0457
Last EDR Contact: 09/19/2011
Next Scheduled EDR Contact: 01/02/2012
Data Release Frequency: No Update Planned

SLIC REG 3: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing
The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 05/18/2006
Date Data Arrived at EDR: 05/18/2006
Date Made Active in Reports: 06/15/2006
Number of Days to Update: 28
Source: California Regional Water Quality Control Board Central Coast Region (3)
Telephone: 805-549-3147
Last EDR Contact: 07/18/2011
Next Scheduled EDR Contact: 10/31/2011
Data Release Frequency: No Update Planned

SLIC REG 4: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing
The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 11/17/2004
Date Data Arrived at EDR: 11/18/2004
Date Made Active in Reports: 01/04/2005
Number of Days to Update: 47
Source: Region Water Quality Control Board Los Angeles Region (4)
Telephone: 213-576-6600
Last EDR Contact: 07/01/2011
Next Scheduled EDR Contact: 10/17/2011
Data Release Frequency: No Update Planned

SLIC REG 5: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing
The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 04/01/2005
Date Data Arrived at EDR: 04/05/2005
Date Made Active in Reports: 04/21/2005
Number of Days to Update: 16
Source: Regional Water Quality Control Board Central Valley Region (5)
Telephone: 916-464-3291
Last EDR Contact: 09/12/2011
Next Scheduled EDR Contact: 12/26/2011
Data Release Frequency: No Update Planned

SLIC REG 6V: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing
The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 05/24/2005
Date Data Arrived at EDR: 05/25/2005
Date Made Active in Reports: 06/16/2005
Number of Days to Update: 22

Source: Regional Water Quality Control Board, Victorville Branch
Telephone: 619-241-6583
Last EDR Contact: 08/15/2011
Next Scheduled EDR Contact: 11/28/2011
Data Release Frequency: No Update Planned

SLIC REG 6L: SLIC Sites
The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 09/07/2004
Date Data Arrived at EDR: 09/07/2004
Date Made Active in Reports: 10/12/2004
Number of Days to Update: 35

Source: California Regional Water Quality Control Board, Lahontan Region
Telephone: 530-542-5574
Last EDR Contact: 08/15/2011
Next Scheduled EDR Contact: 11/28/2011
Data Release Frequency: No Update Planned

SLIC REG 7: SLIC List
The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 11/24/2004
Date Data Arrived at EDR: 11/29/2004
Date Made Active in Reports: 01/04/2005
Number of Days to Update: 36

Source: California Regional Quality Control Board, Colorado River Basin Region
Telephone: 760-346-7491
Last EDR Contact: 08/01/2011
Next Scheduled EDR Contact: 11/14/2011
Data Release Frequency: No Update Planned

SLIC REG 8: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing
The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 04/03/2008
Date Data Arrived at EDR: 04/03/2008
Date Made Active in Reports: 04/14/2008
Number of Days to Update: 11

Source: California Region Water Quality Control Board Santa Ana Region (8)
Telephone: 951-782-3298
Last EDR Contact: 09/12/2011
Next Scheduled EDR Contact: 12/26/2011
Data Release Frequency: No Update Planned

SLIC REG 9: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing
The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 09/10/2007
Date Data Arrived at EDR: 09/11/2007
Date Made Active in Reports: 09/28/2007
Number of Days to Update: 17

Source: California Regional Water Quality Control Board San Diego Region (9)
Telephone: 858-467-2980
Last EDR Contact: 08/08/2011
Next Scheduled EDR Contact: 11/21/2011
Data Release Frequency: No Update Planned

Lists of state and tribal registered storage tanks

FEMA UST: Underground Storage Tank Listing
A listing of all FEMA owned underground storage tanks.

Date of Government Version: 08/12/2024
Date Data Arrived at EDR: 10/30/2024
Date Made Active in Reports: 01/14/2025
Number of Days to Update: 76

Source: FEMA
Telephone: 202-646-5797
Last EDR Contact: 12/23/2024
Next Scheduled EDR Contact: 04/14/2025
Data Release Frequency: Varies

UST CLOSURE: Proposed Closure of Underground Storage Tank (UST) Cases

UST cases that are being considered for closure by either the State Water Resources Control Board or the Executive Director have been posted for a 60-day public comment period. UST Case Closures being proposed for consideration by the State Water Resources Control Board. These are primarily UST cases that meet closure criteria under the decisional framework in State Water Board Resolution No. 92-49 and other Board orders. UST Case Closures proposed for consideration by the Executive Director pursuant to State Water Board Resolution No. 2012-0061. These are cases that meet the criteria of the Low-Threat UST Case Closure Policy. UST Case Closure Review Denials and Approved Orders.

Date of Government Version: 11/25/2024
Date Data Arrived at EDR: 12/03/2024
Date Made Active in Reports: 01/07/2025
Number of Days to Update: 35

Source: State Water Resources Control Board
Telephone: 916-327-7844
Last EDR Contact: 12/03/2024
Next Scheduled EDR Contact: 03/17/2025
Data Release Frequency: Varies

MILITARY UST SITES: Military UST Sites (GEOTRACKER)

Military ust sites

Date of Government Version: 08/28/2024
Date Data Arrived at EDR: 08/28/2024
Date Made Active in Reports: 08/29/2024
Number of Days to Update: 1

Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 02/24/2025
Next Scheduled EDR Contact: 03/17/2025
Data Release Frequency: Varies

UST: Active UST Facilities

Active UST facilities gathered from the local regulatory agencies

Date of Government Version: 11/26/2024
Date Data Arrived at EDR: 11/26/2024
Date Made Active in Reports: 02/20/2025
Number of Days to Update: 86

Source: SWRCB
Telephone: 916-341-5851
Last EDR Contact: 11/26/2024
Next Scheduled EDR Contact: 03/17/2025
Data Release Frequency: Semi-Annually

AST: Aboveground Petroleum Storage Tank Facilities

A listing of aboveground storage tank petroleum storage tank locations.

Date of Government Version: 07/06/2016
Date Data Arrived at EDR: 07/12/2016
Date Made Active in Reports: 09/19/2016
Number of Days to Update: 69

Source: California Environmental Protection Agency
Telephone: 916-327-5092
Last EDR Contact: 12/04/2024
Next Scheduled EDR Contact: 03/24/2025
Data Release Frequency: Varies

INDIAN UST R7: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 7 (Iowa, Kansas, Missouri, Nebraska, and 9 Tribal Nations).

Date of Government Version: 05/14/2024
Date Data Arrived at EDR: 05/30/2024
Date Made Active in Reports: 08/28/2024
Number of Days to Update: 90

Source: EPA Region 7
Telephone: 913-551-7003
Last EDR Contact: 01/16/2025
Next Scheduled EDR Contact: 04/28/2025
Data Release Frequency: Varies

INDIAN UST R1: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 1 (Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, Vermont and ten Tribal Nations).

Date of Government Version: 05/14/2024
Date Data Arrived at EDR: 05/30/2024
Date Made Active in Reports: 08/28/2024
Number of Days to Update: 90

Source: EPA, Region 1
Telephone: 617-918-1313
Last EDR Contact: 01/16/2025
Next Scheduled EDR Contact: 04/28/2025
Data Release Frequency: Varies

INDIAN UST R8: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 8 (Colorado, Montana, North Dakota, South Dakota, Utah, Wyoming and 27 Tribal Nations).

Date of Government Version: 05/14/2024
Date Data Arrived at EDR: 05/30/2024
Date Made Active in Reports: 08/28/2024
Number of Days to Update: 90

Source: EPA Region 8
Telephone: 303-312-6137
Last EDR Contact: 01/16/2025
Next Scheduled EDR Contact: 04/28/2025
Data Release Frequency: Varies

INDIAN UST R10: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 10 (Alaska, Idaho, Oregon, Washington, and Tribal Nations).

Date of Government Version: 05/14/2024
Date Data Arrived at EDR: 05/30/2024
Date Made Active in Reports: 08/28/2024
Number of Days to Update: 90

Source: EPA Region 10
Telephone: 206-553-2857
Last EDR Contact: 01/16/2025
Next Scheduled EDR Contact: 04/28/2025
Data Release Frequency: Varies

INDIAN UST R6: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 6 (Louisiana, Arkansas, Oklahoma, New Mexico, Texas and 65 Tribes).

Date of Government Version: 05/14/2024
Date Data Arrived at EDR: 05/30/2024
Date Made Active in Reports: 08/28/2024
Number of Days to Update: 90

Source: EPA Region 6
Telephone: 214-665-7591
Last EDR Contact: 01/16/2025
Next Scheduled EDR Contact: 04/28/2025
Data Release Frequency: Varies

INDIAN UST R5: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 5 (Michigan, Minnesota and Wisconsin and Tribal Nations).

Date of Government Version: 04/11/2024
Date Data Arrived at EDR: 05/30/2024
Date Made Active in Reports: 08/28/2024
Number of Days to Update: 90

Source: EPA Region 5
Telephone: 312-886-6136
Last EDR Contact: 01/16/2025
Next Scheduled EDR Contact: 04/28/2025
Data Release Frequency: Varies

INDIAN UST R9: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 9 (Arizona, California, Hawaii, Nevada, the Pacific Islands, and Tribal Nations).

Date of Government Version: 05/14/2024
Date Data Arrived at EDR: 05/30/2024
Date Made Active in Reports: 08/28/2024
Number of Days to Update: 90

Source: EPA Region 9
Telephone: 415-972-3368
Last EDR Contact: 01/16/2025
Next Scheduled EDR Contact: 04/28/2025
Data Release Frequency: Varies

INDIAN UST R4: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 4 (Alabama, Florida, Georgia, Kentucky, Mississippi, North Carolina, South Carolina, Tennessee and Tribal Nations)

Date of Government Version: 05/14/2024
Date Data Arrived at EDR: 05/30/2024
Date Made Active in Reports: 08/28/2024
Number of Days to Update: 90

Source: EPA Region 4
Telephone: 404-562-9424
Last EDR Contact: 01/16/2025
Next Scheduled EDR Contact: 07/29/2024
Data Release Frequency: Varies

Lists of state and tribal voluntary cleanup sites

INDIAN VCP R7: Voluntary Cleanup Priority Lisitng
A listing of voluntary cleanup priority sites located on Indian Land located in Region 7.

Date of Government Version: 03/20/2008
Date Data Arrived at EDR: 04/22/2008
Date Made Active in Reports: 05/19/2008
Number of Days to Update: 27

Source: EPA, Region 7
Telephone: 913-551-7365
Last EDR Contact: 07/08/2021
Next Scheduled EDR Contact: 07/20/2009
Data Release Frequency: Varies

INDIAN VCP R1: Voluntary Cleanup Priority Listing
A listing of voluntary cleanup priority sites located on Indian Land located in Region 1.

Date of Government Version: 07/27/2015
Date Data Arrived at EDR: 09/29/2015
Date Made Active in Reports: 02/18/2016
Number of Days to Update: 142

Source: EPA, Region 1
Telephone: 617-918-1102
Last EDR Contact: 12/10/2024
Next Scheduled EDR Contact: 03/31/2025
Data Release Frequency: Varies

VCP: Voluntary Cleanup Program Properties
Contains low threat level properties with either confirmed or unconfirmed releases and the project proponents have request that DTSC oversee investigation and/or cleanup activities and have agreed to provide coverage for DTSC's costs.

Date of Government Version: 10/21/2024
Date Data Arrived at EDR: 10/22/2024
Date Made Active in Reports: 01/10/2025
Number of Days to Update: 80

Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 01/22/2025
Next Scheduled EDR Contact: 05/05/2025
Data Release Frequency: Quarterly

Lists of state and tribal brownfield sites

BROWNFIELDS: Considered Brownfieds Sites Listing
A listing of sites the SWRCB considers to be Brownfields since these are sites have come to them through the MOA Process.

Date of Government Version: 09/16/2024
Date Data Arrived at EDR: 09/17/2024
Date Made Active in Reports: 12/02/2024
Number of Days to Update: 76

Source: State Water Resources Control Board
Telephone: 916-323-7905
Last EDR Contact: 12/11/2024
Next Scheduled EDR Contact: 03/31/2025
Data Release Frequency: Quarterly

ADDITIONAL ENVIRONMENTAL RECORDS

Local Brownfield lists

US BROWNFIELDS: A Listing of Brownfields Sites
Brownfields are real property, the expansion, redevelopment, or reuse of which may be complicated by the presence or potential presence of a hazardous substance, pollutant, or contaminant. Cleaning up and reinvesting in these properties takes development pressures off of undeveloped, open land, and both improves and protects the environment. Assessment, Cleanup and Redevelopment Exchange System (ACRES) stores information reported by EPA Brownfields grant recipients on brownfields properties assessed or cleaned up with grant funding as well as information on Targeted Brownfields Assessments performed by EPA Regions. A listing of ACRES Brownfield sites is obtained from Cleanups in My Community. Cleanups in My Community provides information on Brownfields properties for which information is reported back to EPA, as well as areas served by Brownfields grant programs.

Date of Government Version: 09/09/2024
Date Data Arrived at EDR: 09/11/2024
Date Made Active in Reports: 12/06/2024
Number of Days to Update: 86

Source: Environmental Protection Agency
Telephone: 202-566-2777
Last EDR Contact: 12/12/2024
Next Scheduled EDR Contact: 03/24/2025
Data Release Frequency: Semi-Annually

Local Lists of Landfill / Solid Waste Disposal Sites

WMUDS/SWAT: Waste Management Unit Database

Waste Management Unit Database System. WMUDS is used by the State Water Resources Control Board staff and the Regional Water Quality Control Boards for program tracking and inventory of waste management units. WMUDS is composed of the following databases: Facility Information, Scheduled Inspections Information, Waste Management Unit Information, SWAT Program Information, SWAT Report Summary Information, SWAT Report Summary Data, Chapter 15 (formerly Subchapter 15) Information, Chapter 15 Monitoring Parameters, TPCA Program Information, RCRA Program Information, Closure Information, and Interested Parties Information.

Date of Government Version: 04/01/2000
Date Data Arrived at EDR: 04/10/2000
Date Made Active in Reports: 05/10/2000
Number of Days to Update: 30

Source: State Water Resources Control Board
Telephone: 916-227-4448
Last EDR Contact: 01/15/2025
Next Scheduled EDR Contact: 05/05/2025
Data Release Frequency: No Update Planned

SWRCY: Recycler Database

A listing of recycling facilities in California.

Date of Government Version: 12/02/2024
Date Data Arrived at EDR: 12/03/2024
Date Made Active in Reports: 02/24/2025
Number of Days to Update: 83

Source: Department of Conservation
Telephone: 916-323-3836
Last EDR Contact: 12/03/2024
Next Scheduled EDR Contact: 03/17/2025
Data Release Frequency: Quarterly

HAULERS: Registered Waste Tire Haulers Listing

A listing of registered waste tire haulers.

Date of Government Version: 11/13/2024
Date Data Arrived at EDR: 11/15/2024
Date Made Active in Reports: 12/12/2024
Number of Days to Update: 27

Source: Integrated Waste Management Board
Telephone: 916-341-6422
Last EDR Contact: 01/30/2025
Next Scheduled EDR Contact: 05/19/2025
Data Release Frequency: Varies

INDIAN ODI: Report on the Status of Open Dumps on Indian Lands

Location of open dumps on Indian land.

Date of Government Version: 12/31/1998
Date Data Arrived at EDR: 12/03/2007
Date Made Active in Reports: 01/24/2008
Number of Days to Update: 52

Source: Environmental Protection Agency
Telephone: 703-308-8245
Last EDR Contact: 01/16/2025
Next Scheduled EDR Contact: 05/05/2025
Data Release Frequency: Varies

ODI: Open Dump Inventory

An open dump is defined as a disposal facility that does not comply with one or more of the Part 257 or Part 258 Subtitle D Criteria.

Date of Government Version: 06/30/1985
Date Data Arrived at EDR: 08/09/2004
Date Made Active in Reports: 09/17/2004
Number of Days to Update: 39

Source: Environmental Protection Agency
Telephone: 800-424-9346
Last EDR Contact: 06/09/2004
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

DEBRIS REGION 9: Torres Martinez Reservation Illegal Dump Site Locations

A listing of illegal dump sites location on the Torres Martinez Indian Reservation located in eastern Riverside County and northern Imperial County, California.

Date of Government Version: 01/12/2009
Date Data Arrived at EDR: 05/07/2009
Date Made Active in Reports: 09/21/2009
Number of Days to Update: 137

Source: EPA, Region 9
Telephone: 415-947-4219
Last EDR Contact: 01/23/2025
Next Scheduled EDR Contact: 04/28/2025
Data Release Frequency: No Update Planned

IHS OPEN DUMPS: Open Dumps on Indian Land
A listing of all open dumps located on Indian Land in the United States.

Date of Government Version: 02/07/2024
Date Data Arrived at EDR: 11/13/2024
Date Made Active in Reports: 11/19/2024
Number of Days to Update: 6

Source: Department of Health & Human Serivces, Indian Health Service
Telephone: 301-443-1452
Last EDR Contact: 12/09/2024
Next Scheduled EDR Contact: 05/05/2025
Data Release Frequency: Varies

Local Lists of Hazardous waste / Contaminated Sites

US HIST CDL: National Clandestine Laboratory Register
A listing of clandestine drug lab locations that have been removed from the DEAs National Clandestine Laboratory Register.

Date of Government Version: 05/20/2024
Date Data Arrived at EDR: 08/19/2024
Date Made Active in Reports: 10/09/2024
Number of Days to Update: 51

Source: Drug Enforcement Administration
Telephone: 202-307-1000
Last EDR Contact: 02/20/2025
Next Scheduled EDR Contact: 06/02/2025
Data Release Frequency: No Update Planned

HIST CAL-SITES: Calsites Database
The Calsites database contains potential or confirmed hazardous substance release properties. In 1996, California EPA reevaluated and significantly reduced the number of sites in the Calsites database. No longer updated by the state agency. It has been replaced by ENVIROSTOR.

Date of Government Version: 08/08/2005
Date Data Arrived at EDR: 08/03/2006
Date Made Active in Reports: 08/24/2006
Number of Days to Update: 21

Source: Department of Toxic Substance Control
Telephone: 916-323-3400
Last EDR Contact: 02/23/2009
Next Scheduled EDR Contact: 05/25/2009
Data Release Frequency: No Update Planned

SCH: School Property Evaluation Program
This category contains proposed and existing school sites that are being evaluated by DTSC for possible hazardous materials contamination. In some cases, these properties may be listed in the CalSites category depending on the level of threat to public health and safety or the environment they pose.

Date of Government Version: 10/21/2024
Date Data Arrived at EDR: 10/22/2024
Date Made Active in Reports: 01/10/2025
Number of Days to Update: 80

Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 01/22/2025
Next Scheduled EDR Contact: 05/05/2025
Data Release Frequency: Quarterly

CDL: Clandestine Drug Labs
A listing of drug lab locations. Listing of a location in this database does not indicate that any illegal drug lab materials were or were not present there, and does not constitute a determination that the location either requires or does not require additional cleanup work.

Date of Government Version: 12/31/2022
Date Data Arrived at EDR: 03/21/2024
Date Made Active in Reports: 06/12/2024
Number of Days to Update: 83

Source: Department of Toxic Substances Control
Telephone: 916-255-6504
Last EDR Contact: 12/23/2024
Next Scheduled EDR Contact: 05/12/2025
Data Release Frequency: Varies

CERS HAZ WASTE: California Environmental Reporting System Hazardous Waste
List of sites in the California Environmental Protection Agency (CalEPA) Regulated Site Portal which fall under the Hazardous Chemical Management, Hazardous Waste Onsite Treatment, Household Hazardous Waste Collection, Hazardous Waste Generator, and RCRA LQ HW Generator programs.

Date of Government Version: 10/15/2024
Date Data Arrived at EDR: 10/16/2024
Date Made Active in Reports: 12/31/2024
Number of Days to Update: 76

Source: CalEPA
Telephone: 916-323-2514
Last EDR Contact: 01/14/2025
Next Scheduled EDR Contact: 04/28/2025
Data Release Frequency: Quarterly

TOXIC PITS: Toxic Pits Cleanup Act Sites

Toxic PITS Cleanup Act Sites. TOXIC PITS identifies sites suspected of containing hazardous substances where cleanup has not yet been completed.

Date of Government Version: 07/01/1995
Date Data Arrived at EDR: 08/30/1995
Date Made Active in Reports: 09/26/1995
Number of Days to Update: 27

Source: State Water Resources Control Board
Telephone: 916-227-4364
Last EDR Contact: 01/26/2009
Next Scheduled EDR Contact: 04/27/2009
Data Release Frequency: No Update Planned

US CDL: Clandestine Drug Labs

A listing of clandestine drug lab locations. The U.S. Department of Justice ("the Department") provides this web site as a public service. It contains addresses of some locations where law enforcement agencies reported they found chemicals or other items that indicated the presence of either clandestine drug laboratories or dumpsites. In most cases, the source of the entries is not the Department, and the Department has not verified the entry and does not guarantee its accuracy. Members of the public must verify the accuracy of all entries by, for example, contacting local law enforcement and local health departments.

Date of Government Version: 05/20/2024
Date Data Arrived at EDR: 08/19/2024
Date Made Active in Reports: 10/09/2024
Number of Days to Update: 51

Source: Drug Enforcement Administration
Telephone: 202-307-1000
Last EDR Contact: 02/20/2025
Next Scheduled EDR Contact: 06/02/2025
Data Release Frequency: Quarterly

Local Lists of Registered Storage Tanks

SWEEPS UST: SWEEPS UST Listing

Statewide Environmental Evaluation and Planning System. This underground storage tank listing was updated and maintained by a company contacted by the SWRCB in the early 1990's. The listing is no longer updated or maintained. The local agency is the contact for more information on a site on the SWEEPS list.

Date of Government Version: 06/01/1994
Date Data Arrived at EDR: 07/07/2005
Date Made Active in Reports: 08/11/2005
Number of Days to Update: 35

Source: State Water Resources Control Board
Telephone: N/A
Last EDR Contact: 06/03/2005
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

HIST UST: Hazardous Substance Storage Container Database

The Hazardous Substance Storage Container Database is a historical listing of UST sites. Refer to local/county source for current data.

Date of Government Version: 10/15/1990
Date Data Arrived at EDR: 01/25/1991
Date Made Active in Reports: 02/12/1991
Number of Days to Update: 18

Source: State Water Resources Control Board
Telephone: 916-341-5851
Last EDR Contact: 07/26/2001
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

SAN FRANCISCO AST: Aboveground Storage Tank Site Listing

Aboveground storage tank sites

Date of Government Version: 07/29/2024
Date Data Arrived at EDR: 07/30/2024
Date Made Active in Reports: 10/17/2024
Number of Days to Update: 79

Source: San Francisco County Department of Public Health
Telephone: 415-252-3896
Last EDR Contact: 01/23/2025
Next Scheduled EDR Contact: 05/12/2025
Data Release Frequency: Varies

CERS TANKS: California Environmental Reporting System (CERS) Tanks

List of sites in the California Environmental Protection Agency (CalEPA) Regulated Site Portal which fall under the Aboveground Petroleum Storage and Underground Storage Tank regulatory programs.

Date of Government Version: 10/15/2024
Date Data Arrived at EDR: 10/16/2024
Date Made Active in Reports: 12/31/2024
Number of Days to Update: 76

Source: California Environmental Protection Agency
Telephone: 916-323-2514
Last EDR Contact: 01/14/2025
Next Scheduled EDR Contact: 04/28/2025
Data Release Frequency: Quarterly

CA FID UST: Facility Inventory Database

The Facility Inventory Database (FID) contains a historical listing of active and inactive underground storage tank locations from the State Water Resource Control Board. Refer to local/county source for current data.

Date of Government Version: 10/31/1994
Date Data Arrived at EDR: 09/05/1995
Date Made Active in Reports: 09/29/1995
Number of Days to Update: 24

Source: California Environmental Protection Agency
Telephone: 916-341-5851
Last EDR Contact: 12/28/1998
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

Local Land Records

LIENS: Environmental Liens Listing

A listing of property locations with environmental liens for California where DTSC is a lien holder.

Date of Government Version: 11/26/2024
Date Data Arrived at EDR: 12/03/2024
Date Made Active in Reports: 12/31/2024
Number of Days to Update: 28

Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 02/19/2025
Next Scheduled EDR Contact: 06/09/2025
Data Release Frequency: Varies

LIENS 2: CERCLA Lien Information

A Federal CERCLA ('Superfund') lien can exist by operation of law at any site or property at which EPA has spent Superfund monies. These monies are spent to investigate and address releases and threatened releases of contamination. CERCLIS provides information as to the identity of these sites and properties.

Date of Government Version: 12/19/2024
Date Data Arrived at EDR: 01/02/2025
Date Made Active in Reports: 01/21/2025
Number of Days to Update: 19

Source: Environmental Protection Agency
Telephone: 202-564-6023
Last EDR Contact: 02/03/2025
Next Scheduled EDR Contact: 04/07/2025
Data Release Frequency: Semi-Annually

DEED: Deed Restriction Listing

Site Mitigation and Brownfields Reuse Program Facility Sites with Deed Restrictions & Hazardous Waste Management Program Facility Sites with Deed / Land Use Restriction. The DTSC Site Mitigation and Brownfields Reuse Program (SMBRP) list includes sites cleaned up under the program's oversight and generally does not include current or former hazardous waste facilities that required a hazardous waste facility permit. The list represents deed restrictions that are active. Some sites have multiple deed restrictions. The DTSC Hazardous Waste Management Program (HWMP) has developed a list of current or former hazardous waste facilities that have a recorded land use restriction at the local county recorder's office. The land use restrictions on this list were required by the DTSC HWMP as a result of the presence of hazardous substances that remain on site after the facility (or part of the facility) has been closed or cleaned up. The types of land use restriction include deed notice, deed restriction, or a land use restriction that binds current and future owners.

Date of Government Version: 11/20/2024
Date Data Arrived at EDR: 11/20/2024
Date Made Active in Reports: 02/13/2025
Number of Days to Update: 85

Source: DTSC and SWRCB
Telephone: 916-323-3400
Last EDR Contact: 11/20/2024
Next Scheduled EDR Contact: 03/10/2025
Data Release Frequency: Semi-Annually

Records of Emergency Release Reports

HMIRS: Hazardous Materials Information Reporting System
Hazardous Materials Incident Report System. HMIRS contains hazardous material spill incidents reported to DOT.

Date of Government Version: 06/14/2024
Date Data Arrived at EDR: 06/17/2024
Date Made Active in Reports: 06/24/2024
Number of Days to Update: 7

Source: U.S. Department of Transportation
Telephone: 202-366-4555
Last EDR Contact: 12/11/2024
Next Scheduled EDR Contact: 03/31/2025
Data Release Frequency: Quarterly

CHMIRS: California Hazardous Material Incident Report System
California Hazardous Material Incident Reporting System. CHMIRS contains information on reported hazardous material incidents (accidental releases or spills).

Date of Government Version: 08/01/2024
Date Data Arrived at EDR: 10/16/2024
Date Made Active in Reports: 12/31/2024
Number of Days to Update: 76

Source: Office of Emergency Services
Telephone: 916-845-8400
Last EDR Contact: 01/14/2025
Next Scheduled EDR Contact: 04/28/2025
Data Release Frequency: Semi-Annually

LDS: Land Disposal Sites Listing (GEOTRACKER)
Land Disposal sites (Landfills) included in GeoTracker. GeoTracker is the Water Boards data management system for sites that impact, or have the potential to impact, water quality in California, with emphasis on groundwater.

Date of Government Version: 11/26/2024
Date Data Arrived at EDR: 11/26/2024
Date Made Active in Reports: 02/21/2025
Number of Days to Update: 87

Source: State Water Qualilty Control Board
Telephone: 866-480-1028
Last EDR Contact: 02/24/2025
Next Scheduled EDR Contact: 03/17/2025
Data Release Frequency: Quarterly

MCS: Military Cleanup Sites Listing (GEOTRACKER)
Military sites (consisting of: Military UST sites; Military Privatized sites; and Military Cleanup sites [formerly known as DoD non UST]) included in GeoTracker. GeoTracker is the Water Boards data management system for sites that impact, or have the potential to impact, water quality in California, with emphasis on groundwater.

Date of Government Version: 08/28/2024
Date Data Arrived at EDR: 08/28/2024
Date Made Active in Reports: 08/30/2024
Number of Days to Update: 2

Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 02/24/2025
Next Scheduled EDR Contact: 03/17/2025
Data Release Frequency: Quarterly

SPILLS 90: SPILLS90 data from FirstSearch
Spills 90 includes those spill and release records available exclusively from FirstSearch databases. Typically, they may include chemical, oil and/or hazardous substance spills recorded after 1990. Duplicate records that are already included in EDR incident and release records are not included in Spills 90.

Date of Government Version: 06/06/2012
Date Data Arrived at EDR: 01/03/2013
Date Made Active in Reports: 02/22/2013
Number of Days to Update: 50

Source: FirstSearch
Telephone: N/A
Last EDR Contact: 01/03/2013
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

Other Ascertainable Records

RCRA NonGen / NLR: RCRA - Non Generators / No Longer Regulated
RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Non-Generators do not presently generate hazardous waste.

Date of Government Version: 09/16/2024
Date Data Arrived at EDR: 09/17/2024
Date Made Active in Reports: 12/06/2024
Number of Days to Update: 80

Source: Environmental Protection Agency
Telephone: (415) 495-8895
Last EDR Contact: 02/19/2025
Next Scheduled EDR Contact: 03/31/2025
Data Release Frequency: Quarterly

FUDS: Formerly Used Defense Sites

The listing includes locations of Formerly Used Defense Sites properties where the US Army Corps of Engineers is actively working or will take necessary cleanup actions.

Date of Government Version: 10/01/2024
Date Data Arrived at EDR: 11/12/2024
Date Made Active in Reports: 01/21/2025
Number of Days to Update: 70

Source: U.S. Army Corps of Engineers
Telephone: 202-528-4285
Last EDR Contact: 02/11/2025
Next Scheduled EDR Contact: 05/26/2025
Data Release Frequency: Varies

DOD: Department of Defense Sites

This data set consists of federally owned or administered lands, administered by the Department of Defense, that have any area equal to or greater than 640 acres of the United States, Puerto Rico, and the U.S. Virgin Islands.

Date of Government Version: 06/07/2021
Date Data Arrived at EDR: 07/13/2021
Date Made Active in Reports: 03/09/2022
Number of Days to Update: 239

Source: USGS
Telephone: 888-275-8747
Last EDR Contact: 01/07/2025
Next Scheduled EDR Contact: 04/21/2025
Data Release Frequency: Varies

FEDLAND: Federal and Indian Lands

Federally and Indian administrated lands of the United States. Lands included are administrated by: Army Corps of Engineers, Bureau of Reclamation, National Wild and Scenic River, National Wildlife Refuge, Public Domain Land, Wilderness, Wilderness Study Area, Wildlife Management Area, Bureau of Indian Affairs, Bureau of Land Management, Department of Justice, Forest Service, Fish and Wildlife Service, National Park Service.

Date of Government Version: 04/02/2018
Date Data Arrived at EDR: 04/11/2018
Date Made Active in Reports: 11/06/2019
Number of Days to Update: 574

Source: U.S. Geological Survey
Telephone: 888-275-8747
Last EDR Contact: 12/30/2024
Next Scheduled EDR Contact: 04/14/2025
Data Release Frequency: N/A

SCRD DRYCLEANERS: State Coalition for Remediation of Drycleaners Listing

The State Coalition for Remediation of Drycleaners was established in 1998, with support from the U.S. EPA Office of Superfund Remediation and Technology Innovation. It is comprised of representatives of states with established drycleaner remediation programs. Currently the member states are Alabama, Connecticut, Florida, Illinois, Kansas, Minnesota, Missouri, North Carolina, Oregon, South Carolina, Tennessee, Texas, and Wisconsin.

Date of Government Version: 07/30/2021
Date Data Arrived at EDR: 02/03/2023
Date Made Active in Reports: 02/10/2023
Number of Days to Update: 7

Source: Environmental Protection Agency
Telephone: 615-532-8599
Last EDR Contact: 02/03/2025
Next Scheduled EDR Contact: 05/19/2025
Data Release Frequency: Varies

US FIN ASSUR: Financial Assurance Information

All owners and operators of facilities that treat, store, or dispose of hazardous waste are required to provide proof that they will have sufficient funds to pay for the clean up, closure, and post-closure care of their facilities.

Date of Government Version: 09/16/2024
Date Data Arrived at EDR: 09/17/2024
Date Made Active in Reports: 12/20/2024
Number of Days to Update: 94

Source: Environmental Protection Agency
Telephone: 202-566-1917
Last EDR Contact: 02/19/2025
Next Scheduled EDR Contact: 03/31/2025
Data Release Frequency: Quarterly

EPA WATCH LIST: EPA Watch List

EPA maintains a "Watch List" to facilitate dialogue between EPA, state and local environmental agencies on enforcement matters relating to facilities with alleged violations identified as either significant or high priority. Being on the Watch List does not mean that the facility has actually violated the law only that an investigation by EPA or a state or local environmental agency has led those organizations to allege that an unproven violation has in fact occurred. Being on the Watch List does not represent a higher level of concern regarding the alleged violations that were detected, but instead indicates cases requiring additional dialogue between EPA, state and local agencies - primarily because of the length of time the alleged violation has gone unaddressed or unresolved.

Date of Government Version: 08/30/2013
Date Data Arrived at EDR: 03/21/2014
Date Made Active in Reports: 06/17/2014
Number of Days to Update: 88

Source: Environmental Protection Agency
Telephone: 617-520-3000
Last EDR Contact: 01/27/2025
Next Scheduled EDR Contact: 05/12/2025
Data Release Frequency: No Update Planned

2020 COR ACTION: 2020 Corrective Action Program List

The EPA has set ambitious goals for the RCRA Corrective Action program by creating the 2020 Corrective Action Universe. This RCRA cleanup baseline includes facilities expected to need corrective action. The 2020 universe contains a wide variety of sites. Some properties are heavily contaminated while others were contaminated but have since been cleaned up. Still others have not been fully investigated yet, and may require little or no remediation. Inclusion in the 2020 Universe does not necessarily imply failure on the part of a facility to meet its RCRA obligations.

Date of Government Version: 09/30/2017
Date Data Arrived at EDR: 05/08/2018
Date Made Active in Reports: 07/20/2018
Number of Days to Update: 73

Source: Environmental Protection Agency
Telephone: 703-308-4044
Last EDR Contact: 01/30/2025
Next Scheduled EDR Contact: 05/12/2025
Data Release Frequency: Varies

TSCA: Toxic Substances Control Act

Toxic Substances Control Act. TSCA identifies manufacturers and importers of chemical substances included on the TSCA Chemical Substance Inventory list. It includes data on the production volume of these substances by plant site.

Date of Government Version: 12/31/2020
Date Data Arrived at EDR: 06/14/2022
Date Made Active in Reports: 03/24/2023
Number of Days to Update: 283

Source: EPA
Telephone: 202-260-5521
Last EDR Contact: 12/12/2024
Next Scheduled EDR Contact: 03/24/2025
Data Release Frequency: Every 4 Years

TRIS: Toxic Chemical Release Inventory System

Toxic Release Inventory System. TRIS identifies facilities which release toxic chemicals to the air, water and land in reportable quantities under SARA Title III Section 313.

Date of Government Version: 12/31/2023
Date Data Arrived at EDR: 02/11/2025
Date Made Active in Reports: 02/18/2025
Number of Days to Update: 7

Source: EPA
Telephone: 202-566-0250
Last EDR Contact: 02/11/2025
Next Scheduled EDR Contact: 05/26/2025
Data Release Frequency: Annually

SSTS: Section 7 Tracking Systems

Section 7 of the Federal Insecticide, Fungicide and Rodenticide Act, as amended (92 Stat. 829) requires all registered pesticide-producing establishments to submit a report to the Environmental Protection Agency by March 1st each year. Each establishment must report the types and amounts of pesticides, active ingredients and devices being produced, and those having been produced and sold or distributed in the past year.

Date of Government Version: 10/15/2024
Date Data Arrived at EDR: 10/16/2024
Date Made Active in Reports: 01/14/2025
Number of Days to Update: 90

Source: EPA
Telephone: 202-564-4203
Last EDR Contact: 01/15/2025
Next Scheduled EDR Contact: 04/28/2025
Data Release Frequency: Annually

ROD: Records Of Decision

Record of Decision. ROD documents mandate a permanent remedy at an NPL (Superfund) site containing technical and health information to aid in the cleanup.

Date of Government Version: 10/24/2024
Date Data Arrived at EDR: 11/01/2024
Date Made Active in Reports: 11/19/2024
Number of Days to Update: 18

Source: EPA
Telephone: 703-416-0223
Last EDR Contact: 02/03/2025
Next Scheduled EDR Contact: 03/10/2025
Data Release Frequency: Annually

RMP: Risk Management Plans

When Congress passed the Clean Air Act Amendments of 1990, it required EPA to publish regulations and guidance for chemical accident prevention at facilities using extremely hazardous substances. The Risk Management Program Rule (RMP Rule) was written to implement Section 112(r) of these amendments. The rule, which built upon existing industry codes and standards, requires companies of all sizes that use certain flammable and toxic substances to develop a Risk Management Program, which includes a(n): Hazard assessment that details the potential effects of an accidental release, an accident history of the last five years, and an evaluation of worst-case and alternative accidental releases; Prevention program that includes safety precautions and maintenance, monitoring, and employee training measures; and Emergency response program that spells out emergency health care, employee training measures and procedures for informing the public and response agencies (e.g the fire department) should an accident occur.

Date of Government Version: 10/01/2024
Date Data Arrived at EDR: 10/23/2024
Date Made Active in Reports: 01/14/2025
Number of Days to Update: 83

Source: Environmental Protection Agency
Telephone: 202-564-8600
Last EDR Contact: 01/09/2025
Next Scheduled EDR Contact: 04/28/2025
Data Release Frequency: Varies

RAATS: RCRA Administrative Action Tracking System

RCRA Administration Action Tracking System. RAATS contains records based on enforcement actions issued under RCRA pertaining to major violators and includes administrative and civil actions brought by the EPA. For administration actions after September 30, 1995, data entry in the RAATS database was discontinued. EPA will retain a copy of the database for historical records. It was necessary to terminate RAATS because a decrease in agency resources made it impossible to continue to update the information contained in the database.

Date of Government Version: 04/17/1995
Date Data Arrived at EDR: 07/03/1995
Date Made Active in Reports: 08/07/1995
Number of Days to Update: 35

Source: EPA
Telephone: 202-564-4104
Last EDR Contact: 06/02/2008
Next Scheduled EDR Contact: 09/01/2008
Data Release Frequency: No Update Planned

PRP: Potentially Responsible Parties

A listing of verified Potentially Responsible Parties

Date of Government Version: 09/19/2023
Date Data Arrived at EDR: 10/03/2023
Date Made Active in Reports: 10/19/2023
Number of Days to Update: 16

Source: EPA
Telephone: 202-564-6023
Last EDR Contact: 02/03/2025
Next Scheduled EDR Contact: 05/12/2025
Data Release Frequency: Quarterly

PADS: PCB Activity Database System

PCB Activity Database. PADS Identifies generators, transporters, commercial storers and/or brokers and disposers of PCB's who are required to notify the EPA of such activities.

Date of Government Version: 07/01/2024
Date Data Arrived at EDR: 10/02/2024
Date Made Active in Reports: 01/10/2025
Number of Days to Update: 100

Source: EPA
Telephone: 202-566-0500
Last EDR Contact: 01/02/2025
Next Scheduled EDR Contact: 04/14/2025
Data Release Frequency: Annually

ICIS: Integrated Compliance Information System

The Integrated Compliance Information System (ICIS) supports the information needs of the national enforcement and compliance program as well as the unique needs of the National Pollutant Discharge Elimination System (NPDES) program.

Date of Government Version: 11/18/2016
Date Data Arrived at EDR: 11/23/2016
Date Made Active in Reports: 02/10/2017
Number of Days to Update: 79

Source: Environmental Protection Agency
Telephone: 202-564-2501
Last EDR Contact: 12/23/2024
Next Scheduled EDR Contact: 04/14/2025
Data Release Frequency: Quarterly

FTTS: FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)

FTTS tracks administrative cases and pesticide enforcement actions and compliance activities related to FIFRA, TSCA and EPCRA (Emergency Planning and Community Right-to-Know Act). To maintain currency, EDR contacts the Agency on a quarterly basis.

Date of Government Version: 04/09/2009
Date Data Arrived at EDR: 04/16/2009
Date Made Active in Reports: 05/11/2009
Number of Days to Update: 25

Source: EPA/Office of Prevention, Pesticides and Toxic Substances
Telephone: 202-566-1667
Last EDR Contact: 08/18/2017
Next Scheduled EDR Contact: 12/04/2017
Data Release Frequency: No Update Planned

FTTS INSP: FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)

A listing of FIFRA/TSCA Tracking System (FTTS) inspections and enforcements.

Date of Government Version: 04/09/2009
Date Data Arrived at EDR: 04/16/2009
Date Made Active in Reports: 05/11/2009
Number of Days to Update: 25

Source: EPA
Telephone: 202-566-1667
Last EDR Contact: 08/18/2017
Next Scheduled EDR Contact: 12/04/2017
Data Release Frequency: No Update Planned

MLTS: Material Licensing Tracking System

MLTS is maintained by the Nuclear Regulatory Commission and contains a list of approximately 8,100 sites which possess or use radioactive materials and which are subject to NRC licensing requirements. To maintain currency, EDR contacts the Agency on a quarterly basis.

Date of Government Version: 10/12/2024
Date Data Arrived at EDR: 10/17/2024
Date Made Active in Reports: 11/19/2024
Number of Days to Update: 33

Source: Nuclear Regulatory Commission
Telephone: 301-415-0717
Last EDR Contact: 01/09/2025
Next Scheduled EDR Contact: 04/28/2025
Data Release Frequency: Quarterly

COAL ASH DOE: Steam-Electric Plant Operation Data

A listing of power plants that store ash in surface ponds.

Date of Government Version: 12/31/2023
Date Data Arrived at EDR: 10/16/2024
Date Made Active in Reports: 01/14/2025
Number of Days to Update: 90

Source: Department of Energy
Telephone: 202-586-8719
Last EDR Contact: 02/24/2025
Next Scheduled EDR Contact: 06/09/2025
Data Release Frequency: Varies

COAL ASH EPA: Coal Combustion Residues Surface Impoundments List

A listing of coal combustion residues surface impoundments with high hazard potential ratings.

Date of Government Version: 01/12/2017
Date Data Arrived at EDR: 03/05/2019
Date Made Active in Reports: 11/11/2019
Number of Days to Update: 251

Source: Environmental Protection Agency
Telephone: N/A
Last EDR Contact: 02/24/2025
Next Scheduled EDR Contact: 06/09/2025
Data Release Frequency: Varies

PCB TRANSFORMER: PCB Transformer Registration Database
The database of PCB transformer registrations that includes all PCB registration submittals.

Date of Government Version: 09/13/2019
Date Data Arrived at EDR: 11/06/2019
Date Made Active in Reports: 02/10/2020
Number of Days to Update: 96
Source: Environmental Protection Agency
Telephone: 202-566-0517
Last EDR Contact: 01/30/2025
Next Scheduled EDR Contact: 05/12/2025
Data Release Frequency: Varies

RADINFO: Radiation Information Database
The Radiation Information Database (RADINFO) contains information about facilities that are regulated by U.S. Environmental Protection Agency (EPA) regulations for radiation and radioactivity.

Date of Government Version: 07/01/2019
Date Data Arrived at EDR: 07/01/2019
Date Made Active in Reports: 09/23/2019
Number of Days to Update: 84
Source: Environmental Protection Agency
Telephone: 202-343-9775
Last EDR Contact: 12/17/2024
Next Scheduled EDR Contact: 04/07/2025
Data Release Frequency: Quarterly

HIST FTTS: FIFRA/TSCA Tracking System Administrative Case Listing
A complete administrative case listing from the FIFRA/TSCA Tracking System (FTTS) for all ten EPA regions. The information was obtained from the National Compliance Database (NCDB). NCDB supports the implementation of FIFRA (Federal Insecticide, Fungicide, and Rodenticide Act) and TSCA (Toxic Substances Control Act). Some EPA regions are now closing out records. Because of that, and the fact that some EPA regions are not providing EPA Headquarters with updated records, it was decided to create a HIST FTTS database. It included records that may not be included in the newer FTTS database updates. This database is no longer updated.

Date of Government Version: 10/19/2006
Date Data Arrived at EDR: 03/01/2007
Date Made Active in Reports: 04/10/2007
Number of Days to Update: 40
Source: Environmental Protection Agency
Telephone: 202-564-2501
Last EDR Contact: 12/17/2007
Next Scheduled EDR Contact: 03/17/2008
Data Release Frequency: No Update Planned

HIST FTTS INSP: FIFRA/TSCA Tracking System Inspection & Enforcement Case Listing
A complete inspection and enforcement case listing from the FIFRA/TSCA Tracking System (FTTS) for all ten EPA regions. The information was obtained from the National Compliance Database (NCDB). NCDB supports the implementation of FIFRA (Federal Insecticide, Fungicide, and Rodenticide Act) and TSCA (Toxic Substances Control Act). Some EPA regions are now closing out records. Because of that, and the fact that some EPA regions are not providing EPA Headquarters with updated records, it was decided to create a HIST FTTS database. It included records that may not be included in the newer FTTS database updates. This database is no longer updated.

Date of Government Version: 10/19/2006
Date Data Arrived at EDR: 03/01/2007
Date Made Active in Reports: 04/10/2007
Number of Days to Update: 40
Source: Environmental Protection Agency
Telephone: 202-564-2501
Last EDR Contact: 12/17/2008
Next Scheduled EDR Contact: 03/17/2008
Data Release Frequency: No Update Planned

DOT OPS: Incident and Accident Data
Department of Transporation, Office of Pipeline Safety Incident and Accident data.

Date of Government Version: 10/04/2024
Date Data Arrived at EDR: 10/16/2024
Date Made Active in Reports: 12/06/2024
Number of Days to Update: 51
Source: Department of Transporation, Office of Pipeline Safety
Telephone: 202-366-4595
Last EDR Contact: 01/22/2025
Next Scheduled EDR Contact: 05/05/2025
Data Release Frequency: Quarterly

CONSENT: Superfund (CERCLA) Consent Decrees
Major legal settlements that establish responsibility and standards for cleanup at NPL (Superfund) sites. Released periodically by United States District Courts after settlement by parties to litigation matters.

Date of Government Version: 09/30/2024
Date Data Arrived at EDR: 10/09/2024
Date Made Active in Reports: 01/10/2025
Number of Days to Update: 93

Source: Department of Justice, Consent Decree Library
Telephone: Varies
Last EDR Contact: 12/30/2024
Next Scheduled EDR Contact: 04/14/2025
Data Release Frequency: Varies

BRS: Biennial Reporting System

The Biennial Reporting System is a national system administered by the EPA that collects data on the generation and management of hazardous waste. BRS captures detailed data from two groups: Large Quantity Generators (LQG) and Treatment, Storage, and Disposal Facilities.

Date of Government Version: 12/31/2021
Date Data Arrived at EDR: 03/09/2023
Date Made Active in Reports: 03/20/2023
Number of Days to Update: 11

Source: EPA/NTIS
Telephone: 800-424-9346
Last EDR Contact: 12/12/2024
Next Scheduled EDR Contact: 03/31/2025
Data Release Frequency: Biennially

INDIAN RESERV: Indian Reservations

This map layer portrays Indian administered lands of the United States that have any area equal to or greater than 640 acres.

Date of Government Version: 12/31/2014
Date Data Arrived at EDR: 07/14/2015
Date Made Active in Reports: 01/10/2017
Number of Days to Update: 546

Source: USGS
Telephone: 202-208-3710
Last EDR Contact: 12/30/2024
Next Scheduled EDR Contact: 04/14/2025
Data Release Frequency: Semi-Annually

FUSRAP: Formerly Utilized Sites Remedial Action Program

DOE established the Formerly Utilized Sites Remedial Action Program (FUSRAP) in 1974 to remediate sites where radioactive contamination remained from Manhattan Project and early U.S. Atomic Energy Commission (AEC) operations.

Date of Government Version: 03/03/2023
Date Data Arrived at EDR: 03/03/2023
Date Made Active in Reports: 06/09/2023
Number of Days to Update: 98

Source: Department of Energy
Telephone: 202-586-3559
Last EDR Contact: 01/23/2025
Next Scheduled EDR Contact: 05/12/2025
Data Release Frequency: Varies

UMTRA: Uranium Mill Tailings Sites

Uranium ore was mined by private companies for federal government use in national defense programs. When the mills shut down, large piles of the sand-like material (mill tailings) remain after uranium has been extracted from the ore. Levels of human exposure to radioactive materials from the piles are low; however, in some cases tailings were used as construction materials before the potential health hazards of the tailings were recognized.

Date of Government Version: 05/08/2024
Date Data Arrived at EDR: 08/14/2024
Date Made Active in Reports: 08/28/2024
Number of Days to Update: 14

Source: Department of Energy
Telephone: 505-845-0011
Last EDR Contact: 02/06/2025
Next Scheduled EDR Contact: 05/26/2025
Data Release Frequency: Varies

LEAD SMELTER 1: Lead Smelter Sites

A listing of former lead smelter site locations.

Date of Government Version: 12/19/2024
Date Data Arrived at EDR: 01/02/2025
Date Made Active in Reports: 01/21/2025
Number of Days to Update: 19

Source: Environmental Protection Agency
Telephone: 703-603-8787
Last EDR Contact: 02/03/2025
Next Scheduled EDR Contact: 04/07/2025
Data Release Frequency: Varies

LEAD SMELTER 2: Lead Smelter Sites

A list of several hundred sites in the U.S. where secondary lead smelting was done from 1931and 1964. These sites may pose a threat to public health through ingestion or inhalation of contaminated soil or dust

Date of Government Version: 04/05/2001
Date Data Arrived at EDR: 10/27/2010
Date Made Active in Reports: 12/02/2010
Number of Days to Update: 36

Source: American Journal of Public Health
Telephone: 703-305-6451
Last EDR Contact: 12/02/2009
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

US AIRS (AFS): Aerometric Information Retrieval System Facility Subsystem (AFS)

The database is a sub-system of Aerometric Information Retrieval System (AIRS). AFS contains compliance data on air pollution point sources regulated by the U.S. EPA and/or state and local air regulatory agencies. This information comes from source reports by various stationary sources of air pollution, such as electric power plants, steel mills, factories, and universities, and provides information about the air pollutants they produce. Action, air program, air program pollutant, and general level plant data. It is used to track emissions and compliance data from industrial plants.

Date of Government Version: 10/12/2016
Date Data Arrived at EDR: 10/26/2016
Date Made Active in Reports: 02/03/2017
Number of Days to Update: 100

Source: EPA
Telephone: 202-564-2496
Last EDR Contact: 09/26/2017
Next Scheduled EDR Contact: 01/08/2018
Data Release Frequency: Annually

US AIRS MINOR: Air Facility System Data

A listing of minor source facilities.

Date of Government Version: 10/12/2016
Date Data Arrived at EDR: 10/26/2016
Date Made Active in Reports: 02/03/2017
Number of Days to Update: 100

Source: EPA
Telephone: 202-564-2496
Last EDR Contact: 09/26/2017
Next Scheduled EDR Contact: 01/08/2018
Data Release Frequency: Annually

US MINES: Mines Master Index File

Contains all mine identification numbers issued for mines active or opened since 1971. The data also includes violation information.

Date of Government Version: 11/01/2024
Date Data Arrived at EDR: 11/18/2024
Date Made Active in Reports: 02/11/2025
Number of Days to Update: 85

Source: Department of Labor, Mine Safety and Health Administration
Telephone: 303-231-5959
Last EDR Contact: 02/18/2025
Next Scheduled EDR Contact: 06/02/2025
Data Release Frequency: Semi-Annually

MINES VIOLATIONS: MSHA Violation Assessment Data

Mines violation and assessment information. Department of Labor, Mine Safety & Health Administration.

Date of Government Version: 10/01/2024
Date Data Arrived at EDR: 10/02/2024
Date Made Active in Reports: 10/09/2024
Number of Days to Update: 7

Source: DOL, Mine Safety & Health Admi
Telephone: 202-693-9424
Last EDR Contact: 02/19/2025
Next Scheduled EDR Contact: 06/02/2025
Data Release Frequency: Quarterly

US MINES 2: Ferrous and Nonferrous Metal Mines Database Listing

This map layer includes ferrous (ferrous metal mines are facilities that extract ferrous metals, such as iron ore or molybdenum) and nonferrous (Nonferrous metal mines are facilities that extract nonferrous metals, such as gold, silver, copper, zinc, and lead) metal mines in the United States.

Date of Government Version: 05/02/2024
Date Data Arrived at EDR: 08/20/2024
Date Made Active in Reports: 10/09/2024
Number of Days to Update: 50

Source: USGS
Telephone: 703-648-7709
Last EDR Contact: 02/20/2025
Next Scheduled EDR Contact: 06/02/2025
Data Release Frequency: Varies

US MINES 3: Active Mines & Mineral Plants Database Listing

Active Mines and Mineral Processing Plant operations for commodities monitored by the Minerals Information Team of the USGS.

Date of Government Version: 04/14/2011
Date Data Arrived at EDR: 06/08/2011
Date Made Active in Reports: 09/13/2011
Number of Days to Update: 97

Source: USGS
Telephone: 703-648-7709
Last EDR Contact: 02/20/2025
Next Scheduled EDR Contact: 06/02/2025
Data Release Frequency: Varies

ABANDONED MINES: Abandoned Mines

An inventory of land and water impacted by past mining (primarily coal mining) is maintained by OSMRE to provide information needed to implement the Surface Mining Control and Reclamation Act of 1977 (SMCRA). The inventory contains information on the location, type, and extent of AML impacts, as well as, information on the cost associated with the reclamation of those problems. The inventory is based upon field surveys by State, Tribal, and OSMRE program officials. It is dynamic to the extent that it is modified as new problems are identified and existing problems are reclaimed.

Date of Government Version: 12/10/2024
Date Data Arrived at EDR: 12/11/2024
Date Made Active in Reports: 02/18/2025
Number of Days to Update: 69

Source: Department of Interior
Telephone: 202-208-2609
Last EDR Contact: 12/10/2024
Next Scheduled EDR Contact: 03/17/2025
Data Release Frequency: Quarterly

MINES MRDS: Mineral Resources Data System

Mineral Resources Data System

Date of Government Version: 06/04/2024
Date Data Arrived at EDR: 11/22/2024
Date Made Active in Reports: 02/18/2025
Number of Days to Update: 88

Source: USGS
Telephone: 703-648-6533
Last EDR Contact: 02/20/2025
Next Scheduled EDR Contact: 06/02/2025
Data Release Frequency: Varies

FINDS: Facility Index System/Facility Registry System

Facility Index System. FINDS contains both facility information and 'pointers' to other sources that contain more detail. EDR includes the following FINDS databases in this report: PCS (Permit Compliance System), AIRS (Aerometric Information Retrieval System), DOCKET (Enforcement Docket used to manage and track information on civil judicial enforcement cases for all environmental statutes), FURS (Federal Underground Injection Control), C-DOCKET (Criminal Docket System used to track criminal enforcement actions for all environmental statutes), FFIS (Federal Facilities Information System), STATE (State Environmental Laws and Statutes), and PADS (PCB Activity Data System).

Date of Government Version: 11/11/2024
Date Data Arrived at EDR: 11/20/2024
Date Made Active in Reports: 02/18/2025
Number of Days to Update: 90

Source: EPA
Telephone: (415) 947-8000
Last EDR Contact: 11/20/2024
Next Scheduled EDR Contact: 03/10/2025
Data Release Frequency: Quarterly

DOCKET HWC: Hazardous Waste Compliance Docket Listing

A complete list of the Federal Agency Hazardous Waste Compliance Docket Facilities.

Date of Government Version: 05/06/2021
Date Data Arrived at EDR: 05/21/2021
Date Made Active in Reports: 08/11/2021
Number of Days to Update: 82

Source: Environmental Protection Agency
Telephone: 202-564-0527
Last EDR Contact: 02/12/2025
Next Scheduled EDR Contact: 06/02/2025
Data Release Frequency: Varies

ECHO: Enforcement & Compliance History Information

ECHO provides integrated compliance and enforcement information for about 800,000 regulated facilities nationwide.

Date of Government Version: 12/21/2024
Date Data Arrived at EDR: 12/27/2024
Date Made Active in Reports: 01/10/2025
Number of Days to Update: 14

Source: Environmental Protection Agency
Telephone: 202-564-2280
Last EDR Contact: 12/27/2024
Next Scheduled EDR Contact: 04/14/2025
Data Release Frequency: Quarterly

UXO: Unexploded Ordnance Sites

A listing of unexploded ordnance site locations

Date of Government Version: 09/06/2023
Date Data Arrived at EDR: 09/13/2023
Date Made Active in Reports: 12/11/2023
Number of Days to Update: 89

Source: Department of Defense
Telephone: 703-704-1564
Last EDR Contact: 01/06/2025
Next Scheduled EDR Contact: 04/21/2025
Data Release Frequency: Varies

FUELS PROGRAM: EPA Fuels Program Registered Listing

This listing includes facilities that are registered under the Part 80 (Code of Federal Regulations) EPA Fuels Programs. All companies now are required to submit new and updated registrations.

Date of Government Version: 11/08/2024
Date Data Arrived at EDR: 11/08/2024
Date Made Active in Reports: 01/14/2025
Number of Days to Update: 67

Source: EPA
Telephone: 800-385-6164
Last EDR Contact: 02/13/2025
Next Scheduled EDR Contact: 05/26/2025
Data Release Frequency: Quarterly

PFAS NPL: Superfund Sites with PFAS Detections Information

EPA's Office of Land and Emergency Management and EPA Regional Offices maintain data describing what is known about site investigations, contamination, and remedial actions under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) where PFAS is present in the environment.

Date of Government Version: 12/30/2024
Date Data Arrived at EDR: 01/02/2025
Date Made Active in Reports: 01/10/2025
Number of Days to Update: 8

Source: Environmental Protection Agency
Telephone: 703-603-8895
Last EDR Contact: 02/20/2025
Next Scheduled EDR Contact: 04/14/2025
Data Release Frequency: Varies

PFAS FEDERAL SITES: Federal Sites PFAS Information

Several federal entities, such as the federal Superfund program, Department of Defense, National Aeronautics and Space Administration, Department of Transportation, and Department of Energy provided information for sites with known or suspected detections at federal facilities.

Date of Government Version: 12/30/2024
Date Data Arrived at EDR: 01/02/2025
Date Made Active in Reports: 01/10/2025
Number of Days to Update: 8

Source: Environmental Protection Agency
Telephone: 202-272-0167
Last EDR Contact: 02/20/2025
Next Scheduled EDR Contact: 04/14/2025
Data Release Frequency: Varies

PFAS TSCA: PFAS Manufacture and Imports Information

EPA issued the Chemical Data Reporting (CDR) Rule under the Toxic Substances Control Act (TSCA) and requires chemical manufacturers and facilities that manufacture or import chemical substances to report data to EPA. EPA publishes non-confidential business information (non-CBI) and includes descriptive information about each site, corporate parent, production volume, other manufacturing information, and processing and use information.

Date of Government Version: 12/30/2024
Date Data Arrived at EDR: 01/02/2025
Date Made Active in Reports: 01/10/2025
Number of Days to Update: 8

Source: Environmental Protection Agency
Telephone: 202-272-0167
Last EDR Contact: 02/20/2025
Next Scheduled EDR Contact: 04/14/2025
Data Release Frequency: Varies

PFAS TRIS: List of PFAS Added to the TRI

Section 7321 of the National Defense Authorization Act for Fiscal Year 2020 (NDAA) immediately added certain per- and polyfluoroalkyl substances (PFAS) to the list of chemicals covered by the Toxics Release Inventory (TRI) under Section 313 of the Emergency Planning and Community Right-to-Know Act (EPCRA) and provided a framework for additional PFAS to be added to TRI on an annual basis.

Date of Government Version: 12/30/2024
Date Data Arrived at EDR: 01/02/2025
Date Made Active in Reports: 01/10/2025
Number of Days to Update: 8

Source: Environmental Protection Agency
Telephone: 202-566-0250
Last EDR Contact: 02/20/2025
Next Scheduled EDR Contact: 04/14/2025
Data Release Frequency: Varies

PFAS RCRA MANIFEST: PFAS Transfers Identified In the RCRA Database Listing

To work around the lack of PFAS waste codes in the RCRA database, EPA developed the PFAS Transfers dataset by mining e-Manifest records containing at least one of these common PFAS keywords: PFAS, PFOA, PFOS, PERFL, AFFF, GENX, GEN-X (plus the VT waste codes). These keywords were searched for in the following text fields: Manifest handling instructions (MANIFEST_HANDLING_INSTR), Non-hazardous waste description (NON_HAZ_WASTE_DESCRIPTION), DOT printed information (DOT_PRINTED_INFORMATION), Waste line handling instructions (WASTE_LINE_HANDLING_INSTR), Waste residue comments (WASTE_RESIDUE_COMMENTS).

Date of Government Version: 12/30/2024
Date Data Arrived at EDR: 01/02/2025
Date Made Active in Reports: 01/10/2025
Number of Days to Update: 8

Source: Environmental Protection Agency
Telephone: 202-272-0167
Last EDR Contact: 02/20/2025
Next Scheduled EDR Contact: 04/14/2025
Data Release Frequency: Varies

PFAS ATSDR: PFAS Contamination Site Location Listing

PFAS contamination site locations from the Department of Health & Human Services, Center for Disease Control & Prevention. ATSDR is involved at a number of PFAS-related sites, either directly or through assisting state and federal partners. As of now, most sites are related to drinking water contamination connected with PFAS production facilities or fire training areas where aqueous film-forming firefighting foam (AFFF) was regularly used.

Date of Government Version: 06/24/2020
Date Data Arrived at EDR: 03/17/2021
Date Made Active in Reports: 11/08/2022
Number of Days to Update: 601

Source: Department of Health & Human Services
Telephone: 202-741-5770
Last EDR Contact: 01/16/2025
Next Scheduled EDR Contact: 05/05/2025
Data Release Frequency: Varies

PFAS WQP: Ambient Environmental Sampling for PFAS

The Water Quality Portal (WQP) is a part of a modernized repository storing ambient sampling data for all environmental media and tissue samples. A wide range of federal, state, tribal and local governments, academic and non-governmental organizations and individuals submit project details and sampling results to this public repository. The information is commonly used for research and assessments of environmental quality.

Date of Government Version: 12/13/2024
Date Data Arrived at EDR: 01/02/2025
Date Made Active in Reports: 01/10/2025
Number of Days to Update: 8

Source: Environmental Protection Agency
Telephone: 202-272-0167
Last EDR Contact: 02/20/2025
Next Scheduled EDR Contact: 04/14/2025
Data Release Frequency: Varies

PFAS NPDES: Clean Water Act Discharge Monitoring Information

Any discharger of pollutants to waters of the United States from a point source must have a National Pollutant Discharge Elimination System (NPDES) permit. The process for obtaining limits involves the regulated entity (permittee) disclosing releases in a NPDES permit application and the permitting authority (typically the state but sometimes EPA) deciding whether to require monitoring or monitoring with limits. Caveats and Limitations: Less than half of states have required PFAS monitoring for at least one of their permittees and fewer states have established PFAS effluent limits for permittees. New rulemakings have been initiated that may increase the number of facilities monitoring for PFAS in the future.

Date of Government Version: 12/30/2024
Date Data Arrived at EDR: 01/02/2025
Date Made Active in Reports: 01/14/2025
Number of Days to Update: 12

Source: Environmental Protection Agency
Telephone: 202-272-0167
Last EDR Contact: 01/02/2025
Next Scheduled EDR Contact: 04/14/2025
Data Release Frequency: Varies

PFAS PROJECT: NORTHEASTERN UNIVERSITY PFAS PROJECT

The PFAS Contamination Site Tracker records qualitative and quantitative data from each site in a chart, specifically examining discovery, contamination levels, government response, litigation, health impacts, media coverage, and community characteristics. All data presented in the chart were extracted from government websites, such as state health departments or the Environmental Protection Agency, and news articles.

Date of Government Version: 05/19/2023
Date Data Arrived at EDR: 04/05/2024
Date Made Active in Reports: 06/06/2024
Number of Days to Update: 62

Source: Social Science Environmental Health Research Institute
Telephone: N/A
Last EDR Contact: 12/05/2024
Next Scheduled EDR Contact: 03/17/2025
Data Release Frequency: Varies

PFAS ECHO: Facilities in Industries that May Be Handling PFAS Listing

Regulators and the public have expressed interest in knowing which regulated entities may be using PFAS. EPA has developed a dataset from various sources that show which industries may be handling PFAS. Approximately 120,000 facilities subject to federal environmental programs have operated or currently operate in industry sectors with processes that may involve handling and/or release of PFAS.

Date of Government Version: 12/30/2024
Date Data Arrived at EDR: 01/02/2025
Date Made Active in Reports: 01/10/2025
Number of Days to Update: 8

Source: Environmental Protection Agency
Telephone: 202-272-0167
Last EDR Contact: 02/20/2025
Next Scheduled EDR Contact: 04/14/2025
Data Release Frequency: Varies

PFAS ECHO FIRE TRAIN: Facilities in Industries that May Be Handling PFAS Listing

A list of fire training sites was added to the Industry Sectors dataset using a keyword search on the permitted facilitys name to identify sites where fire-fighting foam may have been used in training exercises. Additionally, you may view an example spreadsheet of the subset of fire training facility data, as well as the keywords used in selecting or deselecting a facility for the subset. as well as the keywords used in selecting or deselecting a facility for the subset. These keywords were tested to maximize accuracy in selecting facilities that may use fire-fighting foam in training exercises, however, due to the lack of a required reporting field in the data systems for designating fire training sites, this methodology may not identify all fire training sites or may potentially misidentify them.

Date of Government Version: 12/30/2024
Date Data Arrived at EDR: 01/02/2025
Date Made Active in Reports: 01/10/2025
Number of Days to Update: 8

Source: Environmental Protection Agency
Telephone: 202-272-0167
Last EDR Contact: 02/20/2025
Next Scheduled EDR Contact: 04/14/2025
Data Release Frequency: Varies

PFAS PT 139 AIRPORT: All Certified Part 139 Airports PFAS Information Listing

Since July 1, 2006, all certified part 139 airports are required to have fire-fighting foam onsite that meet military specifications (MIL-F-24385) (14 CFR 139.317). To date, these military specification fire-fighting foams are fluorinated and have been historically used for training and extinguishing. The 2018 FAA Reauthorization Act has a provision stating that no later than October 2021, FAA shall not require the use of fluorinated AFFF. This provision does not prohibit the use of fluorinated AFFF at Part 139 civilian airports; it only prohibits FAA from mandating its use. The Federal Aviation Administration?s document AC 150/5210-6D - Aircraft Fire Extinguishing Agents provides guidance on Aircraft Fire Extinguishing Agents, which includes Aqueous Film Forming Foam (AFFF).

Date of Government Version: 12/30/2024
Date Data Arrived at EDR: 01/02/2025
Date Made Active in Reports: 01/10/2025
Number of Days to Update: 8

Source: Environmental Protection Agency
Telephone: 202-272-0167
Last EDR Contact: 02/20/2025
Next Scheduled EDR Contact: 04/14/2025
Data Release Frequency: Varies

AQUEOUS FOAM NRC: Aqueous Foam Related Incidents Listing

The National Response Center (NRC) serves as an emergency call center that fields initial reports for pollution and railroad incidents and forwards that information to appropriate federal/state agencies for response. The spreadsheets posted to the NRC website contain initial incident data that has not been validated or investigated by a federal/state response agency. Response center calls from 1990 to the most recent complete calendar year where there was indication of Aqueous Film Forming Foam (AFFF) usage are included in this dataset. NRC calls may reference AFFF usage in the ?Material Involved? or ?Incident Description? fields.

Date of Government Version: 12/30/2024
Date Data Arrived at EDR: 01/02/2025
Date Made Active in Reports: 01/10/2025
Number of Days to Update: 8

Source: Environmental Protection Agency
Telephone: 202-267-2675
Last EDR Contact: 02/20/2025
Next Scheduled EDR Contact: 04/14/2025
Data Release Frequency: Varies

PCS: Permit Compliance System

PCS is a computerized management information system that contains data on National Pollutant Discharge Elimination System (NPDES) permit holding facilities. PCS tracks the permit, compliance, and enforcement status of NPDES facilities.

Date of Government Version: 12/16/2016
Date Data Arrived at EDR: 01/06/2017
Date Made Active in Reports: 03/10/2017
Number of Days to Update: 63

Source: EPA, Office of Water
Telephone: 202-564-2496
Last EDR Contact: 12/23/2024
Next Scheduled EDR Contact: 04/14/2025
Data Release Frequency: No Update Planned

PCS ENF: Enforcement data

No description is available for this data

Date of Government Version: 12/31/2014
Date Data Arrived at EDR: 02/05/2015
Date Made Active in Reports: 03/06/2015
Number of Days to Update: 29

Source: EPA
Telephone: 202-564-2497
Last EDR Contact: 12/23/2024
Next Scheduled EDR Contact: 04/14/2025
Data Release Frequency: Varies

BIOSOLIDS: ICIS-NPDES Biosolids Facility Data

The data reflects compliance information about facilities in the biosolids program.

Date of Government Version: 10/13/2024
Date Data Arrived at EDR: 10/16/2024
Date Made Active in Reports: 10/23/2024
Number of Days to Update: 7

Source: Environmental Protection Agency
Telephone: 202-564-4700
Last EDR Contact: 01/14/2025
Next Scheduled EDR Contact: 04/28/2025
Data Release Frequency: Varies

UST FINDER RELEASE: UST Finder Releases Database

US EPA's UST Finder data is a national composite of leaking underground storage tanks. This data contains information about, and locations of, leaking underground storage tanks. Data was collected from state sources and standardized into a national profile by EPA's Office of Underground Storage Tanks, Office of Research and Development, and the Association of State and Territorial Solid Waste Management Officials.

Date of Government Version: 06/08/2023
Date Data Arrived at EDR: 10/31/2023
Date Made Active in Reports: 01/18/2024
Number of Days to Update: 79

Source: Environmental Protecton Agency
Telephone: 202-564-0394
Last EDR Contact: 02/06/2025
Next Scheduled EDR Contact: 05/19/2025
Data Release Frequency: Semi-Annually

UST FINDER: UST Finder Database

EPA developed UST Finder, a web map application containing a comprehensive, state-sourced national map of underground storage tank (UST) and leaking UST (LUST) data. It provides the attributes and locations of active and closed USTs, UST facilities, and LUST sites from states and from Tribal lands and US territories . UST Finder contains information about proximity of UST facilities and LUST sites to: surface and groundwater public drinking water protection areas; estimated number of private domestic wells and number of people living nearby; and flooding and wildfires.

Date of Government Version: 06/08/2023
Date Data Arrived at EDR: 10/04/2023
Date Made Active in Reports: 01/18/2024
Number of Days to Update: 106

Source: Environmental Protection Agency
Telephone: 202-564-0394
Last EDR Contact: 02/06/2025
Next Scheduled EDR Contact: 05/19/2025
Data Release Frequency: Varies

E MANIFEST: Hazardous Waste Electronic Manifest System

EPA established a national system for tracking hazardous waste shipments electronically. This system, known as ?e-Manifest,? will modernize the nation?s cradle-to-grave hazardous waste tracking process while saving valuable time, resources, and dollars for industry and states.

Date of Government Version: 09/16/2024
Date Data Arrived at EDR: 09/17/2024
Date Made Active in Reports: 12/20/2024
Number of Days to Update: 94

Source: Environmental Protection Agency
Telephone: 833-501-6826
Last EDR Contact: 02/19/2025
Next Scheduled EDR Contact: 03/31/2025
Data Release Frequency: Varies

PFAS: PFAS Contamination Site Location Listing

A listing of PFAS sites included in the Envirostor and GeoTracker databases. Locations of potential sources of per - and polyfluoroalkyl substances (PFAS). This does not mean that PFAS has been produced, used, or discharged at these sites.

Date of Government Version: 12/02/2024
Date Data Arrived at EDR: 12/03/2024
Date Made Active in Reports: 02/24/2025
Number of Days to Update: 83

Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 12/03/2024
Next Scheduled EDR Contact: 03/17/2025
Data Release Frequency: Varies

AQUEOUS FOAM: Former Fire Training Facility Assessments Listing

Airports shown on this list are those believed to use Aqueous Film Forming Foam (AFFF), and certified by the Federal Aviation Administration (FAA) under Title 14, Code of Federal Regulations (CFR), Part 139 (14 CFR Part 139). This list was created by SWRCB using information available from the FAA. Location points shown are from the latitude and longitude listed on the FAA airport master record.

Date of Government Version: 12/02/2024
Date Data Arrived at EDR: 12/03/2024
Date Made Active in Reports: 02/24/2025
Number of Days to Update: 83

Source: State Water Resources Control Board
Telephone: 916-341-5455
Last EDR Contact: 12/03/2024
Next Scheduled EDR Contact: 03/17/2025
Data Release Frequency: Varies

CA BOND EXP. PLAN: Bond Expenditure Plan

Department of Health Services developed a site-specific expenditure plan as the basis for an appropriation of Hazardous Substance Cleanup Bond Act funds. It is not updated.

Date of Government Version: 01/01/1989
Date Data Arrived at EDR: 07/27/1994
Date Made Active in Reports: 08/02/1994
Number of Days to Update: 6

Source: Department of Health Services
Telephone: 916-255-2118
Last EDR Contact: 05/31/1994
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

CHROME PLATING: Chrome Plating Facilities Listing

This listing represents chrome plating facilities the California State Water Resources Control Board staff identified as possibly being a source of Per- and polyfluoroalkyl substance (PFAS) contamination. Sites and locations were identified by staff with the Division of Water Quality in the California State Water Board. Data was collected from the CA Air Resources Board 2013 and 2018 - Cr VI emission survey, CA Emission Inventory, CA HAZ Waste discharge database and by reviewing storm water permits. Former chrome plating sites are also included that are open site investigation or remediation cases with the Regional Water Quality Control Boards and the Department of Toxic Substances Control.

Date of Government Version: 12/02/2024
Date Data Arrived at EDR: 12/03/2024
Date Made Active in Reports: 02/24/2025
Number of Days to Update: 83

Source: State Water Resources Control Board
Telephone: 916-341-5455
Last EDR Contact: 12/03/2024
Next Scheduled EDR Contact: 03/17/2025
Data Release Frequency: Varies

CORTESE: "Cortese" Hazardous Waste & Substances Sites List
The sites for the list are designated by the State Water Resource Control Board (LUST), the Integrated Waste Board (SWF/LS), and the Department of Toxic Substances Control (Cal-Sites).

Date of Government Version: 09/16/2024
Date Data Arrived at EDR: 09/17/2024
Date Made Active in Reports: 12/02/2024
Number of Days to Update: 76

Source: CAL EPA/Office of Emergency Information
Telephone: 916-323-3400
Last EDR Contact: 12/11/2024
Next Scheduled EDR Contact: 03/31/2025
Data Release Frequency: Quarterly

CUPA LIV-PLE: CUPA Facility Listing
list of facilities associated with the various CUPA programs in Livermore-Pleasanton

Date of Government Version: 09/19/2024
Date Data Arrived at EDR: 11/05/2024
Date Made Active in Reports: 01/31/2025
Number of Days to Update: 87

Source: Livermore-Pleasanton Fire Department
Telephone: 925-454-2361
Last EDR Contact: 02/06/2025
Next Scheduled EDR Contact: 05/19/2025
Data Release Frequency: Varies

DRYCLEAN CALAVERAS: Calaveras County Environmental Management Agency Drycleaner Facility Listing
A listing of drycleaner facility locations, for the Calaveras County Environmental Management Agency.

Date of Government Version: 06/17/2019
Date Data Arrived at EDR: 06/19/2019
Date Made Active in Reports: 05/01/2023
Number of Days to Update: 1412

Source: Calaveras County Environmental Management Agency
Telephone: 209-754-6399
Last EDR Contact: 08/21/2024
Next Scheduled EDR Contact: 09/16/2019
Data Release Frequency: Varies

DRYCLEAN BAY AREA: Bay Area Air Quality Management District Drycleaner Facility Listing
Bay Area Air Quality Management District Drycleaner Facility Listing.

Date of Government Version: 02/20/2019
Date Data Arrived at EDR: 05/30/2019
Date Made Active in Reports: 05/01/2023
Number of Days to Update: 1432

Source: Bay Area Air Quality Management District
Telephone: 415-516-1916
Last EDR Contact: 08/21/2024
Next Scheduled EDR Contact: 09/11/2023
Data Release Frequency: Varies

DRYCLEAN PLACER: Placer County Air Quality Management District Drycleaner Facility Listing
A listing of drycleaner facility locations, for the Placer County Air Quality Management District.

Date of Government Version: 05/15/2023
Date Data Arrived at EDR: 05/17/2023
Date Made Active in Reports: 08/14/2023
Number of Days to Update: 89

Source: Placer County Air Quality Management District
Telephone: 530-745-2335
Last EDR Contact: 08/21/2024
Next Scheduled EDR Contact: 09/11/2023
Data Release Frequency: Varies

DRYCLEAN SAN LUIS OB: San Luis Obispo County Air Pollution Control District Drycleaner Facility Listing
A listing of drycleaner facility locations, for the San Luis Obispo County Air Pollution Control District.

Date of Government Version: 01/03/2024
Date Data Arrived at EDR: 01/04/2024
Date Made Active in Reports: 03/20/2024
Number of Days to Update: 76

Source: San Luis Obispo County Air Pollution Control District
Telephone: 805-781-5756
Last EDR Contact: 08/21/2024
Next Scheduled EDR Contact: 09/11/2023
Data Release Frequency: Varies

DRYCLEAN IMPERIAL: Imperial County Air Pollution Control District Drycleaner Facility Listing
A listing of drycleaner facility locations, for the Imperial County Air Pollution Control District

Date of Government Version: 10/02/2024
Date Data Arrived at EDR: 10/03/2024
Date Made Active in Reports: 12/20/2024
Number of Days to Update: 78

Source: Imperial County Air Pollution Control District
Telephone: 442-265-1800
Last EDR Contact: 08/21/2024
Next Scheduled EDR Contact: 09/11/2023
Data Release Frequency: Varies

DRYCLEAN SACRAMENTO: Sacramento Metropolitan Air Quality Management DistrictDrycleaner Facility Listing
A listing of drycleaner facility locations, for the Sacramento Metropolitan Air Quality Management District.

Date of Government Version: 09/03/2024
Date Data Arrived at EDR: 09/05/2024
Date Made Active in Reports: 11/13/2024
Number of Days to Update: 69

Source: Sacramento Metropolitan Air Quality Management District
Telephone: 916-874-3958
Last EDR Contact: 08/21/2024
Next Scheduled EDR Contact: 09/11/2023
Data Release Frequency: Varies

DRYCLEAN MENDOCINO: Mendocino County Air Quality Management District Drycleaner Facility Listing
A listing of drycleaner facility locations, for the Mendocino County Air Quality Management District.

Date of Government Version: 08/26/2024
Date Data Arrived at EDR: 09/03/2024
Date Made Active in Reports: 11/13/2024
Number of Days to Update: 71

Source: Mendocino County Air Quality Management District
Telephone: 707-463-4354
Last EDR Contact: 08/21/2024
Next Scheduled EDR Contact: 09/11/2023
Data Release Frequency: Varies

DRYCLEAN SAN DIEGO: San Diego County Air Pollution Control District Drycleaner Facility Listing
A listing of drycleaner facility locations, for the San Diego County Air Pollution Control District.

Date of Government Version: 08/21/2024
Date Data Arrived at EDR: 08/28/2024
Date Made Active in Reports: 11/13/2024
Number of Days to Update: 77

Source: San Diego County Air Pollution Control District
Telephone: 858-586-2616
Last EDR Contact: 08/21/2024
Next Scheduled EDR Contact: 09/11/2023
Data Release Frequency: Varies

DRYCLEAN LAKE: Lake County Air Quality Management District Drycleaner Facility Listing
A listing of drycleaner facility locations, for the Lake County Air Quality Management District,

Date of Government Version: 02/15/2024
Date Data Arrived at EDR: 02/16/2024
Date Made Active in Reports: 05/02/2024
Number of Days to Update: 76

Source: Lake County Air Quality Management District
Telephone: 707-263-7000
Last EDR Contact: 08/21/2024
Next Scheduled EDR Contact: 09/11/2023
Data Release Frequency: Varies

DRYCLEAN YOLO-SOLANO: Yolo-Solano Air Quality Management District Drycleaner Facility Listing
A listing of drycleaner facility locations, for the Yolo-Solano Air Quality Management District.

Date of Government Version: 08/21/2024
Date Data Arrived at EDR: 08/26/2024
Date Made Active in Reports: 11/06/2024
Number of Days to Update: 72

Source: Yolo-Solano Air Quality Management District
Telephone: 530-757-3650
Last EDR Contact: 08/21/2024
Next Scheduled EDR Contact: 09/11/2023
Data Release Frequency: Varies

DRYCLEAN GRANT: Grant Recipients List
Assembly Bill 998 (AB 998) established the Non-Toxic Dry Cleaning Incentive Program to provide financial assistance to the dry cleaning industry to switch from systems using perchloroethylene (Perc), an identified toxic air contaminant and potential human carcinogen, to non-toxic and non-smog forming alternatives.

Date of Government Version: 12/31/2021
Date Data Arrived at EDR: 01/26/2024
Date Made Active in Reports: 04/16/2024
Number of Days to Update: 81

Source: California Air Resources Board
Telephone: 916-323-0006
Last EDR Contact: 01/23/2025
Next Scheduled EDR Contact: 05/05/2025
Data Release Frequency: Varies

DRYCLEAN N SONOMA: Norther Sonoma County County Air Pollution Control District Drycleaner Facility Listing
A listing of drycleaner facility locations, for the Northern Sonoma County Air Pollution Control District.,

Date of Government Version: 08/23/2024
Date Data Arrived at EDR: 08/26/2024
Date Made Active in Reports: 11/05/2024
Number of Days to Update: 71

Source: Santa Barbara County Air Pollution Control District
Telephone: 707-433-5911
Last EDR Contact: 08/21/2024
Next Scheduled EDR Contact: 09/11/2023
Data Release Frequency: Varies

DRYCLEAN AVAQMD: Antelope Valley Air Quality Management District Drycleaner Listing
A listing of dry cleaners in the Antelope Valley Air Quality Management District.

Date of Government Version: 05/29/2024
Date Data Arrived at EDR: 11/07/2024
Date Made Active in Reports: 11/22/2024
Number of Days to Update: 15

Source: Antelope Valley Air Quality Management District
Telephone: 661-723-8070
Last EDR Contact: 02/19/2025
Next Scheduled EDR Contact: 06/09/2025
Data Release Frequency: Varies

DRYCLEAN FEATHER RVR: Feather River Air Quality Management District Drycleaner Facility Listing
A listing of drycleaner facility locations, for the Feather River Air Quality Management District.

Date of Government Version: 03/08/2023
Date Data Arrived at EDR: 03/09/2023
Date Made Active in Reports: 06/05/2023
Number of Days to Update: 88

Source: Feather River Air Quality Management District
Telephone: 530-634-7659
Last EDR Contact: 08/21/2024
Next Scheduled EDR Contact: 09/11/2023
Data Release Frequency: Varies

DRYCLEAN SHASTA: Shasta County Air Quality Management District District Drycleaner Facility Listing
A listing of drycleaner facility locations, for the Shasta County Air Quality Management District.

Date of Government Version: 08/29/2024
Date Data Arrived at EDR: 09/05/2024
Date Made Active in Reports: 11/13/2024
Number of Days to Update: 69

Source: Shasta County Air Quality Management District
Telephone: 530-225-5674
Last EDR Contact: 08/21/2024
Next Scheduled EDR Contact: 09/11/2023
Data Release Frequency: Varies

DRYCLEANERS: Cleaner Facilities
A list of drycleaner related facilities that have EPA ID numbers. These are facilities with certain SIC codes: power laundries, family and commercial; garment pressing and cleaner's agents; linen supply; coin-operated laundries and cleaning; drycleaning plants, except rugs; carpet and upholster cleaning; industrial launderers; laundry and garment services.

Date of Government Version: 08/28/2024
Date Data Arrived at EDR: 09/05/2024
Date Made Active in Reports: 11/13/2024
Number of Days to Update: 69

Source: Department of Toxic Substance Control
Telephone: 916-327-4498
Last EDR Contact: 02/19/2025
Next Scheduled EDR Contact: 06/09/2025
Data Release Frequency: Annually

DRYCLEAN TEHAMA: Tehama County Air Pollution Control District Drycleaner Facility Listing
A listing of drycleaner facility locations, for the Tehama County Air Pollution Control District.

Date of Government Version: 04/24/2019
Date Data Arrived at EDR: 04/24/2019
Date Made Active in Reports: 05/01/2023
Number of Days to Update: 1468

Source: Tehama County Air Pollution Control District
Telephone: 530-527-3717
Last EDR Contact: 08/21/2024
Next Scheduled EDR Contact: 09/11/2023
Data Release Frequency: Varies

DRYCLEAN SOUTH COAST: South Coast Air Quality Management District Drycleaner Listing
A listing of dry cleaners in the South Coast Air Quality Management District

Date of Government Version: 11/14/2024
Date Data Arrived at EDR: 11/15/2024
Date Made Active in Reports: 02/05/2025
Number of Days to Update: 82

Source: South Coast Air Quality Management District
Telephone: 909-396-3211
Last EDR Contact: 02/12/2025
Next Scheduled EDR Contact: 06/02/2025
Data Release Frequency: Varies

DRYCLEAN BUTTE: Butte County Air Quality Management DistrictDrycleaner Facility Listing
Butte County Air Quality Management DistrictDrycleaner Facility Listing.

Date of Government Version: 09/10/2024
Date Data Arrived at EDR: 09/11/2024
Date Made Active in Reports: 11/25/2024
Number of Days to Update: 75

Source: Butte County Air Quality Management District
Telephone: 530-332-9400
Last EDR Contact: 08/21/2024
Next Scheduled EDR Contact: 09/11/2023
Data Release Frequency: Varies

DRYCLEAN GLENN: Glenn County Air Pollution Control District Drycleaner Facility Listing
A listing of drycleaner facility locations, for the Glenn County Air Pollution Control District.

Date of Government Version: 08/26/2024
Date Data Arrived at EDR: 08/28/2024
Date Made Active in Reports: 11/13/2024
Number of Days to Update: 77

Source: Glenn County Air Pollution Control District
Telephone: 530-934-6500
Last EDR Contact: 08/21/2024
Next Scheduled EDR Contact: 09/11/2023
Data Release Frequency: Varies

DRYCLEAN SAN JOAQUIN: San Joaquin Valley Air Pollution Control District District Drycleaner Facility Listing
A listing of drycleaner facility locations, for the San Joaquin Valley Air Pollution Control District.

Date of Government Version: 08/22/2024
Date Data Arrived at EDR: 08/22/2024
Date Made Active in Reports: 11/05/2024
Number of Days to Update: 75

Source: San Joaquin Valley Air Pollution Control District
Telephone: 559-230-6001
Last EDR Contact: 08/21/2024
Next Scheduled EDR Contact: 09/11/2023
Data Release Frequency: Varies

DRYCLEAN EAST KERN: Eastern Kern Air Pollution Control District District Drycleaner Facility Listing
A listing of drycleaner facility locations, for the Eastern Kern Air Pollution Control District.

Date of Government Version: 08/21/2024
Date Data Arrived at EDR: 08/22/2024
Date Made Active in Reports: 11/05/2024
Number of Days to Update: 75

Source: Eastern Kern Air Pollution Control District
Telephone: 661-862-9684
Last EDR Contact: 08/21/2024
Next Scheduled EDR Contact: 09/11/2023
Data Release Frequency: Varies

DRYCLEAN VENTURA: Drycleaner Facility Listing
A listing of drycleaner facility locations, for the Ventura County Air Pollution Control District.

Date of Government Version: 08/26/2024
Date Data Arrived at EDR: 08/28/2024
Date Made Active in Reports: 11/14/2024
Number of Days to Update: 78

Source: Ventura County Air Pollution Control District
Telephone: 805-645-1421
Last EDR Contact: 08/21/2024
Next Scheduled EDR Contact: 09/11/2023
Data Release Frequency: Varies

DRYCLEAN AMADOR: Amador Air District Drycleaner Facility Listing
A listing of drycleaner facility locations, for the Amador Air Quality Management District

Date of Government Version: 04/26/2023
Date Data Arrived at EDR: 04/27/2023
Date Made Active in Reports: 07/13/2023
Number of Days to Update: 77

Source: Amador Air Quality Management District
Telephone: 209-257-0112
Last EDR Contact: 08/21/2024
Next Scheduled EDR Contact: 09/11/2023
Data Release Frequency: Varies

DRYCLEAN MONTERY BAY: Monterey Bay Air Quality Management District Drycleaner Facility Listing
A listing of drycleaner facility locations, for the Monterey Bay Air Quality Management District.

Date of Government Version: 09/09/2024
Date Data Arrived at EDR: 09/11/2024
Date Made Active in Reports: 11/26/2024
Number of Days to Update: 76

Source: Monterey Bay Air Quality Management District
Telephone: 831-647-9411
Last EDR Contact: 08/21/2024
Next Scheduled EDR Contact: 09/11/2023
Data Release Frequency: Varies

DRYCLEAN N COAST: North Coast Unified Air Quality Management District Drycleaner Facility Listing
A listing of drycleaner facility locations, for the North Coast Unified Air Quality Management District.

Date of Government Version: 11/30/2016
Date Data Arrived at EDR: 04/19/2019
Date Made Active in Reports: 05/01/2023
Number of Days to Update: 1473

Source: North Coast Unified Air Quality Management District
Telephone: 707-443-3093
Last EDR Contact: 08/21/2024
Next Scheduled EDR Contact: 09/11/2023
Data Release Frequency: Varies

DRYCLEAN SANTA BARB: Santa Barbara County Air Pollution Control District Drycleaner Facility Listing
A listing of drycleaner facility locations, for the Santa Barbara County Air Pollution Control District.

Date of Government Version: 02/19/2019
Date Data Arrived at EDR: 04/17/2019
Date Made Active in Reports: 05/01/2023
Number of Days to Update: 1475

Source: Santa Barbara County Air Pollution Control District
Telephone: 805-961-8867
Last EDR Contact: 08/21/2024
Next Scheduled EDR Contact: 09/11/2023
Data Release Frequency: Varies

DRYCLEAN MOJAVE: Mojave Desert Air Quality Management District Drycleaner Facility Listing
A listing of drycleaner facility locations, for the Mojave Desert Air Quality Management District.

Date of Government Version: 08/21/2024
Date Data Arrived at EDR: 08/22/2024
Date Made Active in Reports: 11/05/2024
Number of Days to Update: 75

Source: Mojave Desert Air Quality Management District
Telephone: 760-245-1661
Last EDR Contact: 08/21/2024
Next Scheduled EDR Contact: 09/11/2023
Data Release Frequency: Varies

DRYCLEAN N SIERRA: Northern Sierra Air Quality Management District Drycleaner Facility Listing
A listing of drycleaner facility locations, for the Northern Sierra Air Quality Management District,

Date of Government Version: 08/22/2024
Date Data Arrived at EDR: 08/22/2024
Date Made Active in Reports: 11/05/2024
Number of Days to Update: 75

Source: Northern Sierra Air Quality Management District
Telephone: 530-274-9350
Last EDR Contact: 08/21/2024
Next Scheduled EDR Contact: 09/11/2023
Data Release Frequency: Varies

EMI: Emissions Inventory Data
Toxics and criteria pollutant emissions data collected by the ARB and local air pollution agencies.

Date of Government Version: 12/31/2022
Date Data Arrived at EDR: 06/11/2024
Date Made Active in Reports: 09/03/2024
Number of Days to Update: 84

Source: California Air Resources Board
Telephone: 916-322-2990
Last EDR Contact: 12/12/2024
Next Scheduled EDR Contact: 03/24/2025
Data Release Frequency: Varies

ENF: Enforcement Action Listing
A listing of Water Board Enforcement Actions. Formal is everything except Oral/Verbal Communication, Notice of Violation, Expedited Payment Letter, and Staff Enforcement Letter.

Date of Government Version: 10/15/2024
Date Data Arrived at EDR: 10/16/2024
Date Made Active in Reports: 12/31/2024
Number of Days to Update: 76

Source: State Water Resoruces Control Board
Telephone: 916-445-9379
Last EDR Contact: 01/14/2025
Next Scheduled EDR Contact: 04/28/2025
Data Release Frequency: Varies

FIN ASSURANCE 1: Financial Assurance Information Listing
Financial Assurance information

Date of Government Version: 10/09/2024
Date Data Arrived at EDR: 10/10/2024
Date Made Active in Reports: 12/30/2024
Number of Days to Update: 81

Source: Department of Toxic Substances Control
Telephone: 916-255-3628
Last EDR Contact: 01/09/2025
Next Scheduled EDR Contact: 04/28/2025
Data Release Frequency: Varies

FIN ASSURANCE 2: Financial Assurance Information Listing
A listing of financial assurance information for solid waste facilities. Financial assurance is intended to ensure that resources are available to pay for the cost of closure, post-closure care, and corrective measures if the owner or operator of a regulated facility is unable or unwilling to pay.

Date of Government Version: 11/06/2024
Date Data Arrived at EDR: 11/08/2024
Date Made Active in Reports: 01/31/2025
Number of Days to Update: 84

Source: California Integrated Waste Management Board
Telephone: 916-341-6066
Last EDR Contact: 01/30/2025
Next Scheduled EDR Contact: 05/19/2025
Data Release Frequency: Varies

ICE: Inspection, Compliance and Enforcement
Contains data pertaining to the Permitted Facilities with Inspections / Enforcements sites tracked in Envirostor.

Date of Government Version: 11/08/2024
Date Data Arrived at EDR: 11/08/2024
Date Made Active in Reports: 02/03/2025
Number of Days to Update: 87

Source: Department of Toxic Subsances Control
Telephone: 877-786-9427
Last EDR Contact: 02/11/2025
Next Scheduled EDR Contact: 05/26/2025
Data Release Frequency: Quarterly

HIST CORTESE: Hazardous Waste & Substance Site List
The sites for the list are designated by the State Water Resource Control Board [LUST], the Integrated Waste Board [SWF/LS], and the Department of Toxic Substances Control [CALSITES]. This listing is no longer updated by the state agency.

Date of Government Version: 04/01/2001
Date Data Arrived at EDR: 01/22/2009
Date Made Active in Reports: 04/08/2009
Number of Days to Update: 76

Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 01/22/2009
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

HWP: EnviroStor Permitted Facilities Listing
Detailed information on permitted hazardous waste facilities and corrective action ("cleanups") tracked in EnviroStor.

Date of Government Version: 11/08/2024
Date Data Arrived at EDR: 11/08/2024
Date Made Active in Reports: 02/03/2025
Number of Days to Update: 87

Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 02/11/2025
Next Scheduled EDR Contact: 05/26/2025
Data Release Frequency: Quarterly

HWT: Registered Hazardous Waste Transporter Database
A listing of hazardous waste transporters. In California, unless specifically exempted, it is unlawful for any person to transport hazardous wastes unless the person holds a valid registration issued by DTSC. A hazardous waste transporter registration is valid for one year and is assigned a unique registration number.

Date of Government Version: 09/30/2024
Date Data Arrived at EDR: 10/01/2024
Date Made Active in Reports: 12/13/2024
Number of Days to Update: 73

Source: Department of Toxic Substances Control
Telephone: 916-440-7145
Last EDR Contact: 12/27/2024
Next Scheduled EDR Contact: 04/14/2025
Data Release Frequency: Quarterly

HWTS: Hazardous Waste Tracking System

DTSC maintains the Hazardous Waste Tracking System that stores ID number information since the early 1980s and manifest data since 1993. The system collects both manifest copies from the generator and destination facility.

Date of Government Version: 07/19/2024
Date Data Arrived at EDR: 07/30/2024
Date Made Active in Reports: 08/28/2024
Number of Days to Update: 29

Source: Department of Toxic Substances Control
Telephone: 916-324-2444
Last EDR Contact: 01/02/2025
Next Scheduled EDR Contact: 04/14/2025
Data Release Frequency: Varies

HAZNET: Facility and Manifest Data

Facility and Manifest Data. The data is extracted from the copies of hazardous waste manifests received each year by the DTSC. The annual volume of manifests is typically 700,000 - 1,000,000 annually, representing approximately 350,000 - 500,000 shipments. Data are from the manifests submitted without correction, and therefore many contain some invalid values for data elements such as generator ID, TSD ID, waste category, and disposal method. This database begins with calendar year 1993.

Date of Government Version: 12/31/2023
Date Data Arrived at EDR: 07/02/2024
Date Made Active in Reports: 09/25/2024
Number of Days to Update: 85

Source: California Environmental Protection Agency
Telephone: 916-255-1136
Last EDR Contact: 01/03/2025
Next Scheduled EDR Contact: 04/14/2025
Data Release Frequency: Annually

MINES: Mines Site Location Listing

A listing of mine site locations from the Office of Mine Reclamation.

Date of Government Version: 12/02/2024
Date Data Arrived at EDR: 12/03/2024
Date Made Active in Reports: 02/24/2025
Number of Days to Update: 83

Source: Department of Conservation
Telephone: 916-322-1080
Last EDR Contact: 12/03/2024
Next Scheduled EDR Contact: 03/17/2025
Data Release Frequency: Quarterly

MWMP: Medical Waste Management Program Listing

The Medical Waste Management Program (MWMP) ensures the proper handling and disposal of medical waste by permitting and inspecting medical waste Offsite Treatment Facilities (PDF) and Transfer Stations (PDF) throughout the state. MWMP also oversees all Medical Waste Transporters.

Date of Government Version: 10/07/2024
Date Data Arrived at EDR: 11/20/2024
Date Made Active in Reports: 02/13/2025
Number of Days to Update: 85

Source: Department of Public Health
Telephone: 916-558-1784
Last EDR Contact: 11/20/2024
Next Scheduled EDR Contact: 03/10/2025
Data Release Frequency: Varies

NPDES: NPDES Permits Listing

A listing of NPDES permits, including stormwater.

Date of Government Version: 11/04/2024
Date Data Arrived at EDR: 11/05/2024
Date Made Active in Reports: 01/31/2025
Number of Days to Update: 87

Source: State Water Resources Control Board
Telephone: 916-445-9379
Last EDR Contact: 02/04/2025
Next Scheduled EDR Contact: 05/19/2025
Data Release Frequency: Quarterly

PEST LIC: Pesticide Regulation Licenses Listing

A listing of licenses and certificates issued by the Department of Pesticide Regulation. The DPR issues licenses and/or certificates to: Persons and businesses that apply or sell pesticides; Pest control dealers and brokers; Persons who advise on agricultural pesticide applications.

Date of Government Version: 11/20/2024
Date Data Arrived at EDR: 11/20/2024
Date Made Active in Reports: 02/13/2025
Number of Days to Update: 85

Source: Department of Pesticide Regulation
Telephone: 916-445-4038
Last EDR Contact: 11/20/2024
Next Scheduled EDR Contact: 03/10/2025
Data Release Frequency: Quarterly

PROC: Certified Processors Database
A listing of certified processors.

Date of Government Version: 12/02/2024
Date Data Arrived at EDR: 12/03/2024
Date Made Active in Reports: 02/24/2025
Number of Days to Update: 83
Source: Department of Conservation
Telephone: 916-323-3836
Last EDR Contact: 12/03/2024
Next Scheduled EDR Contact: 03/17/2025
Data Release Frequency: Quarterly

NOTIFY 65: Proposition 65 Records
Listings of all Proposition 65 incidents reported to counties by the State Water Resources Control Board and the Regional Water Quality Control Board. This database is no longer updated by the reporting agency.

Date of Government Version: 09/05/2024
Date Data Arrived at EDR: 09/06/2024
Date Made Active in Reports: 11/13/2024
Number of Days to Update: 68
Source: State Water Resources Control Board
Telephone: 916-445-3846
Last EDR Contact: 12/04/2024
Next Scheduled EDR Contact: 03/24/2025
Data Release Frequency: No Update Planned

SAN JOSE HAZMAT: Hazardous Material Facilities
Hazardous material facilities, including underground storage tank sites.

Date of Government Version: 11/03/2020
Date Data Arrived at EDR: 11/05/2020
Date Made Active in Reports: 01/26/2021
Number of Days to Update: 82
Source: City of San Jose Fire Department
Telephone: 408-535-7694
Last EDR Contact: 01/22/2025
Next Scheduled EDR Contact: 05/12/2025
Data Release Frequency: Annually

UIC: UIC Listing
A listing of wells identified as underground injection wells, in the California Oil and Gas Wells database.

Date of Government Version: 09/02/2024
Date Data Arrived at EDR: 09/04/2024
Date Made Active in Reports: 09/05/2024
Number of Days to Update: 1
Source: Deaprtment of Conservation
Telephone: 916-445-2408
Last EDR Contact: 12/03/2024
Next Scheduled EDR Contact: 03/17/2025
Data Release Frequency: Varies

UIC GEO: Underground Injection Control Sites (GEOTRACKER)
Underground control injection sites

Date of Government Version: 08/28/2024
Date Data Arrived at EDR: 08/28/2024
Date Made Active in Reports: 08/29/2024
Number of Days to Update: 1
Source: State Water Resource Control Board
Telephone: 866-480-1028
Last EDR Contact: 02/24/2025
Next Scheduled EDR Contact: 03/17/2025
Data Release Frequency: Varies

WASTEWATER PITS: Oil Wastewater Pits Listing
Water officials discovered that oil producers have been dumping chemical-laden wastewater into hundreds of unlined pits that are operating without proper permits. Inspections completed by the Central Valley Regional Water Quality Control Board revealed the existence of previously unidentified waste sites. The water boards review found that more than one-third of the region's active disposal pits are operating without permission.

Date of Government Version: 02/11/2021
Date Data Arrived at EDR: 07/01/2021
Date Made Active in Reports: 09/29/2021
Number of Days to Update: 90
Source: RWQCB, Central Valley Region
Telephone: 559-445-5577
Last EDR Contact: 01/02/2025
Next Scheduled EDR Contact: 04/14/2025
Data Release Frequency: Varies

WDS: Waste Discharge System
Sites which have been issued waste discharge requirements.

Date of Government Version: 06/19/2007
Date Data Arrived at EDR: 06/20/2007
Date Made Active in Reports: 06/29/2007
Number of Days to Update: 9

Source: State Water Resources Control Board
Telephone: 916-341-5227
Last EDR Contact: 02/05/2025
Next Scheduled EDR Contact: 05/26/2025
Data Release Frequency: No Update Planned

WIP: Well Investigation Program Case List
Well Investigation Program case in the San Gabriel and San Fernando Valley area.

Date of Government Version: 07/03/2009
Date Data Arrived at EDR: 07/21/2009
Date Made Active in Reports: 08/03/2009
Number of Days to Update: 13

Source: Los Angeles Water Quality Control Board
Telephone: 213-576-6726
Last EDR Contact: 12/10/2024
Next Scheduled EDR Contact: 03/31/2025
Data Release Frequency: No Update Planned

MILITARY PRIV SITES: Military Privatized Sites (GEOTRACKER)
Military privatized sites

Date of Government Version: 08/28/2024
Date Data Arrived at EDR: 08/28/2024
Date Made Active in Reports: 08/29/2024
Number of Days to Update: 1

Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 02/24/2025
Next Scheduled EDR Contact: 03/17/2025
Data Release Frequency: Varies

PROJECT: Project Sites (GEOTRACKER)
Projects sites

Date of Government Version: 08/28/2024
Date Data Arrived at EDR: 08/28/2024
Date Made Active in Reports: 08/29/2024
Number of Days to Update: 1

Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 02/24/2025
Next Scheduled EDR Contact: 03/17/2025
Data Release Frequency: Varies

WDR: Waste Discharge Requirements Listing
In general, the Waste Discharge Requirements (WDRs) Program (sometimes also referred to as the "Non Chapter 15 (Non 15) Program") regulates point discharges that are exempt pursuant to Subsection 20090 of Title 27 and not subject to the Federal Water Pollution Control Act. Exemptions from Title 27 may be granted for nine categories of discharges (e.g., sewage, wastewater, etc.) that meet, and continue to meet, the preconditions listed for each specific exemption. The scope of the WDRs Program also includes the discharge of wastes classified as inert, pursuant to section 20230 of Title 27.

Date of Government Version: 09/03/2024
Date Data Arrived at EDR: 09/04/2024
Date Made Active in Reports: 11/13/2024
Number of Days to Update: 70

Source: State Water Resources Control Board
Telephone: 916-341-5810
Last EDR Contact: 12/03/2024
Next Scheduled EDR Contact: 03/17/2025
Data Release Frequency: Quarterly

CIWQS: California Integrated Water Quality System
The California Integrated Water Quality System (CIWQS) is a computer system used by the State and Regional Water Quality Control Boards to track information about places of environmental interest, manage permits and other orders, track inspections, and manage violations and enforcement activities.

Date of Government Version: 11/20/2024
Date Data Arrived at EDR: 11/20/2024
Date Made Active in Reports: 02/12/2025
Number of Days to Update: 84

Source: State Water Resources Control Board
Telephone: 866-794-4977
Last EDR Contact: 11/20/2024
Next Scheduled EDR Contact: 03/10/2025
Data Release Frequency: Varies

CERS: CalEPA Regulated Site Portal Data
The CalEPA Regulated Site Portal database combines data about environmentally regulated sites and facilities in California into a single database. It combines data from a variety of state and federal databases, and provides an overview of regulated activities across the spectrum of environmental programs for any given location in California. These activities include hazardous materials and waste, state and federal cleanups, impacted ground and surface waters, and toxic materials

Date of Government Version: 10/15/2024
Date Data Arrived at EDR: 10/16/2024
Date Made Active in Reports: 12/31/2024
Number of Days to Update: 76

Source: California Environmental Protection Agency
Telephone: 916-323-2514
Last EDR Contact: 01/14/2025
Next Scheduled EDR Contact: 04/28/2025
Data Release Frequency: Varies

NON-CASE INFO: Non-Case Information Sites (GEOTRACKER)
Non-Case Information sites

Date of Government Version: 08/28/2024
Date Data Arrived at EDR: 08/28/2024
Date Made Active in Reports: 08/29/2024
Number of Days to Update: 1

Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 02/24/2025
Next Scheduled EDR Contact: 03/17/2025
Data Release Frequency: Varies

OTHER OIL GAS: Other Oil & Gas Projects Sites (GEOTRACKER)
Other Oil & Gas Projects sites

Date of Government Version: 08/28/2024
Date Data Arrived at EDR: 08/28/2024
Date Made Active in Reports: 08/29/2024
Number of Days to Update: 1

Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 02/24/2025
Next Scheduled EDR Contact: 03/17/2025
Data Release Frequency: Varies

PROD WATER PONDS: Produced Water Ponds Sites (GEOTRACKER)
Produced water ponds sites

Date of Government Version: 08/28/2024
Date Data Arrived at EDR: 08/28/2024
Date Made Active in Reports: 08/29/2024
Number of Days to Update: 1

Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 02/24/2025
Next Scheduled EDR Contact: 03/17/2025
Data Release Frequency: Varies

SAMPLING POINT: Sampling Point ? Public Sites (GEOTRACKER)
Sampling point - public sites

Date of Government Version: 08/28/2024
Date Data Arrived at EDR: 08/28/2024
Date Made Active in Reports: 08/29/2024
Number of Days to Update: 1

Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 02/24/2025
Next Scheduled EDR Contact: 03/17/2025
Data Release Frequency: Varies

WELL STIM PROJ: Well Stimulation Project (GEOTRACKER)
Includes areas of groundwater monitoring plans, a depiction of the monitoring network, and the facilities, boundaries, and subsurface characteristics of the oilfield and the features (oil and gas wells, produced water ponds, UIC wells, water supply wells, etc?) being monitored

Date of Government Version: 08/28/2024
Date Data Arrived at EDR: 08/28/2024
Date Made Active in Reports: 08/29/2024
Number of Days to Update: 1

Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 02/24/2025
Next Scheduled EDR Contact: 03/17/2025
Data Release Frequency: Varies

EDR HIGH RISK HISTORICAL RECORDS

EDR Exclusive Records

EDR MGP: EDR Proprietary Manufactured Gas Plants
The EDR Proprietary Manufactured Gas Plant Database includes records of coal gas plants (manufactured gas plants) compiled by EDR's researchers. Manufactured gas sites were used in the United States from the 1800's to 1950's to produce a gas that could be distributed and used as fuel. These plants used whale oil, rosin, coal, or a mixture of coal, oil, and water that also produced a significant amount of waste. Many of the byproducts of the gas production, such as coal tar (oily waste containing volatile and non-volatile chemicals), sludges, oils and other compounds are potentially hazardous to human health and the environment. The byproduct from this process was frequently disposed of directly at the plant site and can remain or spread slowly, serving as a continuous source of soil and groundwater contamination.

Date of Government Version: N/A
Date Data Arrived at EDR: N/A
Date Made Active in Reports: N/A
Number of Days to Update: N/A

Source: EDR, Inc.
Telephone: N/A
Last EDR Contact: N/A
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

EDR Hist Auto: EDR Exclusive Historical Auto Stations

EDR has searched selected national collections of business directories and has collected listings of potential gas station/filling station/service station sites that were available to EDR researchers. EDR's review was limited to those categories of sources that might, in EDR's opinion, include gas station/filling station/service station establishments. The categories reviewed included, but were not limited to gas, gas station, gasoline station, filling station, auto, automobile repair, auto service station, service station, etc. This database falls within a category of information EDR classifies as "High Risk Historical Records", or HRHR. EDR's HRHR effort presents unique and sometimes proprietary data about past sites and operations that typically create environmental concerns, but may not show up in current government records searches.

Date of Government Version: N/A
Date Data Arrived at EDR: N/A
Date Made Active in Reports: N/A
Number of Days to Update: N/A

Source: EDR, Inc.
Telephone: N/A
Last EDR Contact: N/A
Next Scheduled EDR Contact: N/A
Data Release Frequency: Varies

EDR Hist Cleaner: EDR Exclusive Historical Cleaners

EDR has searched selected national collections of business directories and has collected listings of potential dry cleaner sites that were available to EDR researchers. EDR's review was limited to those categories of sources that might, in EDR's opinion, include dry cleaning establishments. The categories reviewed included, but were not limited to dry cleaners, cleaners, laundry, laundromat, cleaning/laundry, wash & dry etc. This database falls within a category of information EDR classifies as "High Risk Historical Records", or HRHR. EDR's HRHR effort presents unique and sometimes proprietary data about past sites and operations that typically create environmental concerns, but may not show up in current government records searches.

Date of Government Version: N/A
Date Data Arrived at EDR: N/A
Date Made Active in Reports: N/A
Number of Days to Update: N/A

Source: EDR, Inc.
Telephone: N/A
Last EDR Contact: N/A
Next Scheduled EDR Contact: N/A
Data Release Frequency: Varies

EDR RECOVERED GOVERNMENT ARCHIVES

Exclusive Recovered Govt. Archives

RGA LF: Recovered Government Archive Solid Waste Facilities List

The EDR Recovered Government Archive Landfill database provides a list of landfills derived from historical databases and includes many records that no longer appear in current government lists. Compiled from Records formerly available from the Department of Resources Recycling and Recovery in California.

Date of Government Version: N/A
Date Data Arrived at EDR: 07/01/2013
Date Made Active in Reports: 01/13/2014
Number of Days to Update: 196

Source: Department of Resources Recycling and Recovery
Telephone: N/A
Last EDR Contact: 06/01/2012
Next Scheduled EDR Contact: N/A
Data Release Frequency: Varies

RGA LUST: Recovered Government Archive Leaking Underground Storage Tank

The EDR Recovered Government Archive Leaking Underground Storage Tank database provides a list of LUST incidents derived from historical databases and includes many records that no longer appear in current government lists. Compiled from Records formerly available from the State Water Resources Control Board in California.

Date of Government Version: N/A
Date Data Arrived at EDR: 07/01/2013
Date Made Active in Reports: 12/30/2013
Number of Days to Update: 182

Source: State Water Resources Control Board
Telephone: N/A
Last EDR Contact: 06/01/2012
Next Scheduled EDR Contact: N/A
Data Release Frequency: Varies

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

COUNTY RECORDS

ALAMEDA COUNTY:

CS ALAMEDA: Contaminated Sites
A listing of contaminated sites overseen by the Toxic Release Program (oil and groundwater contamination from chemical releases and spills) and the Leaking Underground Storage Tank Program (soil and ground water contamination from leaking petroleum USTs).

Date of Government Version: 01/09/2019
Date Data Arrived at EDR: 01/11/2019
Date Made Active in Reports: 03/05/2019
Number of Days to Update: 53

Source: Alameda County Environmental Health Services
Telephone: 510-567-6700
Last EDR Contact: 12/23/2024
Next Scheduled EDR Contact: 04/14/2025
Data Release Frequency: Semi-Annually

UST ALAMEDA: Underground Tanks
Underground storage tank sites located in Alameda county.

Date of Government Version: 12/26/2023
Date Data Arrived at EDR: 12/26/2023
Date Made Active in Reports: 03/19/2024
Number of Days to Update: 84

Source: Alameda County Environmental Health Services
Telephone: 510-567-6700
Last EDR Contact: 12/23/2024
Next Scheduled EDR Contact: 04/14/2025
Data Release Frequency: Semi-Annually

AMADOR COUNTY:

CUPA AMADOR: CUPA Facility List
Cupa Facility List

Date of Government Version: 04/27/2023
Date Data Arrived at EDR: 04/27/2023
Date Made Active in Reports: 07/13/2023
Number of Days to Update: 77

Source: Amador County Environmental Health
Telephone: 209-223-6439
Last EDR Contact: 01/22/2025
Next Scheduled EDR Contact: 05/12/2025
Data Release Frequency: Varies

BUTTE COUNTY:

CUPA BUTTE: CUPA Facility Listing
Cupa facility list.

Date of Government Version: 04/21/2017
Date Data Arrived at EDR: 04/25/2017
Date Made Active in Reports: 08/09/2017
Number of Days to Update: 106

Source: Public Health Department
Telephone: 530-538-7149
Last EDR Contact: 12/23/2024
Next Scheduled EDR Contact: 04/14/2025
Data Release Frequency: No Update Planned

CALVERAS COUNTY:

CUPA CALVERAS: CUPA Facility Listing
Cupa Facility Listing

Date of Government Version: 09/25/2024
Date Data Arrived at EDR: 09/26/2024
Date Made Active in Reports: 12/12/2024
Number of Days to Update: 77

Source: Calveras County Environmental Health
Telephone: 209-754-6399
Last EDR Contact: 12/10/2024
Next Scheduled EDR Contact: 03/31/2025
Data Release Frequency: Quarterly

COLUSA COUNTY:

CUPA COLUSA: CUPA Facility List
Cupa facility list.

Date of Government Version: 04/06/2020
Date Data Arrived at EDR: 04/23/2020
Date Made Active in Reports: 07/10/2020
Number of Days to Update: 78

Source: Health & Human Services
Telephone: 530-458-0396
Last EDR Contact: 01/22/2025
Next Scheduled EDR Contact: 05/12/2025
Data Release Frequency: Semi-Annually

CONTRA COSTA COUNTY:

SL CONTRA COSTA: Site List
List includes sites from the underground tank, hazardous waste generator and business plan/2185 programs.

Date of Government Version: 10/21/2024
Date Data Arrived at EDR: 10/23/2024
Date Made Active in Reports: 01/13/2025
Number of Days to Update: 82

Source: Contra Costa Health Services Department
Telephone: 925-646-2286
Last EDR Contact: 01/15/2025
Next Scheduled EDR Contact: 05/05/2025
Data Release Frequency: Semi-Annually

DEL NORTE COUNTY:

CUPA DEL NORTE: CUPA Facility List
Cupa Facility list

Date of Government Version: 02/05/2024
Date Data Arrived at EDR: 02/08/2024
Date Made Active in Reports: 04/26/2024
Number of Days to Update: 78

Source: Del Norte County Environmental Health Division
Telephone: 707-465-0426
Last EDR Contact: 01/15/2025
Next Scheduled EDR Contact: 05/05/2025
Data Release Frequency: Varies

EL DORADO COUNTY:

CUPA EL DORADO: CUPA Facility List
CUPA facility list.

Date of Government Version: 08/08/2022
Date Data Arrived at EDR: 08/09/2022
Date Made Active in Reports: 09/01/2022
Number of Days to Update: 23

Source: El Dorado County Environmental Management Department
Telephone: 530-621-6623
Last EDR Contact: 01/15/2025
Next Scheduled EDR Contact: 05/05/2025
Data Release Frequency: Varies

FRESNO COUNTY:

CUPA FRESNO: CUPA Resources List
Certified Unified Program Agency. CUPA's are responsible for implementing a unified hazardous materials and hazardous waste management regulatory program. The agency provides oversight of businesses that deal with hazardous materials, operate underground storage tanks or aboveground storage tanks.

Date of Government Version: 06/28/2021
Date Data Arrived at EDR: 12/21/2021
Date Made Active in Reports: 03/03/2022
Number of Days to Update: 72

Source: Dept. of Community Health
Telephone: 559-445-3271
Last EDR Contact: 12/19/2024
Next Scheduled EDR Contact: 04/07/2025
Data Release Frequency: Semi-Annually

GLENN COUNTY:

CUPA GLENN: CUPA Facility List
Cupa facility list

Date of Government Version: 01/22/2018
Date Data Arrived at EDR: 01/24/2018
Date Made Active in Reports: 03/14/2018
Number of Days to Update: 49

Source: Glenn County Air Pollution Control District
Telephone: 830-934-6500
Last EDR Contact: 01/08/2025
Next Scheduled EDR Contact: 04/28/2025
Data Release Frequency: No Update Planned

HUMBOLDT COUNTY:

CUPA HUMBOLDT: CUPA Facility List
CUPA facility list.

Date of Government Version: 08/12/2021
Date Data Arrived at EDR: 08/12/2021
Date Made Active in Reports: 11/08/2021
Number of Days to Update: 88

Source: Humboldt County Environmental Health
Telephone: N/A
Last EDR Contact: 02/05/2025
Next Scheduled EDR Contact: 05/26/2025
Data Release Frequency: Semi-Annually

IMPERIAL COUNTY:

CUPA IMPERIAL: CUPA Facility List
Cupa facility list.

Date of Government Version: 10/09/2024
Date Data Arrived at EDR: 10/11/2024
Date Made Active in Reports: 12/30/2024
Number of Days to Update: 80

Source: San Diego Border Field Office
Telephone: 760-339-2777
Last EDR Contact: 01/09/2025
Next Scheduled EDR Contact: 04/28/2025
Data Release Frequency: Varies

INYO COUNTY:

CUPA INYO: CUPA Facility List
Cupa facility list.

Date of Government Version: 04/02/2018
Date Data Arrived at EDR: 04/03/2018
Date Made Active in Reports: 06/14/2018
Number of Days to Update: 72

Source: Inyo County Environmental Health Services
Telephone: 760-878-0238
Last EDR Contact: 02/05/2025
Next Scheduled EDR Contact: 05/26/2025
Data Release Frequency: Varies

KERN COUNTY:

CUPA KERN: CUPA Facility List
A listing of sites included in the Kern County Hazardous Material Business Plan.

Date of Government Version: 01/27/2025
Date Data Arrived at EDR: 01/29/2025
Date Made Active in Reports: 01/31/2025
Number of Days to Update: 2

Source: Kern County Public Health
Telephone: 661-321-3000
Last EDR Contact: 01/22/2025
Next Scheduled EDR Contact: 05/12/2025
Data Release Frequency: Varies

UST KERN: Underground Storage Tank Sites & Tank Listing
Kern County Sites and Tanks Listing.

Date of Government Version: 01/27/2025
Date Data Arrived at EDR: 01/29/2025
Date Made Active in Reports: 01/31/2025
Number of Days to Update: 2

Source: Kern County Environment Health Services Department
Telephone: 661-862-8700
Last EDR Contact: 01/22/2025
Next Scheduled EDR Contact: 05/12/2025
Data Release Frequency: Quarterly

KINGS COUNTY:

CUPA KINGS: CUPA Facility List

A listing of sites included in the county's Certified Unified Program Agency database. California's Secretary for Environmental Protection established the unified hazardous materials and hazardous waste regulatory program as required by chapter 6.11 of the California Health and Safety Code. The Unified Program consolidates the administration, permits, inspections, and enforcement activities.

Date of Government Version: 12/03/2020
Date Data Arrived at EDR: 01/26/2021
Date Made Active in Reports: 04/14/2021
Number of Days to Update: 78

Source: Kings County Department of Public Health
Telephone: 559-584-1411
Last EDR Contact: 02/05/2025
Next Scheduled EDR Contact: 05/26/2025
Data Release Frequency: Varies

LAKE COUNTY:

CUPA LAKE: CUPA Facility List

Cupa facility list

Date of Government Version: 10/31/2024
Date Data Arrived at EDR: 11/01/2024
Date Made Active in Reports: 01/17/2025
Number of Days to Update: 77

Source: Lake County Environmental Health
Telephone: 707-263-1164
Last EDR Contact: 01/03/2025
Next Scheduled EDR Contact: 04/21/2025
Data Release Frequency: Varies

LASSEN COUNTY:

CUPA LASSEN: CUPA Facility List

Cupa facility list

Date of Government Version: 07/31/2020
Date Data Arrived at EDR: 08/21/2020
Date Made Active in Reports: 11/09/2020
Number of Days to Update: 80

Source: Lassen County Environmental Health
Telephone: 530-251-8528
Last EDR Contact: 01/08/2025
Next Scheduled EDR Contact: 04/28/2025
Data Release Frequency: Varies

LOS ANGELES COUNTY:

AOCONCERN: Key Areas of Concerns in Los Angeles County

San Gabriel Valley areas where VOC contamination is at or above the MCL as designated by region 9 EPA office. Date of Government Version: 3/30/2009 Exide Site area is a cleanup plan of lead-impacted soil surrounding the former Exide Facility as designated by the DTSC. Date of Government Version: 7/17/2017

Date of Government Version: 03/30/2009
Date Data Arrived at EDR: 03/31/2009
Date Made Active in Reports: 10/23/2009
Number of Days to Update: 206

Source: N/A
Telephone: N/A
Last EDR Contact: 12/04/2024
Next Scheduled EDR Contact: 03/24/2025
Data Release Frequency: No Update Planned

HMS LOS ANGELES: HMS: Street Number List
Industrial Waste and Underground Storage Tank Sites.

Date of Government Version: 09/26/2024
Date Data Arrived at EDR: 10/01/2024
Date Made Active in Reports: 12/12/2024
Number of Days to Update: 72

Source: Department of Public Works
Telephone: 626-458-3517
Last EDR Contact: 01/09/2025
Next Scheduled EDR Contact: 04/14/2025
Data Release Frequency: Semi-Annually

LF LOS ANGELES: List of Solid Waste Facilities
Solid Waste Facilities in Los Angeles County.

Date of Government Version: 10/04/2024
Date Data Arrived at EDR: 10/04/2024
Date Made Active in Reports: 12/23/2024
Number of Days to Update: 80

Source: La County Department of Public Works
Telephone: 818-458-5185
Last EDR Contact: 01/07/2025
Next Scheduled EDR Contact: 04/21/2025
Data Release Frequency: Varies

LF LOS ANGELES CITY: City of Los Angeles Landfills
Landfills owned and maintained by the City of Los Angeles.

Date of Government Version: 12/31/2023
Date Data Arrived at EDR: 10/03/2024
Date Made Active in Reports: 12/17/2024
Number of Days to Update: 75

Source: Engineering & Construction Division
Telephone: 213-473-7869
Last EDR Contact: 01/03/2025
Next Scheduled EDR Contact: 04/21/2025
Data Release Frequency: Varies

LOS ANGELES AST: Active & Inactive AST Inventory
A listing of active & inactive above ground petroleum storage tank site locations, located in the City of Los Angeles.

Date of Government Version: 06/01/2019
Date Data Arrived at EDR: 06/25/2019
Date Made Active in Reports: 08/22/2019
Number of Days to Update: 58

Source: Los Angeles Fire Department
Telephone: 213-978-3800
Last EDR Contact: 12/10/2024
Next Scheduled EDR Contact: 03/31/2025
Data Release Frequency: Varies

LOS ANGELES CO LF METHANE: Methane Producing Landfills
This data was created on April 30, 2012 to represent known disposal sites in Los Angeles County that may produce and emanate methane gas. The shapefile contains disposal sites within Los Angeles County that once accepted degradable refuse material. Information used to create this data was extracted from a landfill survey performed by County Engineers (Major Waste System Map, 1973) as well as historical records from CalRecycle, Regional Water Quality Control Board, and Los Angeles County Department of Public Health

Date of Government Version: 05/14/2024
Date Data Arrived at EDR: 07/09/2024
Date Made Active in Reports: 09/27/2024
Number of Days to Update: 80

Source: Los Angeles County Department of Public Works
Telephone: 626-458-6973
Last EDR Contact: 01/09/2025
Next Scheduled EDR Contact: 04/21/2025
Data Release Frequency: No Update Planned

LOS ANGELES HM: Active & Inactive Hazardous Materials Inventory
A listing of active & inactive hazardous materials facility locations, located in the City of Los Angeles.

Date of Government Version: 09/01/2024
Date Data Arrived at EDR: 09/17/2024
Date Made Active in Reports: 12/02/2024
Number of Days to Update: 76

Source: Los Angeles Fire Department
Telephone: 213-978-3800
Last EDR Contact: 12/11/2024
Next Scheduled EDR Contact: 03/31/2025
Data Release Frequency: Varies

LOS ANGELES UST: Active & Inactive UST Inventory
A listing of active & inactive underground storage tank site locations and underground storage tank historical sites, located in the City of Los Angeles.

Date of Government Version: 09/01/2024
Date Data Arrived at EDR: 09/17/2024
Date Made Active in Reports: 12/02/2024
Number of Days to Update: 76
Source: Los Angeles Fire Department
Telephone: 213-978-3800
Last EDR Contact: 12/11/2024
Next Scheduled EDR Contact: 03/31/2025
Data Release Frequency: Varies

SITE MIT LOS ANGELES: Site Mitigation LA County List
Industrial sites that have had some sort of spill or complaint.

Date of Government Version: 05/21/2024
Date Data Arrived at EDR: 07/16/2024
Date Made Active in Reports: 10/07/2024
Number of Days to Update: 83
Source: Community Health Services
Telephone: 323-890-7806
Last EDR Contact: 01/14/2025
Next Scheduled EDR Contact: 04/28/2025
Data Release Frequency: Annually

UST EL SEGUNDO: City of El Segundo Underground Storage Tank
Underground storage tank sites located in El Segundo city.

Date of Government Version: 01/21/2017
Date Data Arrived at EDR: 04/19/2017
Date Made Active in Reports: 05/10/2017
Number of Days to Update: 21
Source: City of El Segundo Fire Department
Telephone: 310-524-2236
Last EDR Contact: 01/03/2025
Next Scheduled EDR Contact: 04/21/2025
Data Release Frequency: No Update Planned

UST LONG BEACH: City of Long Beach Underground Storage Tank
Underground storage tank sites located in the city of Long Beach.

Date of Government Version: 04/22/2019
Date Data Arrived at EDR: 04/23/2019
Date Made Active in Reports: 06/27/2019
Number of Days to Update: 65
Source: City of Long Beach Fire Department
Telephone: 562-570-2563
Last EDR Contact: 01/08/2025
Next Scheduled EDR Contact: 04/28/2025
Data Release Frequency: Varies

UST TORRANCE: City of Torrance Underground Storage Tank
Underground storage tank sites located in the city of Torrance.

Date of Government Version: 10/15/2024
Date Data Arrived at EDR: 10/17/2024
Date Made Active in Reports: 01/07/2025
Number of Days to Update: 82
Source: City of Torrance Fire Department
Telephone: 310-618-2973
Last EDR Contact: 01/09/2025
Next Scheduled EDR Contact: 04/28/2025
Data Release Frequency: Semi-Annually

MADERA COUNTY:

CUPA MADERA: CUPA Facility List
A listing of sites included in the county's Certified Unified Program Agency database. California's Secretary for Environmental Protection established the unified hazardous materials and hazardous waste regulatory program as required by chapter 6.11 of the California Health and Safety Code. The Unified Program consolidates the administration, permits, inspections, and enforcement activities.

Date of Government Version: 08/10/2020
Date Data Arrived at EDR: 08/12/2020
Date Made Active in Reports: 10/23/2020
Number of Days to Update: 72
Source: Madera County Environmental Health
Telephone: 559-675-7823
Last EDR Contact: 02/05/2025
Next Scheduled EDR Contact: 05/26/2025
Data Release Frequency: Varies

MARIN COUNTY:

UST MARIN: Underground Storage Tank Sites
Currently permitted USTs in Marin County.

Date of Government Version: 09/26/2018
Date Data Arrived at EDR: 10/04/2018
Date Made Active in Reports: 11/02/2018
Number of Days to Update: 29

Source: Public Works Department Waste Management
Telephone: 415-473-6647
Last EDR Contact: 12/16/2024
Next Scheduled EDR Contact: 04/07/2025
Data Release Frequency: Semi-Annually

MENDOCINO COUNTY:

UST MENDOCINO: Mendocino County UST Database
A listing of underground storage tank locations in Mendocino County.

Date of Government Version: 09/22/2021
Date Data Arrived at EDR: 11/18/2021
Date Made Active in Reports: 11/22/2021
Number of Days to Update: 4

Source: Department of Public Health
Telephone: 707-463-4466
Last EDR Contact: 02/12/2025
Next Scheduled EDR Contact: 06/02/2025
Data Release Frequency: Annually

MERCED COUNTY:

CUPA MERCED: CUPA Facility List
CUPA facility list.

Date of Government Version: 10/08/2024
Date Data Arrived at EDR: 10/09/2024
Date Made Active in Reports: 10/31/2024
Number of Days to Update: 22

Source: Merced County Environmental Health
Telephone: 209-381-1094
Last EDR Contact: 02/05/2025
Next Scheduled EDR Contact: 05/26/2025
Data Release Frequency: Varies

MONO COUNTY:

CUPA MONO: CUPA Facility List
CUPA Facility List

Date of Government Version: 02/22/2021
Date Data Arrived at EDR: 03/02/2021
Date Made Active in Reports: 05/19/2021
Number of Days to Update: 78

Source: Mono County Health Department
Telephone: 760-932-5580
Last EDR Contact: 02/12/2025
Next Scheduled EDR Contact: 06/02/2025
Data Release Frequency: Varies

MONTEREY COUNTY:

CUPA MONTEREY: CUPA Facility Listing
CUPA Program listing from the Environmental Health Division.

Date of Government Version: 01/10/2025
Date Data Arrived at EDR: 01/14/2025
Date Made Active in Reports: 02/20/2025
Number of Days to Update: 37

Source: Monterey County Health Department
Telephone: 831-796-1297
Last EDR Contact: 12/16/2024
Next Scheduled EDR Contact: 04/07/2025
Data Release Frequency: Varies

NAPA COUNTY:

LUST NAPA: Sites With Reported Contamination
A listing of leaking underground storage tank sites located in Napa county.

Date of Government Version: 01/09/2017
Date Data Arrived at EDR: 01/11/2017
Date Made Active in Reports: 03/02/2017
Number of Days to Update: 50

Source: Napa County Department of Environmental Management
Telephone: 707-253-4269
Last EDR Contact: 02/12/2025
Next Scheduled EDR Contact: 06/02/2025
Data Release Frequency: No Update Planned

UST NAPA: Closed and Operating Underground Storage Tank Sites
Underground storage tank sites located in Napa county.

Date of Government Version: 09/05/2019
Date Data Arrived at EDR: 09/09/2019
Date Made Active in Reports: 10/31/2019
Number of Days to Update: 52

Source: Napa County Department of Environmental Management
Telephone: 707-253-4269
Last EDR Contact: 02/12/2025
Next Scheduled EDR Contact: 06/02/2025
Data Release Frequency: No Update Planned

NEVADA COUNTY:

CUPA NEVADA: CUPA Facility List
CUPA facility list.

Date of Government Version: 01/27/2025
Date Data Arrived at EDR: 01/27/2025
Date Made Active in Reports: 02/03/2025
Number of Days to Update: 7

Source: Community Development Agency
Telephone: 530-265-1467
Last EDR Contact: 01/15/2025
Next Scheduled EDR Contact: 05/05/2025
Data Release Frequency: Varies

ORANGE COUNTY:

IND_SITE ORANGE: List of Industrial Site Cleanups Orange County
Petroleum and non-petroleum spills.

Date of Government Version: 10/31/2024
Date Data Arrived at EDR: 10/31/2024
Date Made Active in Reports: 01/24/2025
Number of Days to Update: 85

Source: Health Care Agency
Telephone: 714-834-3446
Last EDR Contact: 01/27/2025
Next Scheduled EDR Contact: 05/12/2025
Data Release Frequency: Annually

LUST ORANGE: List of Underground Storage Tank Cleanups
Orange County Underground Storage Tank Cleanups (LUST).

Date of Government Version: 10/31/2024
Date Data Arrived at EDR: 10/31/2024
Date Made Active in Reports: 01/24/2025
Number of Days to Update: 85

Source: Health Care Agency
Telephone: 714-834-3446
Last EDR Contact: 01/27/2025
Next Scheduled EDR Contact: 05/12/2025
Data Release Frequency: Quarterly

UST ORANGE: List of Underground Storage Tank Facilities
Orange County Underground Storage Tank Facilities (UST).

Date of Government Version: 08/06/2024
Date Data Arrived at EDR: 08/08/2024
Date Made Active in Reports: 10/29/2024
Number of Days to Update: 82

Source: Health Care Agency
Telephone: 714-834-3446
Last EDR Contact: 01/27/2025
Next Scheduled EDR Contact: 05/12/2025
Data Release Frequency: Quarterly

PLACER COUNTY:

MS PLACER: Master List of Facilities
List includes aboveground tanks, underground tanks and cleanup sites.

Date of Government Version: 11/19/2024
Date Data Arrived at EDR: 11/20/2024
Date Made Active in Reports: 02/13/2025
Number of Days to Update: 85

Source: Placer County Health and Human Services
Telephone: 530-745-2363
Last EDR Contact: 02/19/2025
Next Scheduled EDR Contact: 06/09/2025
Data Release Frequency: Semi-Annually

PLUMAS COUNTY:

CUPA PLUMAS: CUPA Facility List
Plumas County CUPA Program facilities.

Date of Government Version: 03/31/2019
Date Data Arrived at EDR: 04/23/2019
Date Made Active in Reports: 06/26/2019
Number of Days to Update: 64

Source: Plumas County Environmental Health
Telephone: 530-283-6355
Last EDR Contact: 01/08/2025
Next Scheduled EDR Contact: 04/28/2025
Data Release Frequency: Varies

RIVERSIDE COUNTY:

LUST RIVERSIDE: Listing of Underground Tank Cleanup Sites
Riverside County Underground Storage Tank Cleanup Sites (LUST).

Date of Government Version: 06/11/2024
Date Data Arrived at EDR: 06/12/2024
Date Made Active in Reports: 06/27/2024
Number of Days to Update: 15

Source: Department of Environmental Health
Telephone: 951-358-5055
Last EDR Contact: 12/04/2024
Next Scheduled EDR Contact: 03/24/2025
Data Release Frequency: Quarterly

UST RIVERSIDE: Underground Storage Tank Tank List
Underground storage tank sites located in Riverside county.

Date of Government Version: 12/05/2024
Date Data Arrived at EDR: 12/05/2024
Date Made Active in Reports: 12/31/2024
Number of Days to Update: 26

Source: Department of Environmental Health
Telephone: 951-358-5055
Last EDR Contact: 12/04/2024
Next Scheduled EDR Contact: 03/24/2025
Data Release Frequency: Quarterly

SACRAMENTO COUNTY:

CS SACRAMENTO: Toxic Site Clean-Up List
List of sites where unauthorized releases of potentially hazardous materials have occurred.

Date of Government Version: 11/07/2022
Date Data Arrived at EDR: 12/21/2022
Date Made Active in Reports: 03/16/2023
Number of Days to Update: 85

Source: Sacramento County Environmental Management
Telephone: 916-875-8406
Last EDR Contact: 12/16/2024
Next Scheduled EDR Contact: 04/07/2025
Data Release Frequency: Quarterly

ML SACRAMENTO: Master Hazardous Materials Facility List
Any business that has hazardous materials on site - hazardous material storage sites, underground storage tanks, waste generators.

Date of Government Version: 11/07/2022
Date Data Arrived at EDR: 12/09/2022
Date Made Active in Reports: 03/01/2023
Number of Days to Update: 82

Source: Sacramento County Environmental Management
Telephone: 916-875-8406
Last EDR Contact: 12/16/2024
Next Scheduled EDR Contact: 04/07/2025
Data Release Frequency: Quarterly

SAN BENITO COUNTY:

CUPA SAN BENITO: CUPA Facility List
Cupa facility list

Date of Government Version: 10/25/2024
Date Data Arrived at EDR: 10/29/2024
Date Made Active in Reports: 01/17/2025
Number of Days to Update: 80

Source: San Benito County Environmental Health
Telephone: N/A
Last EDR Contact: 01/22/2025
Next Scheduled EDR Contact: 05/12/2025
Data Release Frequency: Varies

SAN BERNARDINO COUNTY:

PERMITS SAN BERNARDINO: Hazardous Material Permits
This listing includes underground storage tanks, medical waste handlers/generators, hazardous materials handlers, hazardous waste generators, and waste oil generators/handlers.

Date of Government Version: 08/13/2024
Date Data Arrived at EDR: 08/14/2024
Date Made Active in Reports: 08/20/2024
Number of Days to Update: 6

Source: San Bernardino County Fire Department Hazardous Materials Division
Telephone: 909-387-3041
Last EDR Contact: 01/28/2025
Next Scheduled EDR Contact: 05/12/2025
Data Release Frequency: Quarterly

SAN DIEGO COUNTY:

HMMD SAN DIEGO: Hazardous Materials Management Division Database
The database includes: HE58 - This report contains the business name, site address, business phone number, establishment 'H' permit number, type of permit, and the business status. HE17 - In addition to providing the same information provided in the HE58 listing, HE17 provides inspection dates, violations received by the establishment, hazardous waste generated, the quantity, method of storage, treatment/disposal of waste and the hauler, and information on underground storage tanks. Unauthorized Release List - Includes a summary of environmental contamination cases in San Diego County (underground tank cases, non-tank cases, groundwater contamination, and soil contamination are included.)

Date of Government Version: 11/20/2024
Date Data Arrived at EDR: 11/20/2024
Date Made Active in Reports: 02/13/2025
Number of Days to Update: 85

Source: Hazardous Materials Management Division
Telephone: 619-338-2268
Last EDR Contact: 11/20/2024
Next Scheduled EDR Contact: 03/10/2025
Data Release Frequency: Quarterly

LF SAN DIEGO: Solid Waste Facilities
San Diego County Solid Waste Facilities.

Date of Government Version: 10/01/2023
Date Data Arrived at EDR: 01/31/2024
Date Made Active in Reports: 04/17/2024
Number of Days to Update: 77

Source: Department of Health Services
Telephone: 619-338-2209
Last EDR Contact: 01/09/2025
Next Scheduled EDR Contact: 04/28/2025
Data Release Frequency: Varies

SAN DIEGO CO LOP: Local Oversight Program Listing
A listing of all LOP release sites that are or were under the County of San Diego's jurisdiction. Included are closed or transferred cases, open cases, and cases that did not have a case type indicated. The cases without a case type are mostly complaints; however, some of them could be LOP cases.

Date of Government Version: 07/22/2021
Date Data Arrived at EDR: 10/19/2021
Date Made Active in Reports: 01/13/2022
Number of Days to Update: 86

Source: Department of Environmental Health
Telephone: 858-505-6874
Last EDR Contact: 01/09/2025
Next Scheduled EDR Contact: 04/28/2025
Data Release Frequency: Varies

SAN DIEGO CO SAM: Environmental Case Listing
The listing contains all underground tank release cases and projects pertaining to properties contaminated with hazardous substances that are actively under review by the Site Assessment and Mitigation Program.

Date of Government Version: 03/23/2010
Date Data Arrived at EDR: 06/15/2010
Date Made Active in Reports: 07/09/2010
Number of Days to Update: 24
Source: San Diego County Department of Environmental Health
Telephone: 619-338-2371
Last EDR Contact: 02/19/2025
Next Scheduled EDR Contact: 06/09/2025
Data Release Frequency: No Update Planned

SAN FRANCISCO COUNTY:

CUPA SAN FRANCISCO CO: CUPA Facility Listing
Cupa facilities

Date of Government Version: 10/28/2024
Date Data Arrived at EDR: 10/30/2024
Date Made Active in Reports: 01/21/2025
Number of Days to Update: 83
Source: San Francisco County Department of Environmental Health
Telephone: 415-252-3896
Last EDR Contact: 01/23/2025
Next Scheduled EDR Contact: 05/12/2025
Data Release Frequency: Varies

LUST SAN FRANCISCO: Local Oversite Facilities
A listing of leaking underground storage tank sites located in San Francisco county.

Date of Government Version: 09/19/2008
Date Data Arrived at EDR: 09/19/2008
Date Made Active in Reports: 09/29/2008
Number of Days to Update: 10
Source: Department Of Public Health San Francisco County
Telephone: 415-252-3920
Last EDR Contact: 01/22/2025
Next Scheduled EDR Contact: 05/12/2025
Data Release Frequency: No Update Planned

UST SAN FRANCISCO: Underground Storage Tank Information
Underground storage tank sites located in San Francisco county.

Date of Government Version: 10/28/2024
Date Data Arrived at EDR: 10/30/2024
Date Made Active in Reports: 01/24/2025
Number of Days to Update: 86
Source: Department of Public Health
Telephone: 415-252-3920
Last EDR Contact: 01/23/2025
Next Scheduled EDR Contact: 05/12/2025
Data Release Frequency: Quarterly

SAN FRANCISO COUNTY:

SAN FRANCISCO MAHER: Maher Ordinance Property Listing
a listing of properties that fall within a Maher Ordinance, for all of San Francisco

Date of Government Version: 10/15/2024
Date Data Arrived at EDR: 10/16/2024
Date Made Active in Reports: 01/06/2025
Number of Days to Update: 82
Source: San Francisco Planning
Telephone: 628-652-7483
Last EDR Contact: 01/14/2025
Next Scheduled EDR Contact: 04/28/2025
Data Release Frequency: Varies

SAN JOAQUIN COUNTY:

UST SAN JOAQUIN: San Joaquin Co. UST
A listing of underground storage tank locations in San Joaquin county.

Date of Government Version: 06/22/2018
Date Data Arrived at EDR: 06/26/2018
Date Made Active in Reports: 07/11/2018
Number of Days to Update: 15
Source: Environmental Health Department
Telephone: N/A
Last EDR Contact: 12/04/2024
Next Scheduled EDR Contact: 03/24/2025
Data Release Frequency: Semi-Annually

SAN LUIS OBISPO COUNTY:

CUPA SAN LUIS OBISPO: CUPA Facility List
Cupa Facility List.

Date of Government Version: 11/12/2024
Date Data Arrived at EDR: 11/13/2024
Date Made Active in Reports: 02/06/2025
Number of Days to Update: 85

Source: San Luis Obispo County Public Health Department
Telephone: 805-781-5596
Last EDR Contact: 02/05/2025
Next Scheduled EDR Contact: 05/26/2025
Data Release Frequency: Varies

SAN MATEO COUNTY:

BI SAN MATEO: Business Inventory
List includes Hazardous Materials Business Plan, hazardous waste generators, and underground storage tanks.

Date of Government Version: 02/20/2020
Date Data Arrived at EDR: 02/20/2020
Date Made Active in Reports: 04/24/2020
Number of Days to Update: 64

Source: San Mateo County Environmental Health Services Division
Telephone: 650-363-1921
Last EDR Contact: 12/05/2024
Next Scheduled EDR Contact: 03/17/2025
Data Release Frequency: Annually

LUST SAN MATEO: Fuel Leak List
A listing of leaking underground storage tank sites located in San Mateo county.

Date of Government Version: 03/29/2019
Date Data Arrived at EDR: 03/29/2019
Date Made Active in Reports: 05/29/2019
Number of Days to Update: 61

Source: San Mateo County Environmental Health Services Division
Telephone: 650-363-1921
Last EDR Contact: 11/26/2024
Next Scheduled EDR Contact: 03/17/2025
Data Release Frequency: Semi-Annually

SANTA BARBARA COUNTY:

CUPA SANTA BARBARA: CUPA Facility Listing
CUPA Program Listing from the Environmental Health Services division.

Date of Government Version: 09/08/2011
Date Data Arrived at EDR: 09/09/2011
Date Made Active in Reports: 10/07/2011
Number of Days to Update: 28

Source: Santa Barbara County Public Health Department
Telephone: 805-686-8167
Last EDR Contact: 02/05/2025
Next Scheduled EDR Contact: 05/26/2025
Data Release Frequency: No Update Planned

SANTA CLARA COUNTY:

CUPA SANTA CLARA: Cupa Facility List
Cupa facility list

Date of Government Version: 11/18/2024
Date Data Arrived at EDR: 11/19/2024
Date Made Active in Reports: 02/12/2025
Number of Days to Update: 85

Source: Department of Environmental Health
Telephone: 408-918-1973
Last EDR Contact: 02/05/2025
Next Scheduled EDR Contact: 05/26/2025
Data Release Frequency: Varies

HIST LUST SANTA CLARA: HIST LUST - Fuel Leak Site Activity Report
A listing of open and closed leaking underground storage tanks. This listing is no longer updated by the county. Leaking underground storage tanks are now handled by the Department of Environmental Health.

Date of Government Version: 03/29/2005
Date Data Arrived at EDR: 03/30/2005
Date Made Active in Reports: 04/21/2005
Number of Days to Update: 22

Source: Santa Clara Valley Water District
Telephone: 408-265-2600
Last EDR Contact: 03/23/2009
Next Scheduled EDR Contact: 06/22/2009
Data Release Frequency: No Update Planned

LUST SANTA CLARA: LOP Listing
A listing of leaking underground storage tanks located in Santa Clara county.

Date of Government Version: 03/03/2014
Date Data Arrived at EDR: 03/05/2014
Date Made Active in Reports: 03/18/2014
Number of Days to Update: 13

Source: Department of Environmental Health
Telephone: 408-918-3417
Last EDR Contact: 02/12/2025
Next Scheduled EDR Contact: 06/02/2025
Data Release Frequency: No Update Planned

SANTA CRUZ COUNTY:

CUPA SANTA CRUZ: CUPA Facility List
CUPA facility listing.

Date of Government Version: 01/21/2017
Date Data Arrived at EDR: 02/22/2017
Date Made Active in Reports: 05/23/2017
Number of Days to Update: 90

Source: Santa Cruz County Environmental Health
Telephone: 831-464-2761
Last EDR Contact: 02/05/2025
Next Scheduled EDR Contact: 05/26/2025
Data Release Frequency: Varies

SITE MIT SANTA CRUZ: Site Mitigation Santa Cruz County List
Sites may become contaminated with toxic chemicals through illegal dumping or disposal, from leaking underground storage tanks, or through industrial or commercial activities.The goal of the site mitigation program is to protect the public health and the environment while facilitating completion of contaminated site clean-up projects in a timely manner.

Date of Government Version: 12/03/2018
Date Data Arrived at EDR: 06/23/2023
Date Made Active in Reports: 07/13/2023
Number of Days to Update: 20

Source: Santa Cruz Environmental Health Services
Telephone: 831-454-2761
Last EDR Contact: 02/05/2025
Next Scheduled EDR Contact: 05/26/2025
Data Release Frequency: Varies

SHASTA COUNTY:

CUPA SHASTA: CUPA Facility List
Cupa Facility List.

Date of Government Version: 06/15/2017
Date Data Arrived at EDR: 06/19/2017
Date Made Active in Reports: 08/09/2017
Number of Days to Update: 51

Source: Shasta County Department of Resource Management
Telephone: 530-225-5789
Last EDR Contact: 02/05/2025
Next Scheduled EDR Contact: 05/26/2025
Data Release Frequency: Varies

SOLANO COUNTY:

LUST SOLANO: Leaking Underground Storage Tanks
A listing of leaking underground storage tank sites located in Solano county.

Date of Government Version: 06/04/2019
Date Data Arrived at EDR: 06/06/2019
Date Made Active in Reports: 08/13/2019
Number of Days to Update: 68

Source: Solano County Department of Environmental Management
Telephone: 707-784-6770
Last EDR Contact: 02/12/2025
Next Scheduled EDR Contact: 06/02/2025
Data Release Frequency: Quarterly

UST SOLANO: Underground Storage Tanks
Underground storage tank sites located in Solano county.

Date of Government Version: 09/15/2021
Date Data Arrived at EDR: 09/16/2021
Date Made Active in Reports: 12/09/2021
Number of Days to Update: 84

Source: Solano County Department of Environmental Management
Telephone: 707-784-6770
Last EDR Contact: 02/12/2025
Next Scheduled EDR Contact: 06/02/2025
Data Release Frequency: Quarterly

SONOMA COUNTY:

CUPA SONOMA: Cupa Facility List
Cupa Facility list

Date of Government Version: 07/02/2021
Date Data Arrived at EDR: 07/06/2021
Date Made Active in Reports: 07/14/2021
Number of Days to Update: 8

Source: County of Sonoma Fire & Emergency Services Department
Telephone: 707-565-1174
Last EDR Contact: 12/10/2024
Next Scheduled EDR Contact: 03/31/2025
Data Release Frequency: Varies

LUST SONOMA: Leaking Underground Storage Tank Sites
A listing of leaking underground storage tank sites located in Sonoma county.

Date of Government Version: 06/30/2021
Date Data Arrived at EDR: 06/30/2021
Date Made Active in Reports: 09/24/2021
Number of Days to Update: 86

Source: Department of Health Services
Telephone: 707-565-6565
Last EDR Contact: 12/10/2024
Next Scheduled EDR Contact: 03/31/2025
Data Release Frequency: Quarterly

STANISLAUS COUNTY:

CUPA STANISLAUS: CUPA Facility List
Cupa facility list

Date of Government Version: 02/08/2022
Date Data Arrived at EDR: 02/10/2022
Date Made Active in Reports: 05/04/2022
Number of Days to Update: 83

Source: Stanislaus County Department of Ennvironmental Protection
Telephone: 209-525-6751
Last EDR Contact: 01/03/2025
Next Scheduled EDR Contact: 04/21/2025
Data Release Frequency: Varies

SUTTER COUNTY:

UST SUTTER: Underground Storage Tanks
Underground storage tank sites located in Sutter county.

Date of Government Version: 11/05/2024
Date Data Arrived at EDR: 11/20/2024
Date Made Active in Reports: 02/13/2025
Number of Days to Update: 85

Source: Sutter County Environmental Health Services
Telephone: 530-822-7500
Last EDR Contact: 02/12/2025
Next Scheduled EDR Contact: 06/02/2025
Data Release Frequency: Semi-Annually

TEHAMA COUNTY:

CUPA TEHAMA: CUPA Facility List
Cupa facilities

Date of Government Version: 08/27/2024
Date Data Arrived at EDR: 08/28/2024
Date Made Active in Reports: 11/12/2024
Number of Days to Update: 76

Source: Tehama County Department of Environmental Health
Telephone: 530-527-8020
Last EDR Contact: 02/05/2025
Next Scheduled EDR Contact: 05/12/2025
Data Release Frequency: Varies

TRINITY COUNTY:

CUPA TRINITY: CUPA Facility List
Cupa facility list

Date of Government Version: 10/09/2024
Date Data Arrived at EDR: 10/11/2024
Date Made Active in Reports: 12/30/2024
Number of Days to Update: 80

Source: Department of Toxic Substances Control
Telephone: 760-352-0381
Last EDR Contact: 01/09/2025
Next Scheduled EDR Contact: 04/28/2025
Data Release Frequency: Varies

TULARE COUNTY:

CUPA TULARE: CUPA Facility List
Cupa program facilities

Date of Government Version: 10/07/2022
Date Data Arrived at EDR: 10/07/2022
Date Made Active in Reports: 12/21/2022
Number of Days to Update: 75

Source: Tulare County Environmental Health Services Division
Telephone: 559-624-7400
Last EDR Contact: 01/22/2025
Next Scheduled EDR Contact: 05/12/2025
Data Release Frequency: Varies

TUOLUMNE COUNTY:

CUPA TUOLUMNE: CUPA Facility List
Cupa facility list

Date of Government Version: 04/23/2018
Date Data Arrived at EDR: 04/25/2018
Date Made Active in Reports: 06/25/2018
Number of Days to Update: 61

Source: Divison of Environmental Health
Telephone: 209-533-5633
Last EDR Contact: 01/08/2025
Next Scheduled EDR Contact: 04/28/2025
Data Release Frequency: Varies

VENTURA COUNTY:

BWT VENTURA: Business Plan, Hazardous Waste Producers, and Operating Underground Tanks
The BWT list indicates by site address whether the Environmental Health Division has Business Plan (B), Waste Producer (W), and/or Underground Tank (T) information.

Date of Government Version: 07/02/2024
Date Data Arrived at EDR: 07/17/2024
Date Made Active in Reports: 07/23/2024
Number of Days to Update: 6

Source: Ventura County Environmental Health Division
Telephone: 805-654-2813
Last EDR Contact: 01/13/2025
Next Scheduled EDR Contact: 04/28/2025
Data Release Frequency: Quarterly

LF VENTURA: Inventory of Illegal Abandoned and Inactive Sites
Ventura County Inventory of Closed, Illegal Abandoned, and Inactive Sites.

Date of Government Version: 12/01/2011
Date Data Arrived at EDR: 12/01/2011
Date Made Active in Reports: 01/19/2012
Number of Days to Update: 49

Source: Environmental Health Division
Telephone: 805-654-2813
Last EDR Contact: 12/16/2024
Next Scheduled EDR Contact: 04/07/2025
Data Release Frequency: No Update Planned

LUST VENTURA: Listing of Underground Tank Cleanup Sites
Ventura County Underground Storage Tank Cleanup Sites (LUST).

Date of Government Version: 05/29/2008
Date Data Arrived at EDR: 06/24/2008
Date Made Active in Reports: 07/31/2008
Number of Days to Update: 37

Source: Environmental Health Division
Telephone: 805-654-2813
Last EDR Contact: 01/30/2025
Next Scheduled EDR Contact: 05/19/2025
Data Release Frequency: No Update Planned

MED WASTE VENTURA: Medical Waste Program List
To protect public health and safety and the environment from potential exposure to disease causing agents, the Environmental Health Division Medical Waste Program regulates the generation, handling, storage, treatment and disposal of medical waste throughout the County.

Date of Government Version: 07/02/2024
Date Data Arrived at EDR: 07/18/2024
Date Made Active in Reports: 07/23/2024
Number of Days to Update: 5
Source: Ventura County Resource Management Agency
Telephone: 805-654-2813
Last EDR Contact: 01/13/2025
Next Scheduled EDR Contact: 04/28/2025
Data Release Frequency: Quarterly

UST VENTURA: Underground Tank Closed Sites List
Ventura County Operating Underground Storage Tank Sites (UST)/Underground Tank Closed Sites List.

Date of Government Version: 08/27/2024
Date Data Arrived at EDR: 09/04/2024
Date Made Active in Reports: 11/13/2024
Number of Days to Update: 70
Source: Environmental Health Division
Telephone: 805-654-2813
Last EDR Contact: 12/05/2024
Next Scheduled EDR Contact: 03/17/2025
Data Release Frequency: Quarterly

YOLO COUNTY:

UST YOLO: Underground Storage Tank Comprehensive Facility Report
Underground storage tank sites located in Yolo county.

Date of Government Version: 09/18/2024
Date Data Arrived at EDR: 09/25/2024
Date Made Active in Reports: 12/13/2024
Number of Days to Update: 79
Source: Yolo County Department of Health
Telephone: 530-666-8646
Last EDR Contact: 01/09/2025
Next Scheduled EDR Contact: 04/07/2025
Data Release Frequency: Annually

YUBA COUNTY:

CUPA YUBA: CUPA Facility List
CUPA facility listing for Yuba County.

Date of Government Version: 10/17/2024
Date Data Arrived at EDR: 10/22/2024
Date Made Active in Reports: 01/10/2025
Number of Days to Update: 80
Source: Yuba County Environmental Health Department
Telephone: 530-749-7523
Last EDR Contact: 01/15/2025
Next Scheduled EDR Contact: 05/05/2025
Data Release Frequency: Varies

OTHER DATABASE(S)

Depending on the geographic area covered by this report, the data provided in these specialty databases may or may not be complete. For example, the existence of wetlands information data in a specific report does not mean that all wetlands in the area covered by the report are included. Moreover, the absence of any reported wetlands information does not necessarily mean that wetlands do not exist in the area covered by the report.

CT MANIFEST: Hazardous Waste Manifest Data
Facility and manifest data. Manifest is a document that lists and tracks hazardous waste from the generator through transporters to a tsd facility.

Date of Government Version: 11/04/2024
Date Data Arrived at EDR: 11/05/2024
Date Made Active in Reports: 01/27/2025
Number of Days to Update: 83
Source: Department of Energy & Environmental Protection
Telephone: 860-424-3375
Last EDR Contact: 02/04/2025
Next Scheduled EDR Contact: 05/19/2025
Data Release Frequency: No Update Planned

NJ MANIFEST: Manifest Information
Hazardous waste manifest information.

Date of Government Version: 12/31/2018
Date Data Arrived at EDR: 04/10/2019
Date Made Active in Reports: 05/16/2019
Number of Days to Update: 36

Source: Department of Environmental Protection
Telephone: N/A
Last EDR Contact: 12/23/2024
Next Scheduled EDR Contact: 04/14/2025
Data Release Frequency: Annually

NY MANIFEST: Facility and Manifest Data
Manifest is a document that lists and tracks hazardous waste from the generator through transporters to a TSD facility.

Date of Government Version: 12/31/2019
Date Data Arrived at EDR: 11/30/2023
Date Made Active in Reports: 12/01/2023
Number of Days to Update: 1

Source: Department of Environmental Conservation
Telephone: 518-402-8651
Last EDR Contact: 01/23/2025
Next Scheduled EDR Contact: 05/05/2025
Data Release Frequency: Quarterly

PA MANIFEST: Manifest Information
Hazardous waste manifest information.

Date of Government Version: 06/30/2018
Date Data Arrived at EDR: 07/19/2019
Date Made Active in Reports: 09/10/2019
Number of Days to Update: 53

Source: Department of Environmental Protection
Telephone: 717-783-8990
Last EDR Contact: 01/06/2025
Next Scheduled EDR Contact: 04/21/2025
Data Release Frequency: Annually

RI MANIFEST: Manifest information
Hazardous waste manifest information

Date of Government Version: 12/31/2020
Date Data Arrived at EDR: 11/30/2021
Date Made Active in Reports: 02/18/2022
Number of Days to Update: 80

Source: Department of Environmental Management
Telephone: 401-222-2797
Last EDR Contact: 02/06/2025
Next Scheduled EDR Contact: 05/26/2025
Data Release Frequency: Annually

WI MANIFEST: Manifest Information
Hazardous waste manifest information.

Date of Government Version: 05/31/2018
Date Data Arrived at EDR: 06/19/2019
Date Made Active in Reports: 09/03/2019
Number of Days to Update: 76

Source: Department of Natural Resources
Telephone: N/A
Last EDR Contact: 11/27/2024
Next Scheduled EDR Contact: 03/17/2025
Data Release Frequency: Annually

Oil/Gas Pipelines
Source: Endeavor Business Media
Petroleum Bundle (Crude Oil, Refined Products, Petrochemicals, Gas Liquids (LPG/NGL), and Specialty Gases (Miscellaneous)) N = Natural Gas Bundle (Natural Gas, Gas Liquids (LPG/NGL), and Specialty Gases (Miscellaneous)). This map includes information copyrighted by Endeavor Business Media. This information is provided on a best effort basis and Endeavor Business Media does not guarantee its accuracy nor warrant its fitness for any particular purpose. Such information has been reprinted with the permission of Endeavor Business Media.

Electric Power Transmission Line Data
Source: Endeavor Business Media
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Sensitive Receptors: There are individuals deemed sensitive receptors due to their fragile immune systems and special sensitivity to environmental discharges. These sensitive receptors typically include the elderly, the sick, and children. While the location of all sensitive receptors cannot be determined, EDR indicates those buildings and facilities - schools, daycares, hospitals, medical centers, and nursing homes - where individuals who are sensitive receptors are likely to be located.

AHA Hospitals:
Source: American Hospital Association, Inc.
Telephone: 312-280-5991
The database includes a listing of hospitals based on the American Hospital Association's annual survey of hospitals.

Medical Centers: Provider of Services Listing
Source: Centers for Medicare & Medicaid Services
Telephone: 410-786-3000
A listing of hospitals with Medicare provider number, produced by Centers of Medicare & Medicaid Services, a federal agency within the U.S. Department of Health and Human Services.

Nursing Homes
Source: National Institutes of Health
Telephone: 301-594-6248
Information on Medicare and Medicaid certified nursing homes in the United States.

Public Schools
Source: National Center for Education Statistics
Telephone: 202-502-7300
The National Center for Education Statistics' primary database on elementary and secondary public education in the United States. It is a comprehensive, annual, national statistical database of all public elementary and secondary schools and school districts, which contains data that are comparable across all states.

Private Schools
Source: National Center for Education Statistics
Telephone: 202-502-7300
The National Center for Education Statistics' primary database on private school locations in the United States.

Daycare Centers: Licensed Facilities
Source: Department of Social Services
Telephone: 916-657-4041

Flood Zone Data: This data was obtained from the Federal Emergency Management Agency (FEMA). It depicts 100-year and 500-year flood zones as defined by FEMA. It includes the National Flood Hazard Layer (NFHL) which incorporates Flood Insurance Rate Map (FIRM) data and Q3 data from FEMA in areas not covered by NFHL.
Source: FEMA
Telephone: 877-336-2627
Date of Government Version: 2003, 2015

NWI: National Wetlands Inventory. This data, available in select counties across the country, was obtained by EDR in 2002, 2005, 2010 and 2015 from the U.S. Fish and Wildlife Service.

State Wetlands Data: Wetland Inventory
Source: Department of Fish and Wildlife
Telephone: 916-445-0411

Current USGS 7.5 Minute Topographic Map
Source: U.S. Geological Survey

STREET AND ADDRESS INFORMATION

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GEOCHECK ®- PHYSICAL SETTING SOURCE ADDENDUM

TARGET PROPERTY ADDRESS

NOT REPORTED
NOT REPORTED
ONTARIO, CA 91761

TARGET PROPERTY COORDINATES

Latitude (North):	33.992206 - 33° 59' 31.94''
Longitude (West):	117.562857 - 117° 33' 46.29''
Universal Tranverse Mercator:	Zone 11
UTM X (Meters):	448015.2
UTM Y (Meters):	3761240.2
Elevation:	713 ft. above sea level

USGS TOPOGRAPHIC MAP

Target Property Map:	50005749 CORONA NORTH, CA
Version Date:	2022
North Map:	50005338 GUASTI, CA
Version Date:	2021

EDR's GeoCheck Physical Setting Source Addendum is provided to assist the environmental professional in forming an opinion about the impact of potential contaminant migration.

Assessment of the impact of contaminant migration generally has two principle investigative components:

1. Groundwater flow direction, and
2. Groundwater flow velocity.

Groundwater flow direction may be impacted by surface topography, hydrology, hydrogeology, characteristics of the soil, and nearby wells. Groundwater flow velocity is generally impacted by the nature of the geologic strata.

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

GROUNDWATER FLOW DIRECTION INFORMATION

Groundwater flow direction for a particular site is best determined by a qualified environmental professional using site-specific well data. If such data is not reasonably ascertainable, it may be necessary to rely on other sources of information, such as surface topographic information, hydrologic information, hydrogeologic data collected on nearby properties, and regional groundwater flow information (from deep aquifers).

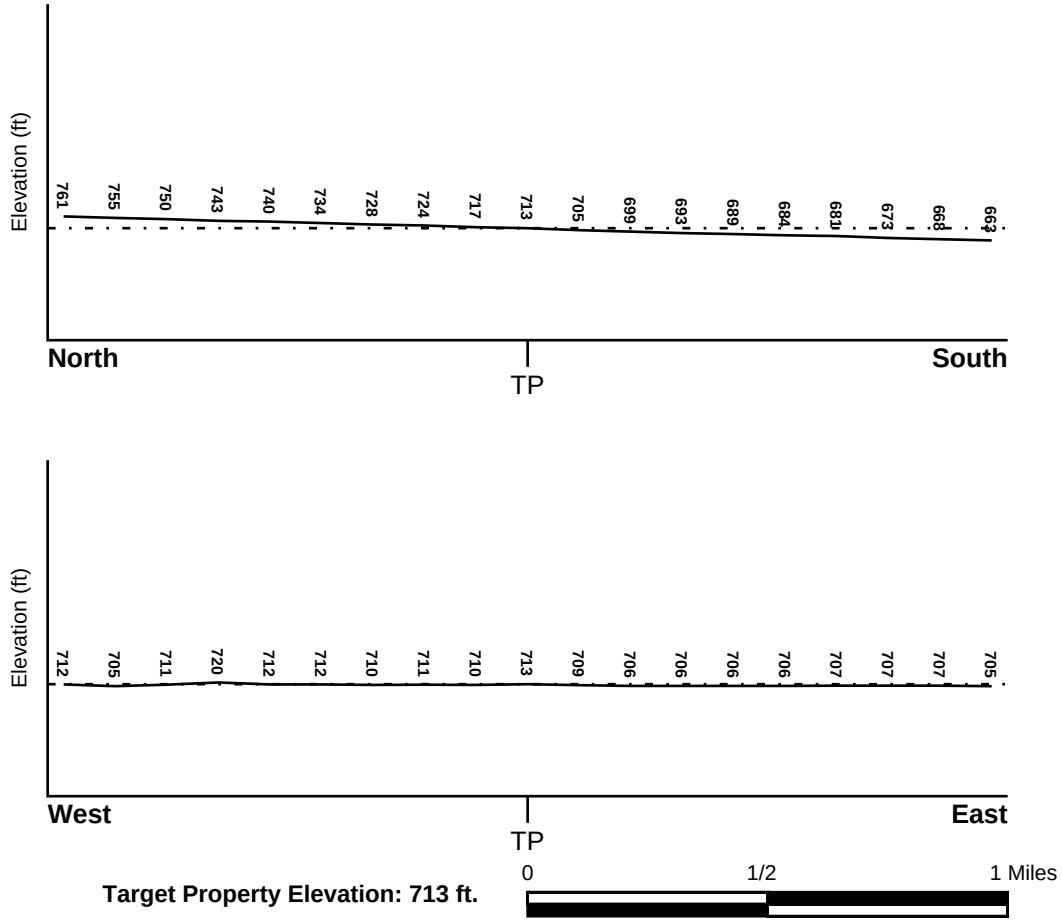
TOPOGRAPHIC INFORMATION

Surface topography may be indicative of the direction of surficial groundwater flow. This information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

TARGET PROPERTY TOPOGRAPHY

General Topographic Gradient: General South

SURROUNDING TOPOGRAPHY: ELEVATION PROFILES



Source: Topography has been determined from the USGS 7.5' Digital Elevation Model and should be evaluated on a relative (not an absolute) basis. Relative elevation information between sites of close proximity should be field verified.

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

HYDROLOGIC INFORMATION

Surface water can act as a hydrologic barrier to groundwater flow. Such hydrologic information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

Refer to the Physical Setting Source Map following this summary for hydrologic information (major waterways and bodies of water).

FEMA FLOOD ZONE

Flood Plain Panel at Target Property	FEMA Source Type
06071C9375H	FEMA FIRM Flood data

Additional Panels in search area:	FEMA Source Type
06071C8639H	FEMA FIRM Flood data
06071C8643H	FEMA FIRM Flood data
06065C0681G	FEMA FIRM Flood data

NATIONAL WETLAND INVENTORY

NWI Quad at Target Property	NWI Electronic Data Coverage
CORONA NORTH	YES - refer to the Overview Map and Detail Map

HYDROGEOLOGIC INFORMATION

Hydrogeologic information obtained by installation of wells on a specific site can often be an indicator of groundwater flow direction in the immediate area. Such hydrogeologic information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

Site-Specific Hydrogeological Data*:

Search Radius:	1.25 miles
Status:	Not found

AQUIFLOW®

Search Radius: 1.000 Mile.

EDR has developed the AQUIFLOW Information System to provide data on the general direction of groundwater flow at specific points. EDR has reviewed reports submitted by environmental professionals to regulatory authorities at select sites and has extracted the date of the report, groundwater flow direction as determined hydrogeologically, and the depth to water table.

MAP ID	LOCATION FROM TP	GENERAL DIRECTION GROUNDWATER FLOW
Not Reported		

* ©1996 Site−specific hydrogeological data gathered by CERCLIS Alerts, Inc., Bainbridge Island, WA. All rights reserved. All of the information and opinions presented are those of the cited EPA report(s), which were completed under a Comprehensive Environmental Response Compensation and Liability Information System (CERCLIS) investigation.

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

GROUNDWATER FLOW VELOCITY INFORMATION

Groundwater flow velocity information for a particular site is best determined by a qualified environmental professional using site specific geologic and soil strata data. If such data are not reasonably ascertainable, it may be necessary to rely on other sources of information, including geologic age identification, rock stratigraphic unit and soil characteristics data collected on nearby properties and regional soil information. In general, contaminant plumes move more quickly through sandy-gravelly types of soils than silty-clayey types of soils.

GEOLOGIC INFORMATION IN GENERAL AREA OF TARGET PROPERTY

Geologic information can be used by the environmental professional in forming an opinion about the relative speed at which contaminant migration may be occurring.

ROCK STRATIGRAPHIC UNIT

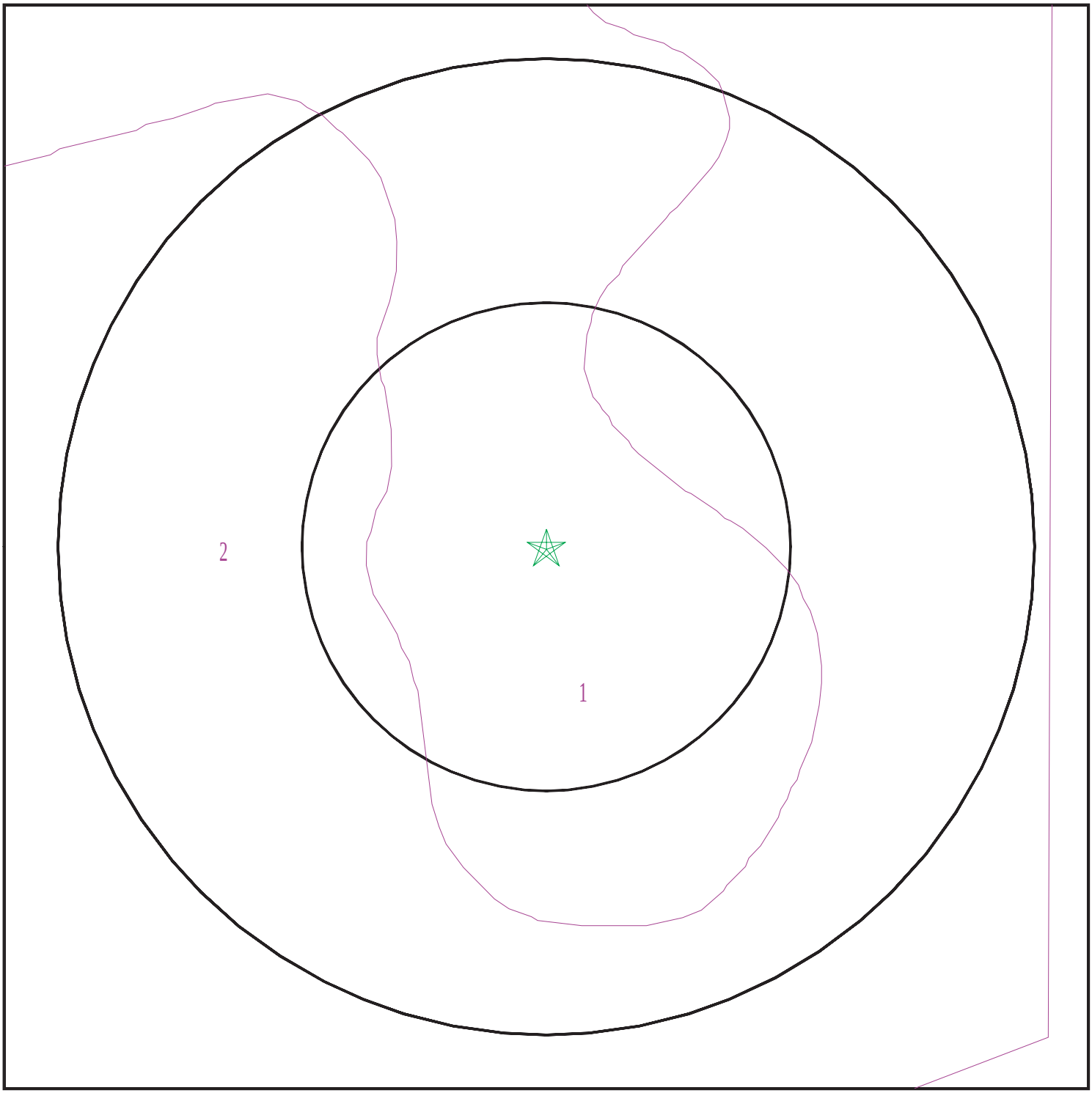
Era:	Cenozoic
System:	Quaternary
Series:	Quaternary
Code:	Q *(decoded above as Era, System & Series)*

GEOLOGIC AGE IDENTIFICATION

Category: Stratifed Sequence

Geologic Age and Rock Stratigraphic Unit Source: P.G. Schruben, R.E. Arndt and W.J. Bawiec, Geology of the Conterminous U.S. at 1:2,500,000 Scale - a digital representation of the 1974 P.B. King and H.M. Beikman Map, USGS Digital Data Series DDS - 11 (1994).

SSURGO SOIL MAP - 07908232.2r



Target Property
SSURGO Soil
Water

0 1/16 1/8 1/4 Miles

N

SITE NAME:	Not Reported	CLIENT:	SCS Engineers
ADDRESS:	Not Reported Ontario CA 91761	CONTACT:	Jose William Padua
LAT/LONG:	33.992206 / 117.562857	INQUIRY #:	07908232.2r
		DATE:	February 25, 2025 1:28 pm

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GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

DOMINANT SOIL COMPOSITION IN GENERAL AREA OF TARGET PROPERTY

The U.S. Department of Agriculture's (USDA) Soil Conservation Service (SCS) leads the National Cooperative Soil Survey (NCSS) and is responsible for collecting, storing, maintaining and distributing soil survey information for privately owned lands in the United States. A soil map in a soil survey is a representation of soil patterns in a landscape. The following information is based on Soil Conservation Service SSURGO data.

Soil Map ID: 1

Soil Component Name: DELHI

Soil Surface Texture: fine sand

Hydrologic Group: Class A - High infiltration rates. Soils are deep, well drained to excessively drained sands and gravels.

Soil Drainage Class: Somewhat excessively drained

Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: Moderate

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

Soil Layer Information							
	Boundary			Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		
1	0 inches	18 inches	fine sand	Granular materials (35 pct. or less passing No. 200), Silty, or Clayey Gravel and Sand.	COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 141 Min: 42	Max: 7.8 Min: 6.1
2	18 inches	59 inches	sand	Granular materials (35 pct. or less passing No. 200), Silty, or Clayey Gravel and Sand.	COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 141 Min: 42	Max: 7.8 Min: 6.1

Soil Map ID: 2

Soil Component Name: HILMAR

Soil Surface Texture: loamy fine sand

Hydrologic Group: Class C - Slow infiltration rates. Soils with layers impeding downward movement of water, or soils with moderately fine or fine textures.

Soil Drainage Class: Somewhat poorly drained

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: High

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

Soil Layer Information							
	Boundary			Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		
1	0 inches	22 inches	loamy fine sand	Granular materials (35 pct. or less passing No. 200), Silty, or Clayey Gravel and Sand.	FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), Lean Clay. FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), silt.	Max: 1.4 Min: 0.42	Max: 8.4 Min: 7.9
2	22 inches	59 inches	stratified loamy sand to loam	Granular materials (35 pct. or less passing No. 200), Silty, or Clayey Gravel and Sand.	FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), Lean Clay. FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), silt.	Max: 1.4 Min: 0.42	Max: 8.4 Min: 7.9

LOCAL / REGIONAL WATER AGENCY RECORDS

EDR Local/Regional Water Agency records provide water well information to assist the environmental professional in assessing sources that may impact ground water flow direction, and in forming an opinion about the impact of contaminant migration on nearby drinking water wells.

WELL SEARCH DISTANCE INFORMATION

DATABASE	SEARCH DISTANCE (miles)
Federal USGS	1.000
Federal FRDS PWS	Nearest PWS within 1 mile
State Database	1.000

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

FEDERAL USGS WELL INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
A11	USGS40000139597	1/4 - 1/2 Mile WSW
A12	USGS40000139596	1/4 - 1/2 Mile WSW
A13	USGS40000139595	1/4 - 1/2 Mile WSW
A14	USGS40000139598	1/4 - 1/2 Mile WSW
A15	USGS40000139601	1/4 - 1/2 Mile WSW
A16	USGS40000139600	1/4 - 1/2 Mile WSW
A17	USGS40000139599	1/4 - 1/2 Mile WSW
A18	USGS40000139594	1/4 - 1/2 Mile WSW
A19	USGS40000139590	1/4 - 1/2 Mile WSW
A20	USGS40000139589	1/4 - 1/2 Mile WSW
A21	USGS40000139591	1/4 - 1/2 Mile WSW
A22	USGS40000139593	1/4 - 1/2 Mile WSW
A23	USGS40000139592	1/4 - 1/2 Mile WSW
40	USGS40000139537	1/2 - 1 Mile SSE
G44	USGS40000139530	1/2 - 1 Mile SE

FEDERAL FRDS PUBLIC WATER SUPPLY SYSTEM INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
No PWS System Found		

Note: PWS System location is not always the same as well location.

STATE DATABASE WELL INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
A1	CAUSGSN00007457	1/4 - 1/2 Mile WSW
A2	CAUSGSN00009264	1/4 - 1/2 Mile WSW
A3	CAUSGSN00000786	1/4 - 1/2 Mile WSW
A4	CAUSGSN00011131	1/4 - 1/2 Mile WSW
A5	CAUSGSN00007464	1/4 - 1/2 Mile WSW
A6	CAUSGSN00003256	1/4 - 1/2 Mile WSW
A7	CAUSGSN00019045	1/4 - 1/2 Mile WSW
A8	CAUSGSN00011745	1/4 - 1/2 Mile WSW
A9	CAUSGSN00016031	1/4 - 1/2 Mile WSW
A10	CAUSGSN00002619	1/4 - 1/2 Mile WSW
B24	CAPFAS000000575	1/4 - 1/2 Mile South
B25	CADDW2000022934	1/4 - 1/2 Mile South
C26	CAPFAS000000725	1/4 - 1/2 Mile SE
C27	CADDW2000013259	1/4 - 1/2 Mile SE
D28	CADWR9000006336	1/4 - 1/2 Mile WSW
D29	CADWR9000006337	1/4 - 1/2 Mile WSW
D30	CADWR9000006338	1/4 - 1/2 Mile WSW
31	CADWR0000011820	1/4 - 1/2 Mile SW
E32	CAPFAS000000511	1/4 - 1/2 Mile SSW
E33	CADDW2000017547	1/4 - 1/2 Mile SSW
F34	CADDW2000001020	1/2 - 1 Mile SSE
F35	2581	1/2 - 1 Mile SSE

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

STATE DATABASE WELL INFORMATION

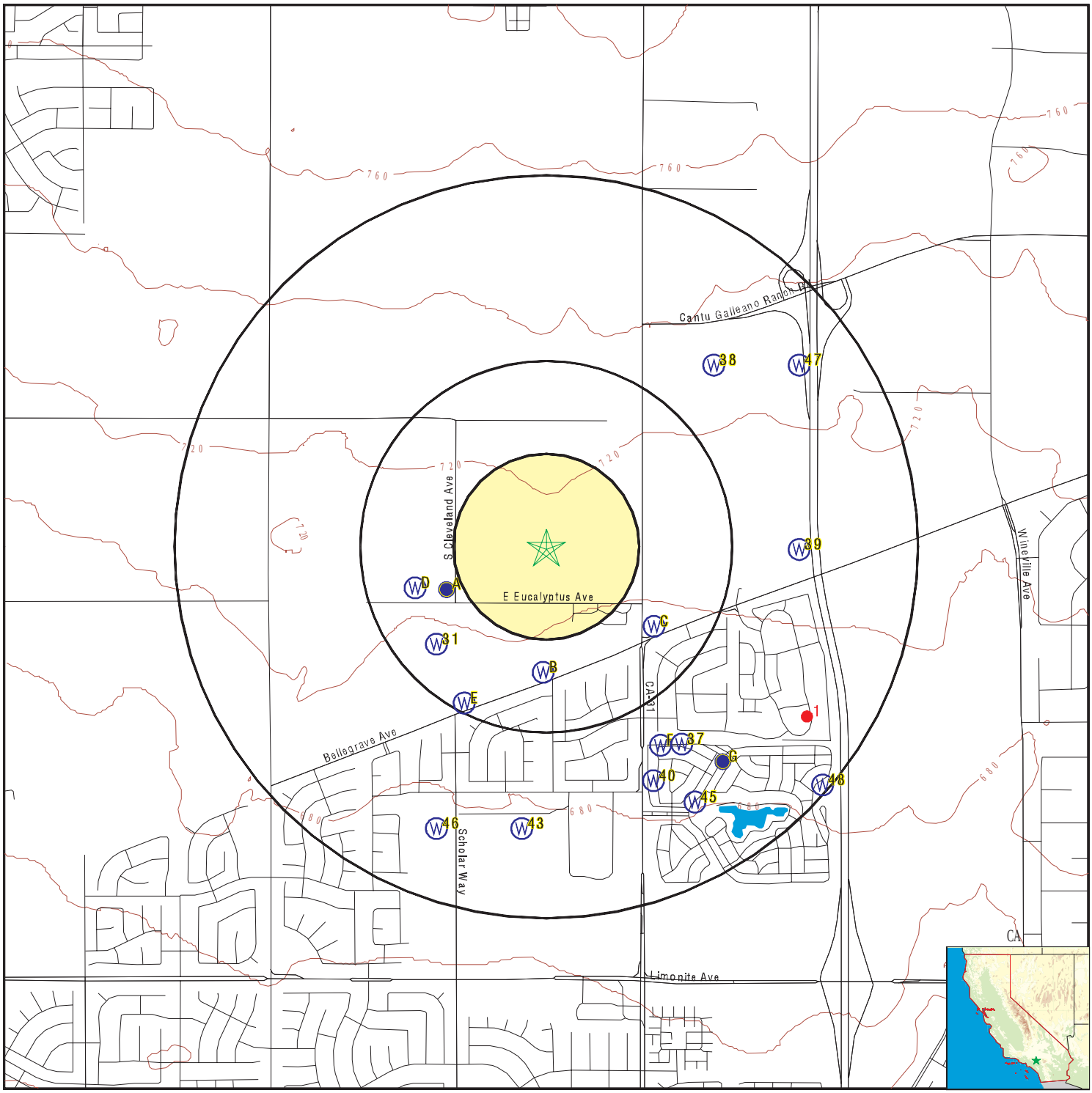
MAP ID	WELL ID	LOCATION FROM TP
F36	CADDW2000024450	1/2 - 1 Mile SSE
37	CADDW2000022321	1/2 - 1 Mile SE
38	CADWR0000006180	1/2 - 1 Mile NE
39	CADWR0000001457	1/2 - 1 Mile East
G41	2582	1/2 - 1 Mile SE
G42	CADDW2000010898	1/2 - 1 Mile SE
43	CADWR0000036121	1/2 - 1 Mile South
45	2583	1/2 - 1 Mile SSE
46	CADWR0000036853	1/2 - 1 Mile SSW
47	CADWR0000024137	1/2 - 1 Mile NE
48	CADDW2000003534	1/2 - 1 Mile SE

OTHER STATE DATABASE INFORMATION

STATE OIL/GAS WELL INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
1	CAOG17000011417	1/2 - 1 Mile ESE

PHYSICAL SETTING SOURCE MAP - 07908232.2r



- County Boundary
- Major Roads
- Contour Lines
- Earthquake Fault Lines
- Earthquake epicenter, Richter 5 or greater
- Water Wells
- Public Water Supply Wells
- Cluster of Multiple Icons
- Groundwater Flow Direction
- GI Indeterminate Groundwater Flow at Location
- GV Groundwater Flow Varies at Location
- HD Closest Hydrogeological Data
- Oil, gas or related wells

SITE NAME:	Not Reported	CLIENT:	SCS Engineers
ADDRESS:	Not Reported Ontario CA 91761	CONTACT:	Jose William Padua
		INQUIRY #:	07908232.2r
LAT/LONG:	33.992206 / 117.562857	DATE:	February 25, 2025 1:28 pm

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GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID
Direction
Distance
Elevation | Database | EDR ID Number

A1
WSW
1/4 - 1/2 Mile
Lower

CA WELLS **CAUSGSN00007457**

Well ID:	USGS-335926117340002	Well Type:	UNK
Source:	United States Geological Survey		
Other Name:	USGS-335926117340002	GAMA PFAS Testing:	Not Reported
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=USGSNEW&samp_date=&global_id=&assigned_name=USGS-335926117340002&store_num=		
GeoTracker Data:	Not Reported		

A2
WSW
1/4 - 1/2 Mile
Lower

CA WELLS **CAUSGSN00009264**

Well ID:	USGS-335926117340001	Well Type:	UNK
Source:	United States Geological Survey		
Other Name:	USGS-335926117340001	GAMA PFAS Testing:	Not Reported
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=USGSNEW&samp_date=&global_id=&assigned_name=USGS-335926117340001&store_num=		
GeoTracker Data:	Not Reported		

A3
WSW
1/4 - 1/2 Mile
Lower

CA WELLS **CAUSGSN00000786**

Well ID:	USGS-335926117340009	Well Type:	UNK
Source:	United States Geological Survey		
Other Name:	USGS-335926117340009	GAMA PFAS Testing:	Not Reported
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=USGSNEW&samp_date=&global_id=&assigned_name=USGS-335926117340009&store_num=		
GeoTracker Data:	Not Reported		

A4
WSW
1/4 - 1/2 Mile
Lower

CA WELLS **CAUSGSN00011131**

Well ID:	USGS-335926117340012	Well Type:	UNK
Source:	United States Geological Survey		
Other Name:	USGS-335926117340012	GAMA PFAS Testing:	Not Reported
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=USGSNEW&samp_date=&global_id=&assigned_name=USGS-335926117340012&store_num=		
GeoTracker Data:	Not Reported		

Map ID
Direction
Distance
Elevation | Database | EDR ID Number

A5
WSW
1/4 - 1/2 Mile
Lower

CA WELLS **CAUSGSN00007464**

Well ID:	USGS-335926117340008	Well Type:	UNK
Source:	United States Geological Survey		
Other Name:	USGS-335926117340008	GAMA PFAS Testing:	Not Reported
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=USGSNEW&samp_date=&global_id=&assigned_name=USGS-335926117340008&store_num=		
GeoTracker Data:	Not Reported		

A6
WSW
1/4 - 1/2 Mile
Lower

CA WELLS **CAUSGSN00003256**

Well ID:	USGS-335926117340011	Well Type:	UNK
Source:	United States Geological Survey		
Other Name:	USGS-335926117340011	GAMA PFAS Testing:	Not Reported
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=USGSNEW&samp_date=&global_id=&assigned_name=USGS-335926117340011&store_num=		
GeoTracker Data:	Not Reported		

A7
WSW
1/4 - 1/2 Mile
Lower

CA WELLS **CAUSGSN00019045**

Well ID:	USGS-335926117340003	Well Type:	UNK
Source:	United States Geological Survey		
Other Name:	USGS-335926117340003	GAMA PFAS Testing:	Not Reported
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=USGSNEW&samp_date=&global_id=&assigned_name=USGS-335926117340003&store_num=		
GeoTracker Data:	Not Reported		

A8
WSW
1/4 - 1/2 Mile
Lower

CA WELLS **CAUSGSN00011745**

Well ID:	USGS-335926117340010	Well Type:	UNK
Source:	United States Geological Survey		
Other Name:	USGS-335926117340010	GAMA PFAS Testing:	Not Reported
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=USGSNEW&samp_date=&global_id=&assigned_name=USGS-335926117340010&store_num=		
GeoTracker Data:	Not Reported		

Map ID
Direction
Distance
Elevation | Database | EDR ID Number

A9
WSW
1/4 - 1/2 Mile
Lower

CA WELLS **CAUSGSN00016031**

Well ID:	USGS-335926117340007	Well Type:	UNK
Source:	United States Geological Survey		
Other Name:	USGS-335926117340007	GAMA PFAS Testing:	Not Reported
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=USGSNEW&samp_date=&global_id=&assigned_name=USGS-335926117340007&store_num=		
GeoTracker Data:	Not Reported		

A10
WSW
1/4 - 1/2 Mile
Lower

CA WELLS **CAUSGSN00002619**

Well ID:	USGS-335926117340013	Well Type:	UNK
Source:	United States Geological Survey		
Other Name:	USGS-335926117340013	GAMA PFAS Testing:	Not Reported
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=USGSNEW&samp_date=&global_id=&assigned_name=USGS-335926117340013&store_num=		
GeoTracker Data:	Not Reported		

A11
WSW
1/4 - 1/2 Mile
Lower

FED USGS **USGS40000139597**

Organization ID:	USGS-CA		
Organization Name:	USGS California Water Science Center		
Monitor Location:	002S007W13P010SLYS		
Type:	Well: Test hole not completed as a well		
Description:	CHINO DAIRY DEEP BLUE LYSIMETER AT 50 FT		
HUC:	18070203	Drainage Area:	Not Reported
Drainage Area Units:	Not Reported	Contrib Drainage Area:	Not Reported
Contrib Drainage Area Unts:	Not Reported	Aquifer:	California Coastal Basin aquifers
Formation Type:	Not Reported	Aquifer Type:	Not Reported
Construction Date:	Not Reported	Well Depth:	Not Reported
Well Depth Units:	Not Reported	Well Hole Depth:	102
Well Hole Depth Units:	ft		

A12
WSW
1/4 - 1/2 Mile
Lower

FED USGS **USGS40000139596**

Organization ID:	USGS-CA		
Organization Name:	USGS California Water Science Center		
Monitor Location:	002S007W13P009SLYS		
Type:	Well: Test hole not completed as a well		
Description:	CHINO DAIRY DEEP YELLOW LYSIMETER AT 75 FT.		
HUC:	18070203	Drainage Area:	Not Reported
Drainage Area Units:	Not Reported	Contrib Drainage Area:	Not Reported

Contrib Drainage Area Unts:	Not Reported	Aquifer:	California Coastal Basin aquifers
Formation Type:	Not Reported	Aquifer Type:	Not Reported
Construction Date:	Not Reported	Well Depth:	Not Reported
Well Depth Units:	Not Reported	Well Hole Depth:	102
Well Hole Depth Units:	ft		

A13
WSW **FED USGS** **USGS40000139595**
1/4 - 1/2 Mile
Lower

Organization ID:	USGS-CA		
Organization Name:	USGS California Water Science Center		
Monitor Location:	002S007W13P008SLYS		
Type:	Well: Test hole not completed as a well		
Description:	CHINO DAIRY DEEP RED LYSIMETER AT 100 FT.		
HUC:	18070203	Drainage Area:	Not Reported
Drainage Area Units:	Not Reported	Contrib Drainage Area:	Not Reported
Contrib Drainage Area Unts:	Not Reported	Aquifer:	California Coastal Basin aquifers
Formation Type:	Not Reported	Aquifer Type:	Not Reported
Construction Date:	Not Reported	Well Depth:	Not Reported
Well Depth Units:	Not Reported	Well Hole Depth:	102
Well Hole Depth Units:	ft		

A14
WSW **FED USGS** **USGS40000139598**
1/4 - 1/2 Mile
Lower

Organization ID:	USGS-CA		
Organization Name:	USGS California Water Science Center		
Monitor Location:	002S007W13P011SLYS		
Type:	Well: Test hole not completed as a well		
Description:	CHINO DAIRY SHALLOW RED LYSIMETER AT 25 FT		
HUC:	18070203	Drainage Area:	Not Reported
Drainage Area Units:	Not Reported	Contrib Drainage Area:	Not Reported
Contrib Drainage Area Unts:	Not Reported	Aquifer:	California Coastal Basin aquifers
Formation Type:	Not Reported	Aquifer Type:	Not Reported
Construction Date:	Not Reported	Well Depth:	Not Reported
Well Depth Units:	Not Reported	Well Hole Depth:	102
Well Hole Depth Units:	ft		

A15
WSW **FED USGS** **USGS40000139601**
1/4 - 1/2 Mile
Lower

Organization ID:	USGS-CA		
Organization Name:	USGS California Water Science Center		
Monitor Location:	002S007W13P014SLYS		
Type:	Well: Test hole not completed as a well		
Description:	CHINO CAIRY SHALLOW BLUE LYSIMETER AT 5 FT		
HUC:	18070203	Drainage Area:	Not Reported
Drainage Area Units:	Not Reported	Contrib Drainage Area:	Not Reported
Contrib Drainage Area Unts:	Not Reported	Aquifer:	California Coastal Basin aquifers
Formation Type:	Not Reported	Aquifer Type:	Not Reported

Construction Date:	Not Reported	Well Depth:	Not Reported
Well Depth Units:	Not Reported	Well Hole Depth:	102
Well Hole Depth Units:	ft		

A16
WSW
1/4 - 1/2 Mile
Lower

FED USGS **USGS40000139600**

Organization ID:	USGS-CA		
Organization Name:	USGS California Water Science Center		
Monitor Location:	002S007W13P013SLYS		
Type:	Well: Test hole not completed as a well		
Description:	CHINO DAIRY SHALLOW GREEN LYSIMETER AT 10 FT		
HUC:	18070203	Drainage Area:	Not Reported
Drainage Area Units:	Not Reported	Contrib Drainage Area:	Not Reported
Contrib Drainage Area Unts:	Not Reported	Aquifer:	California Coastal Basin aquifers
Formation Type:	Not Reported	Aquifer Type:	Not Reported
Construction Date:	Not Reported	Well Depth:	Not Reported
Well Depth Units:	Not Reported	Well Hole Depth:	102
Well Hole Depth Units:	ft		

A17
WSW
1/4 - 1/2 Mile
Lower

FED USGS **USGS40000139599**

Organization ID:	USGS-CA		
Organization Name:	USGS California Water Science Center		
Monitor Location:	002S007W13P012SLYS		
Type:	Well: Test hole not completed as a well		
Description:	CHINO DAIRY SHALLOW YELLOW LYSIMETER AT 15 FT		
HUC:	18070203	Drainage Area:	Not Reported
Drainage Area Units:	Not Reported	Contrib Drainage Area:	Not Reported
Contrib Drainage Area Unts:	Not Reported	Aquifer:	California Coastal Basin aquifers
Formation Type:	Not Reported	Aquifer Type:	Not Reported
Construction Date:	Not Reported	Well Depth:	Not Reported
Well Depth Units:	Not Reported	Well Hole Depth:	102
Well Hole Depth Units:	ft		

A18
WSW
1/4 - 1/2 Mile
Lower

FED USGS **USGS40000139594**

Organization ID:	USGS-CA		
Organization Name:	USGS California Water Science Center		
Monitor Location:	002S007W13P007S	Type:	Well
Description:	Not Reported	HUC:	18070203
Drainage Area:	Not Reported	Drainage Area Units:	Not Reported
Contrib Drainage Area:	Not Reported	Contrib Drainage Area Unts:	Not Reported
Aquifer:	California Coastal Basin aquifers		
Formation Type:	Not Reported	Aquifer Type:	Not Reported
Construction Date:	19901201	Well Depth:	187
Well Depth Units:	ft	Well Hole Depth:	455
Well Hole Depth Units:	ft		

Map ID
Direction
Distance
Elevation | Database | EDR ID Number

A19
WSW
1/4 - 1/2 Mile
Lower

FED USGS **USGS40000139590**

Organization ID:	USGS-CA		
Organization Name:	USGS California Water Science Center		
Monitor Location:	002S007W13P003S	Type:	Well
Description:	Not Reported	HUC:	18070203
Drainage Area:	Not Reported	Drainage Area Units:	Not Reported
Contrib Drainage Area:	Not Reported	Contrib Drainage Area Unts:	Not Reported
Aquifer:	California Coastal Basin aquifers		
Formation Type:	Not Reported	Aquifer Type:	Not Reported
Construction Date:	19901201	Well Depth:	370
Well Depth Units:	ft	Well Hole Depth:	455
Well Hole Depth Units:	ft		

Ground water levels,Number of Measurements:	10	Level reading date:	1992-08-11
Feet below surface:	123.64	Feet to sea level:	Not Reported
Note:	Not Reported		
Level reading date:	1992-06-11	Feet below surface:	121.34
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1992-02-19	Feet below surface:	122.53
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1992-02-05	Feet below surface:	123.07
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1991-09-04	Feet below surface:	126.79
Feet to sea level:	Not Reported		
Note:	A nearby site that taps the same aquifer was being pumped.		
Level reading date:	1991-06-19	Feet below surface:	124.79
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1991-06-18	Feet below surface:	124.78
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1991-04-05	Feet below surface:	124.34
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1991-02-22	Feet below surface:	126.42
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1991-02-21	Feet below surface:	126.32
Feet to sea level:	Not Reported	Note:	Not Reported

A20
WSW
1/4 - 1/2 Mile
Lower

FED USGS **USGS40000139589**

Organization ID:	USGS-CA		
Organization Name:	USGS California Water Science Center		
Monitor Location:	002S007W13P002S	Type:	Well
Description:	Not Reported	HUC:	18070203

Drainage Area:	Not Reported	Drainage Area Units:	Not Reported
Contrib Drainage Area:	Not Reported	Contrib Drainage Area Unts:	Not Reported
Aquifer:	California Coastal Basin aquifers		
Formation Type:	Not Reported	Aquifer Type:	Not Reported
Construction Date:	19901201	Well Depth:	450
Well Depth Units:	ft	Well Hole Depth:	455
Well Hole Depth Units:	ft		

Ground water levels,Number of Measurements:	10	Level reading date:	1992-08-11
Feet below surface:	124.86	Feet to sea level:	Not Reported
Note:	Not Reported		
Level reading date:	1992-06-11	Feet below surface:	122.38
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1992-02-19	Feet below surface:	124.19
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1992-02-05	Feet below surface:	124.74
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1991-09-04	Feet below surface:	127.93
Feet to sea level:	Not Reported		
Note:	A nearby site that taps the same aquifer was being pumped.		
Level reading date:	1991-06-19	Feet below surface:	125.81
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1991-06-18	Feet below surface:	125.70
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1991-04-05	Feet below surface:	126.00
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1991-02-22	Feet below surface:	127.73
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1991-02-21	Feet below surface:	127.86
Feet to sea level:	Not Reported	Note:	Not Reported

A21
WSW
1/4 - 1/2 Mile
Lower

FED USGS **USGS40000139591**

Organization ID:	USGS-CA		
Organization Name:	USGS California Water Science Center		
Monitor Location:	002S007W13P004S	Type:	Well
Description:	Not Reported	HUC:	18070203
Drainage Area:	Not Reported	Drainage Area Units:	Not Reported
Contrib Drainage Area:	Not Reported	Contrib Drainage Area Unts:	Not Reported
Aquifer:	California Coastal Basin aquifers		
Formation Type:	Not Reported	Aquifer Type:	Not Reported
Construction Date:	19901201	Well Depth:	320
Well Depth Units:	ft	Well Hole Depth:	455
Well Hole Depth Units:	ft		

Ground water levels,Number of Measurements:	10	Level reading date:	1992-08-11
Feet below surface:	123.79	Feet to sea level:	Not Reported

Note:	Not Reported		
Level reading date:	1992-06-11	Feet below surface:	121351
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1992-02-19	Feet below surface:	122.50
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1992-02-05	Feet below surface:	123.06
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1991-09-04	Feet below surface:	127.01
Feet to sea level:	Not Reported		
Note:	A nearby site that taps the same aquifer was being pumped.		
Level reading date:	1991-06-19	Feet below surface:	124.97
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1991-06-18	Feet below surface:	124.91
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1991-04-05	Feet below surface:	124.34
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1991-02-22	Feet below surface:	126.48
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1991-02-21	Feet below surface:	126.39
Feet to sea level:	Not Reported	Note:	Not Reported

A22
WSW **FED USGS** **USGS40000139593**
1/4 - 1/2 Mile
Lower

Organization ID:	USGS-CA		
Organization Name:	USGS California Water Science Center		
Monitor Location:	002S007W13P006S	Type:	Well
Description:	Not Reported	HUC:	18070203
Drainage Area:	Not Reported	Drainage Area Units:	Not Reported
Contrib Drainage Area:	Not Reported	Contrib Drainage Area Unts:	Not Reported
Aquifer:	California Coastal Basin aquifers		
Formation Type:	Not Reported	Aquifer Type:	Not Reported
Construction Date:	19901201	Well Depth:	215
Well Depth Units:	ft	Well Hole Depth:	455
Well Hole Depth Units:	ft		

A23
WSW **FED USGS** **USGS40000139592**
1/4 - 1/2 Mile
Lower

Organization ID:	USGS-CA		
Organization Name:	USGS California Water Science Center		
Monitor Location:	002S007W13P005S	Type:	Well
Description:	Not Reported	HUC:	18070203
Drainage Area:	Not Reported	Drainage Area Units:	Not Reported
Contrib Drainage Area:	Not Reported	Contrib Drainage Area Unts:	Not Reported
Aquifer:	California Coastal Basin aquifers		

Formation Type:	Not Reported	Aquifer Type:	Not Reported
Construction Date:	19901201	Well Depth:	255
Well Depth Units:	ft	Well Hole Depth:	455
Well Hole Depth Units:	ft		

B24
South
1/4 - 1/2 Mile
Lower

CA WELLS **CAPFAS000000575**

Well ID:	3310083-004	Well Type:	MUNICIPAL
Source:	Department of Health Services		
Other Name:	WELL II-3	GAMA PFAS Testing:	Yes
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=DHS&samp_date=&global_id=&assigned_name=3310083-004&store_num=		
GeoTracker Data:	Not Reported		

B25
South
1/4 - 1/2 Mile
Lower

CA WELLS **CADDW2000022934**

GAMA:

Well ID:	CA3310083_004_004	Well Type:	MUNICIPAL
Source:	DDW	Other Names:	3310083-004
GAMA Pfas testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=DHS&samp_date=&global_id=&assigned_name=CA3310083_004_004&store_num=		
GeoTracker Data:	Not Reported		

C26
SE
1/4 - 1/2 Mile
Lower

CA WELLS **CAPFAS000000725**

Well ID:	3310083-005	Well Type:	MUNICIPAL
Source:	Department of Health Services		
Other Name:	WELL II-4	GAMA PFAS Testing:	Yes
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=DHS&samp_date=&global_id=&assigned_name=3310083-005&store_num=		
GeoTracker Data:	Not Reported		

C27
SE
1/4 - 1/2 Mile
Lower

CA WELLS **CADDW2000013259**

GAMA:

Well ID:	CA3310083_005_005	Well Type:	MUNICIPAL
Source:	DDW	Other Names:	3310083-005
GAMA Pfas testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=DHS&samp_date=&global_id=&assigned_name=CA3310083_005_005&store_num=		

GeoTracker Data: Not Reported

D28
WSW **CA WELLS** **CADWR9000006336**
1/4 - 1/2 Mile
Lower

State Well #:	02S07W13P002S	Station ID:	3710
Well Name:	Not Reported	Basin Name:	Chino
Well Use:	Unknown	Well Type:	Unknown
Well Depth:	0	Well Completion Rpt #:	Not Reported

D29
WSW **CA WELLS** **CADWR9000006337**
1/4 - 1/2 Mile
Lower

State Well #:	02S07W13P003S	Station ID:	26217
Well Name:	Not Reported	Basin Name:	Chino
Well Use:	Unknown	Well Type:	Unknown
Well Depth:	0	Well Completion Rpt #:	Not Reported

D30
WSW **CA WELLS** **CADWR9000006338**
1/4 - 1/2 Mile
Lower

State Well #:	02S07W13P004S	Station ID:	3711
Well Name:	Not Reported	Basin Name:	Chino
Well Use:	Unknown	Well Type:	Unknown
Well Depth:	0	Well Completion Rpt #:	Not Reported

31
SW **CA WELLS** **CADWR0000011820**
1/4 - 1/2 Mile
Lower

Well ID:	02S07W24C001S	Well Type:	UNK
Source:	Department of Water Resources		
Other Name:	02S07W24C001S	GAMA PFAS Testing:	Not Reported
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=DWR&samp_date=&global_id=&assigned_name=02S07W24C001S&store_num=		
GeoTracker Data:	Not Reported		

E32
SSW **CA WELLS** **CAPFAS000000511**
1/4 - 1/2 Mile
Lower

Well ID:	3310083-003	Well Type:	MUNICIPAL
Source:	Department of Health Services		
Other Name:	WELL II-2	GAMA PFAS Testing:	Yes
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=DHS&samp_date=&global_id=&assigned_name=3310083-003&store_num=		

GeoTracker Data: Not Reported

E33
SSW **CA WELLS** **CADDW2000017547**
1/4 - 1/2 Mile
Lower

GAMA:

Well ID:	CA3310083_003_003	Well Type:	MUNICIPAL
Source:	DDW	Other Names:	3310083-003
GAMA Pfas testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=DHS&samp_date=&global_id=&assigned_name=CA3310083_003_003&store_num=		
GeoTracker Data:	Not Reported		

F34
SSE **CA WELLS** **CADDW2000001020**
1/2 - 1 Mile
Lower

GAMA:

Well ID:	CA3310021_042_042	Well Type:	MUNICIPAL
Source:	DDW	Other Names:	3310021-042
GAMA Pfas testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=DHS&samp_date=&global_id=&assigned_name=CA3310021_042_042&store_num=		
GeoTracker Data:	Not Reported		

F35
SSE **CA WELLS** **2581**
1/2 - 1 Mile
Lower

Seq:	2581	Prim sta c:	02S/06W-19E01 S
Frds no:	3310025009	County:	33
District:	14	User id:	WAT
System no:	3310025	Water type:	G
Source nam:	WELL 09 - INACTIVE	Station ty:	WELL/AMBNT
Latitude:	335904.0	Longitude:	1173324.8
Precision:	1	Status:	IR
Comment 1:	Not Reported	Comment 2:	Not Reported
Comment 3:	Not Reported	Comment 4:	Not Reported
Comment 5:	Not Reported	Comment 6:	Not Reported
Comment 7:	Not Reported		

System no:	3310025	System nam:	Norco, City Of
Hqname:	Not Reported	Address:	P.O. BOX 428
City:	NORCO	State:	CA
Zip:	91760	Zip ext:	Not Reported
Pop serv:	24704	Connection:	6153
Area serve:	NORCO CITY		

Map ID
Direction
Distance
Elevation | Database | EDR ID Number

F36
SSE
1/2 - 1 Mile
Lower

CA WELLS **CADDW2000024450**

GAMA:

Well ID:	CA3310025_009_009	Well Type:	MUNICIPAL
Source:	DDW	Other Names:	3310025-009
GAMA Pfas testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=DHS&samp_date=&global_id=&assigned_name=CA3310025_009_009&store_num=		
GeoTracker Data:	Not Reported		

37
SE
1/2 - 1 Mile
Lower

CA WELLS **CADDW2000022321**

GAMA:

Well ID:	CA3310025_011_011	Well Type:	MUNICIPAL
Source:	DDW	Other Names:	3310025-011
GAMA Pfas testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=DHS&samp_date=&global_id=&assigned_name=CA3310025_011_011&store_num=		
GeoTracker Data:	Not Reported		

38
NE
1/2 - 1 Mile
Higher

CA WELLS **CADWR0000006180**

Well ID:	02S06W18E001S	Well Type:	UNK
Source:	Department of Water Resources		
Other Name:	02S06W18E001S	GAMA PFAS Testing:	Not Reported
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=DWR&samp_date=&global_id=&assigned_name=02S06W18E001S&store_num=		
GeoTracker Data:	Not Reported		

39
East
1/2 - 1 Mile
Lower

CA WELLS **CADWR0000001457**

Well ID:	02S06W18P001S	Well Type:	UNK
Source:	Department of Water Resources		
Other Name:	02S06W18P001S	GAMA PFAS Testing:	Not Reported
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=DWR&samp_date=&global_id=&assigned_name=02S06W18P001S&store_num=		
GeoTracker Data:	Not Reported		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID
Direction
Distance
Elevation | Database | EDR ID Number

40
SSE
1/2 - 1 Mile
Lower

FED USGS **USGS40000139537**

Organization ID:	USGS-CA		
Organization Name:	USGS California Water Science Center		
Monitor Location:	002S006W19E001S	Type:	Well
Description:	Not Reported	HUC:	18070203
Drainage Area:	Not Reported	Drainage Area Units:	Not Reported
Contrib Drainage Area:	Not Reported	Contrib Drainage Area Unts:	Not Reported
Aquifer:	California Coastal Basin aquifers		
Formation Type:	Not Reported	Aquifer Type:	Not Reported
Construction Date:	Not Reported	Well Depth:	370
Well Depth Units:	ft	Well Hole Depth:	Not Reported
Well Hole Depth Units:	Not Reported		

G41
SE
1/2 - 1 Mile
Lower

CA WELLS **2582**

Seq:	2582	Prim sta c:	02S/06W-19E02 S
Frds no:	3310025010	County:	33
District:	14	User id:	WAT
System no:	3310025	Water type:	G
Source nam:	WELL 10	Station ty:	WELL/AMBNT
Latitude:	335903.4	Longitude:	1173314.2
Precision:	1	Status:	AR
Comment 1:	Not Reported	Comment 2:	Not Reported
Comment 3:	Not Reported	Comment 4:	Not Reported
Comment 5:	Not Reported	Comment 6:	Not Reported
Comment 7:	Not Reported		

System no:	3310025	System nam:	Norco, City Of
Hqname:	Not Reported	Address:	P.O. BOX 428
City:	NORCO	State:	CA
Zip:	91760	Zip ext:	Not Reported
Pop serv:	24704	Connection:	6153
Area serve:	NORCO CITY		

G42
SE
1/2 - 1 Mile
Lower

CA WELLS **CADDW2000010898**

GAMA:

Well ID:	CA3310025_010_010	Well Type:	MUNICIPAL
Source:	DDW	Other Names:	3310025-010
GAMA Pfas testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=DHS&samp_date=&global_id=&assigned_name=CA3310025_010_010&store_num=		
GeoTracker Data:	Not Reported		

Map ID
Direction
Distance
Elevation | Database | EDR ID Number

43
South
1/2 - 1 Mile
Lower

CA WELLS **CADWR0000036121**

Well ID:	02S07W24K001S	Well Type:	UNK
Source:	Department of Water Resources		
Other Name:	02S07W24K001S	GAMA PFAS Testing:	Not Reported
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=DWR&samp_date=&global_id=&assigned_name=02S07W24K001S&store_num=		
GeoTracker Data:	Not Reported		

G44
SE
1/2 - 1 Mile
Lower

FED USGS **USGS40000139530**

Organization ID:	USGS-CA		
Organization Name:	USGS California Water Science Center		
Monitor Location:	002S006W19E002S	Type:	Well
Description:	Not Reported	HUC:	18070203
Drainage Area:	Not Reported	Drainage Area Units:	Not Reported
Contrib Drainage Area:	Not Reported	Contrib Drainage Area Unts:	Not Reported
Aquifer:	California Coastal Basin aquifers		
Formation Type:	Not Reported	Aquifer Type:	Not Reported
Construction Date:	Not Reported	Well Depth:	345
Well Depth Units:	ft	Well Hole Depth:	Not Reported
Well Hole Depth Units:	Not Reported		

45
SSE
1/2 - 1 Mile
Lower

CA WELLS **2583**

Seq:	2583	Prim sta c:	02S/06W-19E03 S
Frds no:	3310025011	County:	33
District:	14	User id:	WAT
System no:	3310025	Water type:	G
Source nam:	WELL 11	Station ty:	WELL/AMBNT/MUN/INTAKE
Latitude:	335856.6	Longitude:	1173318.3
Precision:	1	Status:	AR
Comment 1:	Not Reported	Comment 2:	Not Reported
Comment 3:	Not Reported	Comment 4:	Not Reported
Comment 5:	Not Reported	Comment 6:	Not Reported
Comment 7:	Not Reported		

System no:	3310025	System nam:	Norco, City Of
Hqname:	Not Reported	Address:	P.O. BOX 428
City:	NORCO	State:	CA
Zip:	91760	Zip ext:	Not Reported
Pop serv:	24704	Connection:	6153
Area serve:	NORCO CITY		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID
Direction
Distance
Elevation | Database | EDR ID Number

46
SSW
1/2 - 1 Mile
Lower

CA WELLS **CADWR0000036853**

Well ID:	02S07W24L001S	Well Type:	UNK
Source:	Department of Water Resources		
Other Name:	02S07W24L001S	GAMA PFAS Testing:	Not Reported
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=DWR&samp_date=&global_id=&assigned_name=02S07W24L001S&store_num=		
GeoTracker Data:	Not Reported		

47
NE
1/2 - 1 Mile
Higher

CA WELLS **CADWR0000024137**

Well ID:	02S06W18F001S	Well Type:	UNK
Source:	Department of Water Resources		
Other Name:	02S06W18F001S	GAMA PFAS Testing:	Not Reported
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=DWR&samp_date=&global_id=&assigned_name=02S06W18F001S&store_num=		
GeoTracker Data:	Not Reported		

48
SE
1/2 - 1 Mile
Lower

CA WELLS **CADDW2000003534**

GAMA:

Well ID:	CA3301654_001_001	Well Type:	MUNICIPAL
Source:	DDW	Other Names:	3301654-001
GAMA Pfas testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=DHS&samp_date=&global_id=&assigned_name=CA3301654_001_001&store_num=		
GeoTracker Data:	Not Reported		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID
Direction
Distance

Database EDR ID Number

1
ESE
1/2 - 1 Mile

OIL_GAS **CAOG17000011417**

OIL_GAS:

API #:	0406500137	Well #:	2
Well Type:	Dry Hole	Well Status:	Plugged
Lease Name:	Smith & Scott	Well Design:	Smith & Scott 2
Operator ID:	06950	Operator Name:	Prosper D. Smith
Field Name:	Any Field	Area Name:	Any Area
Place:	Eastvale	GIS Source:	hud
Confidential Well:	N	Directionally Drilled:	N
Spud Date:	Not Reported		
Well Record Request URL:	https://filerequest.conservation.ca.gov/WellRecord?api=06500137		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS
RADON

AREA RADON INFORMATION

State Database: CA Radon

Radon Test Results

Zipcode	Num Tests	> 4 pCi/L
91761	7	0

Federal EPA Radon Zone for SAN BERNARDINO County: 2

Note: Zone 1 indoor average level > 4 pCi/L.
: Zone 2 indoor average level >= 2 pCi/L and <= 4 pCi/L.
: Zone 3 indoor average level < 2 pCi/L.

Federal Area Radon Information for SAN BERNARDINO COUNTY, CA

Number of sites tested: 18

Area	Average Activity	% <4 pCi/L	% 4-20 pCi/L	% >20 pCi/L
Living Area - 1st Floor	0.678 pCi/L	100%	0%	0%
Living Area - 2nd Floor	Not Reported	Not Reported	Not Reported	Not Reported
Basement	Not Reported	Not Reported	Not Reported	Not Reported

PHYSICAL SETTING SOURCE RECORDS SEARCHED

TOPOGRAPHIC INFORMATION

USGS 7.5' Digital Elevation Model (DEM)
Source: United States Geologic Survey
EDR acquired the USGS 7.5' Digital Elevation Model in 2002 and updated it in 2006. The 7.5 minute DEM corresponds to the USGS 1:24,000- and 1:25,000-scale topographic quadrangle maps. The DEM provides elevation data with consistent elevation units and projection.

Current USGS 7.5 Minute Topographic Map
Source: U.S. Geological Survey

HYDROLOGIC INFORMATION

Flood Zone Data: This data was obtained from the Federal Emergency Management Agency (FEMA). It depicts 100-year and 500-year flood zones as defined by FEMA. It includes the National Flood Hazard Layer (NFHL) which incorporates Flood Insurance Rate Map (FIRM) data and Q3 data from FEMA in areas not covered by NFHL.
Source: FEMA
Telephone: 877-336-2627
Date of Government Version: 2003, 2015

NWI: National Wetlands Inventory. This data, available in select counties across the country, was obtained by EDR in 2002, 2005, 2010 and 2015 from the U.S. Fish and Wildlife Service.

State Wetlands Data: Wetland Inventory
Source: Department of Fish and Wildlife
Telephone: 916-445-0411

HYDROGEOLOGIC INFORMATION

AQUIFLOW^{R} Information System
Source: EDR proprietary database of groundwater flow information
EDR has developed the AQUIFLOW Information System (AIS) to provide data on the general direction of groundwater flow at specific points. EDR has reviewed reports submitted to regulatory authorities at select sites and has extracted the date of the report, hydrogeologically determined groundwater flow direction and depth to water table information.

GEOLOGIC INFORMATION

Geologic Age and Rock Stratigraphic Unit
Source: P.G. Schruben, R.E. Arndt and W.J. Bawiec, Geology of the Conterminous U.S. at 1:2,500,000 Scale - A digital representation of the 1974 P.B. King and H.M. Beikman Map, USGS Digital Data Series DDS - 11 (1994).

STATSGO: State Soil Geographic Database
Source: Department of Agriculture, Natural Resources Conservation Service (NRCS)
The U.S. Department of Agriculture's (USDA) Natural Resources Conservation Service (NRCS) leads the national Conservation Soil Survey (NCSS) and is responsible for collecting, storing, maintaining and distributing soil survey information for privately owned lands in the United States. A soil map in a soil survey is a representation of soil patterns in a landscape. Soil maps for STATSGO are compiled by generalizing more detailed (SSURGO) soil survey maps.

SSURGO: Soil Survey Geographic Database
Source: Department of Agriculture, Natural Resources Conservation Service (NRCS)
Telephone: 800-672-5559
SSURGO is the most detailed level of mapping done by the Natural Resources Conservation Service, mapping scales generally range from 1:12,000 to 1:63,360. Field mapping methods using national standards are used to construct the soil maps in the Soil Survey Geographic (SSURGO) database. SSURGO digitizing duplicates the original soil survey maps. This level of mapping is designed for use by landowners, townships and county natural resource planning and management.

PHYSICAL SETTING SOURCE RECORDS SEARCHED

LOCAL / REGIONAL WATER AGENCY RECORDS

FEDERAL WATER WELLS

PWS: Public Water Systems
Source: EPA/Office of Drinking Water
Telephone: 202-564-3750
Public Water System data from the Federal Reporting Data System. A PWS is any water system which provides water to at least 25 people for at least 60 days annually. PWSs provide water from wells, rivers and other sources.

PWS ENF: Public Water Systems Violation and Enforcement Data
Source: EPA/Office of Drinking Water
Telephone: 202-564-3750
Violation and Enforcement data for Public Water Systems from the Safe Drinking Water Information System (SDWIS) after August 1995. Prior to August 1995, the data came from the Federal Reporting Data System (FRDS).

USGS Water Wells: USGS National Water Inventory System (NWIS)
This database contains descriptive information on sites where the USGS collects or has collected data on surface water and/or groundwater. The groundwater data includes information on wells, springs, and other sources of groundwater.

OTHER STATE DATABASE INFORMATION

Groundwater Ambient Monitoring & Assessment Program
State Water Resources Control Board
Telephone: 916-341-5577
The GAMA Program is Californias comprehensive groundwater quality monitoring program. GAMA collects data by testing the untreated, raw water in different types of wells for naturally-occurring and man-made chemicals. The GAMA data includes Domestic, Monitoring and Municipal well types from the following sources, Department of Water Resources, Department of Heath Services, EDF, Agricultural Lands, Lawrence Livermore National Laboratory, Department of Pesticide Regulation, United States Geological Survey, Groundwater Ambient Monitoring and Assessment Program and Local Groundwater Projects.

Water Well Database
Source: Department of Water Resources
Telephone: 916-651-9648

California Drinking Water Quality Database
Source: Department of Public Health
Telephone: 916-324-2319
The database includes all drinking water compliance and special studies monitoring for the state of California since 1984. It consists of over 3,200,000 individual analyses along with well and water system information.

Geothermal Wells Listing
Department of Conservation
Telephone: 916-445-9686
Geothermal well means a well constructed to extract or return water to the ground after it has been used for heating or cooling purposes. Geothermal wells in California (except for wells on federal leases which are administered by the Bureau of Land Management) are permitted, drilled, operated, and permanently sealed and closed (plugged and abandoned) under requirements and procedures administered by the Geothermal Section of the Department of Conservations Geologic Energy Management Division (CalGEM, formerly DOGGR).

California Oil and Gas Well Locations
Source: Dept of Conservation, Geologic Energy Management Division
Telephone: 916-323-1779
Oil and Gas well locations in the state.

PHYSICAL SETTING SOURCE RECORDS SEARCHED

California Earthquake Fault Lines
Source: California Division of Mines and Geology
The fault lines displayed on EDR's Topographic map are digitized quaternary fault lines prepared in 1975 by the United State Geological Survey. Additional information (also from 1975) regarding activity at specific fault lines comes from California's Preliminary Fault Activity Map prepared by the California Division of Mines and Geology.

RADON

State Database: CA Radon
Source: Department of Public Health
Telephone: 916-210-8558
Radon Database for California

Area Radon Information
Source: USGS
Telephone: 703-356-4020
The National Radon Database has been developed by the U.S. Environmental Protection Agency (USEPA) and is a compilation of the EPA/State Residential Radon Survey and the National Residential Radon Survey. The study covers the years 1986 - 1992. Where necessary data has been supplemented by information collected at private sources such as universities and research institutions.

EPA Radon Zones
Source: EPA
Telephone: 703-356-4020
Sections 307 & 309 of IRAA directed EPA to list and identify areas of U.S. with the potential for elevated indoor radon levels.

OTHER

Airport Landing Facilities: Private and public use landing facilities
Source: Federal Aviation Administration, 800-457-6656

Epicenters: World earthquake epicenters, Richter 5 or greater
Source: Department of Commerce, National Oceanic and Atmospheric Administration

California Earthquake Fault Lines: The fault lines displayed on EDR's Topographic map are digitized quaternary fault lines, prepared in 1975 by the United State Geological Survey. Additional information (also from 1975) regarding activity at specific fault lines comes from California's Preliminary Fault Activity Map prepared by the California Division of Mines and Geology.

STREET AND ADDRESS INFORMATION

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Appendix F

Owner and User Questionnaires

Project No.:
Project Name:

OWNER/OPERATOR QUESTIONNAIRE

Site Name: Esperanza PA-11

Site Address: Tract 18380, Lot 1
NWC of Eucalyptus and Clifton

Interviewee: David Waters

Title: VP California

Date: 3/7/25

SECTION I – Undeveloped Property (If this site is developed, go to SECTION II)

1. How long have you owned (or been involved in) this property?

   Since 2010 (15 years)

2. To the best of your knowledge, has there ever been any development on this property? If yes, what and when was the nature of that development?

   The site was historically a dairy farm operation, however operations ceased so

3. To the best of your knowledge, have there ever been any environmental or soils investigations conducted on this Property? If yes, what kind and when? Are there any reports available?

   There was a Phase 1 completed in 1998 by SID Geotech, in 2004 by Petra and

4. Are you aware of any environmental liens or deed restrictions associated with this property? If yes, please describe.

   No

5. To the best of your knowledge, have there ever been any incidents of chemical spills/dumping or waste disposal on or close to this property?

   No

6. Are there any wells on the site? If yes, what are they used for?

   Historically, but were all abandoned during grading.

SECTION II – Developed Property

1. What is your involvement with this property and when did that involvement begin?

   Ownership representative since 2010

2. To the best of your knowledge, how long has the current development been on the property? What was there before the current development?

   Last improvements completed on or around 2018 (perimeter and mass grading)

3. Does this facility use, store, manufacture, or dispose of chemicals or petroleum products? What types (be as specific as possible)?

   No

4. If the answer to Question 3 above was "Yes," may we review MSDS, business plans, hazardous material inventories, manifest files, SPCC plans (whatever is applicable)?

   n/a

5. Do you have any environmental permits (wastewater discharge, air emissions, hazardous material storage, etc.)? Have there ever been any Notices of Violation in regards to any of these permits?

   No

6. Have any environmental investigations ever been conducted on this property? When and why? Are there any reports available that we can review?

Phase 1/2 referenced above are available.

7. Has the facility ever been subject to an environmental health and safety regulatory action, complaint, or lawsuit? When and why? What was the outcome?

No

8. Have there been any know chemical spills or releases on this property?

No

9. Are there any underground or aboveground storage tanks on this property? How many? Sizes? Ages?

No

10. Where is wastewater discharged to? To the best of your knowledge, have there ever been any on-site wastewater disposal systems (septic tank, leach field, cesspool, dry well, etc.)?

No wastewater improvements on site.

11. To the best of your knowledge, are there any environmental liens or deed restrictions associated with this property? If yes, please describe.

No

Project No.:
Project Name:

USER QUESTIONNAIRE[1]

Site Name: Esperanza PA-11

Site Address: Tract 18380, Lot 1
NWC of Eucalyptus and Clifton

Interviewee: David Waters

Title: VP California

Date: 3/7/25

In reference to Section 6, User Responsibilities, of the ASTM E1527-21 Standard Practice, the Environmental Professional (SCS Engineers) for this Phase I ESA is required to inquire with the user (Client) regarding their knowledge or possession of information that may assist in identifying recognized environmental conditions (RECs) pertaining to the Subject Property.

In order to qualify for one of the Landowner Liability Protections (LLPs) offered by the Small Business Liability Relief and Brownfields Revitalization Act of 2001 (the "Brownfields Amendments"), the user must conduct the following inquiries required by 40 CFR §312.25, §312.28, §312.29, §312.30, and §312.31. These inquiries must also be conducted by U.S. EPA Brownfield Assessment and Characterization grantees. The user should provide the following information to the Environmental Professional overseeing this Phase I ESA. Failure to conduct these inquiries could result in a determination that "all appropriate inquiries" is not complete.

(1) Environmental Cleanup Liens (40 CFR §312.25). Did a search of land title records (or judicial records where appropriate) identify any environmental liens filed or recorded against the Subject Property under federal, tribal, state or local law? ☐ Yes ■ No

If Yes, explain and/or provide information:

(2) Activity and Use Limitations (40 CFR §312.26(a)(1)(v) and (vi)). Did a search of land title records (or judicial records, where appropriate) identify any Activity Use Limitations (AULs) such as engineering controls, land use restrictions, or institutional controls that are in place at the Subject Property and/or have been filed or recorded against the Subject Property under federal, tribal, state or local law? ☐ Yes ■ No

☐ Yes ☐ No

If Yes, explain and/or provide information:

Since 2010 (15 years)

[1] The document is designed to comply with Appendix X3, User Questionnaire, of ASTM E1527-21, Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process, and the U.S. EPA AAI regulations (40 CFR §312).

(3) Specialized Knowledge or Experience (40 CFR §312.28). Do you have any specialized knowledge or experience related to the Subject Property or nearby properties? For example, are you involved in the same line of business as the current or former occupants of the Subject Property or an adjoining property so that you would have specialized knowledge of the chemicals and processes used by this type of business? ■ Yes ☐ No

If Yes, explain and/or provide information:

The site was historically a dairy farm operation, however operations ceased sometime i

(4) Purchase Price vs. Fair Market Value (40 CFR §312.29). Does the purchase price being paid for this Subject Property reasonably reflect its fair market value? ■ Yes ☐ No

If you conclude that there is a difference, have you considered whether the lower purchase price is because contamination is known or believed to be present at the Subject Property?

☐ Yes ☐ No

If Yes, explain and/or provide information:

There was a Phase 1 completed in 1998 by SID Geotech, in 2004 by Petra and in 2010

(5) Commonly Known or Reasonably Ascertainable Information (40 CFR §312.30). Are you aware of commonly known or reasonably ascertainable information about the Subject Property that would help the Environmental Professional to identify conditions indicative of releases or threatened releases? For example:

(a) Do you know the past use of the Subject Property?

(b) Do you know specific chemicals that are present or once were present at the Subject Property?

(c) Do you know of spills or other chemical releases that have taken place at the Subject Property?

(d) Do you know of any environmental cleanups that have taken place at the Subject Property?

■ Yes ☐ No to all

If Yes, explain and/or provide information:

No

(6) Obvious Indications of Contamination (40 CFR §312.31). Based on your knowledge and experience related to the Subject Property, are there any obvious indicators that point to the presence or likely presence of releases at the Subject Property? ☐ Yes ■ No

If Yes, explain and/or provide information:

No

Appendix G

Project Personnel Resumes

J. JUSTIN RAUZON, REPA

Justin Rauzon, REPA

Education

MEM – Environmental Management, Duke University, 2014
BS – Zoology (Double Emphasis: Human and Marine Biology), Brigham Young University, 2004

Professional Licenses

Registered Environmental Property Assessor (REPA), National Registry of Environmental Professionals (No. 485639)

Specialty Certifications

OSHA 40-Hour Health and Safety Training for Hazardous Waste Workers
8-Hour Annual Refresher Training for Hazardous Waste Site Activities
OSHA 16-Hour Initial Asbestos Operations and Maintenance Training
Thermo Scientific Niton XRF Analyzer Operator's Training
First-Aid and CPR Training

Professional Affiliations

National Ground Water Association, Member (2015 to Present)
Industrial Environmental Association, Member (2018 to Present)

Professional Experience

Mr. Rauzon has more than 16 years of environmental services experience, all with SCS. Fluent in Spanish, Mr. Rauzon is an SCS Project Manager with a diverse background in biological and environmental sciences, and regularly performs environmental assessments and compliance audits at sites in the U.S. and in Latin America. He has technical and management experience with soil, soil vapor, and groundwater investigations at industrial, commercial, landfill, greenfield, and residential properties. He has extensive experience with environmental laws and regulations in both the U.S. and Mexico. His work experience includes all project phases, from development of cost estimates for various site assessment and cleanup programs to implementing remediation programs and interfacing with regulatory agencies. His experience with and understanding of these issues led to his appointment as a National Partner in Environmental Due Diligence in 2021.

Selected projects in which he has participated are described below.

Environmental Management

Due Diligence Assessments of Properties Prior to Real Estate Transfer of Properties in California, Arizona, New Jersey, Mexico, Puerto Rico, and the Dominican Republic. Mr. Rauzon has completed numerous due diligence assessments of properties prior to acquisition, disposition, or loan financing by investment banks, insurance companies, corporations, non-profit entities, real

estate developers, and private parties. Projects have included Phase I assessments that meet federal All Appropriate Investigation (AAI) regulations, American Society for Testing and Materials (ASTM) standards, and client-specific guidelines; inspections for asbestos and lead-based paint; Phase II investigations; preparation of abatement and remediation cost estimates; and regulatory agency coordination. These projects frequently involve review of previous environmental reports and investigation of current and past on-site operations, regulatory agency records searches, evaluation of historical property use information, identification of nearby potentially contaminated sites, and development of appropriate conclusions about environmental risks. Investigations involve preparation of work plans, soil boring and subsequent sampling, groundwater well installation and sampling, soil gas probe installation and sampling, precision mapping, evaluation of contaminants in accordance with regulatory requirements or generally accepted guidelines, preparation of investigation report, and analysis of applicable remedial alternatives. Mr. Rauzon has served as the Project Manager for sites that have received regulatory closure from various regulatory agencies.

Planning, Coordinating, and Supervising Remedial Actions That Included Excavation, Transport, and Disposal of Contaminated Soils and Water. Investigations involve preparation of Remedial Action Plans (RAPs), direction of fieldwork, oversight of confirmatory sampling, and interfacing with regulatory agencies.

Groundwater Monitoring and Reporting for Simi Valley Landfill and Recycling Center, Simi Valley, CA. Mr. Rauzon is a key team member for the sampling and monitoring of 10 groundwater wells and 5 leachate locations to evaluate potential releases from waste units affecting groundwater at Simi Valley Landfill. He also prepares the annual leachate control system's effectiveness reports and documents results of resampling of groundwater wells based on initial statistical indications of a release.

The Characterization of Hazardous Waste Materials. These projects include collection of soil and/or liquid samples to profile the waste materials, interpretation of laboratory results, and evaluation of disposal/recycling options to minimize the costs and liabilities to clients associated with the removal of wastes.

Assessment and Certification of Hazardous Waste Tank Systems. These investigations involve working with a Professional Engineer to complete field inspections of hazardous waste tanks, associated ancillary equipment, leak-detection systems, and secondary containment devices, as well as interfacing with regulatory agencies.

Project Management

Project Manager for Environmental Due Diligence Assessment and Health and Safety Program Review of Six Geothermal Power Plants Located in California, Nevada, New Mexico, and Utah. SCS services included time-sensitive field inspection, environmental document and permit review, and preparation of environmental risk evaluation reports. Mr. Rauzon reviewed and assessed plant health and safety plans and procedures; facility response plans; incident reports; and arrangements for plant selection, appointment, and management of support contractors. SCS provided support consulting services in the successful client plant acquisition and integration support.

Project Manager for Due Diligence Investigations at Dry Mill and Biofuel Distillery Plant, Madera, CA. SCS services included Phase I environmental assessment and Phase II soil, soil vapor, and groundwater investigation to support client's acquisition of an ethanol production plant at which a lumber mill was historically located. SCS provided additional consulting services related to remediation cost analysis and management of ongoing environmental issues.

Project Manager for Due Diligence Investigation of a Portfolio With More Than 300 Industrial Sites Throughout Mexico. SCS services included conducting Phase I and Phase II environmental assessments within the strict timeline of the $1.2 billion industrial real estate transaction. Subsequent to the closing of the deal, SCS provided ongoing consulting services to facilitate integration and management of various facilities with ongoing environmental issues.

Project Manager for Hazardous Materials Consulting Services in Support of the State Route 91 Corridor Improvement Project in Orange and Riverside Counties, CA. SCS services included sampling and inventory of potentially hazardous materials associated with more than 25 bridges along the SR-91 and I-15 freeways; environmental assessments on properties within the proposed freeway expansion area; and soil testing for herbicides, pesticides, and fungicides on several land parcels.

Project Manager for Investigation and Remediation of Industrial Facility Located in Fontana, CA. SCS conducted a series of environmental assessments, investigations, and remedial activities that provided sufficient information to identify environmental issues and business risks, and facilitate the client's successful purchase of property. A number of recognized environmental conditions, including releases of coal tar, solvents, heavy metals, and total petroleum hydrocarbons, were identified. Project activities conducted during the acquisition and redevelopment of the property included shallow and deep soil and soil vapor investigations; installation of groundwater monitoring wells and subsequent groundwater sampling; subsequent remedial excavation under San Bernardino County Fire Department (SBCFD) oversight to obtain closure; and excavation and off-site disposition of contaminated soil.

Health and Safety

Mr. Rauzon has participated in a certified health and safety program in compliance with OSHA Standard 29 CFR 1910.120. He is knowledgeable in incident response operations, team functions, personnel safety, and field equipment. He is able to recognize and evaluate potential chemical and physical hazards and associated risks in field operations; discuss and use personal protective equipment (PPE), such as respiratory protection and protective clothing; use and interpret direct-reading instruments; and examine and establish Standard Operating Safety Guidelines to ensure safe and effective response operations.

Publications

Rauzon, J. J., "Mexico: Environmental Due Diligence and the Mexican Waste Law," EHS Journal, November 13, 2010.

MADDIE PETERSON

Education

BA – Environmental Science and Policy, California State University, Long Beach, 2022
AA – Liberal Arts and Sciences/Communications, College of the Canyons, 2017

Specialty Certifications

40-Hour HAZWOPER Trained
SCAQMD Dust Control Officer Trained (Rule 403)

Professional Experience

Ms. Peterson is an Associate Professional who has participated in Phase I and II site investigations, sampling and monitoring at landfills, methane assessments, geophysical surveys and monitoring well installations, and pesticide and heavy metal evaluations. She has a background in environmental law and policy and sustainability. As an undergraduate, she performed heavy metal analysis and research regarding lead and zinc concentrations in soil samples for the Environmental Science and Policy Capstone Project in Long Beach (2022), and has volunteered for habitat restoration and other environmental improvement projects in Southern California.

Her SCS project work includes:

Phase I Environmental Site Assessments (ESAs). Ms. Peterson has contributed to Phase I Environmental Site Assessments (ESAs), completed in accordance with various lender, American Society for Testing and Materials (ASTM), or government guidelines. Activities consisted of evaluating current and past on-site operations, generating historical property use information, identifying potentially contaminated sites in the surrounding areas, reviewing previous reports and/or files maintained by regulatory agencies, and developing conclusions regarding the presence of Recognized Environmental Conditions (RECs) and recommendations for further investigation.

Site Investigations. Ms. Peterson has conducted soil gas surveys and soil sampling with precision mapping of sites, installation of soil borings, lithologic logging, collection of soil samples, and evaluation of subsurface contaminants in soil and groundwater in accordance with regulatory agency requirements or generally accepted guidelines.

Quarterly and Semiannual Groundwater Monitoring Reports. Ms. Peterson has assisted in preparation of numerous routine monitoring reports for various sites with oversight of various regulatory agencies. Facilities have included landfills across California and manufacturing sites.

Construction Quality Assurance (CQA). Ms. Peterson has assisted in CQA and oversight of the construction of gas collection and control system (GCCS) vertical well installation at Simi Valley, Antelope Valley, and El Sobrante Landfills.

Investigation and Remediation for Industrial Facility Redevelopment, Downey, CA. SCS conducted a series of environmental assessments, investigations, and remedial activities that provided sufficient information to identify the environmental issues, and business risks to facilitate the client's successful purchase of property for redevelopment to a commercial warehouse and office. A number of Recognized Environmental Conditions (RECs) were identified. Ms. Peterson provided oversight for numerous activities conducted concurrently with the redevelopment of the property, including the installation of groundwater monitoring wells, both on and off site; oversight of well development; soil vapor extraction (SVE) network monitoring; and permitting and removal of clarifiers.

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DRAINAGE STUDY

FOR

TRACT NO. 20730

ESPERANZA – PA II

EUCALYPTUS AVENUE & AMHERST AVENUE

ONTARIO, CA

MARCH 2025

PREPARED BY:

WALDEN & ASSOCIATES
2552 WHITE ROAD, SUITE B
IRVINE, CA 92614

JN: 2175-996-001

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SECTION 1

DISCUSSION

PURPOSE:

This report was prepared to supplement the preliminary grading plan for Esperanza – PA II, Tentative Tract No. 20730 in the City of Ontario, County of San Beranrdino.

The project is bounded by Clifton Avenue to the north, Eucalyptus Avenue to the east, Amherst Avenue to the south and Chatham Street to the west, in the City of Ontario. This report includes the existing and proposed Q100 for the10.0-acre project site. The study abides by the most current City of Ontario requirements and the San Bernardino County Hydrology Manual procedures.

DESCRIPTION OF WATERSHED:

The existing site is undeveloped and relatively flat and surface flows in a southwesterly direction towards the intersection of Eucalyptus Avenue and Amherst Avenue where an onsite detention basin is located. The basin has a 36-inch inlet that joins a public storm drain in Amherst Avenue. The proposed site will drain in a similar direction with its own storm drain system throughout the development and will join the Amherst storm drain as stated above.

	Acreage	100-Year
Existing		
A	10.02 ac	20.34 cfs
Proposed		
A	8.42 ac	27.60 cfs
B	1.60 ac	6.92 cfs
Total	10.02 ac	34.52 cfs
Difference	**-**	**<-14.18> cfs**

Mitigation is required when the proposed exceeds the existing as shown in the table above; however, the city has confirmed that there is a more restrictive Q that must be used in place of the existing Q that was established by this study. The Q to be used was established by Tract 17931, at line 'D', using a Q100 of15.64 cfs.as the maximum flow allowed from the site into the public storm drain.

The tract's private onsite storm drain system will function with the necessary flow restriction as established by the City. This will be accomplished by over-sizing the private onsite storm drain system to provide on-site storage and installing a stainless-steel plate with a 16"x24" opening (orifice) over the downstream side of the junction structure, before entering the public system. This will restrict the outflow from the site to no more than 15.64 cfs at any time. The volume to be stored is approximately 5,100 cubic feet (cf) (See Table A) as determined by the hydrograph in this study

All proposed inlets and storm drain piping have been designed for a Q100 storm event, and emergency overflow drain patterns have been considered if drainage clogging should occur.

METHODOLOGY:

This Hydrology Study was performed using the rational Hydrology Method Program by CivilCADD / Civil Design Engineering software based on the San Bernardino County Hydrology Manual dated August 1986. The soil has been identified from the maps accompanying the San Bernardino County Hydrology Manual as being of Hydrologic Soil Group B. The calculations were done for a 100-year storm frequency for the storm drain system.

SUMMARY:

The plans for which this report supports has been prepared to meet the standards of rainstorm protection as adopted by the City of Ontario. Positive overflow is available throughout the development for protection of habitable areas against the 100-year storm when drainage obstructions occur, and there will be no adverse impact to the existing conditions.

TABLE A VOLUME STORAGE CALCULATIONS FOR THE PRIVATE ONSITE STORM DRAIN PIPE

TRACT 20730 2175 – 996 - 001

ON SITE PIPE SUMMARY (MAIN LINE ONLY)

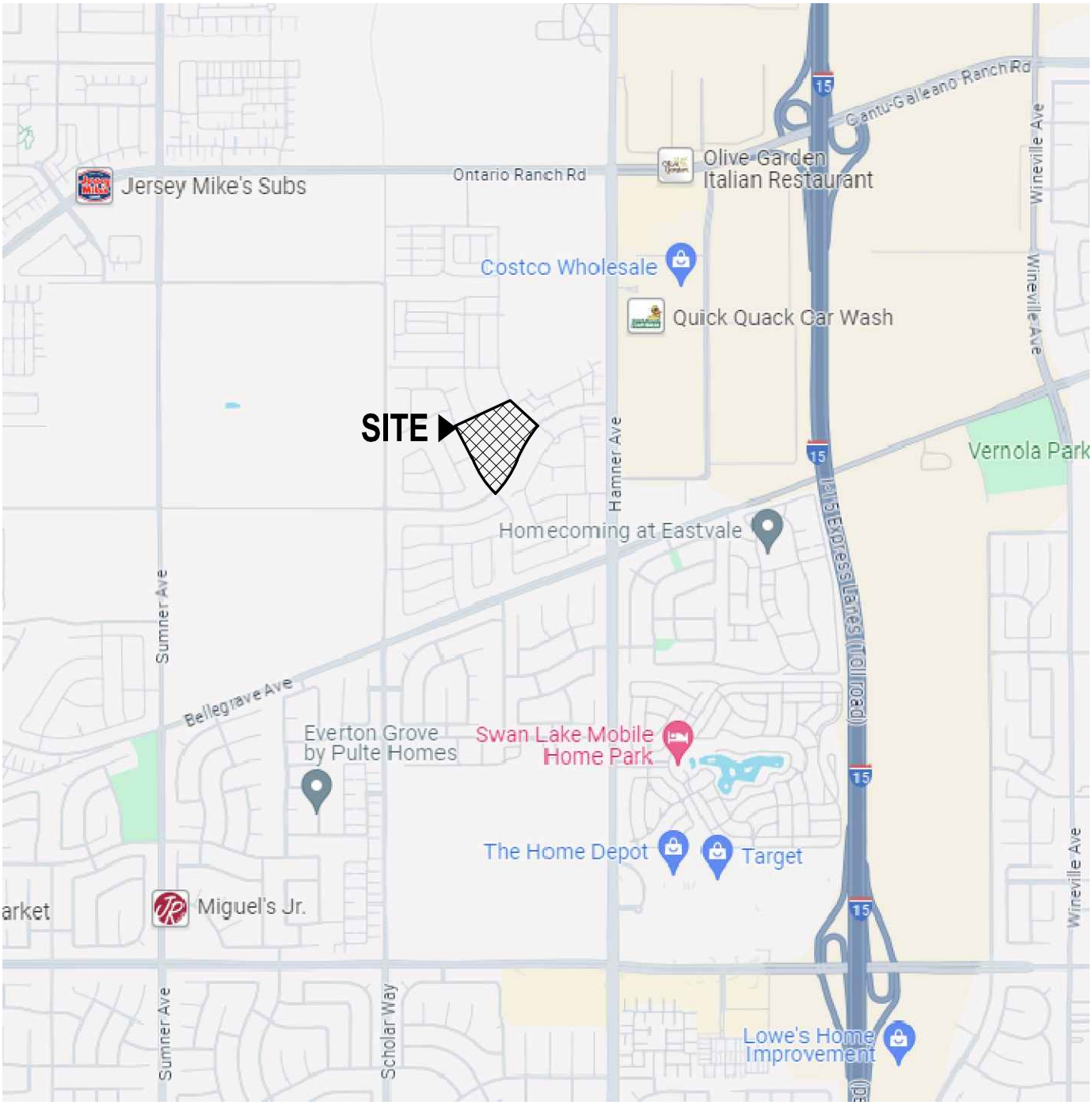
	PIPE SIZE ESTIMATED (IN)	LENGTH OF PIPE (FT)	INTERNAL AREA- STARTING (SQ FT)	PIPE VOLUME- STARTING (CU FT)	PIPE SIZE FOR STORAGE (IN)	PIPE INTERNAL AREA - (SQ FT)	STORAGE PIPE VOLUME (CU FT)	PIPE INTERNAL AREA -GAINED (SQ FT)	PIPE VOLUME GAINED (CU FT)
LINE 'A'	18	710	1.8	1,280	36	7.1	5,045	5.3	3,765
LINE 'A'	24	380	3.1	1,180	36	7.1	2,700	4	1,520
LINE 'B'	8	185	0.4	75	-	-	-	-	0
LINE 'C'	12	155	0.8	125	-	-	-	-	0
LINE 'C'	18	570	1.8	1,030	24	3.1	1,770	1.3	740
	TOTAL	2,000		3,690			9,515		6,025

STORAGE REQUIRED = 5,100

STORAGE PROVIDED = 6,025

SECTION 2

VICINITY MAP



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VICINITY MAP

EUCALYPTUS AVE. AND S. AMHERST AVE.
ONTARIO, CA

W.O. No. 2175-996-001 Date 05/22/2024
Engr. MP Chk'd. DB Sheet 1 of 1

SECTION 3

HYDROLOGIC CLASSIFICATION OF SOIL PER SAN BERNARDINO COUNTY HYDROLOGY MANUAL

NEWTOWN	C	NORTON	C	OKAW	D	ORELLA	D	PACK	C
NEWVILLE	C	NORTONVILLE	C	OKAY	B	OREM	A	PACKARD	B
NEZ PERCE	C	NORTUNE	D	OKEECHOBEE	A/D	ORESTIMBA	C	PACKER	C
NIAGARA	C	NORWALK	B	OKEELANTA	A/D	ORFORD	C	PACKHAM	B
NIART	B	NORWAY FLAT	B	OKEMAH	C	ORIDIA	C	PACKSADDLE	B
NIBLEY	C	NORWELL	C	OKLARED	B	ORIF	A	PACKWOOD	D
NICHOLSON	C	NORWICH	D	OKLAWAHA	A/D	ORIO	C	PACOLET	B
NICHOLVILLE	C	NORWOOD	B	OKMOX	B	ORION	B	PACTOLUS	C
NICKEL	B	NOTI	D	OKO	D	ORITA	B	PADEN	C
NICODEMUS	B	NOTUS	A/C	OKOBOJI	C	ORLAND	B	PADRONI	B
NICOLAUS	C	NOUQUE	D	OKOLONA	D	ORLANDO	A	PADUCAH	B
NICOLLET	B	NOVARA	B	OKREEK	D	ORMAN	C	PAJUS	B
NIELSEN	D	NOVARY	B	OKTIBBEHA	D	ORMSBY	B/C	PAESL	B
NIGHTHAWK	B	NOWOOD	C	OLA	C	ORODELL	C	PAGET	B
NIHILL	B	NOYO	C	OLAA	A	ORO FINO	B	PAGODA	C
NIKABUNA	D	NOYSON	C	OLALLA	C	ORO GRANDE	C	PAHRANAGAT	C
NIKEY	B	NUBY	C/D	OLANTA	B	ORONO	D	PAHREAH	D
NIKISHKA	A	NUCKOLLS	C	OLATHE	C	OROVADA	C	PAHROC	D
NIKLASON	B	NUCLA	B	OLD CAMP	D	ORPHANT	D	PAIA	C
NIKOLAI	D	NUECES	C	OLDHAM	C	ORR	C	PAIGE	C
NILAND	C	NUGENT	A	OLDS	D	ORRVILLE	C	PAINESVILLE	C
NILES	C	NUGGET	C	OLDSMAR	B/D	ORSA	A	PAINTROCK	C
NIMROD	C	NUMA	C	OLDWICK	B	ORSINO	A	PAIT	B
NINCH	C	NUNDA	C	OLELO	B	ORTELLO	A	PAJARITO	B
NINEMILE	D	NUNICA	C	OLENA	B	ORTIGALITA	C	PAJARO	C
NINEVEH	B	NUNN	C	OLEQUA	B	ORTING	C	PAKA	B
NINIGRET	B	NUSS	D	OLETE	C	ORTIZ	C	PAKALA	B
NININGER	B	NUTLEY	C	OLEX	B	ORTLEY	B	PAKINI	B
NINNESCAH	E	NUTRAS	C	OLGA	C	ORWET	A	PALA	B
NIOBELL	C	NUTRIOSO	B	OLI	B	ORWOOD	B	PALACIO	B
NIOTA	D	NUVALDE	C	OLIAGA	B/D	OSAGE	D	PALAPALAI	B
NIPE	B	NYALA	D	OLINDA	B	OSAKIS	B	PALATINE	B
NIPPERSINK	B	NYMORE	A	OLIPHANT	B	OSCAR	D	PALESTINE	B
NIPPT	A	NYSSA	C	OLIVENHAIN	D	OSCURA	C	PALISADE	B
NIPSUM	C	NYSSATON	B	OLIVER	B	OSGOOD	B	PALMA	B
NIRA	B	NYSTROM	C	OLIVIER	C	OSHA	B	PALMAREJO	C
NISHNA	C			OLJETO	A	OSHAWA	D	PALM BEACH	A
NISHON	D	OAHE	B	OLMITO	D	O'SHEA	C	PALMER	D
NISQUALLY	A	OAKDALE	B	OLMITZ	B	OSHKOSH	C	PALMER CANYON	B
NISSWA	B	OAKDEN	D	OLMOS	C	OSHTEMO	B	PALMICH	B
NIU	B	OAKFORD	B	OLMSTED	B/D	OSIER	B/D	PALMS	D
NIULII	C	OAK GLEN	B	OLNEY	B	OSKA	C	PALMYRA	B
NIVLOC	D	OAK GROVE	C	OLOKUI	D	OSMUND	B	PALO	B
NIWOT	C	OAK LAKE	B	OLPE	C	OSO	B	PALODURO	B
NIXA	C	OAKLAND	C	OLSON	D	OSOBB	D	PALOMAS	B
NIXON	B	OAKS RIDGE	C	OLTON	C	OSORIDGE	D	PALOMINO	D
NIXONTON	B	OAKVILLE	A	OLUSTEE	B/D	OSOTE	B	PALOS VERDES	B
NIZINA	A	OAKWOOD	D	OLYIC	B	OSSIAN	C	PALOUSE	B
NOBE	D	OANAPUKA	B	OLYMPIC	B	OST	B	PALSGROVE	B
NOBLE	B	OASIS	B	OMADI	B	OSTRANDER	B	PAMLICO	D
NOBSCOTT	A	OATMAN	B	OMAHA	B	OTERO	B	PAMOA	C
NOCKEN	C	OBAN	C	OMAK	C	OTHELLO	D	PAMSDEL	D
NODAWAY	B	OBARC	B	OMEGA	A	OTIS	C	PAMUNKEY	C
NOEL	D	OBEN	C	OMENA	B	OTISCO	A	PANA	B
NOHILI	D	OBRAST	D	OMNI	C	OTISVILLE	A	PANACA	D
NOKASIPPI	D	OBRAY	D	ONA	A/D	OTLEY	B	PANAEMA	D
NOKAY	C	OBURN	D	ONALASKA	B	OTSEGO	C	PANASOFFKEE	D
NOKOMIS	B	OCALA	D	ONAMIA	B	OTTER	B/D	PANCHERI	B
NOLAM	B	OCEANET	D	ONARGA	B	OTTERBEIN	C	PANCHUELA	C
NOLICHUCKY	B	OCEANO	A	ONAWA	D	OTTERHOLT	B	PANDO	B
NOLIN	B	OCHEYEDAN	B	ONAWAY	B	OTTOKEE	A	PANDOAH	C
NOLO	B	OCHLOCKONEE	B	ONDAWA	B	OTWAY	D	PANDORA	D
NOME	D	OCHO	D	ONEIDA	B	OTWELL	C	PANDURA	D
NONDALTON	B	OCHOCO	C	O'NEILL	B	OUACHITA	C	PANE	B
NONOPAHU	D	OCHOPEE	B/D	ONEONTA	B	OURAY	A	PANGUITCH	B
NOOKACHAMPS	C/D	OCILLA	C	ONITA	C	OUTLET	C	PANHILL	B
NOOKSACK	B	OCKLEY	B	ONITE	B	OVALL	C	PANIOGUE	B
NOONAN	D	OCOEE	A/D	ONGTA	C	OVERGAARD	C	PANKY	C
NORA	B	OCONEE	C	ONOVA	D	OVERLAND	C	PANOCHE	B
NORAD	B	OCONTO	B	ONRAY	C	OVERLY	C	PANOLA	D
NORBERT	D	OCOSTA	D	ONSLOW	B	OVERTON	D	PANSEY	D
NORBORNE	B	OCQUEOC	B	ONTARIO	B	OVID	C	PANTEGO	D
NORBY	B	OCTAGON	B	ONTRO	B/D	OVINA	B	PANTHER	D
NORD	B	ODEE	D	ONTONAGON	D	OWEGO	D	PANTON	D
NORDBY	B	ODELL	B	ONYX	B	OWEN CREEK	C	PAOLA	A
NORDEN	B	ODEM	A	OOKALA	A	OWENS	D	PAOLI	B
NORDNESS	B	ODERMOTT	C	OPAL	D	OWHI	B	PAONIA	C
NORFOLK	B	ODESSA	D	OPEQUON	C/D	OWOSSO	B	PAPAA	D
NORGE	B	ODIN	C	OPHIR	C	OWYHEE	B	PAPAI	A
NORKA	B	ODNE	C	OPIHIKAO	D	OXALIS	C	PAPAKATING	D
NORMA	B/C	O'FALLON	D	OPPIO	D	OXBOW	C	PAPOOSE	C
NORMANGEE	D	OGDEN	D	OQUAGA	C	OXERINE	C	PARADISE	C
NORREST	C	OGEECHEE	C	ORA	C	OXFORD	D	PARADOX	B
NORRIS	C	OGEMAW	C	ORAN	B	OZAMIS	B/D	PARALOMA	C
NORRISTON	B	OGILVIE	C	ORANGE	D	OZAN	D	PARAMORE	D
NORTE	B	OGLALA	B	ORANGEBURG	B	OZAUKEE	C	PARASOL	B
NORTHDALE	C	OGLE	B	ORCAS	D			PARCELAS	D
NORTHFIELD	B	OHAYSI	D	ORCHARD	B	PAAIKI	B	PARDEE	D
NORTHMORE	C	OHIA	A	ORD	A	PAALOA	B	PAREHAT	C
NORTHPORT		OJAI	B	ORDNANCE	C	PAAUHAU	A	PARENT	C
NORTH POWDER	C	OJATA	D	ORDWAY	D	PACHAPPA	B	PARIETTE	C
NORTHUMBERLAND	C/D	OKANOGAN	B	ORELIA	D	PACHECO	B/C	PARIS	

NOTES: A BLANK HYDROLOGIC SOIL GROUP INDICATES THE SOIL GROUP HAS NOT BEEN DETERMINED
TWO SOIL GROUPS SUCH AS B/C INDICATES THE DRAINED/UNDRAINED SITUATION

SAN BERNARDINO COUNTY
HYDROLOGY MANUAL

S.C.S. SOIL NAMES FOR HYDROLOGIC CLASSIFICATIONS

(14 01636 56

SECTION 4

ISOHYETAL MAP

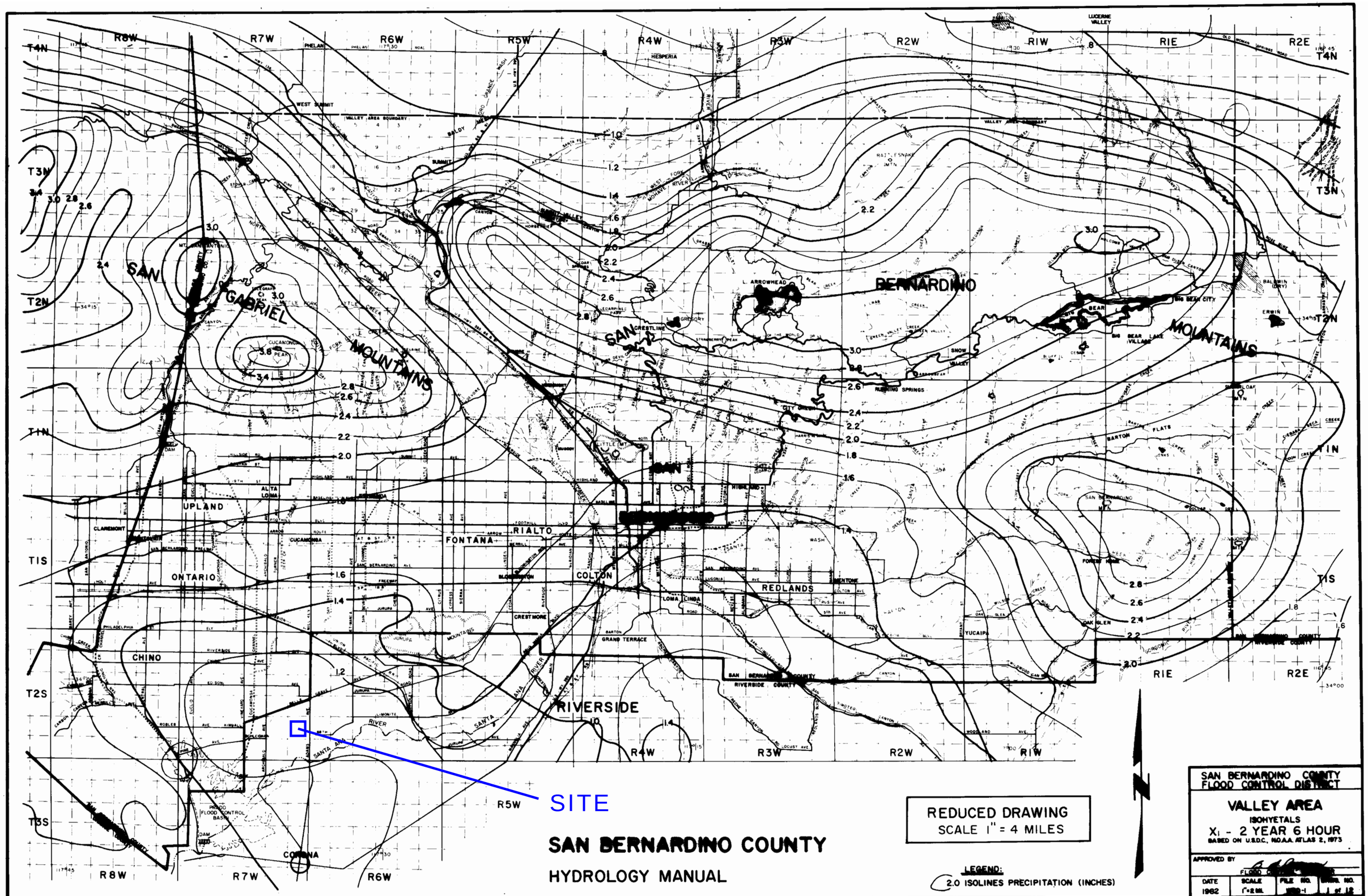
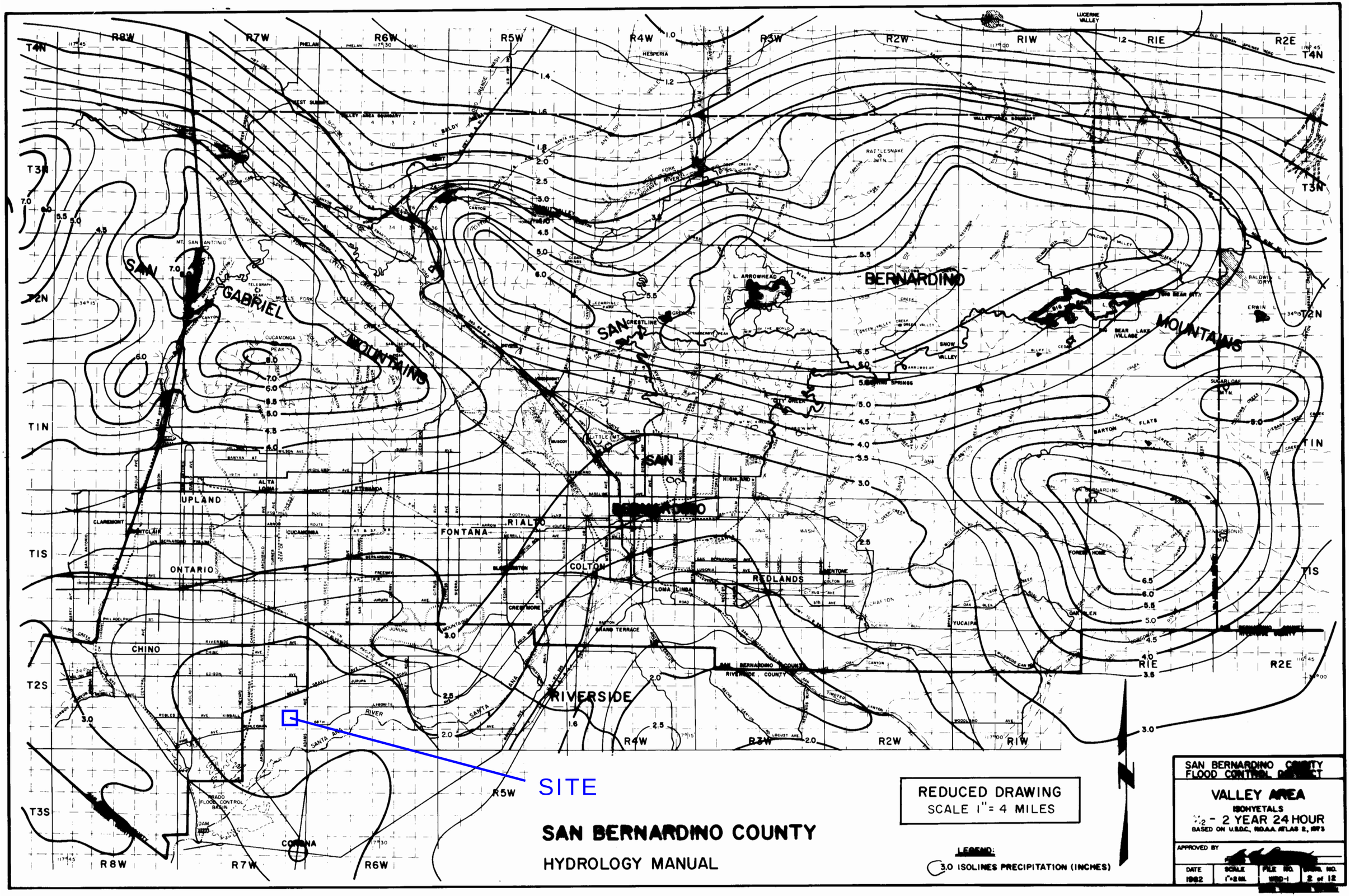

SITE
SAN BERNARDINO COUNTY
HYDROLOGY MANUAL
REDUCED DRAWING
SCALE 1" = 4 MILES
LEGEND:
2.0 ISOLINES PRECIPITATION (INCHES)
SAN BERNARDINO COUNTY FLOOD CONTROL DISTRICT
VALLEY AREA
ISOHYETALS
X1 - 2 YEAR 6 HOUR
BASED ON U.S.D.C., N.O.A.A. ATLAS 2, 1973
APPROVED BY
DATE 1982
SCALE 1"=2 MI.
FILE NO. W29-1
DRWG. NO. 1 of 12
SAN BERNARDINO MOUNTAINS
SAN GABRIEL MOUNTAINS
RIVERSIDE
UPLAND
ONTARIO
CHINO
FONTANA
RIALTO
COLTON
REDLANDS
CORONA
PRADO FLOOD CONTROL BASIN
R8W
R7W
R6W
R5W
R4W
R3W
R2W
R1W
R1E
R2E
T4N
T3N
T2N
T1N
T1S
T2S
T3S

FIGURE B-1



REDUCED DRAWING
SCALE 1" = 4 MILES

LEGEND:
3.0 ISOLINES PRECIPITATION (INCHES)

SAN BERNARDINO COUNTY
HYDROLOGY MANUAL

SAN BERNARDINO COUNTY FLOOD CONTROL DISTRICT

VALLEY AREA
ISOHYETALS
½ - 2 YEAR 24 HOUR
BASED ON U.S.D.C., N.O.A.A. ATLAS 2, 1973

APPROVED BY [redacted]

DATE	SCALE	FILE NO.	DRWG. NO.
1982	1"=2 MI.	HYD-1	2 of 12

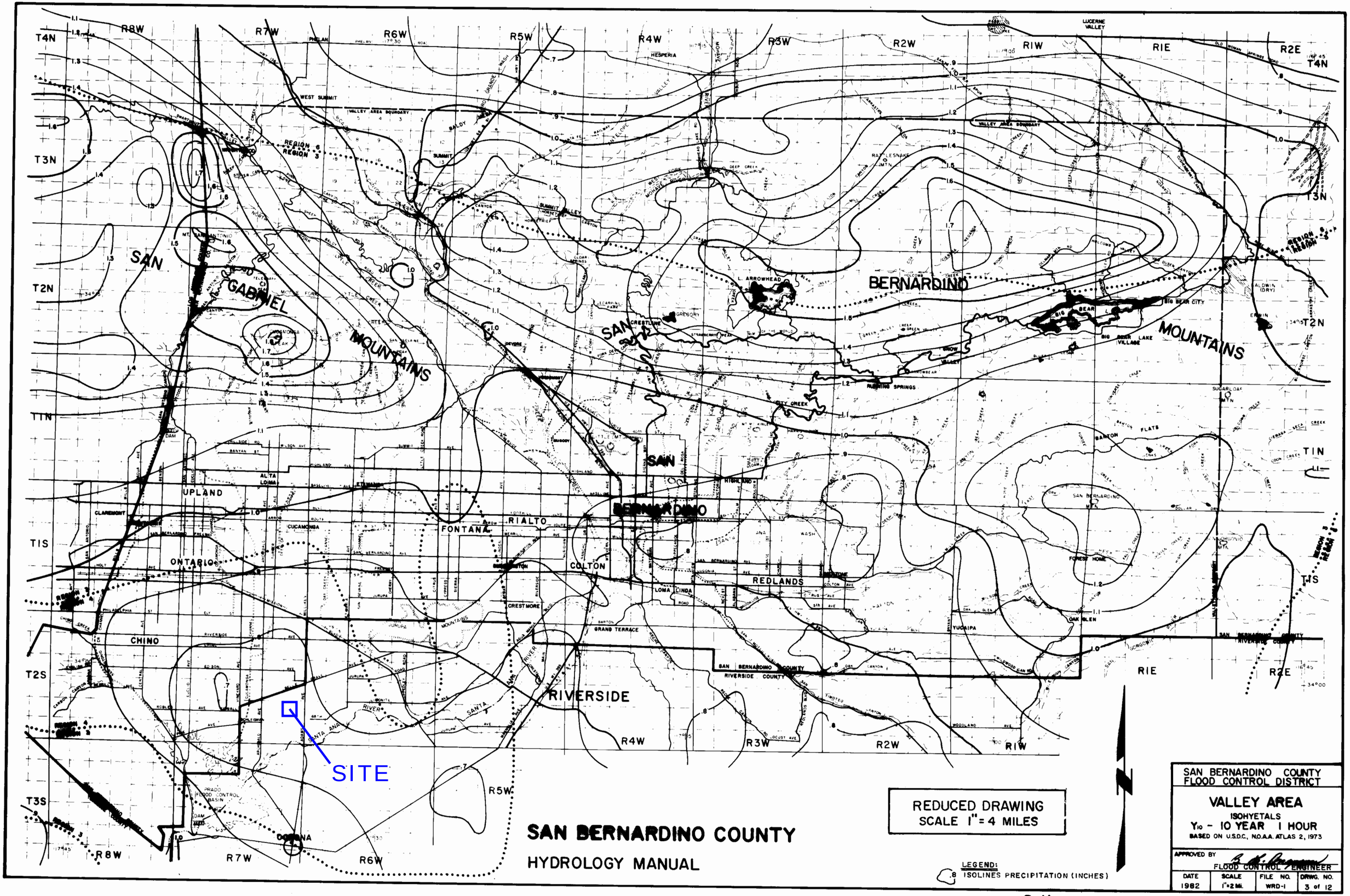
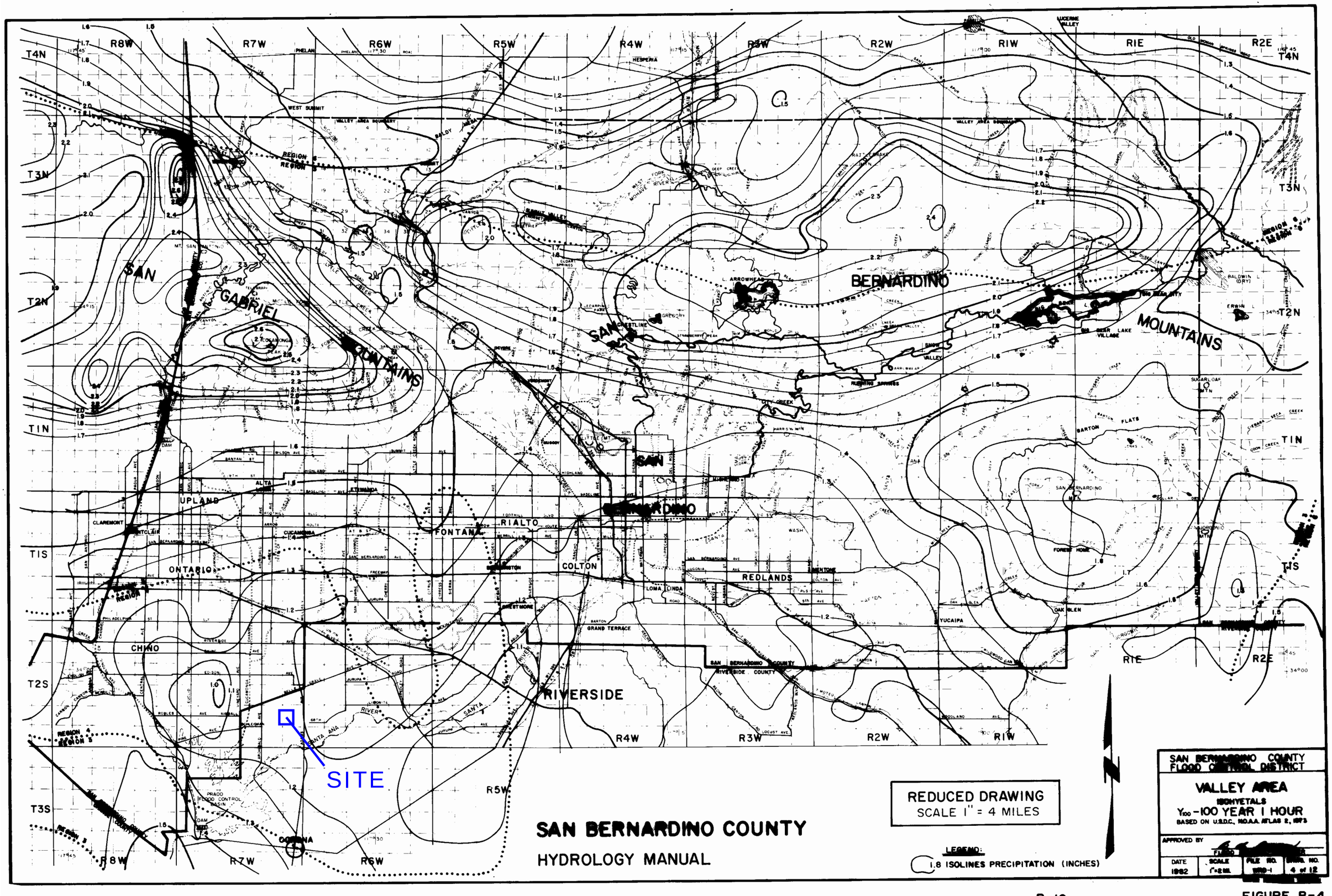

SAN GABRIEL MOUNTAINS
SAN BERNARDINO MOUNTAINS
SAN BERNARDINO
RIVERSIDE
SITE
SAN BERNARDINO COUNTY
HYDROLOGY MANUAL
REDUCED DRAWING
SCALE 1" = 4 MILES
LEGEND:
.8 ISOLINES PRECIPITATION (INCHES)
SAN BERNARDINO COUNTY
FLOOD CONTROL DISTRICT
VALLEY AREA
ISOHYETALS
Y10 - 10 YEAR 1 HOUR
BASED ON U.S.D.C., N.O.A.A. ATLAS 2, 1973
APPROVED BY
FLOOD CONTROL ENGINEER
DATE 1982
SCALE 1"=2 Mi.
FILE NO. WRD-1
DRWG. NO. 3 of 12

FIGURE B-3



SAN BERNARDINO COUNTY
HYDROLOGY MANUAL

REDUCED DRAWING
SCALE 1" = 4 MILES

LEGEND:
1.8 ISOLINES PRECIPITATION (INCHES)

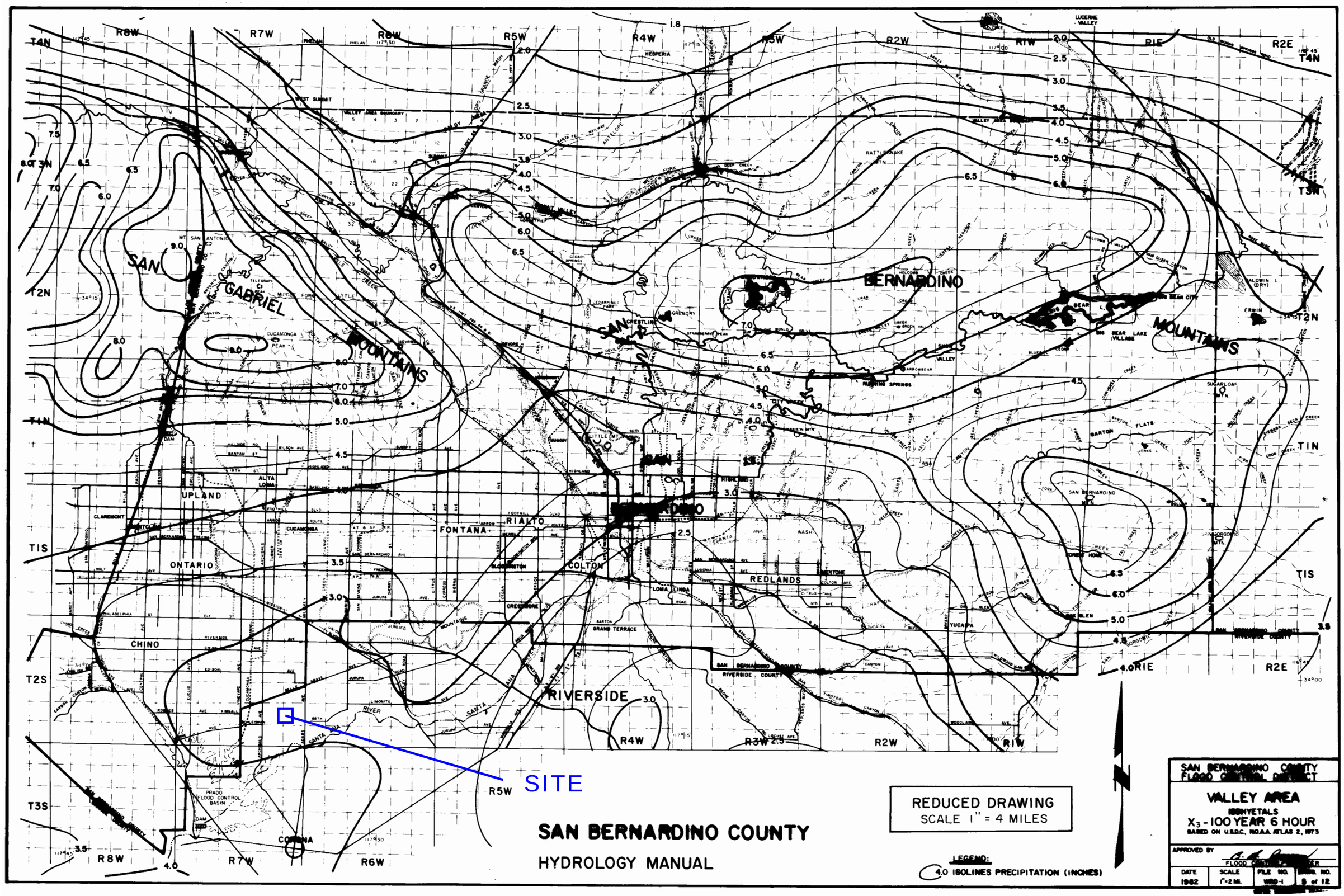
SAN BERNARDINO COUNTY FLOOD CONTROL DISTRICT

VALLEY AREA
ISOHYETALS
Y_{100} - 100 YEAR 1 HOUR
BASED ON U.S.D.C., NOAA ATLAS 2, 1973

APPROVED BY

DATE	SCALE	FILE NO.	DRWG. NO.
1982	1"=2MI.	SBD-1	4 of 12

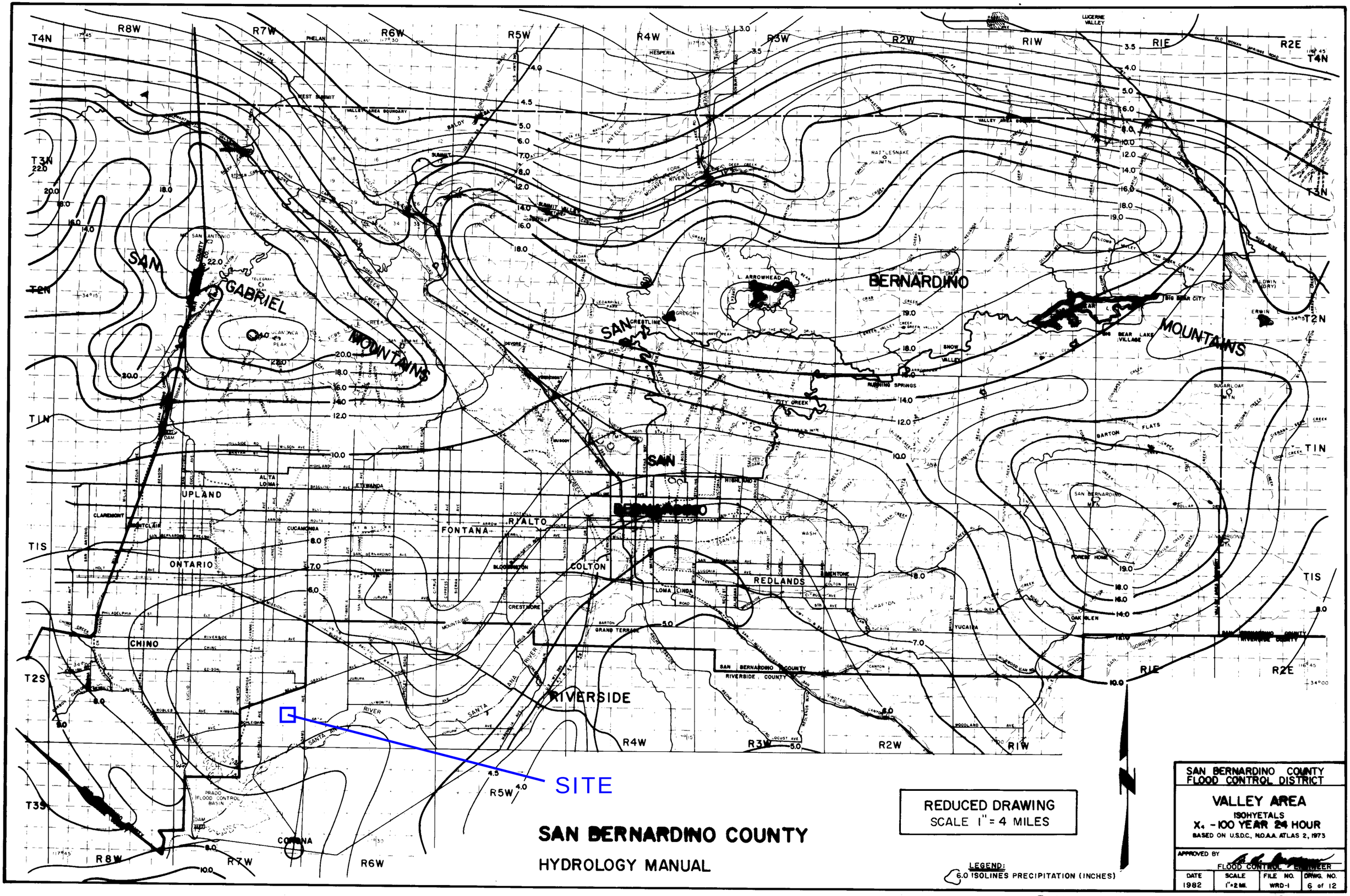
FIGURE B-4



1642

B-13

FIGURE B-5


SAN BERNARDINO COUNTY
HYDROLOGY MANUAL
SITE
REDUCED DRAWING
SCALE 1" = 4 MILES
LEGEND:
6.0 ISOLINES PRECIPITATION (INCHES)
SAN BERNARDINO COUNTY FLOOD CONTROL DISTRICT
VALLEY AREA
ISOHYETALS
X₆ - 100 YEAR 24 HOUR
BASED ON U.S.D.C., N.O.A.A. ATLAS 2, 1973
APPROVED BY
FLOOD CONTROL ENGINEER
DATE 1982
SCALE 1"=2 MI.
FILE NO. WRD-1
DRWG. NO. 6 of 12
SAN GABRIEL MOUNTAINS
SAN BERNARDINO MOUNTAINS
RIVERSIDE
SAN BERNARDINO
REDLANDS
UPLAND
ONTARIO
CHINO
COLTON
FONTANA
RIALTO
CORONA
PRADO FLOOD CONTROL BASIN DAM
SAN ANTONIO DAM
SAN ANTONIO PEAK
SAN GREGONIO PEAK
SAN BERNARDINO PEAK
SUGARLOAF MTN.
L. ARROWHEAD
BIG BEAR CITY
BEAR LAKE VILLAGE
RUNNING SPRINGS
SNOW VALLEY
CRESTLINE
LAKE GREGORY
LUCERNE VALLEY
HESPERIA
WEST SUMMIT
SUMMIT
SUMMIT VALLEY
CITY CREEK
BARTON FLATS
T4N
T3N
T2N
T1N
T1S
T2S
T3S
R8W
R7W
R6W
R5W
R4W
R3W
R2W
R1W
R1E
R2E

SECTION 5.1

HYDROLOGY STUDY
100-YEAR - EXISTING

San Bernardino County Rational Hydrology Program

(Hydrology Manual Date - August 1986)

CIVILCADD/CIVILDESIGN Engineering Software, (c) 1989-2012 Version 7.2
Rational Hydrology Study Date: 07/11/24

Program License Serial Number 6293

********* Hydrology Study Control Information **********

Rational hydrology study storm event year is 100.0
Computed rainfall intensity:
Storm year = 100.00 1 hour rainfall = 1.200 (In.)
Slope used for rainfall intensity curve b = 0.6000
Soil antecedent moisture condition (AMC) = 3

++

Process from Point/Station 1.000 to Point/Station 2.000
**** INITIAL AREA EVALUATION ****A-1

UNDEVELOPED (poor cover) subarea
Decimal fraction soil group A = 0.000
Decimal fraction soil group B = 1.000
Decimal fraction soil group C = 0.000
Decimal fraction soil group D = 0.000
SCS curve number for soil(AMC 2) = 78.00
Adjusted SCS curve number for AMC 3 = 92.80
Pervious ratio(Ap) = 1.0000 Max loss rate(Fm)= 0.140(In/Hr)
Initial subarea data:
Initial area flow distance = 420.000(Ft.)
Top (of initial area) elevation = 711.000(Ft.)
Bottom (of initial area) elevation = 705.000(Ft.)
Difference in elevation = 6.000(Ft.)
Slope = 0.01429 s(%)= 1.43
TC = k(0.525)*[(length^3)/(elevation change)]^0.2
Initial area time of concentration = 13.756 min.
Rainfall intensity = 2.904(In/Hr) for a 100.0 year storm
Effective runoff coefficient used for area (Q=KCIA) is C = 0.857
Subarea runoff = 3.259(CFS)
Total initial stream area = 1.310(Ac.)
Pervious area fraction = 1.000
Initial area Fm value = 0.140(In/Hr)

++

Process from Point/Station 2.000 to Point/Station 3.000
**** IRREGULAR CHANNEL FLOW TRAVEL TIME ****A-2

Estimated mean flow rate at midpoint of channel = 0.000(CFS)
Depth of flow = 0.901(Ft.), Average velocity = 2.372(Ft/s)
******* Irregular Channel Data **********

Information entered for subchannel number 1 :

Point number	'X' coordinate	'Y' coordinate
1	0.00	5.00
2	3.80	4.00

```
      3              6.30              3.00
      4             10.20              2.00
      5             15.40              1.00
      6             22.60              0.00
      7             27.70              1.00
      8             35.50              2.00
      9             41.40              3.00
      10             50.50              4.00
      11             68.20              4.00
Manning's 'N' friction factor =   0.030
-----------------------------------------------------------------
Sub-Channel flow  =     11.843(CFS)
  '     '    flow top width =     11.083(Ft.)
  '     '    velocity=    2.372(Ft/s)
  '     '    area =      4.994(Sq.Ft)
  '     '    Froude number =     0.623

Upstream point elevation =   705.000(Ft.)
Downstream point elevation =   700.000(Ft.)
Flow length =   740.000(Ft.)
Travel time  =    5.20 min.
Time of concentration =   18.96 min.
Depth of flow =   0.901(Ft.)
Average velocity =   2.372(Ft/s)
Total irregular channel flow =    11.843(CFS)
Irregular channel normal depth above invert elev. =   0.901(Ft.)
Average velocity of channel(s) =   2.372(Ft/s)
 Adding area flow to channel
UNDEVELOPED (poor cover) subarea
Decimal fraction soil group A = 0.000
Decimal fraction soil group B = 1.000
Decimal fraction soil group C = 0.000
Decimal fraction soil group D = 0.000
SCS curve number for soil(AMC 2)  = 78.00
Adjusted SCS curve number for AMC 3 = 92.80
Pervious ratio(Ap) = 1.0000     Max loss rate(Fm)=     0.140(In/Hr)
Rainfall intensity =      2.396(In/Hr) for a   100.0 year storm
Effective runoff coefficient used for area,(total area with modified
rational method)(Q=KCIA) is C = 0.847
Subarea runoff =     17.083(CFS) for    8.710(Ac.)
Total runoff =     20.341(CFS)
Effective area this stream =       10.02(Ac.)
Total Study Area (Main Stream No. 1) =       10.02(Ac.)
Area averaged Fm value =    0.140(In/Hr)
Depth of flow =   1.105(Ft.), Average velocity =   2.708(Ft/s)
End of computations, Total Study Area =           10.02 (Ac.)
The following figures may
be used for a unit hydrograph study of the same area.
Note: These figures do not consider reduced effective area
effects caused by confluences in the rational equation.

Area averaged pervious area fraction(Ap) = 1.000
Area averaged SCS curve number =  78.0
```

SECTION 5.2

HYDROLOGY STUDY
100-YEAR - PROPOSED

San Bernardino County Rational Hydrology Program

(Hydrology Manual Date - August 1986)

CIVILCADD/CIVILDESIGN Engineering Software, (c) 1989-2012 Version 7.2
Rational Hydrology Study Date: 07/18/24

ESPERANZA - PA II
EUCALYPTUS AVENUE & AMHERST AVENUE
PROPOSED Q100
ONTARIO, CALIFORNIA

Program License Serial Number 6293

********* Hydrology Study Control Information **********

Rational hydrology study storm event year is 100.0
Computed rainfall intensity:
Storm year = 100.00 1 hour rainfall = 1.200 (In.)
Slope used for rainfall intensity curve b = 0.6000
Soil antecedent moisture condition (AMC) = 3

++

Process from Point/Station 1.000 to Point/Station 2.000
**** INITIAL AREA EVALUATION ****

A-1

RESIDENTIAL(11+ dwl/acre)
Decimal fraction soil group A = 0.000
Decimal fraction soil group B = 1.000
Decimal fraction soil group C = 0.000
Decimal fraction soil group D = 0.000
SCS curve number for soil(AMC 2) = 56.00
Adjusted SCS curve number for AMC 3 = 75.80
Pervious ratio(Ap) = 0.2000 Max loss rate(Fm)= 0.088(In/Hr)
Initial subarea data:
Initial area flow distance = 100.000(Ft.)
Top (of initial area) elevation = 710.510(Ft.)
Bottom (of initial area) elevation = 709.000(Ft.)
Difference in elevation = 1.510(Ft.)
Slope = 0.01510 s(%)= 1.51
TC = k(0.324)*[(length^3)/(elevation change)]^0.2
Initial area time of concentration = 4.729 min.
Rainfall intensity = 5.511(In/Hr) for a 100.0 year storm
Effective runoff coefficient used for area (Q=KCIA) is C = 0.886
Subarea runoff = 0.586(CFS)
Total initial stream area = 0.120(Ac.)
Pervious area fraction = 0.200
Initial area Fm value = 0.088(In/Hr)

++

Process from Point/Station 2.000 to Point/Station 3.000
**** PIPEFLOW TRAVEL TIME (Program estimated size) ****

Upstream point/station elevation = 706.000(Ft.)
Downstream point/station elevation = 705.240(Ft.)
Pipe length = 117.00(Ft.) Manning's N = 0.012

No. of pipes = 1 Required pipe flow =   0.586(CFS)
Nearest computed pipe diameter =   9.00(In.)
Calculated individual pipe flow =   0.586(CFS)
Normal flow depth in pipe =   3.99(In.)
Flow top width inside pipe =   8.94(In.)
Critical Depth =   4.16(In.)
Pipe flow velocity =   3.10(Ft/s)
Travel time through pipe =   0.63 min.
Time of concentration (TC) =   5.36 min.

++
Process from Point/Station   3.000 to Point/Station   3.000
**** SUBAREA FLOW ADDITION **** **A-2**

RESIDENTIAL(11+ dwl/acre)
Decimal fraction soil group A = 0.000
Decimal fraction soil group B = 1.000
Decimal fraction soil group C = 0.000
Decimal fraction soil group D = 0.000
SCS curve number for soil(AMC 2) = 56.00
Adjusted SCS curve number for AMC 3 = 75.80
Pervious ratio(Ap) = 0.2000   Max loss rate(Fm)=   0.088(In/Hr)
Time of concentration =   5.36 min.
Rainfall intensity =   5.113(In/Hr) for a   100.0 year storm
Effective runoff coefficient used for area,(total area with modified
rational method)(Q=KCIA) is C = 0.885
Subarea runoff =   0.590(CFS) for   0.140(Ac.)
Total runoff =   1.176(CFS)
Effective area this stream =   0.26(Ac.)
Total Study Area (Main Stream No. 1) =   0.26(Ac.)
Area averaged Fm value =   0.088(In/Hr)

++
Process from Point/Station   3.000 to Point/Station   4.000
**** PIPEFLOW TRAVEL TIME (Program estimated size) ****

Upstream point/station elevation =   705.240(Ft.)
Downstream point/station elevation =   704.690(Ft.)
Pipe length =   110.00(Ft.)   Manning's N = 0.012
No. of pipes = 1 Required pipe flow =   1.176(CFS)
Nearest computed pipe diameter =   9.00(In.)
Calculated individual pipe flow =   1.176(CFS)
Normal flow depth in pipe =   6.86(In.)
Flow top width inside pipe =   7.67(In.)
Critical Depth =   5.98(In.)
Pipe flow velocity =   3.26(Ft/s)
Travel time through pipe =   0.56 min.
Time of concentration (TC) =   5.92 min.

++
Process from Point/Station   4.000 to Point/Station   4.000
**** SUBAREA FLOW ADDITION **** **A-3**

RESIDENTIAL(11+ dwl/acre)
Decimal fraction soil group A = 0.000
Decimal fraction soil group B = 1.000
Decimal fraction soil group C = 0.000
Decimal fraction soil group D = 0.000
SCS curve number for soil(AMC 2) = 56.00
Adjusted SCS curve number for AMC 3 = 75.80

```
Pervious ratio(Ap) = 0.2000     Max loss rate(Fm)=     0.088(In/Hr)
Time of concentration =     5.92 min.
Rainfall intensity =      4.816(In/Hr) for a   100.0 year storm
Effective runoff coefficient used for area,(total area with modified
rational method)(Q=KCIA) is C = 0.884
Subarea runoff =      0.781(CFS) for    0.200(Ac.)
Total runoff =      1.957(CFS)
Effective area this stream =        0.46(Ac.)
Total Study Area (Main Stream No. 1) =        0.46(Ac.)
Area averaged Fm value =    0.088(In/Hr)


++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station        4.000 to Point/Station        5.000
**** PIPEFLOW TRAVEL TIME (Program estimated size) ****
------------------------------------------------------------------------
Upstream point/station elevation =   704.690(Ft.)
Downstream point/station elevation =   704.610(Ft.)
Pipe length  =    15.00(Ft.)   Manning's N = 0.012
No. of pipes = 1  Required pipe flow  =     1.957(CFS)
Nearest computed pipe diameter  =     12.00(In.)
Calculated individual pipe flow  =     1.957(CFS)
Normal flow depth in pipe =    7.36(In.)
Flow top width inside pipe =   11.69(In.)
Critical Depth =    7.15(In.)
Pipe flow velocity =      3.88(Ft/s)
Travel time through pipe =    0.06 min.
Time of concentration (TC) =     5.99 min.


++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station        5.000 to Point/Station        5.000
**** SUBAREA FLOW ADDITION ****
```

A-4

```
------------------------------------------------------------------------
RESIDENTIAL(11+ dwl/acre)
Decimal fraction soil group A = 0.000
Decimal fraction soil group B = 1.000
Decimal fraction soil group C = 0.000
Decimal fraction soil group D = 0.000
SCS curve number for soil(AMC 2)  = 56.00
Adjusted SCS curve number for AMC 3 = 75.80
Pervious ratio(Ap) = 0.2000     Max loss rate(Fm)=     0.088(In/Hr)
Time of concentration =     5.99 min.
Rainfall intensity =      4.784(In/Hr) for a   100.0 year storm
Effective runoff coefficient used for area,(total area with modified
rational method)(Q=KCIA) is C = 0.883
Subarea runoff =      1.889(CFS) for    0.450(Ac.)
Total runoff =      3.846(CFS)
Effective area this stream =        0.91(Ac.)
Total Study Area (Main Stream No. 1) =        0.91(Ac.)
Area averaged Fm value =    0.088(In/Hr)


++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station        5.000 to Point/Station        6.000
**** PIPEFLOW TRAVEL TIME (Program estimated size) ****
------------------------------------------------------------------------
Upstream point/station elevation =   704.610(Ft.)
Downstream point/station elevation =   703.830(Ft.)
Pipe length  =   156.00(Ft.)   Manning's N = 0.012
No. of pipes = 1  Required pipe flow  =     3.846(CFS)
Nearest computed pipe diameter  =     15.00(In.)
Calculated individual pipe flow  =     3.846(CFS)
```

```
Normal flow depth in pipe =    9.94(In.)
Flow top width inside pipe =   14.19(In.)
Critical Depth =    9.52(In.)
Pipe flow velocity =      4.46(Ft/s)
Travel time through pipe =    0.58 min.
Time of concentration (TC) =     6.57 min.


++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station        6.000 to Point/Station        6.000
**** SUBAREA FLOW ADDITION **** A-5
------------------------------------------------------------------------------
RESIDENTIAL(11+ dwl/acre)
Decimal fraction soil group A = 0.000
Decimal fraction soil group B = 1.000
Decimal fraction soil group C = 0.000
Decimal fraction soil group D = 0.000
SCS curve number for soil(AMC 2)  = 56.00
Adjusted SCS curve number for AMC 3 = 75.80
Pervious ratio(Ap) = 0.2000     Max loss rate(Fm)=     0.088(In/Hr)
Time of concentration =     6.57 min.
Rainfall intensity =      4.525(In/Hr) for a   100.0 year storm
Effective runoff coefficient used for area,(total area with modified
rational method)(Q=KCIA) is C = 0.882
Subarea runoff =      1.664(CFS) for    0.470(Ac.)
Total runoff =      5.510(CFS)
Effective area this stream =        1.38(Ac.)
Total Study Area (Main Stream No. 1) =        1.38(Ac.)
Area averaged Fm value =    0.088(In/Hr)


++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station        6.000 to Point/Station        7.000
**** PIPEFLOW TRAVEL TIME (Program estimated size) ****
------------------------------------------------------------------------------
Upstream point/station elevation =   703.830(Ft.)
Downstream point/station elevation =   703.710(Ft.)
Pipe length  =    15.00(Ft.)   Manning's N = 0.012
No. of pipes = 1  Required pipe flow  =     5.510(CFS)
Nearest computed pipe diameter  =     15.00(In.)
Calculated individual pipe flow  =     5.510(CFS)
Normal flow depth in pipe =   10.92(In.)
Flow top width inside pipe =   13.35(In.)
Critical Depth =   11.41(In.)
Pipe flow velocity =      5.76(Ft/s)
Travel time through pipe =    0.04 min.
Time of concentration (TC) =     6.61 min.


++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station        7.000 to Point/Station        7.000
**** SUBAREA FLOW ADDITION **** A-6
------------------------------------------------------------------------------
RESIDENTIAL(11+ dwl/acre)
Decimal fraction soil group A = 0.000
Decimal fraction soil group B = 1.000
Decimal fraction soil group C = 0.000
Decimal fraction soil group D = 0.000
SCS curve number for soil(AMC 2)  = 56.00
Adjusted SCS curve number for AMC 3 = 75.80
Pervious ratio(Ap) = 0.2000     Max loss rate(Fm)=     0.088(In/Hr)
Time of concentration =     6.61 min.
Rainfall intensity =      4.507(In/Hr) for a   100.0 year storm
```

```
Effective runoff coefficient used for area,(total area with modified
rational method)(Q=KCIA) is C = 0.882
Subarea runoff =      2.364(CFS) for    0.600(Ac.)
Total runoff =      7.874(CFS)
Effective area this stream =        1.98(Ac.)
Total Study Area (Main Stream No. 1) =        1.98(Ac.)
Area averaged Fm value =    0.088(In/Hr)


++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station        7.000 to Point/Station        8.000
**** PIPEFLOW TRAVEL TIME (Program estimated size) ****
------------------------------------------------------------------------
Upstream point/station elevation =   703.710(Ft.)
Downstream point/station elevation =   703.270(Ft.)
Pipe length  =    90.00(Ft.)   Manning's N = 0.012
No. of pipes = 1  Required pipe flow  =     7.874(CFS)
Nearest computed pipe diameter  =     18.00(In.)
Calculated individual pipe flow  =     7.874(CFS)
Normal flow depth in pipe =   14.58(In.)
Flow top width inside pipe =   14.13(In.)
Critical Depth =   13.04(In.)
Pipe flow velocity =      5.13(Ft/s)
Travel time through pipe =    0.29 min.
Time of concentration (TC) =     6.90 min.


++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station        8.000 to Point/Station        8.000
**** SUBAREA FLOW ADDITION ****
```

A-7

```
------------------------------------------------------------------------
RESIDENTIAL(11+ dwl/acre)
Decimal fraction soil group A = 0.000
Decimal fraction soil group B = 1.000
Decimal fraction soil group C = 0.000
Decimal fraction soil group D = 0.000
SCS curve number for soil(AMC 2)  = 56.00
Adjusted SCS curve number for AMC 3 = 75.80
Pervious ratio(Ap) = 0.2000     Max loss rate(Fm)=     0.088(In/Hr)
Time of concentration =     6.90 min.
Rainfall intensity =      4.391(In/Hr) for a   100.0 year storm
Effective runoff coefficient used for area,(total area with modified
rational method)(Q=KCIA) is C = 0.882
Subarea runoff =      0.763(CFS) for    0.250(Ac.)
Total runoff =      8.637(CFS)
Effective area this stream =        2.23(Ac.)
Total Study Area (Main Stream No. 1) =        2.23(Ac.)
Area averaged Fm value =    0.088(In/Hr)


++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station        8.000 to Point/Station        9.000
**** PIPEFLOW TRAVEL TIME (Program estimated size) ****
------------------------------------------------------------------------
Upstream point/station elevation =   703.270(Ft.)
Downstream point/station elevation =   702.910(Ft.)
Pipe length  =    72.00(Ft.)   Manning's N = 0.012
No. of pipes = 1  Required pipe flow  =     8.637(CFS)
Nearest computed pipe diameter  =     21.00(In.)
Calculated individual pipe flow  =     8.637(CFS)
Normal flow depth in pipe =   13.09(In.)
Flow top width inside pipe =   20.35(In.)
Critical Depth =   13.11(In.)
```

```
Pipe flow velocity =      5.48(Ft/s)
Travel time through pipe =    0.22 min.
Time of concentration (TC) =     7.12 min.


++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station        9.000 to Point/Station        9.000
**** SUBAREA FLOW ADDITION **** A-8
----------------------------------------------------------------------
RESIDENTIAL(11+ dwl/acre)
Decimal fraction soil group A = 0.000
Decimal fraction soil group B = 1.000
Decimal fraction soil group C = 0.000
Decimal fraction soil group D = 0.000
SCS curve number for soil(AMC 2)  = 56.00
Adjusted SCS curve number for AMC 3 = 75.80
Pervious ratio(Ap) = 0.2000     Max loss rate(Fm)=     0.088(In/Hr)
Time of concentration =     7.12 min.
Rainfall intensity =      4.310(In/Hr) for a   100.0 year storm
Effective runoff coefficient used for area,(total area with modified
rational method)(Q=KCIA) is C = 0.882
Subarea runoff =      2.268(CFS) for    0.640(Ac.)
Total runoff =     10.905(CFS)
Effective area this stream =        2.87(Ac.)
Total Study Area (Main Stream No. 1) =        2.87(Ac.)
Area averaged Fm value =    0.088(In/Hr)


++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station        9.000 to Point/Station        9.500
**** PIPEFLOW TRAVEL TIME (Program estimated size) ****
----------------------------------------------------------------------
Upstream point/station elevation =   702.910(Ft.)
Downstream point/station elevation =   702.660(Ft.)
Pipe length  =    50.00(Ft.)   Manning's N = 0.012
No. of pipes = 1  Required pipe flow  =    10.905(CFS)
Nearest computed pipe diameter  =     21.00(In.)
Calculated individual pipe flow  =    10.905(CFS)
Normal flow depth in pipe =   15.56(In.)
Flow top width inside pipe =   18.40(In.)
Critical Depth =   14.77(In.)
Pipe flow velocity =      5.71(Ft/s)
Travel time through pipe =    0.15 min.
Time of concentration (TC) =     7.27 min.


++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station        9.500 to Point/Station        9.500
**** SUBAREA FLOW ADDITION **** A-9
----------------------------------------------------------------------
RESIDENTIAL(11+ dwl/acre)
Decimal fraction soil group A = 0.000
Decimal fraction soil group B = 1.000
Decimal fraction soil group C = 0.000
Decimal fraction soil group D = 0.000
SCS curve number for soil(AMC 2)  = 56.00
Adjusted SCS curve number for AMC 3 = 75.80
Pervious ratio(Ap) = 0.2000     Max loss rate(Fm)=     0.088(In/Hr)
Time of concentration =     7.27 min.
Rainfall intensity =      4.258(In/Hr) for a   100.0 year storm
Effective runoff coefficient used for area,(total area with modified
rational method)(Q=KCIA) is C = 0.881
Subarea runoff =      1.742(CFS) for    0.500(Ac.)
```

```
Total runoff =     12.647(CFS)
Effective area this stream =        3.37(Ac.)
Total Study Area (Main Stream No. 1) =        3.37(Ac.)
Area averaged Fm value =    0.088(In/Hr)


++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station        9.500 to Point/Station       14.000
**** PIPEFLOW TRAVEL TIME (Program estimated size) ****
------------------------------------------------------------------------
Upstream point/station elevation =   702.660(Ft.)
Downstream point/station elevation =   702.560(Ft.)
Pipe length  =    20.00(Ft.)   Manning's N = 0.012
No. of pipes = 1  Required pipe flow  =    12.647(CFS)
Nearest computed pipe diameter  =     24.00(In.)
Calculated individual pipe flow  =    12.647(CFS)
Normal flow depth in pipe =   15.21(In.)
Flow top width inside pipe =   23.12(In.)
Critical Depth =   15.36(In.)
Pipe flow velocity =      6.02(Ft/s)
Travel time through pipe =    0.06 min.
Time of concentration (TC) =     7.32 min.


++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station       14.000 to Point/Station       14.000
**** CONFLUENCE OF MAIN STREAMS ****
------------------------------------------------------------------------
The following data inside Main Stream is listed:
In Main Stream number: 1
Stream flow area =      3.370(Ac.)
Runoff from this stream =     12.647(CFS)
Time of concentration =    7.32 min.
Rainfall intensity =     4.238(In/Hr)
Area averaged loss rate (Fm) =    0.0880(In/Hr)
Area averaged Pervious ratio (Ap) = 0.2000
Program is now starting with Main Stream No. 2


++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station       10.000 to Point/Station       11.000
**** INITIAL AREA EVALUATION **** A-10
------------------------------------------------------------------------
RESIDENTIAL(11+ dwl/acre)
Decimal fraction soil group A = 0.000
Decimal fraction soil group B = 1.000
Decimal fraction soil group C = 0.000
Decimal fraction soil group D = 0.000
SCS curve number for soil(AMC 2)  = 56.00
Adjusted SCS curve number for AMC 3 = 75.80
Pervious ratio(Ap) = 0.2000     Max loss rate(Fm)=     0.088(In/Hr)
Initial subarea data:
Initial area flow distance =   180.000(Ft.)
Top (of initial area) elevation =   708.390(Ft.)
Bottom (of initial area) elevation =   707.500(Ft.)
Difference in elevation =     0.890(Ft.)
Slope =    0.00494  s(%)=       0.49
TC = k(0.324)*[(length^3)/(elevation change)]^0.2
Initial area time of concentration =    7.479 min.
Rainfall intensity =      4.186(In/Hr) for a   100.0 year storm
Effective runoff coefficient used for area (Q=KCIA) is C = 0.881
Subarea runoff =      0.590(CFS)
Total initial stream area =        0.160(Ac.)
```

```
Pervious area fraction = 0.200
Initial area Fm value =    0.088(In/Hr)


++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station       11.000 to Point/Station       12.000
**** PIPEFLOW TRAVEL TIME (Program estimated size) ****
------------------------------------------------------------------------
Upstream point/station elevation =   705.000(Ft.)
Downstream point/station elevation =   704.200(Ft.)
Pipe length  =   158.00(Ft.)   Manning's N = 0.012
No. of pipes = 1  Required pipe flow  =     0.590(CFS)
Nearest computed pipe diameter  =      9.00(In.)
Calculated individual pipe flow  =     0.590(CFS)
Normal flow depth in pipe =    4.30(In.)
Flow top width inside pipe =    8.99(In.)
Critical Depth =    4.18(In.)
Pipe flow velocity =      2.83(Ft/s)
Travel time through pipe =    0.93 min.
Time of concentration (TC) =     8.41 min.


++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station       12.000 to Point/Station       12.000
**** SUBAREA FLOW ADDITION ****
```
A-11
```
------------------------------------------------------------------------
RESIDENTIAL(11+ dwl/acre)
Decimal fraction soil group A = 0.000
Decimal fraction soil group B = 1.000
Decimal fraction soil group C = 0.000
Decimal fraction soil group D = 0.000
SCS curve number for soil(AMC 2)  = 56.00
Adjusted SCS curve number for AMC 3 = 75.80
Pervious ratio(Ap) = 0.2000     Max loss rate(Fm)=     0.088(In/Hr)
Time of concentration =     8.41 min.
Rainfall intensity =      3.901(In/Hr) for a   100.0 year storm
Effective runoff coefficient used for area,(total area with modified
rational method)(Q=KCIA) is C = 0.880
Subarea runoff =      1.092(CFS) for    0.330(Ac.)
Total runoff =      1.682(CFS)
Effective area this stream =        0.49(Ac.)
Total Study Area (Main Stream No. 2) =        3.86(Ac.)
Area averaged Fm value =    0.088(In/Hr)


++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station       12.000 to Point/Station       13.000
**** PIPEFLOW TRAVEL TIME (Program estimated size) ****
------------------------------------------------------------------------
Upstream point/station elevation =   704.200(Ft.)
Downstream point/station elevation =   702.810(Ft.)
Pipe length  =   130.00(Ft.)   Manning's N = 0.012
No. of pipes = 1  Required pipe flow  =     1.682(CFS)
Nearest computed pipe diameter  =      9.00(In.)
Calculated individual pipe flow  =     1.682(CFS)
Normal flow depth in pipe =    6.73(In.)
Flow top width inside pipe =    7.82(In.)
Critical Depth =    7.15(In.)
Pipe flow velocity =      4.75(Ft/s)
Travel time through pipe =    0.46 min.
Time of concentration (TC) =     8.87 min.
```

```
++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station       13.000 to Point/Station       13.000
**** SUBAREA FLOW ADDITION **** A-12
------------------------------------------------------------------------
RESIDENTIAL(11+ dwl/acre)
Decimal fraction soil group A = 0.000
Decimal fraction soil group B = 1.000
Decimal fraction soil group C = 0.000
Decimal fraction soil group D = 0.000
SCS curve number for soil(AMC 2)  = 56.00
Adjusted SCS curve number for AMC 3 = 75.80
Pervious ratio(Ap) = 0.2000     Max loss rate(Fm)=     0.088(In/Hr)
Time of concentration =     8.87 min.
Rainfall intensity =      3.780(In/Hr) for a   100.0 year storm
Effective runoff coefficient used for area,(total area with modified
rational method)(Q=KCIA) is C = 0.879
Subarea runoff =      0.378(CFS) for    0.130(Ac.)
Total runoff =      2.060(CFS)
Effective area this stream =        0.62(Ac.)
Total Study Area (Main Stream No. 2) =        3.99(Ac.)
Area averaged Fm value =    0.088(In/Hr)


++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station       13.000 to Point/Station       14.000
**** PIPEFLOW TRAVEL TIME (Program estimated size) ****
------------------------------------------------------------------------
Upstream point/station elevation =   702.810(Ft.)
Downstream point/station elevation =   702.560(Ft.)
Pipe length  =    50.00(Ft.)   Manning's N = 0.012
No. of pipes = 1  Required pipe flow  =     2.060(CFS)
Nearest computed pipe diameter  =     12.00(In.)
Calculated individual pipe flow  =     2.060(CFS)
Normal flow depth in pipe =    7.79(In.)
Flow top width inside pipe =   11.45(In.)
Critical Depth =    7.36(In.)
Pipe flow velocity =      3.82(Ft/s)
Travel time through pipe =    0.22 min.
Time of concentration (TC) =     9.08 min.


++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station       14.000 to Point/Station       14.000
**** CONFLUENCE OF MAIN STREAMS ****
------------------------------------------------------------------------
The following data inside Main Stream is listed:
In Main Stream number: 2
Stream flow area =      0.620(Ac.)
Runoff from this stream =      2.060(CFS)
Time of concentration =    9.08 min.
Rainfall intensity =     3.725(In/Hr)
Area averaged loss rate (Fm) =    0.0880(In/Hr)
Area averaged Pervious ratio (Ap) = 0.2000
Summary of stream data:

Stream Flow rate    Area    TC     Fm       Rainfall Intensity
 No.    (CFS)   (Ac.)       (min) (In/Hr)     (In/Hr)


1     12.65     3.370      7.32    0.088      4.238
2      2.06     0.620      9.08    0.088      3.725
Qmax(1) =
         1.000 *    1.000 *    12.647) +
```

```
         1.141 *    0.806 *     2.060) + =      14.542
Qmax(2) =
         0.876 *    1.000 *    12.647) +
         1.000 *    1.000 *     2.060) + =      13.143

Total of 2 main streams to confluence:
Flow rates before confluence point:
      13.647       3.060
Maximum flow rates at confluence using above data:
       14.542       13.143
Area of streams before confluence:
        3.370        0.620
Effective area values after confluence:
        3.870        3.990


Results of confluence:
Total flow rate =     14.542(CFS)
Time of concentration =     7.325 min.
Effective stream area after confluence  =      3.870(Ac.)
Study area average Pervious fraction(Ap) =  0.200
Study area average soil loss rate(Fm) =    0.088(In/Hr)
Study area total =       3.99(Ac.)


++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station       14.000 to Point/Station       15.000
**** PIPEFLOW TRAVEL TIME (Program estimated size) ****
------------------------------------------------------------------------
Upstream point/station elevation =   702.560(Ft.)
Downstream point/station elevation =   702.000(Ft.)
Pipe length  =    80.00(Ft.)   Manning's N = 0.012
No. of pipes = 1  Required pipe flow  =    14.542(CFS)
Nearest computed pipe diameter  =     24.00(In.)
Calculated individual pipe flow  =    14.542(CFS)
Normal flow depth in pipe =   14.93(In.)
Flow top width inside pipe =   23.27(In.)
Critical Depth =   16.48(In.)
Pipe flow velocity =      7.08(Ft/s)
Travel time through pipe =    0.19 min.
Time of concentration (TC) =     7.51 min.


++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station       15.000 to Point/Station       15.000
**** SUBAREA FLOW ADDITION ****
------------------------------------------------------------------------
RESIDENTIAL(11+ dwl/acre)
Decimal fraction soil group A = 0.000
Decimal fraction soil group B = 1.000
Decimal fraction soil group C = 0.000
Decimal fraction soil group D = 0.000
SCS curve number for soil(AMC 2)  = 56.00
Adjusted SCS curve number for AMC 3 = 75.80
Pervious ratio(Ap) = 0.2000     Max loss rate(Fm)=     0.088(In/Hr)
Time of concentration =     7.51 min.
Rainfall intensity =      4.174(In/Hr) for a   100.0 year storm
Effective runoff coefficient used for area,(total area with modified
rational method)(Q=KCIA) is C = 0.881
Subarea runoff =      0.573(CFS) for    0.240(Ac.)
Total runoff =     15.115(CFS)
Effective area this stream =        4.11(Ac.)
Total Study Area (Main Stream No. 1) =        4.23(Ac.)
```

A-13

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Area averaged Fm value =    0.088(In/Hr)


++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station       15.000 to Point/Station       26.000
**** PIPEFLOW TRAVEL TIME (Program estimated size) ****
----------------------------------------------------------------------
Upstream point/station elevation =   702.000(Ft.)
Downstream point/station elevation =   701.870(Ft.)
Pipe length  =    26.00(Ft.)   Manning's N = 0.012
No. of pipes = 1  Required pipe flow  =    15.115(CFS)
Nearest computed pipe diameter  =     24.00(In.)
Calculated individual pipe flow  =    15.115(CFS)
Normal flow depth in pipe =   17.34(In.)
Flow top width inside pipe =   21.49(In.)
Critical Depth =   16.82(In.)
Pipe flow velocity =      6.22(Ft/s)
Travel time through pipe =    0.07 min.
Time of concentration (TC) =     7.58 min.


++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station       26.000 to Point/Station       26.000
**** CONFLUENCE OF MAIN STREAMS ****
----------------------------------------------------------------------
The following data inside Main Stream is listed:
In Main Stream number: 1
Stream flow area =      4.110(Ac.)
Runoff from this stream =     15.115(CFS)
Time of concentration =    7.58 min.
Rainfall intensity =     4.151(In/Hr)
Area averaged loss rate (Fm) =    0.0880(In/Hr)
Area averaged Pervious ratio (Ap) = 0.2000
Program is now starting with Main Stream No. 2


++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station       16.000 to Point/Station       17.000
**** INITIAL AREA EVALUATION **** A-14
----------------------------------------------------------------------
RESIDENTIAL(11+ dwl/acre)
Decimal fraction soil group A = 0.000
Decimal fraction soil group B = 1.000
Decimal fraction soil group C = 0.000
Decimal fraction soil group D = 0.000
SCS curve number for soil(AMC 2)  = 56.00
Adjusted SCS curve number for AMC 3 = 75.80
Pervious ratio(Ap) = 0.2000     Max loss rate(Fm)=     0.088(In/Hr)
Initial subarea data:
Initial area flow distance =   235.000(Ft.)
Top (of initial area) elevation =   710.700(Ft.)
Bottom (of initial area) elevation =   707.930(Ft.)
Difference in elevation =     2.770(Ft.)
Slope =    0.01179  s(%)=       1.18
TC = k(0.324)*[(length^3)/(elevation change)]^0.2
Initial area time of concentration =    6.993 min.
Rainfall intensity =      4.358(In/Hr) for a   100.0 year storm
Effective runoff coefficient used for area (Q=KCIA) is C = 0.882
Subarea runoff =      2.306(CFS)
Total initial stream area =        0.600(Ac.)
Pervious area fraction = 0.200
Initial area Fm value =    0.088(In/Hr)
```

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++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station       17.000 to Point/Station       18.000
**** PIPEFLOW TRAVEL TIME (Program estimated size) ****
----------------------------------------------------------------------
Upstream point/station elevation =   705.500(Ft.)
Downstream point/station elevation =   704.940(Ft.)
Pipe length  =    50.00(Ft.)   Manning's N = 0.012
No. of pipes = 1  Required pipe flow  =     2.306(CFS)
Nearest computed pipe diameter  =     12.00(In.)
Calculated individual pipe flow  =     2.306(CFS)
Normal flow depth in pipe =    6.45(In.)
Flow top width inside pipe =   11.97(In.)
Critical Depth =    7.79(In.)
Pipe flow velocity =      5.36(Ft/s)
Travel time through pipe =    0.16 min.
Time of concentration (TC) =     7.15 min.


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Process from Point/Station       18.000 to Point/Station       18.000
**** SUBAREA FLOW ADDITION **** A-15
----------------------------------------------------------------------
RESIDENTIAL(11+ dwl/acre)
Decimal fraction soil group A = 0.000
Decimal fraction soil group B = 1.000
Decimal fraction soil group C = 0.000
Decimal fraction soil group D = 0.000
SCS curve number for soil(AMC 2)  = 56.00
Adjusted SCS curve number for AMC 3 = 75.80
Pervious ratio(Ap) = 0.2000     Max loss rate(Fm)=     0.088(In/Hr)
Time of concentration =     7.15 min.
Rainfall intensity =      4.301(In/Hr) for a   100.0 year storm
Effective runoff coefficient used for area,(total area with modified
rational method)(Q=KCIA) is C = 0.882
Subarea runoff =      1.258(CFS) for    0.340(Ac.)
Total runoff =      3.564(CFS)
Effective area this stream =        0.94(Ac.)
Total Study Area (Main Stream No. 2) =        5.17(Ac.)
Area averaged Fm value =    0.088(In/Hr)


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Process from Point/Station       18.000 to Point/Station       19.000
**** PIPEFLOW TRAVEL TIME (Program estimated size) ****
----------------------------------------------------------------------
Upstream point/station elevation =   704.940(Ft.)
Downstream point/station elevation =   704.410(Ft.)
Pipe length  =   106.00(Ft.)   Manning's N = 0.012
No. of pipes = 1  Required pipe flow  =     3.564(CFS)
Nearest computed pipe diameter  =     15.00(In.)
Calculated individual pipe flow  =     3.564(CFS)
Normal flow depth in pipe =    9.42(In.)
Flow top width inside pipe =   14.50(In.)
Critical Depth =    9.15(In.)
Pipe flow velocity =      4.39(Ft/s)
Travel time through pipe =    0.40 min.
Time of concentration (TC) =     7.55 min.
```

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++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station       19.000 to Point/Station       19.000
**** SUBAREA FLOW ADDITION **** A-16
----------------------------------------------------------------------
RESIDENTIAL(11+ dwl/acre)
Decimal fraction soil group A = 0.000
Decimal fraction soil group B = 1.000
Decimal fraction soil group C = 0.000
Decimal fraction soil group D = 0.000
SCS curve number for soil(AMC 2)  = 56.00
Adjusted SCS curve number for AMC 3 = 75.80
Pervious ratio(Ap) = 0.2000     Max loss rate(Fm)=     0.088(In/Hr)
Time of concentration =     7.55 min.
Rainfall intensity =      4.162(In/Hr) for a   100.0 year storm
Effective runoff coefficient used for area,(total area with modified
rational method)(Q=KCIA) is C = 0.881
Subarea runoff =      0.652(CFS) for    0.210(Ac.)
Total runoff =      4.216(CFS)
Effective area this stream =        1.15(Ac.)
Total Study Area (Main Stream No. 2) =        5.38(Ac.)
Area averaged Fm value =    0.088(In/Hr)


++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station       19.000 to Point/Station       20.000
**** PIPEFLOW TRAVEL TIME (Program estimated size) ****
----------------------------------------------------------------------
Upstream point/station elevation =   704.410(Ft.)
Downstream point/station elevation =   704.150(Ft.)
Pipe length  =    47.00(Ft.)   Manning's N = 0.012
No. of pipes = 1  Required pipe flow  =     4.216(CFS)
Nearest computed pipe diameter  =     15.00(In.)
Calculated individual pipe flow  =     4.216(CFS)
Normal flow depth in pipe =   10.24(In.)
Flow top width inside pipe =   13.96(In.)
Critical Depth =    9.97(In.)
Pipe flow velocity =      4.72(Ft/s)
Travel time through pipe =    0.17 min.
Time of concentration (TC) =     7.72 min.


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Process from Point/Station       20.000 to Point/Station       20.000
**** SUBAREA FLOW ADDITION **** A-17
----------------------------------------------------------------------
RESIDENTIAL(11+ dwl/acre)
Decimal fraction soil group A = 0.000
Decimal fraction soil group B = 1.000
Decimal fraction soil group C = 0.000
Decimal fraction soil group D = 0.000
SCS curve number for soil(AMC 2)  = 56.00
Adjusted SCS curve number for AMC 3 = 75.80
Pervious ratio(Ap) = 0.2000     Max loss rate(Fm)=     0.088(In/Hr)
Time of concentration =     7.72 min.
Rainfall intensity =      4.108(In/Hr) for a   100.0 year storm
Effective runoff coefficient used for area,(total area with modified
rational method)(Q=KCIA) is C = 0.881
Subarea runoff =      1.572(CFS) for    0.450(Ac.)
Total runoff =      5.788(CFS)
Effective area this stream =        1.60(Ac.)
Total Study Area (Main Stream No. 2) =        5.83(Ac.)
```

```
Area averaged Fm value =    0.088(In/Hr)


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Process from Point/Station       20.000 to Point/Station       21.000
**** PIPEFLOW TRAVEL TIME (Program estimated size) ****
----------------------------------------------------------------------
Upstream point/station elevation =   704.150(Ft.)
Downstream point/station elevation =   703.670(Ft.)
Pipe length  =    88.00(Ft.)   Manning's N = 0.012
No. of pipes = 1  Required pipe flow  =     5.788(CFS)
Nearest computed pipe diameter  =     18.00(In.)
Calculated individual pipe flow  =     5.788(CFS)
Normal flow depth in pipe =   10.98(In.)
Flow top width inside pipe =   17.56(In.)
Critical Depth =   11.15(In.)
Pipe flow velocity =      5.13(Ft/s)
Travel time through pipe =    0.29 min.
Time of concentration (TC) =     8.00 min.


++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station       21.000 to Point/Station       21.000
**** SUBAREA FLOW ADDITION **** A-18
----------------------------------------------------------------------
RESIDENTIAL(11+ dwl/acre)
Decimal fraction soil group A = 0.000
Decimal fraction soil group B = 1.000
Decimal fraction soil group C = 0.000
Decimal fraction soil group D = 0.000
SCS curve number for soil(AMC 2)  = 56.00
Adjusted SCS curve number for AMC 3 = 75.80
Pervious ratio(Ap) = 0.2000     Max loss rate(Fm)=     0.088(In/Hr)
Time of concentration =     8.00 min.
Rainfall intensity =      4.019(In/Hr) for a   100.0 year storm
Effective runoff coefficient used for area,(total area with modified
rational method)(Q=KCIA) is C = 0.880
Subarea runoff =      0.969(CFS) for    0.310(Ac.)
Total runoff =      6.757(CFS)
Effective area this stream =        1.91(Ac.)
Total Study Area (Main Stream No. 2) =        6.14(Ac.)
Area averaged Fm value =    0.088(In/Hr)


++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station       21.000 to Point/Station       22.000
**** PIPEFLOW TRAVEL TIME (Program estimated size) ****
----------------------------------------------------------------------
Upstream point/station elevation =   703.670(Ft.)
Downstream point/station elevation =   703.290(Ft.)
Pipe length  =    70.00(Ft.)   Manning's N = 0.012
No. of pipes = 1  Required pipe flow  =     6.757(CFS)
Nearest computed pipe diameter  =     18.00(In.)
Calculated individual pipe flow  =     6.757(CFS)
Normal flow depth in pipe =   12.25(In.)
Flow top width inside pipe =   16.79(In.)
Critical Depth =   12.08(In.)
Pipe flow velocity =      5.28(Ft/s)
Travel time through pipe =    0.22 min.
Time of concentration (TC) =     8.22 min.
```

++
Process from Point/Station 22.000 to Point/Station 22.000
**** SUBAREA FLOW ADDITION **** **A-19**

RESIDENTIAL(11+ dwl/acre)
Decimal fraction soil group A = 0.000
Decimal fraction soil group B = 1.000
Decimal fraction soil group C = 0.000
Decimal fraction soil group D = 0.000
SCS curve number for soil(AMC 2) = 56.00
Adjusted SCS curve number for AMC 3 = 75.80
Pervious ratio(Ap) = 0.2000 Max loss rate(Fm)= 0.088(In/Hr)
Time of concentration = 8.22 min.
Rainfall intensity = 3.954(In/Hr) for a 100.0 year storm
Effective runoff coefficient used for area,(total area with modified rational method)(Q=KCIA) is C = 0.880
Subarea runoff = 0.827(CFS) for 0.270(Ac.)
Total runoff = 7.585(CFS)
Effective area this stream = 2.18(Ac.)
Total Study Area (Main Stream No. 2) = 6.41(Ac.)
Area averaged Fm value = 0.088(In/Hr)

++
Process from Point/Station 22.000 to Point/Station 23.000
**** PIPEFLOW TRAVEL TIME (Program estimated size) ****

Upstream point/station elevation = 703.290(Ft.)
Downstream point/station elevation = 702.930(Ft.)
Pipe length = 66.00(Ft.) Manning's N = 0.012
No. of pipes = 1 Required pipe flow = 7.585(CFS)
Nearest computed pipe diameter = 18.00(In.)
Calculated individual pipe flow = 7.585(CFS)
Normal flow depth in pipe = 13.38(In.)
Flow top width inside pipe = 15.72(In.)
Critical Depth = 12.81(In.)
Pipe flow velocity = 5.38(Ft/s)
Travel time through pipe = 0.20 min.
Time of concentration (TC) = 8.43 min.

++
Process from Point/Station 23.000 to Point/Station 23.000
**** SUBAREA FLOW ADDITION **** **A-20**

RESIDENTIAL(11+ dwl/acre)
Decimal fraction soil group A = 0.000
Decimal fraction soil group B = 1.000
Decimal fraction soil group C = 0.000
Decimal fraction soil group D = 0.000
SCS curve number for soil(AMC 2) = 56.00
Adjusted SCS curve number for AMC 3 = 75.80
Pervious ratio(Ap) = 0.2000 Max loss rate(Fm)= 0.088(In/Hr)
Time of concentration = 8.43 min.
Rainfall intensity = 3.896(In/Hr) for a 100.0 year storm
Effective runoff coefficient used for area,(total area with modified rational method)(Q=KCIA) is C = 0.880
Subarea runoff = 0.949(CFS) for 0.310(Ac.)
Total runoff = 8.534(CFS)
Effective area this stream = 2.49(Ac.)
Total Study Area (Main Stream No. 2) = 6.72(Ac.)
Area averaged Fm value = 0.088(In/Hr)

```
++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station       23.000 to Point/Station       24.000
**** PIPEFLOW TRAVEL TIME (Program estimated size) ****
----------------------------------------------------------------------
Upstream point/station elevation =   702.930(Ft.)
Downstream point/station elevation =   702.190(Ft.)
Pipe length  =   135.00(Ft.)   Manning's N = 0.012
No. of pipes = 1  Required pipe flow  =     8.534(CFS)
Nearest computed pipe diameter  =     21.00(In.)
Calculated individual pipe flow  =     8.534(CFS)
Normal flow depth in pipe =   12.60(In.)
Flow top width inside pipe =   20.58(In.)
Critical Depth =   13.01(In.)
Pipe flow velocity =      5.67(Ft/s)
Travel time through pipe =    0.40 min.
Time of concentration (TC) =     8.83 min.


++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station       24.000 to Point/Station       24.000
**** SUBAREA FLOW ADDITION **** A-21
----------------------------------------------------------------------
RESIDENTIAL(11+ dwl/acre)
Decimal fraction soil group A = 0.000
Decimal fraction soil group B = 1.000
Decimal fraction soil group C = 0.000
Decimal fraction soil group D = 0.000
SCS curve number for soil(AMC 2)  = 56.00
Adjusted SCS curve number for AMC 3 = 75.80
Pervious ratio(Ap) = 0.2000     Max loss rate(Fm)=     0.088(In/Hr)
Time of concentration =     8.83 min.
Rainfall intensity =      3.790(In/Hr) for a   100.0 year storm
Effective runoff coefficient used for area,(total area with modified
rational method)(Q=KCIA) is C = 0.879
Subarea runoff =      0.462(CFS) for    0.210(Ac.)
Total runoff =      8.995(CFS)
Effective area this stream =        2.70(Ac.)
Total Study Area (Main Stream No. 2) =        6.93(Ac.)
Area averaged Fm value =    0.088(In/Hr)


++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station       24.000 to Point/Station       25.000
**** PIPEFLOW TRAVEL TIME (Program estimated size) ****
----------------------------------------------------------------------
Upstream point/station elevation =   702.190(Ft.)
Downstream point/station elevation =   702.090(Ft.)
Pipe length  =    18.00(Ft.)   Manning's N = 0.012
No. of pipes = 1  Required pipe flow  =     8.995(CFS)
Nearest computed pipe diameter  =     21.00(In.)
Calculated individual pipe flow  =     8.995(CFS)
Normal flow depth in pipe =   12.98(In.)
Flow top width inside pipe =   20.40(In.)
Critical Depth =   13.37(In.)
Pipe flow velocity =      5.76(Ft/s)
Travel time through pipe =    0.05 min.
Time of concentration (TC) =     8.88 min.
```

```
++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station       25.000 to Point/Station       25.000
**** SUBAREA FLOW ADDITION **** A-22
------------------------------------------------------------------------
RESIDENTIAL(11+ dwl/acre)
Decimal fraction soil group A = 0.000
Decimal fraction soil group B = 1.000
Decimal fraction soil group C = 0.000
Decimal fraction soil group D = 0.000
SCS curve number for soil(AMC 2)  = 56.00
Adjusted SCS curve number for AMC 3 = 75.80
Pervious ratio(Ap) = 0.2000     Max loss rate(Fm)=     0.088(In/Hr)
Time of concentration =     8.88 min.
Rainfall intensity =      3.776(In/Hr) for a   100.0 year storm
Effective runoff coefficient used for area,(total area with modified
rational method)(Q=KCIA) is C = 0.879
Subarea runoff =      1.461(CFS) for    0.450(Ac.)
Total runoff =     10.457(CFS)
Effective area this stream =        3.15(Ac.)
Total Study Area (Main Stream No. 2) =        7.38(Ac.)
Area averaged Fm value =    0.088(In/Hr)


++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station       25.000 to Point/Station       26.000
**** PIPEFLOW TRAVEL TIME (Program estimated size) ****
------------------------------------------------------------------------
Upstream point/station elevation =   702.090(Ft.)
Downstream point/station elevation =   701.870(Ft.)
Pipe length  =    40.00(Ft.)   Manning's N = 0.012
No. of pipes = 1  Required pipe flow  =    10.457(CFS)
Nearest computed pipe diameter  =     21.00(In.)
Calculated individual pipe flow  =    10.457(CFS)
Normal flow depth in pipe =   14.48(In.)
Flow top width inside pipe =   19.43(In.)
Critical Depth =   14.45(In.)
Pipe flow velocity =      5.91(Ft/s)
Travel time through pipe =    0.11 min.
Time of concentration (TC) =     8.99 min.


++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station       26.000 to Point/Station       26.000
**** CONFLUENCE OF MAIN STREAMS ****
------------------------------------------------------------------------
The following data inside Main Stream is listed:
In Main Stream number: 2
Stream flow area =      3.150(Ac.)
Runoff from this stream =     10.457(CFS)
Time of concentration =    8.99 min.
Rainfall intensity =     3.748(In/Hr)
Area averaged loss rate (Fm) =    0.0880(In/Hr)
Area averaged Pervious ratio (Ap) = 0.2000
Summary of stream data:

Stream Flow rate    Area    TC     Fm       Rainfall Intensity
 No.    (CFS)   (Ac.)       (min) (In/Hr)     (In/Hr)


1     15.12     4.110      7.58    0.088      4.151
2     10.46     3.150      8.99    0.088      3.748
Qmax(1) =
```

```
         1.000 *    1.000 *    15.115) +
         1.110 *    0.843 *    10.457) + =      24.906
Qmax(2) =
         0.901 *    1.000 *    15.115) +
         1.000 *    1.000 *    10.457) + =      24.072

Total of 2 main streams to confluence:
Flow rates before confluence point:
      16.115      11.457
Maximum flow rates at confluence using above data:
       24.906       24.072
Area of streams before confluence:
        4.110        3.150
Effective area values after confluence:
        6.767        7.260


Results of confluence:
Total flow rate =     24.906(CFS)
Time of concentration =     7.583 min.
Effective stream area after confluence  =      6.767(Ac.)
Study area average Pervious fraction(Ap) =  0.200
Study area average soil loss rate(Fm) =    0.088(In/Hr)
Study area total =       7.26(Ac.)


++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station       26.000 to Point/Station       27.000
**** PIPEFLOW TRAVEL TIME (Program estimated size) ****
------------------------------------------------------------------------
Upstream point/station elevation =   701.870(Ft.)
Downstream point/station elevation =   701.720(Ft.)
Pipe length  =    80.00(Ft.)   Manning's N = 0.012
No. of pipes = 1  Required pipe flow  =    24.906(CFS)
Nearest computed pipe diameter  =     36.00(In.)
Calculated individual pipe flow  =    24.906(CFS)
Normal flow depth in pipe =   24.28(In.)
Flow top width inside pipe =   33.74(In.)
Critical Depth =   19.32(In.)
Pipe flow velocity =      4.91(Ft/s)
Travel time through pipe =    0.27 min.
Time of concentration (TC) =     7.85 min.


++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station       27.000 to Point/Station       27.000
**** SUBAREA FLOW ADDITION ****
```

A-23

```
------------------------------------------------------------------------
RESIDENTIAL(11+ dwl/acre)
Decimal fraction soil group A = 0.000
Decimal fraction soil group B = 1.000
Decimal fraction soil group C = 0.000
Decimal fraction soil group D = 0.000
SCS curve number for soil(AMC 2)  = 56.00
Adjusted SCS curve number for AMC 3 = 75.80
Pervious ratio(Ap) = 0.2000     Max loss rate(Fm)=     0.088(In/Hr)
Time of concentration =     7.85 min.
Rainfall intensity =      4.065(In/Hr) for a   100.0 year storm
Effective runoff coefficient used for area,(total area with modified
rational method)(Q=KCIA) is C = 0.881
Subarea runoff =      0.278(CFS) for    0.270(Ac.)
Total runoff =     25.184(CFS)
Effective area this stream =        7.04(Ac.)
```

```
Total Study Area (Main Stream No. 1) =        7.65(Ac.)
Area averaged Fm value =    0.088(In/Hr)


++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station       27.000 to Point/Station       28.000
**** PIPEFLOW TRAVEL TIME (Program estimated size) ****
----------------------------------------------------------------------
Upstream point/station elevation =   701.720(Ft.)
Downstream point/station elevation =   701.380(Ft.)
Pipe length  =    68.00(Ft.)   Manning's N = 0.012
No. of pipes = 1  Required pipe flow  =    25.184(CFS)
Nearest computed pipe diameter  =     30.00(In.)
Calculated individual pipe flow  =    25.184(CFS)
Normal flow depth in pipe =   20.32(In.)
Flow top width inside pipe =   28.05(In.)
Critical Depth =   20.51(In.)
Pipe flow velocity =      7.11(Ft/s)
Travel time through pipe =    0.16 min.
Time of concentration (TC) =     8.01 min.


++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station       28.000 to Point/Station       28.000
**** SUBAREA FLOW ADDITION ****
----------------------------------------------------------------------
RESIDENTIAL(11+ dwl/acre)
Decimal fraction soil group A = 0.000
Decimal fraction soil group B = 1.000
Decimal fraction soil group C = 0.000
Decimal fraction soil group D = 0.000
SCS curve number for soil(AMC 2)  = 56.00
Adjusted SCS curve number for AMC 3 = 75.80
Pervious ratio(Ap) = 0.2000     Max loss rate(Fm)=     0.088(In/Hr)
Time of concentration =     8.01 min.
Rainfall intensity =      4.016(In/Hr) for a   100.0 year storm
Effective runoff coefficient used for area,(total area with modified
rational method)(Q=KCIA) is C = 0.880
Subarea runoff =      2.414(CFS) for    0.770(Ac.)
Total runoff =     27.597(CFS)
Effective area this stream =        7.81(Ac.)
Total Study Area (Main Stream No. 1) =        8.42(Ac.)
Area averaged Fm value =    0.088(In/Hr)


++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station       28.000 to Point/Station       29.000
**** PIPEFLOW TRAVEL TIME (Program estimated size) ****
----------------------------------------------------------------------
Upstream point/station elevation =   701.380(Ft.)
Downstream point/station elevation =   701.080(Ft.)
Pipe length  =    56.00(Ft.)   Manning's N = 0.012
No. of pipes = 1  Required pipe flow  =    27.597(CFS)
Nearest computed pipe diameter  =     30.00(In.)
Calculated individual pipe flow  =    27.597(CFS)
Normal flow depth in pipe =   21.23(In.)
Flow top width inside pipe =   27.29(In.)
Critical Depth =   21.49(In.)
Pipe flow velocity =      7.44(Ft/s)
Travel time through pipe =    0.13 min.
Time of concentration (TC) =     8.14 min.
End of computations, Total Study Area =           8.42 (Ac.)
The following figures may
```

A-24

be used for a unit hydrograph study of the same area.
Note: These figures do not consider reduced effective area
effects caused by confluences in the rational equation.

Area averaged pervious area fraction(Ap) = 0.200
Area averaged SCS curve number = 56.0

San Bernardino County Rational Hydrology Program

(Hydrology Manual Date - August 1986)

CIVILCADD/CIVILDESIGN Engineering Software, (c) 1989-2012 Version 7.2
Rational Hydrology Study Date: 07/18/24

ESPERANZA - PA II
EUCALYPTUS AVENUE & AMHERST AVENUE, ONTARIO, CALIFORNIA
PROPOSED Q 100
2175-906-001

Program License Serial Number 6293

********* Hydrology Study Control Information **********

Rational hydrology study storm event year is 100.0
Computed rainfall intensity:
Storm year = 100.00 1 hour rainfall = 1.200 (In.)
Slope used for rainfall intensity curve b = 0.6000
Soil antecedent moisture condition (AMC) = 3

++

Process from Point/Station 20.000 to Point/Station 21.000
**** INITIAL AREA EVALUATION ****B-1

RESIDENTIAL(11+ dwl/acre)
Decimal fraction soil group A = 0.000
Decimal fraction soil group B = 1.000
Decimal fraction soil group C = 0.000
Decimal fraction soil group D = 0.000
SCS curve number for soil(AMC 2) = 56.00
Adjusted SCS curve number for AMC 3 = 75.80
Pervious ratio(Ap) = 0.2000 Max loss rate(Fm)= 0.088(In/Hr)
Initial subarea data:
Initial area flow distance = 140.000(Ft.)
Top (of initial area) elevation = 708.080(Ft.)
Bottom (of initial area) elevation = 706.540(Ft.)
Difference in elevation = 1.540(Ft.)
Slope = 0.01100 s(%)= 1.10
TC = k(0.324)*[(length^3)/(elevation change)]^0.2
Initial area time of concentration = 5.764 min.
Rainfall intensity = 4.894(In/Hr) for a 100.0 year storm
Effective runoff coefficient used for area (Q=KCIA) is C = 0.884
Subarea runoff = 6.920(CFS)
Total initial stream area = 1.600(Ac.)
Pervious area fraction = 0.200
Initial area Fm value = 0.088(In/Hr)
End of computations, Total Study Area = 1.60 (Ac.)
The following figures may
be used for a unit hydrograph study of the same area.
Note: These figures do not consider reduced effective area
effects caused by confluences in the rational equation.

Area averaged pervious area fraction(Ap) = 0.200
Area averaged SCS curve number = 56.0

SECTION 6

CATCH BASIN SIZING
(100-YEAR)

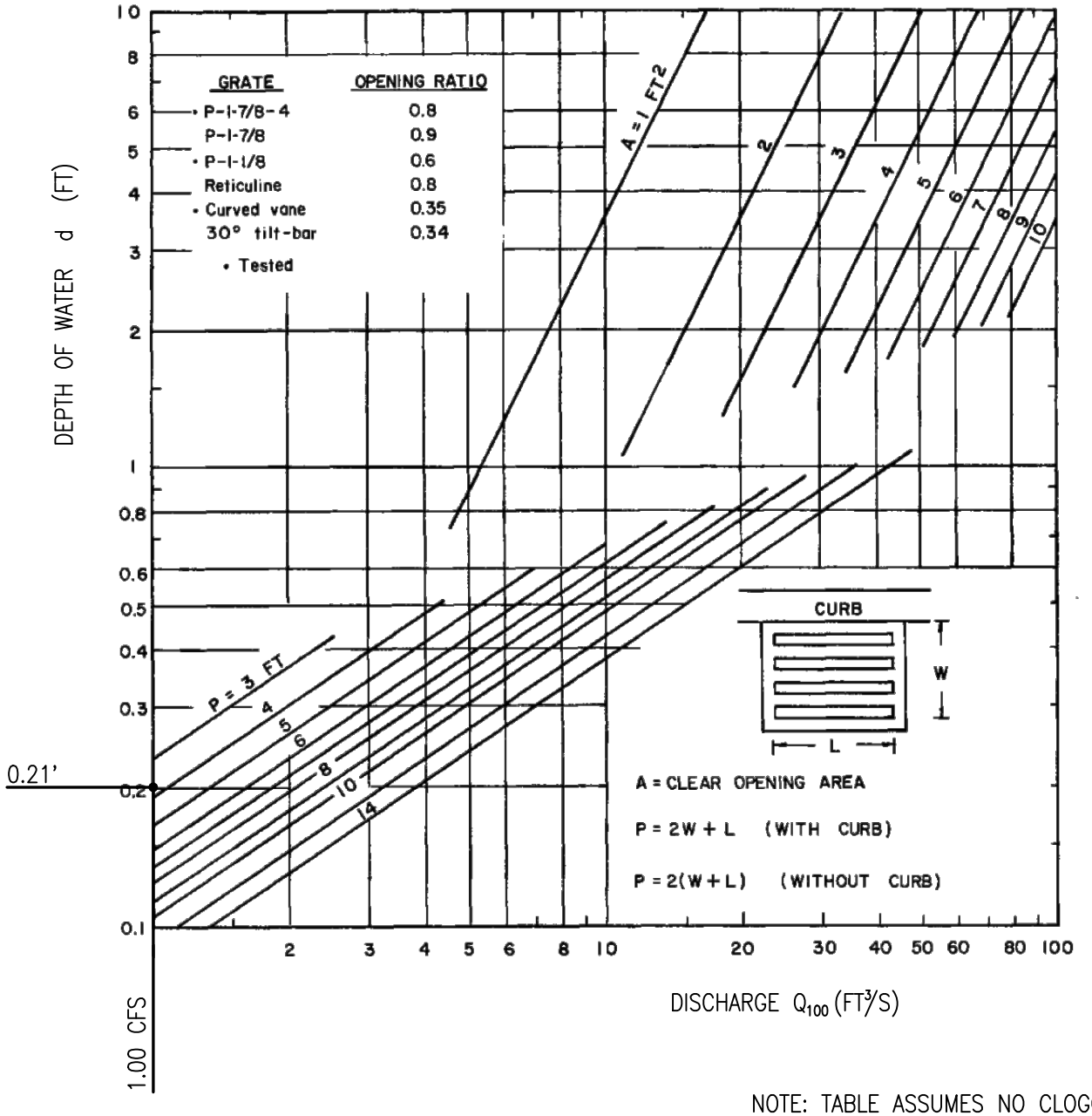
12"X12" GRATED INLET IN ALLEYS AND OPEN AREAS

Q_{100} = 0.50 CFS (LARGEST Q)

P = 2(W+L) = 4'

Q X 2 = 0.50 CFS X 2 = 1.00 CFS (CLOGGING ASSUMPTION)

RESULT: 0.21' WHICH IS LESS THAN THEN SPILL OVER DEPTH, THEREFORE OK



NOTE: TABLE ASSUMES NO CLOGGING

WALDEN & ASSOCIATES

2552 WHITE RD., SUITE B, IRVINE, CA 92614

(949) 660-0110 FAX: 660-0418

GRATE INLET CAPACITY IN SUMP CONDITION

SOURCE: U.S. DEPARTMENT OF TRANSPORTATION, HEC-22, CHART 9B

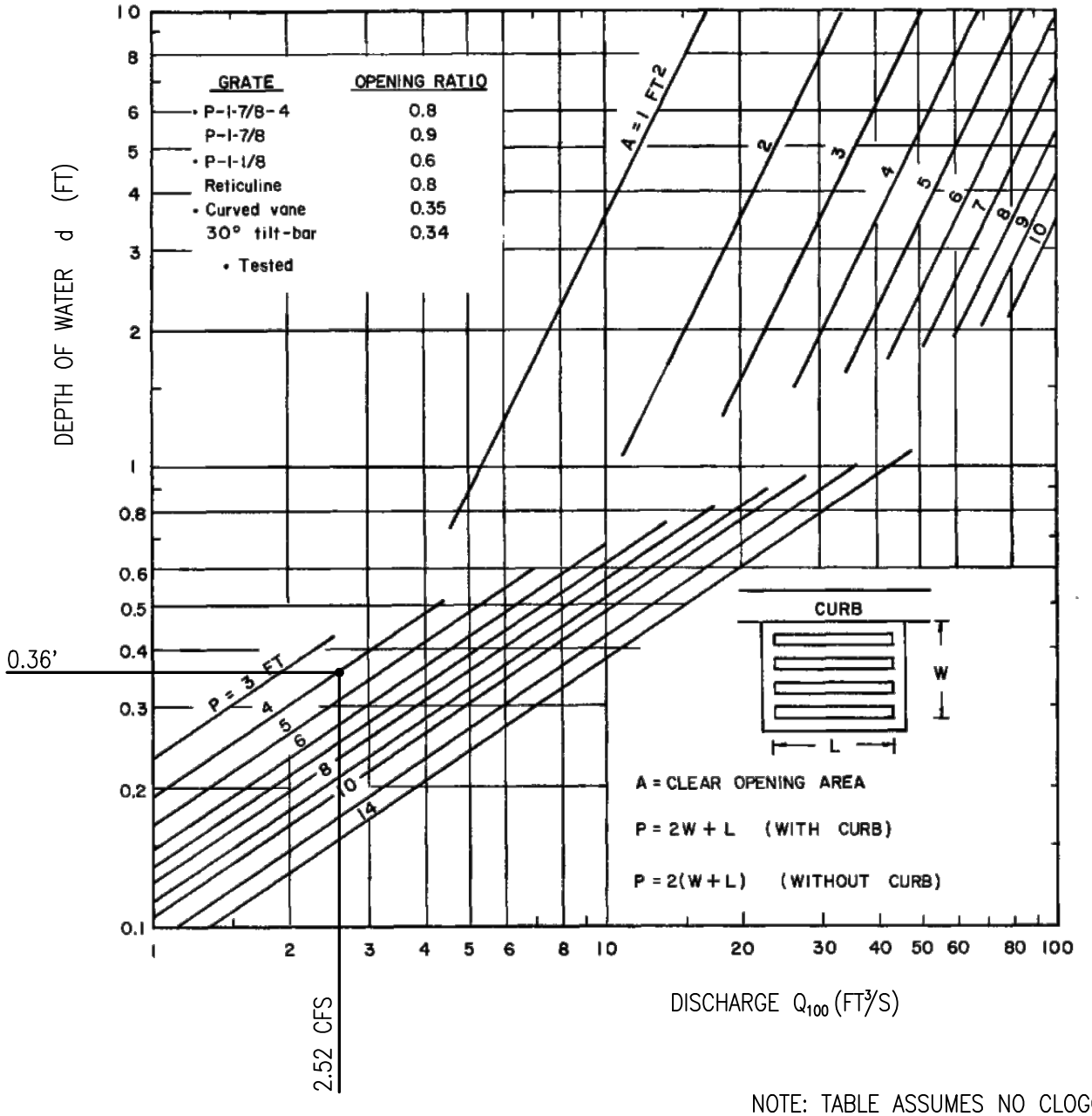
24"X24" GRATED INLET FOR AREAS A-15

Q_{100} = 1.26 CFS

P = 4'

Q X 2 = 1.26 CFS X 2 = 2.52 CFS (CLOGGING ASSUMPTION)

RESULT: 0.36' WHICH IS LESS THAN TOP OF CURB, THEREFORE OK



NOTE: TABLE ASSUMES NO CLOGGING

WALDEN & ASSOCIATES

2552 WHITE RD., SUITE B, IRVINE, CA 92614

(949) 660-0110 FAX: 660-0418

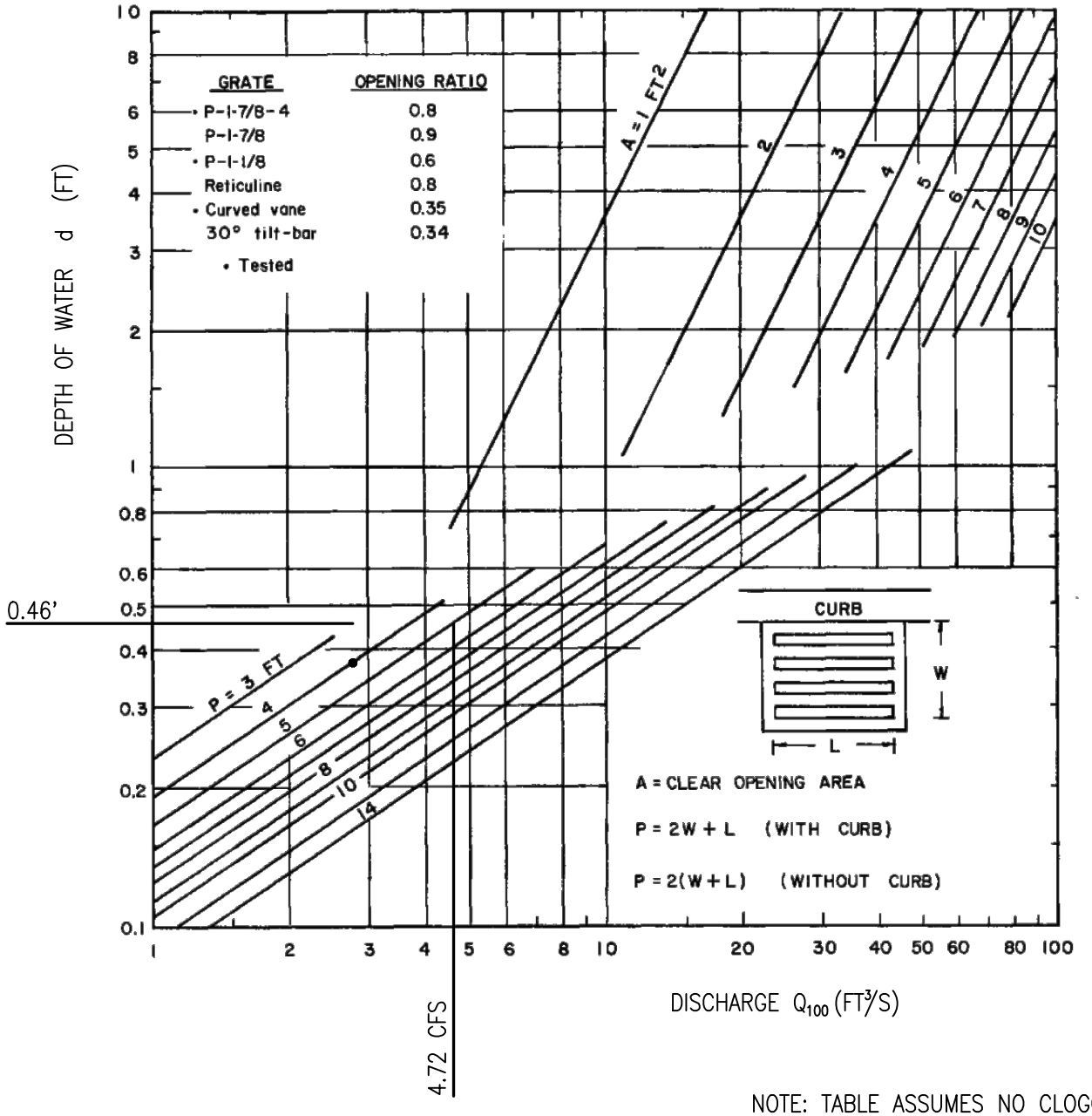
GRATE INLET CAPACITY IN SUMP CONDITION

SOURCE: U.S. DEPARTMENT OF TRANSPORTATION, HEC-22, CHART 9B

24"X24" GRATED INLET

Q_{100} = 2.36 CFS
P = 2W+L = 3'
Q X 2 = 2.36 CFS X 2 = 4.72 CFS (CLOGGING ASSUMPTION)

RESULT: 0.39' WHICH IS LESS THAN THE TOP OF CURB, THEREFORE OK



NOTE: TABLE ASSUMES NO CLOGGING

WALDEN & ASSOCIATES
2552 WHITE RD., SUITE B, IRVINE, CA 92614
(949) 660-0110 FAX: 660-0418

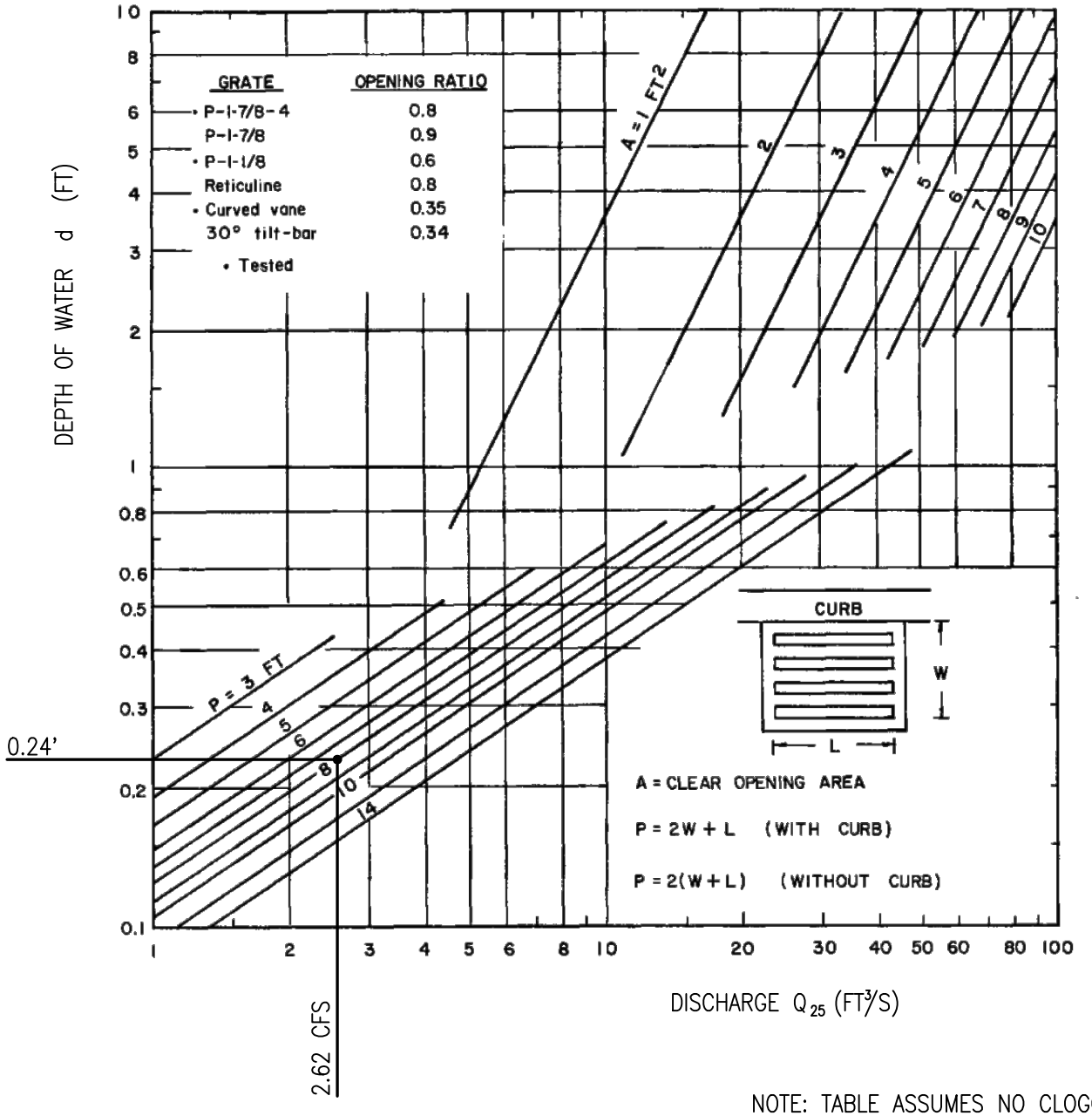
GRATE INLET CAPACITY IN SUMP CONDITION

SOURCE: U.S. DEPARTMENT OF TRANSPORTATION, HEC-22, CHART 9B

24"X24" GRATED INLET FOR AREA A-12

Q_{25} = 1.31 CFS
P = 2(W+L) = 8'
Q X 2 = 1.31 CFS X 2 = 2.62 CFS (CLOGGING ASSUMPTION)

RESULT: 0.24' WHICH IS BEFORE SPILL-OVER DEPTH TO ADJACENT DRAINAGE AREA, THEREFORE OK



NOTE: TABLE ASSUMES NO CLOGGING

WALDEN & ASSOCIATES
2552 WHITE RD., SUITE B, IRVINE, CA 92614
(949) 660-0110 FAX: 660-0418

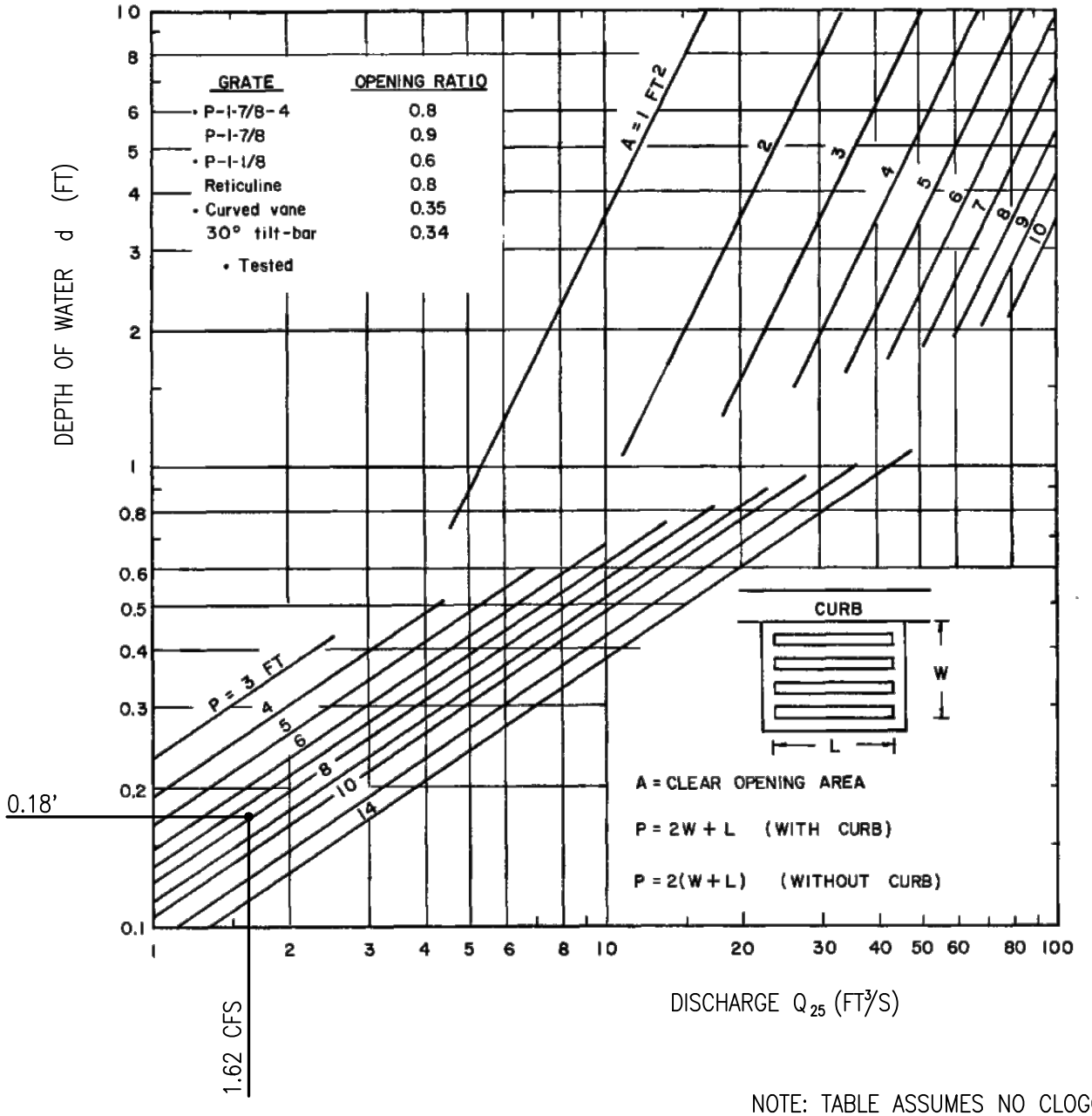
GRATE INLET CAPACITY IN SUMP CONDITION

SOURCE: U.S. DEPARTMENT OF TRANSPORTATION, HEC-22, CHART 9B

24"X24" GRATED INLET FOR AREA A-14

Q_{25} = 0.81 CFS
P = 2(W+L) = 8'
Q X 2 = 0.81 CFS X 2 = 1.62 CFS (CLOGGING ASSUMPTION) WORSE CASE

RESULT: 0.18' WHICH IS BEFORE SPILL-OVER DEPTH TO ADJACENT DRAINAGE AREA, THEREFORE OK



NOTE: TABLE ASSUMES NO CLOGGING

WALDEN & ASSOCIATES
2552 WHITE RD., SUITE B, IRVINE, CA 92614
(949) 660-0110 FAX: 660-0418

GRATE INLET CAPACITY IN SUMP CONDITION

SOURCE: U.S. DEPARTMENT OF TRANSPORTATION, HEC-22, CHART 9B

```
******************************************************************************
                HYDRAULIC ELEMENTS - I  PROGRAM PACKAGE
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            Ver. 21.0  Release Date: 06/01/2014  License ID 1272

                           Analysis prepared by:

                             WALDEN & ASSOCIATES
                           2552 WHITE ROAD, SUITE B
                              IRVINE, CA 92614
                    TEL: # 949.660.0110 FAX: # 949.660.0418

------------------------------------------------------------------------------
  TIME/DATE OF STUDY: 14:55 07/18/2024
==============================================================================
 Problem Descriptions:
  FOR AREA A-14


******************************************************************************
>>>>SUMP TYPE BASIN INPUT INFORMATION<<<< FOR AREA A-14
------------------------------------------------------------------------------

    Curb Inlet Capacities are approximated based on the Bureau of
    Public Roads nomograph plots for flowby basins and sump basins.


    BASIN INFLOW(CFS) =    2.30
    BASIN OPENING(FEET) =  0.33
    DEPTH OF WATER(FEET) =  0.32

    >>>>CALCULATED ESTIMATED SUMP BASIN WIDTH(FEET) =       4.12 USE 4'

==============================================================================

 Problem Descriptions:
  FOR AREA A-24


******************************************************************************
>>>>SUMP TYPE BASIN INPUT INFORMATION<<<< FOR AREA A-24
------------------------------------------------------------------------------

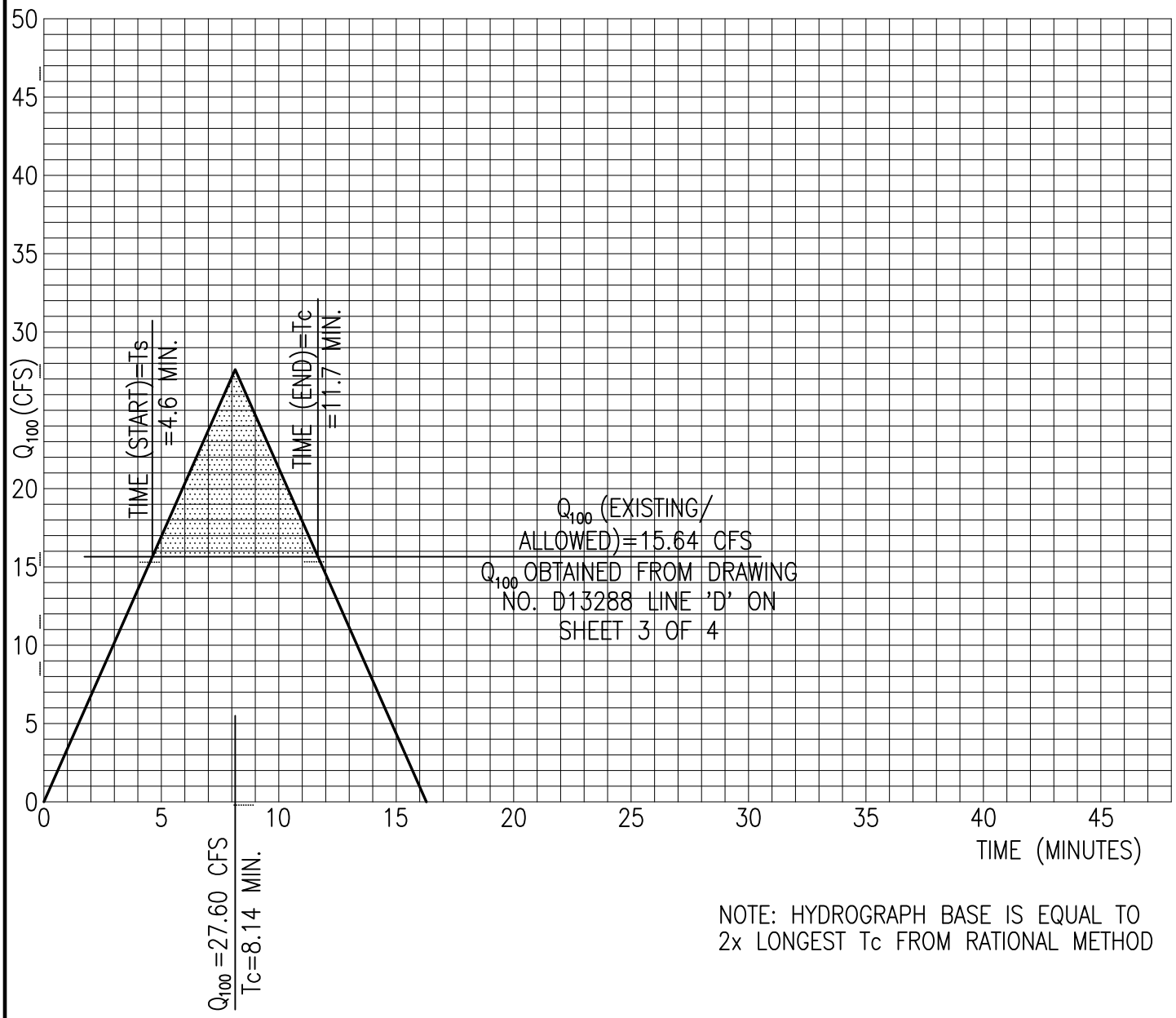
    Curb Inlet Capacities are approximated based on the Bureau of
    Public Roads nomograph plots for flowby basins and sump basins.


    BASIN INFLOW(CFS) =    2.41
    BASIN OPENING(FEET) =  0.50
    DEPTH OF WATER(FEET) =  0.45

    >>>>CALCULATED ESTIMATED SUMP BASIN WIDTH(FEET) =       2.59 USE 3'
```

SECTION 7

HYDROGRAPH



NOTE: HYDROGRAPH BASE IS EQUAL TO
2x LONGEST Tc FROM RATIONAL METHOD

REQUIRED STORAGE VOLUME

Q (ALLOWED) = Qa = EXISTING Q25 = 15.67 CFS

REQUIRED STORAGE VOLUME = (PROP Q100 – Qa) X (Tc – Ts) X 60 sec./min.
= (27.60 CFS – 15.64 CFS) X (11.7 MIN. – 4.6 MIN.) X 60 SEC./MIN.
= 5,095 CF

STORAGE VOLUME PROVIDED = 725 LF OF 36" (7.07 SQ FT) = 5,175 CF

WALDEN & ASSOCIATES
2552 WHITE RD., SUITE B, IRVINE, CA 92614
(949) 660-0110 FAX: 660-0418

HYDROGRAPH

PROPOSED DETENTION SYSTEM SIZING
(PROPOSED 100-YEAR – EXISTING 100-YEAR)

SECTION 8

ORIFICE CALCULATION

Cross Section for Rectangular Orifice

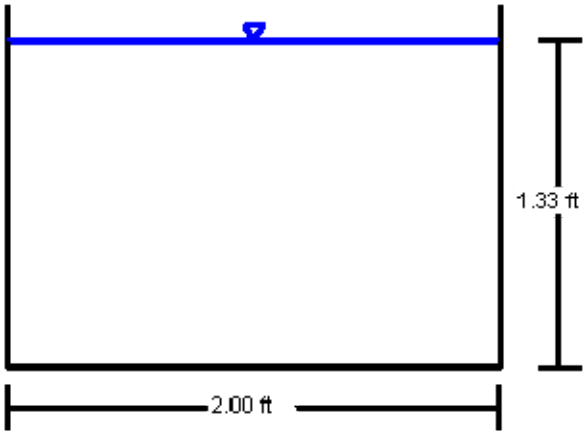
Project Description

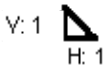
Solve For	Opening Height

Input Data

Discharge	15.64	ft³/s
Headwater Elevation	697.00	ft
Centroid Elevation	695.50	ft
Tailwater Elevation	692.64	ft
Discharge Coefficient	0.60	
Opening Width	2.00	ft
Opening Height	1.33	ft

Cross Section Image





Worksheet for Rectangular Orifice

Project Description

Solve For	Opening Height

Input Data

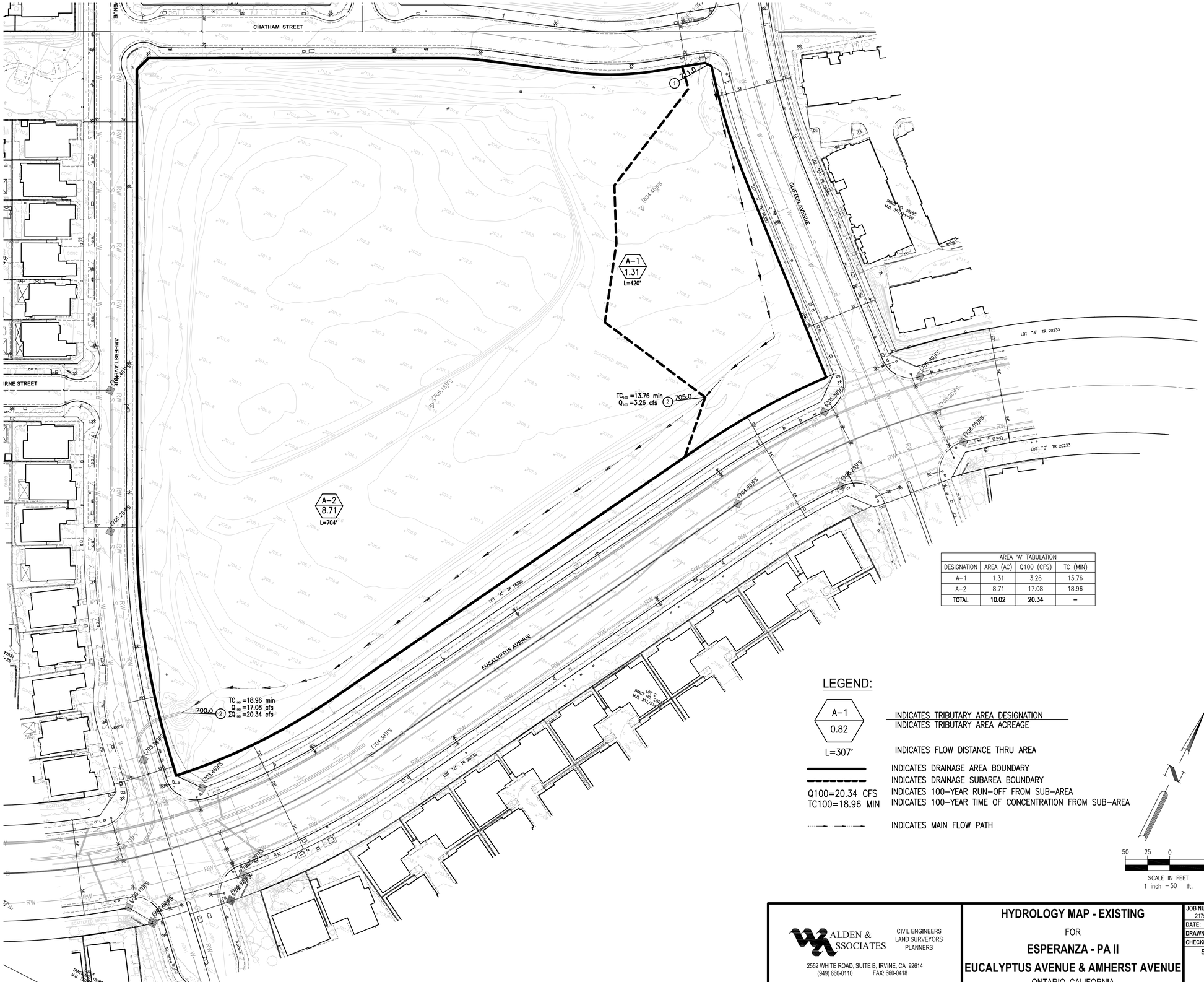
Discharge	15.64	ft³/s
Headwater Elevation	697.00	ft
Centroid Elevation	695.50	ft
Tailwater Elevation	692.64	ft
Discharge Coefficient	0.60	
Opening Width	2.00	ft

Results

Opening Height	1.33	ft
Headwater Height Above Centroid	1.50	ft
Tailwater Height Above Centroid	-2.86	ft
Flow Area	2.65	ft²
Velocity	5.89	ft/s

SECTION 10

APPENDIX


CHATHAM STREET
CLIFTON AVENUE
AMHERST AVENUE
EUCALYPTUS AVENUE
A-1
1.31
L=420'
A-2
8.71
L=704'
TC100 =13.76 min
Q100 =3.26 cfs
705.0
TC100 =18.96 min
Q100 =17.08 cfs
ΣQ100 =20.34 cfs
700.0
711.0
LOT "A" TR 18380
LOT "C" TR 20233
LOT "K" TR 20233
LOT 2 TRACT NO. 20095 M.B. 357/37-39
TRACT NO. 20095 M.B. 357/37-39
(705.16)FS
(705.36)FS
(705.30)FS
(705.00)FS
(704.98)FS
(704.87)FS
(704.39)FS
(703.40)FS
(703.36)FS
(703.10)FS
(702.68)FS
(701.30)FS
(700.70)FS
(700.50)FS
(699.80)FS
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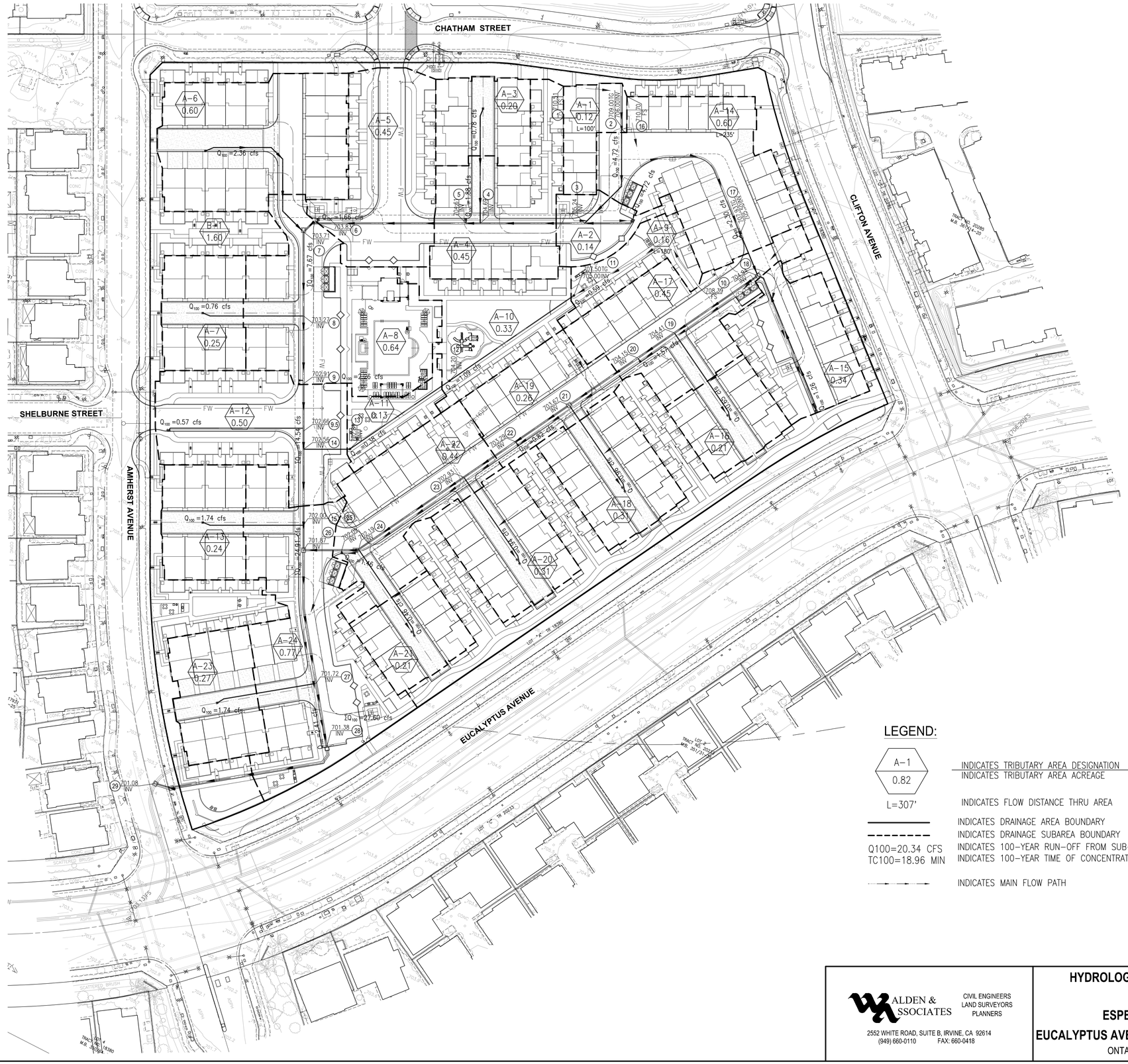
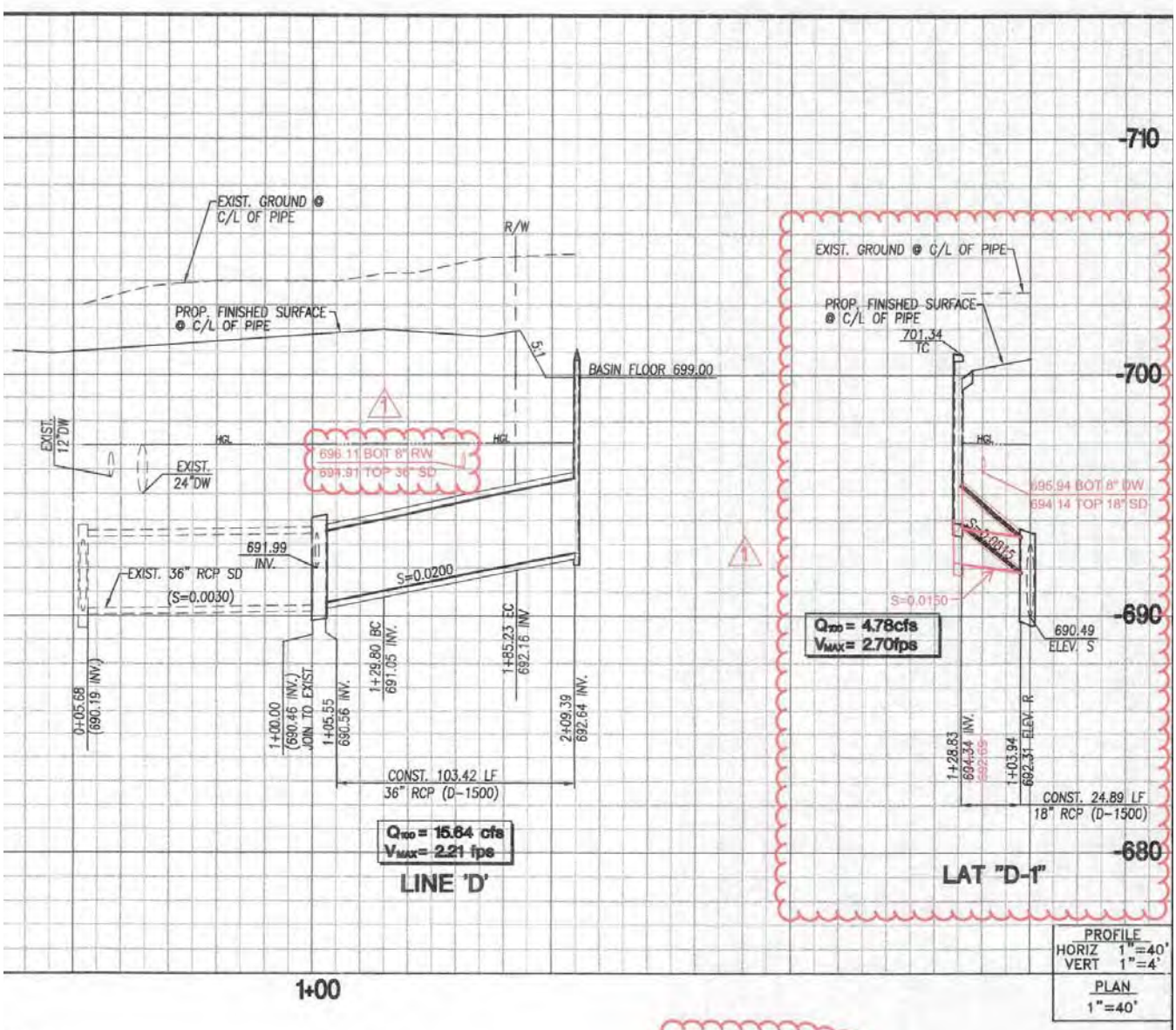
AREA 'A' TABULATION			
DESIGNATION	AREA (AC)	Q100 (CFS)	TC (MIN)
A-1	0.12	0.58	4.72
A-2	0.14	0.59	5.36
A-3	0.20	0.78	5.92
A-4	0.45	1.88	5.99
A-5	0.47	1.66	6.57
A-6	0.60	2.36	6.61
A-7	0.25	0.76	6.90
A-8	0.64	2.26	7.12
A-9	0.16	0.59	7.47
A-10	0.33	1.09	8.41
A-11	0.13	0.38	8.87
A-12	0.24	0.57	7.51
A-13	0.50	1.74	7.27
A-14	0.60	2.30	6.99
A-15	0.34	1.26	7.15
A-16	0.21	0.65	7.55
A-17	0.45	1.57	7.72
A-18	0.31	0.96	8.00
A-19	0.27	0.82	8.22
A-20	0.31	0.94	8.43
A-21	0.21	0.46	8.83
A-22	0.45	1.46	8.88
A-23	0.27	0.28	7.85
A-24	0.77	2.41	8.01
TOTAL	8.42	27.60	–

AREA 'B' TABULATION			
DESIGNATION	AREA (AC)	Q100 (CFS)	TC (MIN)
B-1	1.60	6.92	5.76

AREA TABULATION			
DESIGNATION	AREA (AC)	Q100 (CFS)	TC (MIN)
A	8.42	27.60	–
B	1.60	6.92	–
TOTAL	10.02	34.52	–


CHATHAM STREET
SHELBURNE STREET
AMHERST AVENUE
CLIFTON AVENUE
EUCALYPTUS AVENUE
A-1 0.12 L=100'
A-2 0.14
A-3 0.20
A-4 0.45
A-5 0.45
A-6 0.60
A-7 0.25
A-8 0.64
A-9 0.16
A-10 0.33
A-11 0.13
A-12 0.50
A-13 0.24
A-14 0.60 L=235'
A-15 0.34
A-16 0.21
A-17 0.45
A-18 0.31
A-19 0.27
A-20 0.31
A-21 0.21
A-22 0.45
A-23 0.27
A-24 0.77
B-1 1.60
Q100=2.36 cfs
Q100=1.66 cfs
Q100=0.76 cfs
Q100=0.57 cfs
Q100=1.74 cfs
Q100=7.60 cfs
Q100=20.34 cfs
Q100=4.72 cfs
Q100=1.88 cfs
Q100=0.59 cfs
Q100=1.09 cfs
Q100=0.38 cfs
Q100=1.46 cfs
Q100=0.28 cfs
Q100=2.41 cfs
Q100=1.57 cfs
Q100=1.26 cfs
Q100=0.65 cfs
Q100=0.96 cfs
Q100=0.82 cfs
Q100=0.94 cfs
Q100=0.46 cfs
Q100=1.46 cfs
Q100=0.28 cfs
Q100=2.41 cfs
Q100=1.74 cfs
Q100=7.60 cfs
Q100=4.72 cfs
Q100=0.59 cfs
Q100=1.26 cfs
Q100=0.65 cfs
Q100=1.57 cfs
Q100=0.96 cfs
Q100=0.82 cfs
Q100=0.94 cfs
Q100=0.46 cfs
Q100=1.46 cfs
Q100=0.28 cfs
Q100=2.41 cfs
Q100=1.74 cfs
Q100=7.60 cfs
Q100=20.34 cfs
Q100=4.72 cfs
Q100=1.88 cfs
Q100=0.59 cfs
Q100=1.09 cfs
Q100=0.38 cfs
Q100=1.46 cfs
Q100=0.28 cfs
Q100=2.41 cfs
Q100=1.74 cfs
Q100=7.60 cfs
Q100=4.72 cfs
Q100=0.59 cfs
Q100=1.26 cfs
Q100=0.65 cfs
Q100=1.57 cfs
Q100=0.96 cfs
Q100=0.82 cfs
Q100=0.94 cfs
Q100=0.46



6 WITH CITY-APPROVED

TARIO STD. NO. 2104

CURVE DATA

DELTA	RADIUS	LENGTH	TANGENT
05°14'14"	296.00'	27.06'	13.54'

CITY OF ONTARIO

Engineering Department

Preliminary Water Quality Management Plan (PWQMP)

For compliance with Santa Ana Regional Water Quality Control Board
Order Number R8-2010-0036 (NPDES Permit No. CAS618036)

Project Name:	Esperanza Townhomes
Ontario Project #:	2175-996-001 TM_20730 (PDEV24-017)
Applicant Name:	Genstar Development Company
Applicant Address:	12770 El Camino Real, Ste. 220 San Diego, CA 92130
Project Address:	Eucalyptus Avenue & Amherst Avenue Ontario, CA
Project Size (acres):	10.24-acres
Project Description:	Townhomes

Submittal Date: 3/12/2025

Preliminary Water Quality Management Plan (PWQMP)

1. Introduction

The Preliminary Water Quality Management Plan (PWQMP) is a planning tool to improve integration of required water quality elements, stormwater management, water conservation, rainwater harvesting and re-use, and flood management in land use planning and the City's development process. The Preliminary WQMP will assist project applicants and planners in properly designing and laying out project sites so that water quality may be incorporated in the most effective manner and at the lowest cost for the developer.

The San Bernardino County Municipal Separate Storm Sewer System Permit (MS4 Permit) requires project-specific Water Quality Management plans (WQMP) to be prepared for all priority new development and significant redevelopment projects listed in Section 2 of this document. The MS4 Permit stipulates that the City of Ontario require priority project applicants to submit a Preliminary project-specific WQMP, as early as possible, during the environmental review or planning phase of a development project and that the Preliminary WQMP be approved prior to the issuance of land use entitlement.

2. Priority Projects (requiring a Preliminary WQMP)

Land Use entitlement shall not be issued for any of the listed projects, below, until a Preliminary WQMP has been approved by the City's Engineering Department. For construction projects not going through entitlement, a Preliminary and Final project specific WQMP shall be approved, prior to the issuance of construction permits:

Check the appropriate project category below, for this project:

Check below	**Project Categories**
	1. All significant re-development projects. Significant re-development is defined as the addition or replacement of 5,000 or more square feet of impervious surface on an already developed site subject to discretionary approval of the Permittee. Redevelopment does not include routine maintenance activities that are conducted to maintain original line and grade, hydraulic capacity, original purpose of the facility, or emergency redevelopment activity required to protect public health and safety. Where redevelopment results in an increase of less than fifty percent of the impervious surfaces of a previously existing developed site, and the existing development was not subject to WQMP requirements, the numeric sizing criteria discussed below applies only to the addition or replacement, and not to the entire developed site. Where redevelopment results in an increase of fifty percent or more of the impervious surfaces of a previously existing developed site, the numeric sizing criteria applies to the entire development (new and existing).
✔	2. New development projects that create 10,000 square feet or more of impervious surface (collectively over the entire project site) including commercial, industrial, residential housing subdivisions (i.e., detached single family home subdivisions, multi-family attached subdivisions or townhomes, condominiums, apartments, etc.), mixed-use, and public projects. This category includes development projects on public and private land, which fall under the planning and building authority of the permitting agency.

Check below	Project Categories
	3. Automotive repair shops (with SIC codes 5013, 5014, 5541, 7532- 7534, 7536-7539).
	4. Restaurants and Food Service Establishments where the land area of development is 5,000 square feet or more.
	5. Developments of 2,500 square feet of impervious surface or more adjacent to (within 200 feet) or discharging directly into environmentally sensitive areas (ESA's) such as areas designated in the Ocean Plan as areas of special biological significance or waterbodies listed on the CWA Section 303(d) list of impaired waters.
	6. Parking lots of 5,000 square feet or more exposed to storm water. Parking lot is defined as land area or facility for the temporary storage of motor vehicles.
	7. Retail Gasoline Outlets (RGOs) that are either 5,000 sq ft or more or have a projected average daily traffic of 100 or more vehicles per day.
	8. *This project is not covered under any of the categories listed above.

* If the development is not covered under any of the project categories listed in Section 2, the project is not required to design and install Site Design/LID BMPs or Treatment Control BMPs to treat the design storm event (Design Capture Volume) described in Section 4.

3. Preliminary WQMP Objectives

Through a combination of Site Design/LID BMPs (where feasible), Source Control, and/or Treatment Control BMPs, project-specific WQMPs shall address all identified pollutants and hydrologic conditions of concern from new development and significant re-development projects for the categories of projects (priority projects) listed in Section 2. Under each type of BMP, listed below, please indicate which BMPs are planned to be implemented and included in the Final WQMP for the project:

A. Site Design/LID (Low Impact Design) for Reducing Stormwater Runoff:

The MS4 Permit requires each priority development project to infiltrate, harvest and use, evapotranspire, or bio-treat the runoff from a 2-yr, 24-hour storm event (Design Capture Volume). If site conditions do not permit infiltration, harvest and use, evapotranspiration, and/or bio-treatment of the entire Design Capture Volume, at the project site, Site Design/LID techniques are required to be implemented to the Maximum Extent Practicable, at the project site, and the remainder of the DCV shall be infiltrated, harvested, bio-treated or treated by alternative measures. Project applicants shall submit a Preliminary WQMP that documents the LID/Site Design BMPs, proposed for the project. Please indicate, in the table below, which Site Design/LID BMPs will be utilized on this project to accomplish this requirement:

Site Design/LID Practice	Planned	Not Planned
Provide at least the minimum effective area required for LID BMPs, to comply with the WQMP (see Table 3-1 below).		✔
Grade parking lot areas/drive aisles/roof drains to sheet flow runoff into landscaped swales, via curb cuts or zero-face curbs or otherwise disconnect direct drainage from MS4.		✔
Design landscaped areas as swales and grade to accept runoff from building roofs, parking lots and project roadways.		✔
Install surface retention basins or infiltration trenches to receive impervious area runoff.		✔
Install pervious pavement in parking stalls, alleys, driveways, gutters, walkways, trails or patios.		✔
Install underground stormwater retention chambers where downstream landscaped areas are limited.		✔
Install approved Stormwater Drywells in detention areas.		✔
Construct streets, sidewalks, and parking lot stalls to the minimum widths necessary.	✔	
Install on-site Biotreatment basins/trenches with underdrains, where soil type is poorly draining.		✔
Install “Engineered Soil” to increase uptake/soil storage capacity and/or evapotranspiration.		✔
Install Rainwater Harvesting/Use Equipment.		✔
Regional LID BMP facilities are installed, off-site, with the capacity and conveyances to accept post-development storm water runoff from this project and reserved capacity allocation credits have been assigned to the project, in a Certificate or other legally binding document, attached herein	✔	

Table 3-1 Minimum Effective Area[1] Required for LID BMPs (surface + subsurface facilities) for Project WQMP to Demonstrate Infeasibility[2] (% of site)

Project Type	New Development	Re-Development
SF/MF Residential < 7 du/ac	10%	5%
SF/MF Residential < 7 - 18 du/ac	7%	3.5%
SF/MF Residential > 18 du/ac	5%	2.5%
Mixed Use, Commercial/Industrial w/FAR< 1.0	10%	5%
Mixed Use, Commercial/Industrial w/FAR 1.0-2.0	7%	3.5%
Mixed Use, Commercial/Industrial w/FAR> 2.0	5%	2.5%
Podium (parking under > 75% of project)	3%	1.5%
Zoning allowing development to property lines	2%	1%
Transit Oriented Development[3]	5%	2.5%
Parking	5%	2.5%

[1] "Effective area" is defined as land area which 1) is suitable for a retention/infiltration BMP (based on infeasibility criteria) and 2) is located down-gradient from building roof or paved areas, so that it may receive gravity flow runoff.
[2] Criteria only required if the project WQMP seeks to demonstrate that the full DCV cannot be feasibly managed on-site.
[3] Transit oriented development is defined as a project with development center within one half mile of a mass transit center.
Key: du/ac = dwelling units/acre, FAR = Floor Area Ratio = ratio of gross floor area of building to gross lot area, MF = Multi Family, SF = Single Family

B. Source Control BMPs – The following BMPs are designed to control stormwater pollutants and runoff water at the location where it is generated. Please indicate which of the listed BMPs are planned to be implemented for the project:

Source Control BMPs	Planned	Not Planned
Minimize non-stormwater site runoff through efficient irrigation system design and controllers.	✔	
Minimize trash and debris in storm runoff through a regular parking lot, storage yard and roadway sweeping program.	✔	
Provide proper covers/roofs and secondary containment for outside material storage & work areas.		✔
Provide solid roofs over all trash enclosures.	✔	
Site Owner(s)/Property Manager/HOA or POA will be familiar with the project WQMP and stormwater BMPs.	✔	
Owner or HOA or POA to provide Education/Training of site occupants and employees on stormwater BMPs.	✔	
Install stormwater placards/stenciled messages with a "No Dumping" message on all on-site/off-site storm drain inlets.	✔	
Provide contained equipment/vehicle wash rack areas that discharge to sanitary sewer.		✔

C. Treatment Control BMPs – The following BMPs are designed to control stormwater pollutants where it is not feasible to install on-site or off-site Site Design/LID BMPs, with the requisite capacity to treat the Design Capture Volume for identified Pollutants of Concern or where pretreatment of stormwater runoff is required, ahead of infiltration BMPs. Please indicate which of the listed BMPs are planned to be implemented for the project:

Treatment Control BMP	Planned	Not Planned
Gravity Separator devices for pretreatment of sediment, trash/litter or Oil & Grease		✔
Proprietary Biofiltration vaults/devices		✔
Media Cartridge Filtration Vaults		✔
Proprietary Filter Inserts for on-site storm drain inlets or retention basin/trench overflow drains	✔	

4. Volume-based calculation (approximate) for sizing on-site or off-site Stormwater Retention/Infiltration, Harvest & Re-Use or Biotreatment facilities

1) After calculating the "Watershed Imperviousness Ratio", i, which is equal to the percent of impervious area in each Drainage Management Area, divided by 100, calculate the composite runoff coefficient C_{BMP} for the Drainage Area above using the following equation:

$$\mathbf{C_{BMP} = 0.858i^3 - 0.78i^2 + 0.774i + 0.04}$$

where: **C_{BMP}** = composite runoff coefficient; and,

i = watershed imperviousness ratio.

3) Determine the area-averaged "6-hour Mean Storm Rainfall", P_6, for the Drainage Area. This is calculated by multiplying the area averaged 2-year 1-hour value (0.5"-0.6") by the appropriate regression coefficient (1.4807). The 2-yr, 1-hr value for southern Ontario is approximately to 0.5" (P_6 = 0.5*1.4807 = 0.74 and northern Ontario is approximately 0.6" in/hr (P_6 = 0.6*1.4807 = 0.89).

4) Determine the appropriate drawdown time. Use the regression constant a = 1.582 for 24 hours and a = 1.963 for 48 hours. *Note: Regression constants are provided for both 24 hour and 48-hour drawdown times; however, 48-hour drawdown times should be used in most areas of California. Drawdown times in excess of 48 hours should be used with caution as vector breeding can be a problem after water has stood in excess of 72 hours. (Use of the 24-hour drawdown time should be limited to drainage areas with coarse soils (Class 'A' soils that readily drain.)*

5) Calculate the "Maximized Detention Volume", P_0, using the following equation:

$$\mathbf{P_0 = a \cdot C_{BMP} \cdot P_6}$$

where: **P_0** = Maximized Detention Volume, in inches

a = 1.582 for 24 hour and a = 1.963 for 48-hour drawdown,

C_{BMP} = composite runoff coefficient; and,

P_6 = 6-hour Mean Storm Rainfall, in inches

6) Calculate the "Target Capture Volume", V_0, using the following equation:

$$\mathbf{V_0 = (P_0 \cdot A) / 12}$$

where: **V_0** = Target Capture Volume, in acre-feet

P_0 = Maximized Detention Volume, in inches; and,

A = BMP Drainage Area, in acres

Project Volume-based calculation (approximate) for planned on-site or off-site Stormwater Retention/Infiltration, Harvest & Re-Use or Biotreatment facilities:

Variable	Factor/Formula	DA1, DMA A	DA1 DMA B	DA2 DMA A	DA2 DMA B
Impervious surface/total surface, ratio	(i)	0.79			
C_{BMP}= runoff coefficient	$0.858i^3 - 0.78i^2 + 0.774i + 0.04$	0.588			
P_6	**P_6 = 2-yr,1-hr depth*1.4807 =	0.797			
Detention Volume (acre inches)	$P_0 = a * C_{BMP} * P_6$ =	0.920			
Drawdown rate of basin/trench (a)	1.963 for 48-hr drawdown =	1.963			
Project Total Area (acre)	(A)	10.24			
Design Capture Volume in cu. ft.	$V_0 = [(P_0 * A)/12] *43560$ =	34,198			
Retention Volume provided in cubic feet.	Retention capacity of basins, trenches, underground storage or biotreatment basin				

**For P_6 value, use site coordinates and NOAA website to determine project's average 2-yr, 1-hr rainfall depth, at: http://hdsc.nws.noaa.gov/hdsc/pfds/sa/sca_pfds.html .

5. Flow-Based calculation (approximate) for sizing on-site or off-site Biotreatment facilities and proprietary treatment technology BMPs:

1) After calculating the "Watershed Imperviousness Ratio", i, which is equal to the percent of impervious area in each Drainage Management Area divided by 100, calculate the composite runoff coefficient C_{BMP} for the Drainage Area above using the following equation:

$$\mathbf{C_{BMP} = 0.858i^3 - 0.78i^2 + 0.774i + 0.04}$$

where: $\mathbf{C_{BMP}}$ = composite runoff coefficient; and,

i = watershed imperviousness ratio.

2) Determine BMP design rainfall intensity, **I_{BMP}**, using the project site geo-coordinates and the NOAA website to determine project's average 2-yr, 1-hr rainfall intensity, at: http://hdsc.nws.noaa.gov/hdsc/pfds/sa/sca_pfds.html .Multiply this value by 0.2787 (regression coefficient for Ontario) and a minimum safety factor of 2.

4) Calculate the target BMP flowrate, Q, using the following formula (for each DMA <50 acres*):

$$Q = C_{BMP} \cdot I_{BMP} \cdot A$$

Where: **Q** = flow in cfs (Cubic feet per second)
I_{BMP} = BMP design rainfall intensity, in/hr
A = Drainage Area in acres

*For DMAs >50 acres, with C_{BMP} <0.5, the project applicant shall use the unit hydrograph method specified in the San Bernardino County Hydrology Manual, using the design storm pattern with rainfall return frequency such that the peak 1-hr rainfall intensity equals the 85th percentile 1-hr rainfall, multiplied by 2.

Project Flow-based calculation (approximate) for planned on-site or off-site flow-based Biotreatment facilities or Stormwater Treatment BMPs:

Variable	Factor/Formula	DA1 DMA A	DA1 DMA B	DA2 DMA A	DA2 DMA B
Impervious surface/ total surface, ratio	(i)	0.79			
C_{BMP}= composite runoff coefficient	$0.858i^3 + 0.78i^2 + 0.774i + 0.04$	0.588			
I_{BMP}	I_{BMP} = 2-yr,1-hr storm intensity*0.2787*safety factor	0.300			
Drainage area (ac)	A = DMA sq ft/43,560	10.24			
Target BMP flowrate	Q = C_{BPM}* I_{BMP} * A	1.81			

6. Hydrologic Conditions of Concern (HCOC) and use of the on-line San Bernardino County HCOC Map for determining necessary mitigation steps necessary if there are HCOCs downstream of a project:

Project applicants may access the on-line HCOC Map at: http://permitrack.sbcounty.gov/WAP/. The map will indicate any hydrology concerns with downstream waterways that are hydraulically connected to the project and will indicate if there are any approved regional projects downstream that could be utilized for off-site mitigation of HCOCs. Please indicate here if the project will or will not be able to retain/infilter, harvest and use or biotreat and detain the DCV, on-site, as calculated in Section 4 and if there are HCOCs identified downstream of the project:

Retain or Harvest/Use the DCV on site?	Yes		No	✔
Biotreat the DCV but not infilter the runoff?	Yes		No	✔
HCOCs identified downstream of site?	Yes		No	✔

If the entire DCV will not be retained on site, the DCV is biotreated but not infiltered or additional detention capacity is needed to address identified HCOCs, downstream of the site, please list here, what additional mitigation measures will be utilized (on-site or off-site) to address HCOCs (see Section 4.2.1-4.2.3 of the SB County WQMP Technical Guidance):

_____

_____

7. Site Plan and Conceptual Grading/Drainage Plan requirements for submission with the Preliminary WQMP:

Provide a Site Plan and Conceptual Grading/Drainage Plan along with this Preliminary WQMP, which conceptually shows the proposed locations of buildings, homes, parking lots, parks, new paved roadways, landscaped areas, drainage patterns and drainage sub-areas, methods of conveyance, proposed retention/infiltration, harvest & use or biotreatment facilities that are planned for installation. Where it is determined to be infeasible to capture and detain design storm runoff volumes, on-site, please include other design features, as described in Section 3, above. Include numbered or lettered notes on the Site Plan with a legend detailing other BMPs, as described in Section 3.

8. BMP Maintenance and Funding Mechanism & Description:

_____

_____

9. Acknowledgment:

As the property owner or developer, I understand that this project is required to install and implement permanent LID Storm Water Best Management Practices pursuant to the requirements of the San Bernardino County MS4 Permit and to document those BMPs in the submittal of a Water Quality Management Plan, which is binding on any current or successive owners of this property.

Yes	✔	No	

10. Exemption Signature:

As the property owner or developer, I understand that this project is not required by the San Bernardino County MS4 Permit to install and implement permanent LID Storm Water Best Management Practices and will not be required to submit a Water Quality Management Plan.

_____ _____

Signature of Owner or Developer Date

CITY OF ONTARIO
MEMORANDUM

TO: Rudy Zeledon, PLANNING DEPARTMENT
Mike Eskander, ENGINEERING DEPARTMENT
FROM: Steve Wilson
DATE: November 16, 2006
SUBJECT: File No. PMTT06-056 (TT 18380) -Esperanza Specific Plan area "A" Map

---

[X] The "A" Maps for these tracts are approved. Prior to DAB approval of the "B" Maps for these tracts, the following items must be included in the Tentative Tract Maps and resubmitted to Engineering:

1. The Tract Map "B" Map submittals for these tracts must conceptually address the use of the regional wetlands in the ultimate condition as well as interim conditions to comply with the water quality requirements for all new development in the Regional Water Quality Management Plan (WQMP). All stormwater runoff pollutants not adequately addressed by on-site Source Control and Site design BMPs or off-site treatment controls must be addressed by on-site Treatment BMPs.

2. Interim on-site treatment control BMPs to address water quality, until such time that the regional wetlands are constructed and operational, are required to be to be shown on the Tract Map/Drainage Plan for this tract or on other tracts within this same project that would be slated for interim treatment BMPs and would receive drainage from this tract. Tentative Tract Map approval will not be granted until this is addressed.

Note: Each landowner/developer in the Esperanza project will be conditioned in the Engineering DAB Report, to prepare and submit one Water Quality Management Plan (WQMP), along with separate Grading Plans, for all of the tracts being developed by that owner. The model WQMP form is available at: www.swrcb.ca.gov/rwqcb8/html/sb_wqmp.html
The WQMP shall identify and detail all appropriate site design, source control and treatment control BMPs to be implemented or installed in this development project in order to reduce storm water pollutants and site runoff. You may also request a revised copy of the WQMP document, and the Standard Erosion & Sediment Control Notes for the Grading Plans from me by emailing a request to: swilson@ci.ontario.ca.us . Please direct all questions to Mr. Steve Wilson at (909)395-2389.

CITY OF ONTARIO
MEMORANDUM

Development Plan Review

Project: Esperanza Specific Plan PA-11 Date: March 7, 2024

Location: NEC of Clifton Ave and Eucalyptus Ave By: Diego Tapia

The following comments on the subject project are provided for the benefit of City Engineering and Planning staff and the Applicant. These are not the conditions of approval which will be submitted under separate cover.

Preliminary Comments:

1. A Traffic Impact Analysis must be submitted that supports the Applicant/Developer's proposed land use change and evaluates potential project traffic impacts. Additional comments may be provided once the Traffic Impact Analysis review is complete.

2. The previous site plan had the tract entrance being proposed on Amherst Avenue, currently it's now being proposed on Clifton Avenue. Please restore the tract entrance onto Amherst Avenue and align the centerline of the tract entry with Shelburne Street. Chokers shall also be installed on the east side of the intersection on Amherst Avenue at tract entrance per City of Ontario Standard Drawing No. 1110. Our intent is that by having the tract entrance on Amherst Avenue with chokers, speeding along the straightaway segment of Amherst Avenue will be reduced.

3. The Applicant/Developer shall align the proposed tract entry onto Chatham Street with Ventura Avenue (existing tract entrance).

4. Install choker, ramp and crosswalk on Chatham Street east of Ventura Avenue and appropriate parking restrictions for sight distance.

5. Remove on-street parking stall markings from site plans.

6. The Applicant/Developer shall install ADA ramps for pedestrian crossings at the following locations per City of Ontario Standard Drawing No. 1213.

    a. Southwest corner of Chatham Street and Clifton Avenue
    b. Southeast corner of Chatham Street and Amherst Avenue

7. The Applicant/Developer shall be responsible to design and construct street improvements along property frontages of Eucalyptus Avenue, Amherst Avenue, Chatham Street, and Clifton Avenue in accordance with conditions issued by City's Land Development Division.

These, and all other street improvements required herein, shall include, but not be limited to, concrete curb and gutter, sidewalk, LED streetlights, signing and striping, and parkway landscaping.

8. The Applicant/Developer shall be responsible to design and construct intersection choker on the southeast corner of Amherst Avenue and Chatham Street per City of Ontario Standard Drawing No. 1110.

9. Existing parking restrictions along Eucalyptus Avenue shall remain in place.

10. All landscaping, block walls, and other obstructions shall be compatible with the stopping sight distance requirements per City of Ontario Standard Drawing No. 1309.

dt;

CHATHAM STREET

PROPOSED BUILDING 27
F.F.=709.50

PROPOSED BUILDING 26
F.F.=709.50

PROPOSED BUILDING 25
F.F.=708.00

PROPOSED BUILDING 24
F.F.=708.00

PROPOSED BUILDING 23
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PROPOSED BUILDING 21
F.F.=706.00

PROPOSED BUILDING 20
F.F.=705.00

PROPOSED BUILDING 28
F.F.=710.00

PROPOSED BUILDING 1
F.F.=710.50

PROPOSED BUILDING 2
F.F.=710.50

PROPOSED BUILDING 3
F.F.=710.50

PROPOSED BUILDING 4
F.F.=710.50

PROPOSED BUILDING 15
F.F.=710.50

F.F.=709.25

SWQ AREA = 446,054
10.24 AC

PROPOSED BUILDING 16
F.F.=709.50

PROPOSED BUILDING 17
F.F.=708.50

PROPOSED BUILDING 18
F.F.=708.00

PROPOSED BUILDING 19
F.F.=707.50

PROPOSED BUILDING 5
F.F.=709.50

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F.F.=707.50

PROPOSED BUILDING 13
F.F.=707.00

PROPOSED BUILDING 14
F.F.=707.00

AMHERST AVENUE

CLIFTON AVENUE

EUCALYPTUS AVENUE

EX. R/W

R/W

VICINITY MAP
NO SCALE

SCALE IN FEET
1 inch = 30 ft.

WALDEN & ASSOCIATES
CIVIL ENGINEERS
LAND SURVEYORS
PLANNERS
2552 WHITE ROAD, SUITE B, IRVINE, CA 92614
(949) 660-0110 FAX: 660-0418

STORMWATER QUALITY EXHIBIT
ESPERANZA TOWNHOMES
EUCALYPTUS AVE. & AMHERST AVE.
ONTARIO, CA

Esperanza Specific Plan Amendment

NOISE IMPACT ANALYSIS

CITY OF ONTARIO

PREPARED BY:

Bill Maddux, INCE
bmaddux@urbanxroads.com
(619) 778-1971

APRIL 24, 2025

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LIST OF ABBREVIATED TERMS

(1)	Reference
ADT	Average Daily Traffic
ANSI	American National Standards Institute
CEQA	California Environmental Quality Act
CNEL	Community Noise Equivalent Level
dBA	A-weighted decibels
EPA	Environmental Protection Agency
ESP	Esperanza Specific Plan
FHWA	Federal Highway Administration
FTA	Federal Transit Administration
Hz	Hertz
L_{eq}	Equivalent continuous (average) sound level
L_{max}	Maximum level measured over the time interval
L_{min}	Minimum level measured over the time interval
OPR	Office of Planning and Research
PPV	Peak particle velocity
Project	Esperanza Specific Plan Amendment
REMEL	Reference Energy Mean Emission Level
RMS	Root-mean-square
VdB	Vibration Decibels

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EXECUTIVE SUMMARY

Urban Crossroads, Inc. has prepared this noise study to determine the noise exposure and the necessary noise mitigation measures for the Esperanza Specific Plan Amendment ("Project"). The Project is located within the Esperanza Specific Plan. The original Specific Plan that was approved contemplated a 736-student elementary school within Planning Area 11. It is our understanding that the Project is to consist of 161 multifamily residential dwelling units (with a density of approximately 16.1 dwelling units per net acre). This noise study has been prepared to satisfy the applicable City of Ontario noise standards and significance criteria based on Appendix G of the California Environmental Quality Act (CEQA) Guidelines. (1)

The results of this Noise Impact Analysis are summarized below based on the significance criteria in Section 4 of this report, consistent with Appendix G of the California Environmental Quality Act (CEQA) Guidelines. (1) Table ES-1 shows the findings of significance for each potential noise and/or vibration impact under CEQA before and after any required mitigation measures.

TABLE ES-1: SUMMARY OF CEQA SIGNIFICANCE FINDINGS

Analysis	Report Section	Significance Findings	
		Unmitigated	Mitigated
Off-Site Traffic Noise	7	*Less Than Significant*	-
On-Site Traffic Noise	8	--[1]	--[1]
Operational Noise	10	*Less Than Significant*	-
Construction Noise	11	*Less Than Significant*	-
Construction Vibration		*Less Than Significant*	-

[1] Impacts to the Project from the environment are not considered a noise impact under CEQA.

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1 INTRODUCTION

This noise analysis has been completed to determine the noise impacts associated with the development of the Esperanza Specific Plan Amendment ("Project"). This noise study briefly describes the Project, provides information regarding noise fundamentals, sets out the local regulatory setting, presents the study methods and procedures for noise analysis, and evaluates the future exterior noise environment. In addition, this study includes an analysis of the potential Project-related long-term stationary-source operational noise and short-term construction noise and vibration impacts.

1.1 SITE LOCATION

The Subarea 29 Specific Plan area is located on the northeast corner of Eucalyptus Avenue and Amherst Avenue in the City of Ontario. The location of the Project is shown in Exhibit 1-A. The Ontario International Airport (ONT) is located approximately 4 miles north of the Project site, and Chino Airport is located approximately 3 miles east of the Project site.

1.2 PROJECT DESCRIPTION

The Project is located within the Esperanza Specific Plan (ESP). The approved original Specific Plan contemplated a 736-student elementary school within Planning Area 11. As part of the Project, the land use designation will be updated from "School" to "MDR Medium Density Residential" consistent with the adjacent land use to the northeast, as shown in Exhibit 1-B.

It is our understanding that the Project consists of an amendment to the ESP to replace the elementary school with 161 multifamily residential dwelling units (with a density of approximately 16.1 dwelling units per net acre). The Project also includes a 6-foot-high wall along Eucalyptus Avenue. The Project site plan is illustrated in Exhibit 1-C.

EXHIBIT 1-A: LOCATION MAP

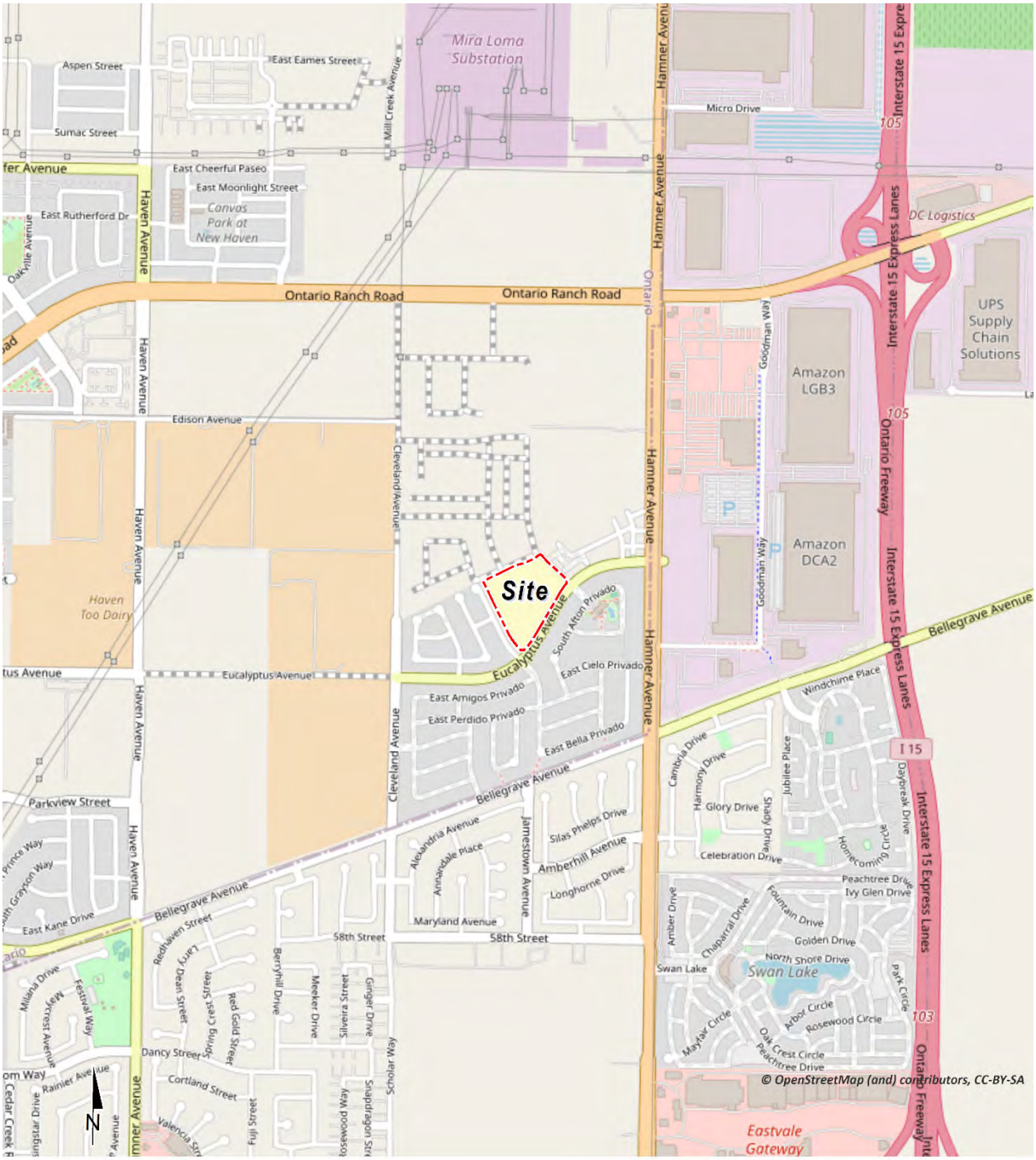


EXHIBIT 1-B: LAND USE PLAN

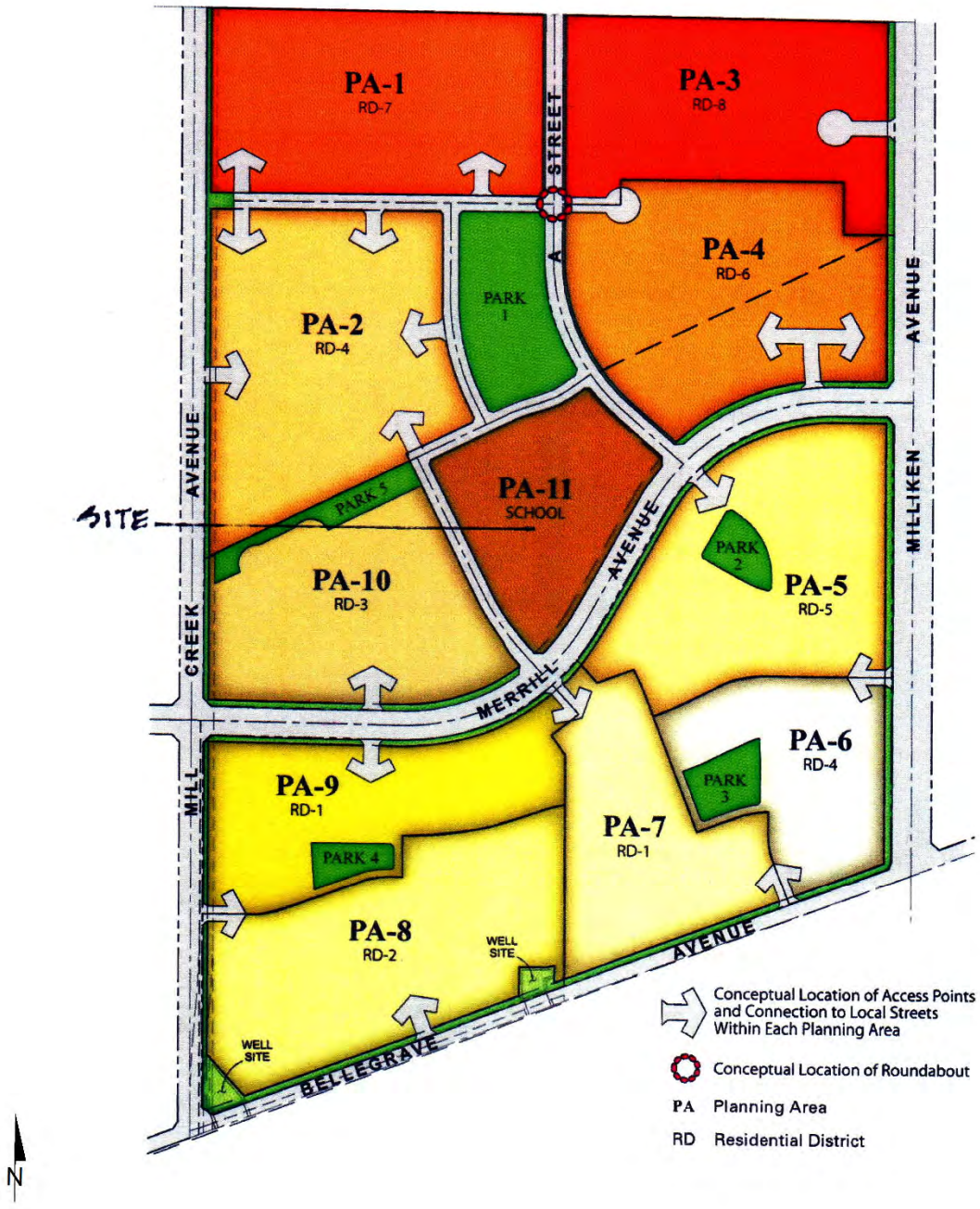


EXHIBIT 1-C: PROJECT SITE PLAN

2 FUNDAMENTALS

Noise is simply defined as "unwanted sound." Sound becomes unwanted when it interferes with normal activities, when it causes actual physical harm, or when it has adverse effects on health. Noise is measured on a logarithmic scale of sound pressure level known as a decibel (dB). A-weighted decibels (dBA) approximate the subjective response of the human ear to broad-frequency noise sources by discriminating against very low and very high frequencies of the audible spectrum. They are adjusted to reflect only those frequencies which are audible to the human ear. Exhibit 2-A presents a summary of the typical noise levels and their subjective loudness and effects, which are described in more detail below.

EXHIBIT 2-A: TYPICAL NOISE LEVELS

COMMON OUTDOOR ACTIVITIES	COMMON INDOOR ACTIVITIES	A - WEIGHTED SOUND LEVEL dBA	SUBJECTIVE LOUDNESS	EFFECTS OF NOISE
THRESHOLD OF PAIN		140	INTOLERABLE OR DEAFENING	HEARING LOSS
NEAR JET ENGINE		130		
		120		
JET FLY-OVER AT 300m (1000 ft)	ROCK BAND	110		
LOUD AUTO HORN		100	VERY NOISY	
GAS LAWN MOWER AT 1m (3 ft)		90		
DIESEL TRUCK AT 15m (50 ft), at 80 km/hr (50 mph)	FOOD BLENDER AT 1m (3 ft)	80		SPEECH INTERFERENCE
NOISY URBAN AREA, DAYTIME	VACUUM CLEANER AT 3m (10 ft)	70	LOUD	
HEAVY TRAFFIC AT 90m (300 ft)	NORMAL SPEECH AT 1m (3 ft)	60		
QUIET URBAN DAYTIME	LARGE BUSINESS OFFICE	50	MODERATE	SLEEP DISTURBANCE
QUIET URBAN NIGHTTIME	THEATER, LARGE CONFERENCE ROOM (BACKGROUND)	40		
QUIET SUBURBAN NIGHTTIME	LIBRARY	30	FAINT	NO EFFECT
QUIET RURAL NIGHTTIME	BEDROOM AT NIGHT, CONCERT HALL (BACKGROUND)	20		
	BROADCAST/RECORDING STUDIO	10	VERY FAINT	
LOWEST THRESHOLD OF HUMAN HEARING	LOWEST THRESHOLD OF HUMAN HEARING	0		

Source: Environmental Protection Agency Office of Noise Abatement and Control, Information on Levels of Environmental Noise Requisite to Protect Public Health and Welfare with an Adequate Margin of Safety (EPA/ONAC 550/9-74-004) March 1974.

2.1 RANGE OF NOISE

Since the range of intensities that the human ear can detect is so large, the scale frequently used to measure intensity is a scale based on multiples of 10, the logarithmic scale. The scale for measuring intensity is the decibel scale. Each interval of 10 decibels indicates a sound energy ten times greater than before, which is perceived by the human ear as being roughly twice as loud. (2) The most common sounds vary between 40 dBA (very quiet) to 100 dBA (very loud). Normal conversation at three feet is roughly at 60 dBA, while loud jet engine noises equate to 110 dBA at approximately 1,000 feet, which can cause serious discomfort. (3)

Another important aspect of noise is the duration of the sound and the way it is described and distributed in time.

2.2 NOISE DESCRIPTORS

Environmental noise descriptors are generally based on averages rather than instantaneous noise levels. The most used metric is the equivalent level (L_{eq}). Equivalent sound levels are not measured directly but are calculated from sound pressure levels typically measured in A-weighted decibels (dBA). The equivalent sound level (L_{eq}) represents a steady-state sound level containing the same total energy as a time-varying signal over a given sample period and is commonly used to describe the "average" noise levels within the environment.

Peak hour or average noise levels, while useful, do not completely describe a given noise environment. Noise levels lower than peak hour may be disturbing if they occur during times when quiet is most desirable, namely evening and nighttime (sleeping) hours. To account for this, the Community Noise Equivalent Level (CNEL), representing a composite 24-hour noise level is utilized. The CNEL is the weighted average of the intensity of a sound, with corrections for time of day, and averaged over 24 hours. The time-of-day corrections require the addition of 5 decibels to dBA L_{eq} sound levels in the evening from 7:00 p.m. to 10:00 p.m., and the addition of 10 decibels to dBA L_{eq} sound levels at night between 10:00 p.m. and 7:00 a.m. These additions are made to account for the noise-sensitive time periods during the evening and night hours when noise can become more intrusive. CNEL does not represent the actual sound level heard at any time but rather represents the total sound exposure. The City of Ontario relies on the 24-hour CNEL level to assess land use compatibility with transportation-related noise sources.

2.3 SOUND PROPAGATION

When sound propagates over a distance, it changes in level and frequency content. The way noise reduces with distance depends on the following factors.

2.3.1 GEOMETRIC SPREADING

Sound from a localized source (i.e., a stationary point source) propagates uniformly outward in a spherical pattern. The sound level attenuates (or decreases) at a rate of 6 dB for each doubling of distance from a point source. Highways consist of several localized noise sources on a defined path and hence can be treated as a line source, which approximates the effect of several point sources. Noise from a line source propagates outward in a cylindrical pattern, often referred to as cylindrical spreading. Sound levels attenuate at a rate of 3 dB for each doubling of distance from a line source. (2)

2.3.2 GROUND ABSORPTION

The propagation path of noise from a highway to a receiver is usually very close to the ground. Noise attenuation from ground absorption and reflective wave canceling adds to the attenuation associated with geometric spreading. Traditionally, the excess attenuation has also been expressed in terms of attenuation per doubling of distance. This approximation is usually sufficiently accurate for distances of less than 200 ft. For acoustically hard sites (i.e., sites with a

reflective surface between the source and the receiver, such as a parking lot or body of water), no excess ground attenuation is assumed. For acoustically absorptive or soft sites (i.e., those sites with an absorptive ground surface between the source and the receiver, such as soft dirt, grass, or scattered bushes and trees), an excess ground attenuation value of 1.5 dB per doubling of distance is normally assumed. When added to the cylindrical spreading, the excess ground attenuation results in an overall drop-off rate of 4.5 dB per doubling of distance from a line source. (4)

2.3.3 ATMOSPHERIC EFFECTS

Receivers located downwind from a source can be exposed to increased noise levels relative to calm conditions, whereas locations upwind can have lowered noise levels. Sound levels can be increased at large distances (e.g., more than 500 feet) due to atmospheric temperature inversion (i.e., increasing temperature with elevation). Other factors, such as air temperature, humidity, and turbulence, can also have significant effects. (2)

2.3.4 SHIELDING

A large object or barrier in the path between a noise source and a receiver can substantially attenuate noise levels at the receiver. The amount of attenuation provided by shielding depends on the size of the object and the frequency content of the noise source. Shielding by trees and other such vegetation typically only has an "out of sight, out of mind" effect. That is, the perception of noise impact tends to decrease when vegetation blocks the line of sight to nearby residents. However, for vegetation to provide a substantial, or even noticeable, noise reduction, the vegetation area must be at least 15 feet in height, 100 feet wide, and dense enough to completely obstruct the line of sight between the source and the receiver. This size of vegetation may provide up to 5 dBA of noise reduction. The Federal Highway Administration (FHWA) does not consider the planting of vegetation to be a noise abatement measure. (5)

2.4 NOISE CONTROL

Noise control is the process of obtaining an acceptable noise environment for an observation point or receiver by controlling the noise source, transmission path, receiver, or all three. This concept is known as the source-path-receiver concept. In general, noise control measures can be applied to these three elements.

2.5 NOISE BARRIER ATTENUATION

Effective noise barriers can reduce noise levels by 10 to 15 dBA, cutting the loudness of traffic noise in half. A noise barrier is most effective when placed close to the noise source or receiver. Noise barriers, however, do have limitations. For a noise barrier to work, it must block the line-of-sight path of sound from the noise source.

2.6 LAND USE COMPATIBILITY WITH NOISE

Some land uses are more tolerant of noise than others. For example, schools, hospitals, churches, and residences are more sensitive to noise intrusion than are commercial or industrial developments and related activities. As ambient noise levels affect the perceived amenity or livability of a development, so too can the mismanagement of noise impacts impair

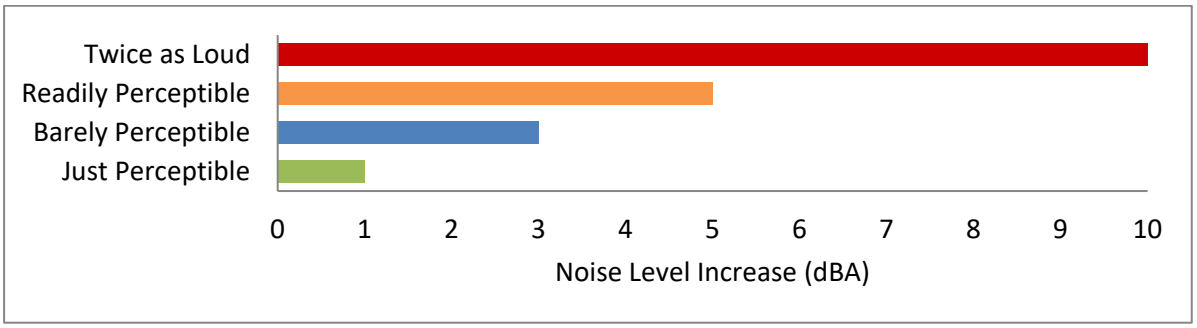
the economic health and growth potential of a community by reducing the area's desirability as a place to live, shop, and work. For this reason, land use compatibility with the noise environment is an important consideration in the planning and design process. The FHWA encourages State and Local government to regulate land development in such a way that noise-sensitive land uses are either prohibited from being located adjacent to a highway, or that the developments are planned, designed, and constructed in such a way that noise impacts are minimized. (6)

2.7 COMMUNITY RESPONSE TO NOISE

Approximately sixteen percent of the population has a very low tolerance for noise and will object to any noise not of their making. Consequently, even in the quietest environment, some complaints may occur. Twenty to thirty percent of the population will not complain even in very severe noise environments. (7 pp. 8-6) Thus, a variety of reactions can be expected from people exposed to any given noise environment.

Surveys have shown that community response to noise varies from no reaction to vigorous action for newly introduced noises averaging from 10 dB below existing to 25 dB above existing. (8) According to research originally published in the Noise Effects Handbook (7), the percentage of high annoyance ranges from approximately 0 percent at 45 dB or less, 10 percent are highly annoyed at around 60 dB, and increases rapidly to approximately 70 percent being highly annoyed at approximately 85 dB or greater. Despite this variability in behavior on an individual level, the population can be expected to exhibit the following responses to changes in noise levels, as shown in Exhibit 2-B. A change of 3 dBA is considered barely perceptible, and changes of 5 dBA are considered readily perceptible. (4)

EXHIBIT 2-B: NOISE LEVEL INCREASE PERCEPTION



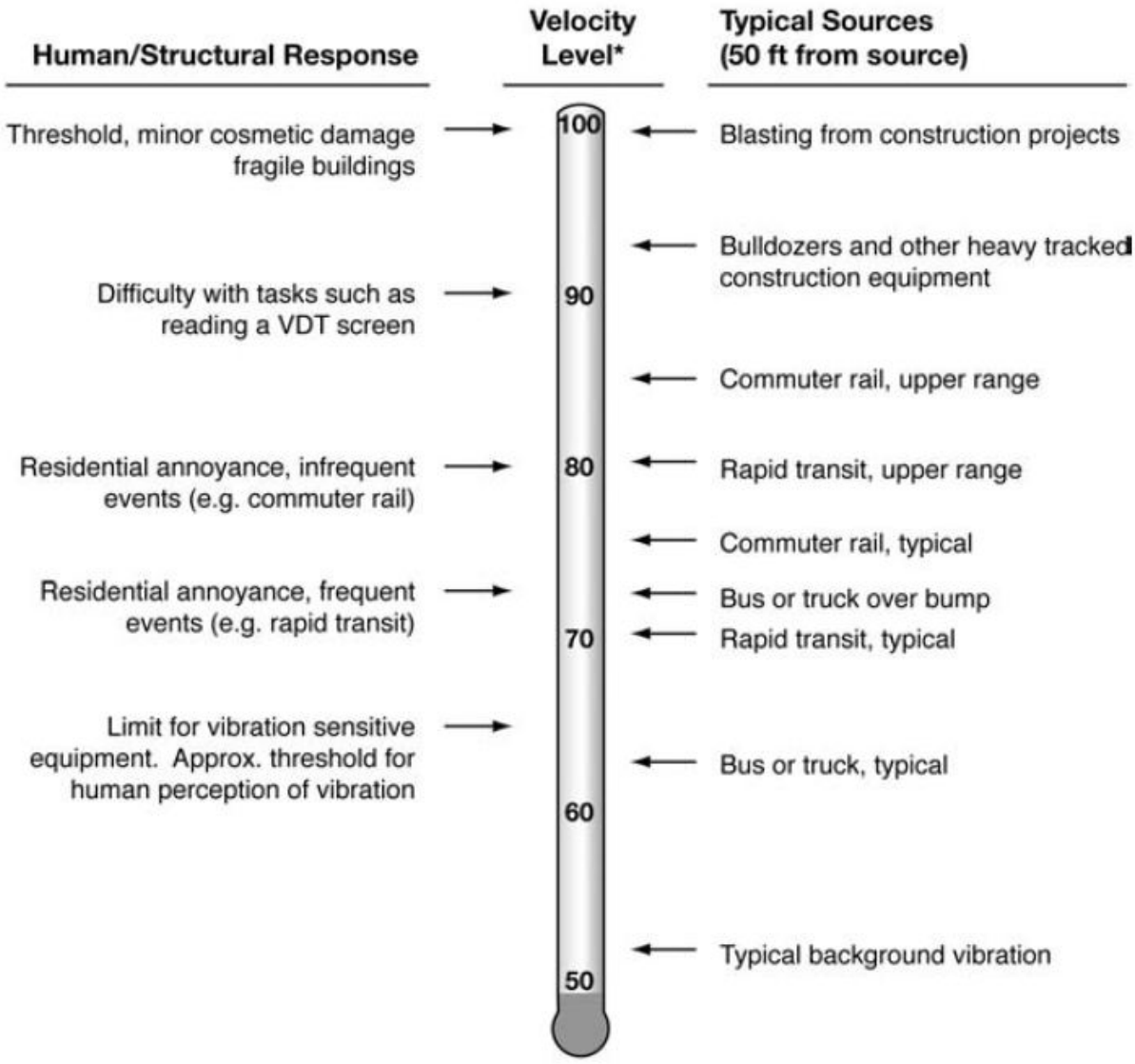
2.8 VIBRATION

Per the Federal Transit Administration (FTA) *Transit Noise Impact and Vibration Impact Assessment Manual* (8) , vibration is the periodic oscillation of a medium or object. The rumbling sound caused by the vibration of room surfaces is called structure-borne noise. Sources of ground-borne vibrations include natural phenomena (e.g., earthquakes, volcanic eruptions, sea waves, landslides) or human-made causes (e.g., explosions, machinery, traffic, trains, construction equipment). Vibration sources may be continuous, such as factory machinery, or transient, such as explosions. As is the case with airborne sound, ground-borne vibrations may be described by amplitude and frequency.

There are several different methods that are used to quantify vibration. The peak particle velocity (PPV) is defined as the maximum instantaneous peak of the vibration signal. The PPV is most frequently used to describe vibration impacts to buildings but is not always suitable for evaluating human response (annoyance) because it takes some time for the human body to respond to vibration signals. Instead, the human body responds to average vibration amplitude, often described as the root mean square (RMS). The RMS amplitude is defined as the average of the squared amplitude of the signal and is most frequently used to describe the effect of vibration on the human body. Decibel notation (VdB) is commonly used to measure RMS. Decibel notation (VdB) serves to reduce the range of numbers used to describe human response to vibration. Typically, ground-borne vibration generated by man-made activities attenuates rapidly with distance from the source of the vibration. Sensitive receivers for vibration include structures (especially older masonry structures), people (especially residents, the elderly, and the sick), and vibration-sensitive equipment and/or activities.

The background vibration-velocity level in residential areas is generally 50 VdB. Ground-borne vibration is normally perceptible to humans at approximately 65 VdB. For most people, a vibration-velocity level of 75 VdB is the approximate dividing line between barely perceptible and distinctly perceptible levels. Typical outdoor sources of perceptible ground-borne vibration are construction equipment, steel-wheeled trains, and traffic on rough roads. If a roadway is smooth, the ground-borne vibration is rarely perceptible. The range of interest is from approximately 50 VdB, which is the typical background vibration-velocity level, to 100 VdB, which is the general threshold where minor damage can occur in fragile buildings. Exhibit 2-C illustrates common vibration sources and the human and structural response to ground-borne vibration.

EXHIBIT 2-C: TYPICAL LEVELS OF GROUND-BORNE VIBRATION



Source: Federal Transit Administration (FTA) Transit Noise and Vibration Impact Assessment Manual.

3 REGULATORY SETTING

The federal government, the State of California, various county governments, and most municipalities in the state have established standards and ordinances to control noise. In most areas, automobile and truck traffic is the major source of environmental noise. Traffic activity generally produces an average sound level that remains constant with time. Air and rail traffic, and commercial and industrial activities are also major sources of noise in some areas. Federal, state, and local agencies regulate different aspects of environmental noise. Federal and state agencies generally set noise standards for mobile sources such as aircraft and motor vehicles, while regulation of stationary sources is left to local agencies.

3.1 STATE OF CALIFORNIA NOISE REQUIREMENTS

The State of California regulates freeway noise, sets standards for sound transmission, provides occupational noise control criteria, identifies noise standards, and provides guidance for local land use compatibility. State law requires that each county and city adopt a General Plan that includes a Noise Element, which is to be prepared per guidelines adopted by the Governor's Office of Planning and Research (OPR). (9) The purpose of the Noise Element is to *limit the exposure of the community to excessive noise levels*. In addition, the California Environmental Quality Act (CEQA) requires that all known environmental effects of a project be analyzed, including environmental noise impacts.

3.2 CITY OF ONTARIO GENERAL PLAN

The City of Ontario General Plan (Policy Plan) identifies several policies to minimize the impacts of excessive noise levels throughout the community. Policy Plan Section S4, Noise Hazards, establishes a goal of maintaining *an environment where noise does not adversely affect the public's health, safety, and welfare.* (10) To satisfy this goal, the Policy Plan identifies six policies related to: noise mitigation; coordination with transportation authorities; noise mitigation; truck traffic; roadway design; airport noise compatibility, and rail noise mitigation. Noise criteria identified in the General Plan Environmental Impact Report (EIR) in Table 5.13-3 are the guidelines used in the 2010 General Plan to evaluate land use compatibility within various noise environments. Table 5.13-3 is reproduced here in Exhibit 3-A *Noise Level Exposure and Land Use Compatibility Guidelines*. The Project residential land uses are considered *clearly acceptable* within exterior noise level environments approaching 60 dBA CNEL and *normally acceptable* within noise level environments up to 65 dBA CNEL. For noise level environments greater than 70 dBA CNEL, the Project land uses would be considered *clearly unacceptable* and no new construction should be permitted.

EXHIBIT 3-A: NOISE LEVEL EXPOSURE AND LAND USE COMPATIBILITY GUIDELINES

LAND USE CATEGORIES		COMMUNITY NOISE EQUIVALENT LEVEL (CNEL)						
Category	Land Use	55	60	65	70	75	80	
Residential/ Lodging	Single Family / Duplex							
	Multi-Family							
	Mobile Homes							
	Hotel/Motels							
Public/Institutional	Schools/Hospitals							
	Churches/ Libraries							
	Auditoriums/Concert Halls							
Commercial	Offices							
	Retail							
Industrial	Manufacturing							
	Warehousing							
Recreational/ Open Space	Parks/Playgrounds							
	Golf Courses/ Riding Stables							
	Outdoor Spectator Sports							
	Outdoor Music Shells/ Amphitheaters							
	Livestock/Wildlife Preserves							
	Crop Agriculture							

LEGEND

Clearly Acceptable:	No special noise insulation required, assuming buildings of normal conventional construction.
Normally Acceptable:	Acoustical reports will be required for major new residential construction. Conventional construction with closed windows and fresh air supply systems of air conditioning will normally suffice.
Normally Unacceptable:	New construction should be discouraged. Noise/aviation easements required for all new construction. If new construction does proceed, a detailed analysis of noise reduction requirements must be made and necessary noise insulation features included.
Clearly Unacceptable:	No new construction should be permitted.

Source: The Ontario Plan 2050 Environmental Impact Report (Table 5.13-3).

3.3 OPERATIONAL NOISE STANDARDS

To analyze noise impacts originating from a designated fixed location or private property such as the Project, stationary-source (operational) noise levels are evaluated against standards established under a City's Municipal Code, which is included in Appendix 3.1. The City of Ontario requires that noise from new stationary sources in the City comply with the City's Noise Ordinance, which limits the acceptable noise at the property line of the impacted property to reduce nuisances to sensitive land uses. Compliance with the City's Noise Ordinance would result in noise levels that are acceptable to the City and would result in less than significant noise impacts from stationary sources (11).

Section 5-29.04(a) identifies the allowable daytime and nighttime ambient exterior noise standards for each land use type. For residential land uses (Noise Zone I), ambient exterior noise levels may not exceed 65 dBA L_{eq} during the daytime hours (7:00 a.m. to 10:00 p.m.) and may not exceed 45 dBA L_{eq} during the nighttime hours (10:00 p.m. to 7:00 a.m.). (12) The lower noise level standard shall apply on the boundary between two (2) different noise zones. If the ambient noise level exceeds the resulting standard, the ambient noise level shall be the standard. The maximum acceptable Project-related operational noise levels received at off-site land uses in the City of Ontario are identified in Table 3-1.

TABLE 3-1: OPERATIONAL NOISE STANDARDS

Noise Zone	Land Use	Exterior Noise Levels (dBA Leq)[2]	
		Daytime (7 am-10 pm)	Nighttime (10 pm-7 am)
I	Single-Family Residential	65	45
II	Multi-Family Residential	65	50
III	Commercial	65	60
IV	Residential Mixed-Use	70	70
V	Manufacturing and Industrial	70	70

[1] Source: Section 5-29.04 of the City of Ontario Municipal Code (Appendix 3.1).
[2] L_{eq} represents a steady-state sound level containing the same total energy as a time-varying signal over a given period.

3.4 CONSTRUCTION NOISE STANDARDS

The City of Ontario has set restrictions to control noise impacts associated with construction. Section 5-29.09 of the Municipal Code states: No person, while engaged in construction, remodeling, digging, grading, demolition or any other related building activity, shall operate any tool, equipment or machine in a manner that produces loud noise that disturbs a person of normal sensitivity who works or resides in the vicinity, or a Police or Code Enforcement Officer, on any weekday except between the hours of 7:00 a.m. and 6:00 p.m. or on Saturday or Sunday between the hours of 9:00 a.m. and 6:00 p.m. (12) While the City establishes limits to the hours during which construction activity may take place, it does not identify specific noise level limits for construction noise levels at potentially affected receiver locations for CEQA analysis purposes. Therefore, a numerical construction threshold based on the Federal Transit

Administration (FTA) Transit Noise and Vibration Impact Assessment Manual is used for the analysis of daytime construction impacts, as discussed below.

According to the FTA, local noise ordinances are typically not very useful in evaluating construction noise. They usually relate to nuisance and hours of allowed activity and sometimes specify limits in terms of maximum levels but are generally not practical for assessing the impact of a construction project. Project construction noise criteria should account for the existing noise environment, the absolute noise levels during construction activities, the duration of the construction, and the adjacent land use. Due to the lack of standardized construction noise thresholds, the FTA provides guidelines that can be considered reasonable criteria for construction noise assessment. The FTA considers a daytime exterior construction noise level of 80 dBA L_{eq} as a reasonable threshold for noise-sensitive residential land use. (8 p. 179)

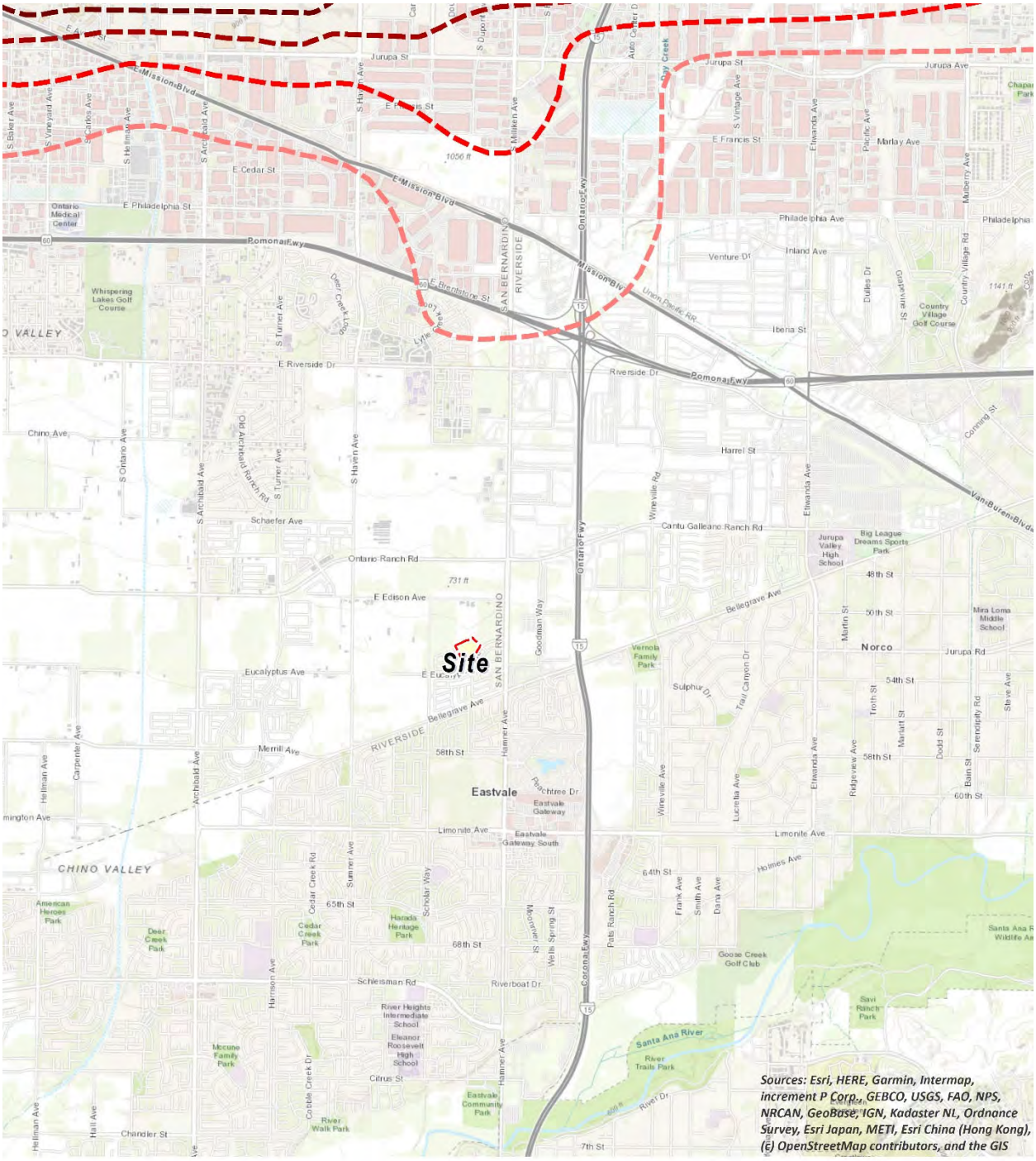
3.5 VIBRATION STANDARDS

Construction activity can result in varying degrees of ground-borne vibration, depending on the equipment and methods used, distance to the affected structures, and soil type. Construction vibration is generally associated with pile driving and rock blasting. Other construction equipment, such as air compressors, light trucks, hydraulic loaders, etc., generates little or no ground vibration. (8) To analyze vibration impacts originating from the operation and construction of a project, vibration-generating activities are appropriately evaluated against standards established under a City's Municipal Code, if such standards exist. However, the City of Ontario does not identify specific vibration level limits. Therefore, for analysis purposes, the Caltrans *Transportation and Construction Vibration Guidance Manual*, (13 p. 38) Table 19, vibration damage limit, is used in this noise study to assess potential temporary construction-related impacts at adjacent building locations. The nearest noise-sensitive buildings adjacent to the Project site can best be described as "older residential structures" with a maximum acceptable continuous vibration threshold of 0.3 PPV (in/sec).

3.6 AIRPORT LAND USE COMPATIBILITY

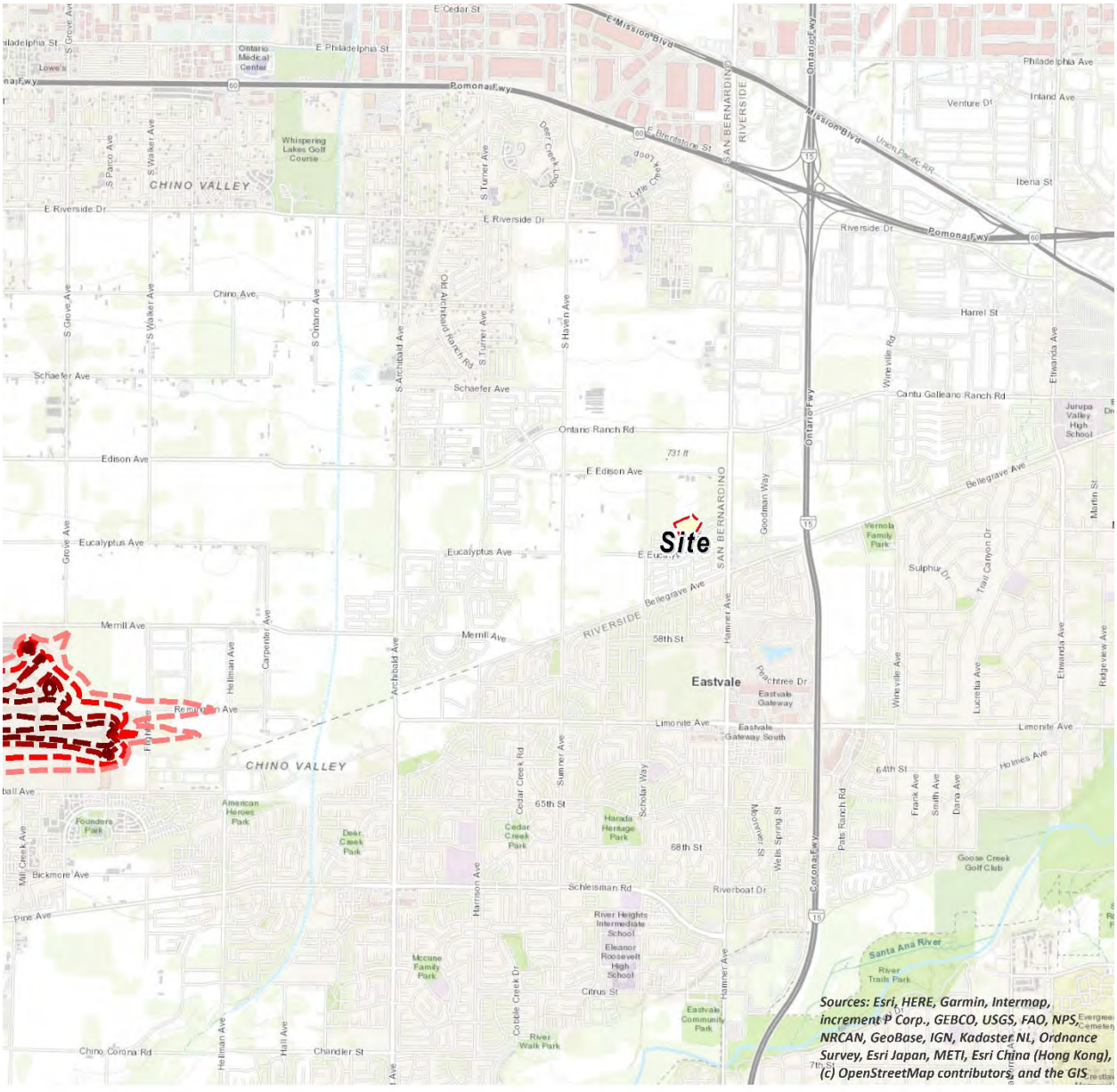
The Project site is located approximately 4 miles south of the Ontario International Airport (ONT). This places the Project site within the ONT Airport Influence Area according to Policy Map 2-1 of the *Ontario International Airport Land Use Compatibility Plan (ONT ALUCP).* The ONT ALUCP was amended in July 2018 to promote compatibility between the airport and the land uses that surround it (14). Since the Project site is located within the ONT Airport Influence Area, the Project is subject to the Noise Criteria established in Table 2-3 in the ONT ALUCP. As shown in Exhibit 3-B, the Project site is located within the ONT Airport Influence Area but outside the 60 dBA CNEL airport noise impact zone consistent with Policy Map 2-3. According to Table 2-3 of the ONT ALUCP, residential land uses and schools located outside the 60 dBA CNEL noise level contours of ONT, such as the Project, are considered *normally compatible land use.* For *normally compatible land use,* either the activities associated with the land use are inherently noisy or standard construction methods will sufficiently attenuate exterior noise to an acceptable indoor community noise equivalent level (CNEL).

EXHIBIT 3-B: ONT AIRPORT NOISE LEVEL CONTOURS



The Project site is located approximately 2.5 miles east of the Chino Airport (CNO). This places the Project site outside the Chino Airport Influence Area according to Figure 1-4 Airport Referral Areas of the *Comprehensive Land Use Plan for the Chino Airport.* As shown in Exhibit 3-C, the Project site is outside the 60 dBA CNEL airport noise level contour, and impacts would be *less than significant*.

EXHIBIT 3-C: CHINO AIRPORT NOISE LEVEL CONTOURS



4 SIGNIFICANCE CRITERIA

The following significance criteria are based on currently adopted guidance provided by Appendix G of the California Environmental Quality Act (CEQA) Guidelines. (15) For the purposes of this report, impacts would be potentially significant if the Project results in or causes:

A. Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?

B. Generation of excessive ground-borne vibration or ground-borne noise levels?

C. For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?

4.1 NOISE LEVEL INCREASES (THRESHOLD A)

Noise level increases resulting from the Project are evaluated based on the Appendix G CEQA Guidelines. Under CEQA, consideration must be given to the magnitude of the increase, the existing baseline ambient noise levels, and the location of receivers to determine if a noise increase represents a significant adverse environmental impact. This approach recognizes *that there is no single noise increase that renders the noise impact significant.* (16) This is primarily because of the wide variation in individual thresholds of annoyance and differing individual experiences with noise. Thus, an important way of determining a person's subjective reaction to a new noise is to compare it to the existing environment to which one has adapted—the so-called *ambient* environment. In general, the more a new noise exceeds the previously existing ambient noise level, the less acceptable the new noise will typically be judged.

The Federal Interagency Committee on Noise (FICON) (17) developed guidance to be used for the assessment of project-generated increases in noise levels that consider the ambient noise level. The FICON recommendations are based on studies that relate aircraft noise levels to the percentage of persons highly annoyed by aircraft noise. Although the FICON recommendations were specifically developed to assess aircraft noise impacts, these recommendations are often used in environmental noise impact assessments involving the use of cumulative noise exposure metrics, such as the average-daily noise level (CNEL) and equivalent continuous noise level (L_{eq}).

As previously stated, the approach used in this noise study recognizes *that there is no single noise increase that renders the noise impact significant*, based on a 2008 California Court of Appeal ruling on Gray v. County of Madera. (16) For example, if the ambient noise environment is quiet (<60 dBA) and the new noise source greatly increases the noise levels, an impact may occur if the noise criteria are exceeded. Therefore, for this analysis, a *readily perceptible* 5 dBA or greater project-related noise level increase is considered a significant impact when the without project noise levels are below 60 dBA. Per the FICON, in areas where the without project noise levels range from 60 to 64 dBA, a 3 dBA *barely perceptible* noise level increase

appears to be appropriate for most people. When the without project noise levels are 65 dBA and higher, any increase in community noise louder than 1.5 dBA or greater is considered a significant impact if the noise criteria for a given land use is exceeded since it likely contributes to an existing noise exposure exceedance. The FICON guidance provides an established source of criteria to assess the impacts of substantial temporary or permanent increases in baseline ambient noise levels. Based on the FICON criteria, the amount to which a given noise level increase is considered acceptable is reduced when the without Project (baseline) noise levels are already shown to exceed certain land-use specific exterior noise level criteria. The specific levels are based on typical responses to noise level increases of 5 dBA or *readily perceptible*, 3 dBA or *barely perceptible*, and 1.5 dBA depending on the underlying without Project noise levels for noise-sensitive uses. These levels of increase and their perceived acceptance are consistent with guidance provided by the Federal Aviation Administration, the Federal Highway Administration (4 p. 9), and Caltrans (18 p. 2_48).

4.2 VIBRATION (THRESHOLD B)

As described in Section 3.5, the vibration impacts originating from the construction of the Esperanza Specific Plan Amendment, vibration-generating activities are appropriately evaluated using the Caltrans vibration damage thresholds to assess potential temporary construction-related impacts at adjacent building locations. The nearest noise-sensitive buildings adjacent to the Project site can best be described as “older residential structures” with a maximum acceptable continuous vibration threshold of 0.3 PPV (in/sec).

4.3 CEQA GUIDELINES NOT FURTHER ANALYZED (THRESHOLD C)

CEQA Noise Threshold C applies when there are nearby public and private airports and/or airstrips and focuses on land use compatibility of the Project to nearby airports and airstrips. The closest airport that would require additional noise analysis under CEQA Guideline threshold C is the Ontario International Airport, which is located approximately 4 miles north of the Project site. As previously indicated in Section 3.6, the Project site is located within the ONT Airport Influence Area but is located outside the 60 dBA CNEL airport noise impact zone. Similarly, as indicated in Section 3.6, the Project site is not located within the CNO Airport Influence Area and is outside the 60 dBA CNEL airport noise impact zone. Therefore, airport noise impacts are considered *less than significant,* and no further noise analysis is provided under Guideline C.

4.4 SIGNIFICANCE CRITERIA SUMMARY

Noise impacts shall be considered significant if any of the following occur as a direct result of the Project. Table 4-1 shows the significance criteria summary matrix that includes the allowable criteria used to identify potentially significant incremental noise level increases.

TABLE 4-1: SIGNIFICANCE CRITERIA SUMMARY

Analysis	Receiving Land Use	Condition(s)	Significance Criteria	
			Daytime	Nighttime
Off-Site Traffic	All	If ambient is < 60 dBA CNEL[2]	≥ 5 dBA CNEL Project increase	
		If ambient is 60 - 64 dBA CNEL[2]	≥ 3 dBA CNEL Project increase	
		If ambient is >= 65 dBA CNEL[2]	≥ 1.5 dBA CNEL Project increase	
On-Site Traffic	All	See Exhibit 3-A		
Operational	Noise-Sensitive	Exterior Noise Level Standards[1]	65 dBA L_{eq}	45 dBA L_{eq}
		If ambient is < 60 dBA Leq[2]	≥ 5 dBA L_{eq} Project increase	
		If ambient is 60 - 65 dBA Leq[2]	≥ 3 dBA L_{eq} Project increase	
		If ambient is > 65 dBA Leq[2]	≥ 1.5 dBA L_{eq} Project increase	
Construction		Permitted hours of 7:00 a.m. and 6:00 p.m. on weekdays[3]		
		Noise Level Threshold[4]	80 dBA L_{eq}	
		Vibration Level Threshold[5]	0.3 PPV (in/sec)	

[1] City of Ontario Municipal Code, 5-29.04(a) exterior noise standards for residential land uses (Noise Zone I).
[2] FICON, 1992.
[3] City of Ontario Municipal Code Section 5-29.09(a).
[4] Federal Transit Administration, Transit Noise and Vibration Impact Assessment Manual.
[5] Caltrans Transportation and Construction Vibration Manual, April 2020 Table 19.
"Daytime" = 7:00 a.m. to 10:00 p.m.; "Nighttime" = 10:00 p.m. to 7:00 a.m.

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5 EXISTING NOISE LEVEL MEASUREMENTS

To assess the existing noise level environment, six 24-hour noise level measurements were taken at sensitive receiver locations in the Project study area. The receiver locations were selected to describe and document the existing noise environment within the Project study area. Exhibit 5-A provides the boundaries of the Project study area and the noise level measurement locations. To fully describe the existing noise conditions, noise level measurements were collected by Urban Crossroads, Inc. on Wednesday, October 4, 2023. Appendix 5.1 includes study area photos.

5.1 MEASUREMENT PROCEDURE AND CRITERIA

To describe the existing noise environment, the hourly noise levels were measured during typical weekday conditions over a 24-hour period. By collecting individual hourly noise level measurements, it is possible to describe the daytime and nighttime hourly noise levels and calculate the 24-hour CNEL. The long-term noise readings were recorded using Piccolo Type 2 integrating sound level meter and dataloggers. The Piccolo sound level meters were calibrated using a Larson-Davis calibrator, Model CAL 150. All noise meters were programmed in "slow" mode to record noise levels in "A" weighted form. The sound level meters and microphones were equipped with a windscreen during all measurements. All noise level measurement equipment satisfies the American National Standards Institute (ANSI) standard specifications for sound level meters ANSI S1.4-2014/IEC 61672-1:2013.

5.2 NOISE MEASUREMENT LOCATIONS

The long-term noise level measurements were positioned as close to the nearest sensitive receiver locations as possible to assess the existing ambient hourly noise levels surrounding the Project site. Actual measurement locations may be affected by location access, equipment security, and proximity to noise sources or solid objects that would affect the measurement and thus may be located at locations that have similar acoustic conditions as the desired locations. Both Caltrans and the FTA recognize that it is not reasonable to collect noise level measurements that can fully represent any part of a private yard, patio, deck, or balcony normally used for human activity when estimating impacts for new development projects. This is demonstrated in the Caltrans general site location guidelines, which indicate that *sites must be free of noise contamination by sources other than sources of interest. Avoid sites located near sources such as barking dogs, lawnmowers, pool pumps, and air conditioners unless it is the express intent of the analyst to measure these sources*. (2) Further, FTA guidance states, t*hat it is not necessary nor recommended that existing noise exposure be determined by measuring at every noise-sensitive location in the project area. Rather, the recommended approach is to characterize the noise environment for clusters of sites based on measurements or estimates at representative locations in the community*. (19)

EXHIBIT 5-A: AMBIENT NOISE MEASUREMENT LOCATIONS

Based on recommendations of Caltrans and the FTA, it is not necessary to collect measurements at each individual building or residence because each measurement represents a group of locations that share acoustical equivalence. (19) In other words, the area represented by the measurement location shares similar shielding, terrain, and geometric relationship to the reference noise source as the receiver location. Receivers represent a location of noise-sensitive areas and are used to estimate the future noise level impacts. Collecting reference ambient noise level measurements at the nearby sensitive receiver locations allows for a comparison of the before and after Project noise levels and is necessary to assess potential noise impacts due to the Project's contribution to the ambient noise levels.

5.3 NOISE MEASUREMENT RESULTS

The noise measurements presented below focus on the average or equivalent sound levels (L_{eq}). The equivalent sound level (L_{eq}) represents a steady-state sound level containing the same total energy as a time-varying signal over a given sample period. Table 5-1 identifies the hourly daytime (7:00 a.m. to 10:00 p.m.) and nighttime (10:00 p.m. to 7:00 a.m.) noise levels at each noise level measurement location. Appendix 5.2 provides a summary of the existing hourly ambient noise levels.

TABLE 5-1: NOISE LEVEL MEASUREMENT SUMMARY

Location[1]	Description	Energy Average Noise Level (dBA L_{eq})[2]	
		Daytime	Nighttime
L1	Located East of the site at future residential	67.9	55.3
L2	Located Northwest of the site at future residential	45.1	36.9
L3	Located North of the site	47.4	34.9
L4	Located West of the site near the residence at 4500 S. Amherst Ave.	53.2	53.3
L5	Located South of the site near the residence at 4576 S Afton Privado	60.3	53.4
L6	Located South of the site near the residence at 4554 S Afton Privado	66.0	45.2

[1] See Exhibit 5-A for the noise level measurement locations.
[2] Energy (logarithmic) average levels. The long-term 24-hour measurement worksheets are included in Appendix 5.2.
"Daytime" = 7:00 a.m. to 10:00 p.m.; "Nighttime" = 10:00 p.m. to 7:00 a.m.

Table 5-1 provides the (energy average) noise levels used to describe the daytime and nighttime ambient conditions. These daytime and nighttime energy average noise levels represent the average of all hourly noise levels observed during these time periods expressed as a single number. Appendix 5.2 provides summary worksheets of the noise levels for each

hour as well as the minimum, maximum, L_1, L_2, L_5, L_8, L_{25}, L_{50}, L_{90}, L_{95}, and L_{99} percentile noise levels observed during the daytime and nighttime periods.

6 METHODS AND PROCEDURES

The following section outlines the methods and procedures used to model and analyze the future traffic noise environment.

6.1 FHWA TRAFFIC NOISE PREDICTION MODEL

The estimated roadway noise impacts from vehicular traffic were calculated using a computer program that replicates the Federal Highway Administration (FHWA) Traffic Noise Prediction Model- FHWA-RD-77-108. (20) The FHWA Model arrives at a predicted noise level through a series of adjustments to the Reference Energy Mean Emission Level (REMEL). In California, the national REMELs are substituted with the California Vehicle Noise (Calveno) Emission Levels. (21) Adjustments are then made to the REMEL to account for: the roadway classification (e.g., collector, secondary, major, or arterial), the roadway active width (i.e., the distance between the center of the outermost travel lanes on each side of the roadway), the total average daily traffic (ADT), the travel speed, the percentages of automobiles, medium trucks, and heavy trucks in the traffic volume, the roadway grade, the angle of view (e.g., whether the roadway view is blocked), the site conditions ("hard" or "soft" relates to the absorption of the ground, pavement, or landscaping), and the percentage of total ADT which flows each hour throughout a 24-hour period.

6.2 ON-SITE TRAFFIC NOISE PREDICTION MODEL INPUTS

Table 6-1 presents the on-site roadway parameters, including the ADT volumes used for this study. The on-site roadway parameters are based on the City of Ontario General Plan Mobility Element roadway classifications. The maximum two-way traffic volumes are based on the roadway design capacity and reflect future long-range traffic conditions needed to assess the on-site traffic noise environment and to identify potential noise abatement measures (if any) that address the worst-case future noise conditions.

TABLE 6-1: ON-SITE ROADWAY PARAMETERS

Location	Classification[1]	Lanes	Average Daily Traffic Volume[2]	Speed Limit (mph)[2]	Site Conditions[2]
Eucalyptus Ave	Arterial	4	21,700	40	Soft
Amherst Ave	Local	2	9,500	25	Soft
Clifton Ave	Local	2	9,500	25	Soft
Chatham St	Local	2	9,500	25	Soft

[1] Road classifications based upon the Esperanza Specific Plan, Exhibit 10 Master Circulation Plan.
[2] Volumes based upon the roadway capacity defined City of Ontario General Plan (TOP2050) Draft EIR, Appendix K.

6.3 TRAFFIC NOISE PREDICTION MODEL INPUTS

The average daily traffic (ADT) volumes used for this study are presented in Table 6-1. The Existing Plus Project ADT was derived based on the differences in Opening Year ADT volumes

added to the Existing ADT volumes. Tables 6-2 and 6-3 provide the time of day (daytime, evening, and nighttime) vehicle splits used for calculating CNEL values.

TABLE 6-2: TIME OF DAY VEHICLE SPLITS

Time Period	Vehicle Type		
	Autos	Medium Trucks	Heavy Trucks
Daytime (7:00 a.m. - 7:00 p.m.)	77.50%	84.80%	86.50%
Evening (7:00 p.m. - 10:00 p.m.)	12.90%	4.90%	2.70%
Nighttime (10:00 p.m. - 7:00 a.m.)	9.60%	10.30%	10.80%
Total:	100.00%	100.00%	100.00%

Source: Typical Southern California vehicle mix.

TABLE 6-3: DISTRIBUTION OF TRAFFIC FLOW BY VEHICLE TYPE (VEHICLE MIX)

Roadway	Total % Traffic Flow			Total
	Autos	Medium Trucks	Heavy Trucks	
All Roadways	97.42%	1.84%	0.74%	100.00%

Source: Typical Southern California vehicle mix.

7 OFF-SITE TRAFFIC NOISE ANALYSIS

The Project would result in a small increase in regional and local traffic volumes. Because sources are calculated on a logarithmic scale, a doubling of the energy is required to generate a noise level increase of 3 dBA. In the case of traffic, a doubling of the traffic volume, without changing the vehicle speeds or mix ratio, results in a noise increase of 3 dBA.

Based on the Project trip generation analysis, the Project is anticipated to generate a net -5 new trips daily (22). Therefore, the Project's traffic volumes would not result in an increase on Eucalyptus Avenue or other area roadways greater than predicted in the original Esperanza Specific Plan or The Ontario Plan 2050 (TOP 2050). Off-site traffic noise impacts would continue to be *less than significant* under CEQA.

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8 ON-SITE TRAFFIC NOISE ANALYSIS

An on-site exterior noise impact analysis has been completed to determine the noise exposure levels resulting from adjacent transportation noise sources in the Project study area and identify potential noise attenuation measures that would achieve acceptable Project exterior and interior noise levels. The primary source of transportation noise affecting the Project site is anticipated to be from Eucalyptus Avenue, Clifton Avenue, Chatham Street, and Amherst Avenue. The Project would also be exposed to nominal traffic noise from the Project's internal roads. However, due to the low traffic volume/speed, traffic noise from these internal roads will not substantially contribute to ambient noise conditions.

8.1 EXTERIOR NOISE ANALYSIS

The expected exterior noise levels for the on-site Project land uses were estimated using the FHWA traffic noise prediction model and the parameters outlined in Tables 6-1 to 6-3. Table 8-1 presents a summary of future on-site exterior traffic noise levels at Project building facades, including the Project 6-foot-high wall along Eucalyptus Avenue. The on-site traffic noise analysis calculations are provided in Appendix 8.1.

TABLE 8-1: EXTERIOR NOISE LEVELS

Building	Roadway	Unmitigated Exterior Noise Level (dBA CNEL)[2]	Land Use Compatibility[3]
BLDG 20	Eucalyptus Ave	59.3	*Clearly Acceptable*
BLDG 7-14	Eucalyptus Ave	59.4	*Clearly Acceptable*
BLDG 6	Eucalyptus Ave	59.4	*Clearly Acceptable*
BLDG 5-6	Clifton Ave	62.7	*Normally Acceptable*
BLDG 4	Clifton Ave	61.0	*Normally Acceptable*
BLDG 4	Chatham St	64.4	*Normally Acceptable*
BLDG 1-3	Chatham St	63.9	*Normally Acceptable*
BLDG 27-28	Chatham St	62.3	*Normally Acceptable*
BLDG 27	Amherst Ave	62.9	*Normally Acceptable*
BLDG 26-22	Amherst Ave	62.9	*Normally Acceptable*
BLDG 20-21	Amherst Ave	62.9	*Normally Acceptable*

[1] Project buildings shown on Exhibit 1-B.
[2] Exterior on-site traffic noise level calculations are included in Appendix 8.1.
[3] Based on the General Plan land use compatibility guidelines as shown in Exhibit 3-A.

The on-site exterior traffic noise analysis indicates that all buildings will experience exterior noise levels ranging from 59.3 to 64.4 CNEL. Based on the City of Ontario Land Use Compatibility for Community Noise Exposure shown in Exhibit 3-A, the Project land uses are considered clearly acceptable to normally acceptable with unmitigated exterior noise levels of less than 65 dBA CNEL. For *normally acceptable* exterior noise levels, a*coustical reports will be*

required for major new residential construction. Conventional construction with closed windows and fresh air supply systems of air conditioning will normally suffice.

In addition, the Project will satisfy the City of Ontario 65 dBA CNEL exterior noise level standards for residential land uses. This noise analysis shows that the Project will satisfy the City of Ontario 65 dBA CNEL exterior noise level standards for residential use without additional noise abatement measures.

8.1.4 EXTERIOR TRAFFIC NOISE LEVEL COMPLIANCE

Table 8-1 shows that on-site traffic noise levels do not exceed the City of Ontario 65 dBA CNEL exterior noise level standards for noise-sensitive residential land uses.

8.2 INTERIOR NOISE ANALYSIS

To ensure that the interior noise levels comply with the interior noise level standards, future exterior noise levels were calculated at the first-, second-, and third-floor building façade/balcony locations.

8.2.1 NOISE REDUCTION METHODOLOGY

The interior noise level is the difference between the predicted exterior noise level at the building facade and the noise reduction of the structure. Typical building construction will provide a Noise Reduction (NR) of approximately 12 dBA with "windows open" and a minimum 25 dBA noise reduction with "windows closed." (4) (23)

8.2.2 INTERIOR NOISE LEVEL ASSESSMENT

To provide the necessary interior noise level reduction, Tables 8-2 through 8-4 indicate that Project land uses adjacent to Eucalyptus Avenue, Clifton Avenue, Chatham Street, and Amherst Avenue will require a windows-closed condition and mechanical ventilation (e.g., air conditioning). Table 8-2 shows that the future noise levels at the first-floor building façade are expected to range from 59.3 to 64.4 dBA CNEL, and with standard construction, interior noise levels will range from 33.9 to 39.4 dBA CNEL. Table 8-3 shows that the future noise levels at the second-floor building façade are expected to range from 60.8 to 65.5 dBA CNEL, and with standard construction, interior noise levels will range from 38.5 to 40.5 dBA CNEL. Table 8-4 shows that the future noise levels at the third-floor building façade are expected to range from 60.4 to 65.3 dBA CNEL, and with standard construction, interior noise levels will range from 35.4 to 40.3 dBA CNEL.

8.2.3 INTERIOR TRAFFIC NOISE LEVEL COMPLIANCE

Tables 8-2 through 8-4 show that on-site interior traffic noise levels will not exceed the City of Ontario 45 dBA CNEL interior noise level standard for residential development and additional noise abatement measures are unnecessary.

TABLE 8-2: FIRST-FLOOR INTERIOR NOISE LEVELS (CNEL)

Building	Roadway	Noise Level at Façade[2]	Required Interior Noise Reduction[3]	Estimated Interior Noise Reduction[4]	Upgraded Windows[5]	Interior Noise Level[6]	Threshold[7]	Threshold Exceeded?
BLDG 20	Keller Rd.	59.3	14.3	25.0	No	34.3	45	No
BLDG 7-14	Keller Rd.	59.4	14.4	25.0	No	34.4	45	No
BLDG 6	Keller Rd.	59.4	14.4	25.0	No	34.4	45	No
BLDG 5-6	Keller Rd.	62.7	17.7	25.0	No	37.7	45	No
BLDG 4	Keller Rd.	61.0	16.0	25.0	No	36.0	45	No
BLDG 4	Keller Rd.	64.4	19.4	25.0	No	39.4	45	No
BLDG 1-3	Keller Rd.	63.9	18.9	25.0	No	38.9	45	No
BLDG 27-28	Keller Rd.	62.3	17.3	25.0	No	37.3	45	No
BLDG 27	Keller Rd.	62.9	17.9	25.0	No	37.9	45	No
BLDG 26-22	Keller Rd.	62.9	17.9	25.0	No	37.9	45	No
BLDG 20-21	Keller Rd.	62.9	17.9	25.0	No	37.9	45	No

[1] Project site plan shown on Exhibit 1-B.
[2] Exterior noise level at the facade with a windows-closed condition and a means of mechanical ventilation (e.g., air conditioning). See Appendix 8.1.
[3] Noise reduction to satisfy the interior noise level threshold.
[4] A minimum of 25 dBA noise reduction is assumed with standard building construction and approximately 2 dBA less than the STC rating for upgraded windows.
[5] Does the required interior noise reduction trigger upgraded windows with a minimum STC rating of greater than 27?
[6] Estimated interior noise level with minimum STC rating for all windows.
[7] Interior noise level threshold: 45 dBA CNEL for residential use (California Code of Regulations, Title 24, Building Standards Administrative Code).

TABLE 8-3: SECOND-FLOOR INTERIOR NOISE LEVELS (CNEL)

Building	Roadway	Noise Level at Façade[2]	Required Interior Noise Reduction[3]	Estimated Interior Noise Reduction[4]	Upgraded Windows[5]	Interior Noise Level[6]	Threshold[7]	Threshold Exceeded?
BLDG 20	Keller Rd.	65.3	20.3	25.0	No	40.3	45	No
BLDG 7-14	Keller Rd.	65.5	20.5	25.0	No	40.5	45	No
BLDG 6	Keller Rd.	65.4	20.4	25.0	No	40.4	45	No
BLDG 5-6	Keller Rd.	62.4	17.4	25.0	No	37.4	45	No
BLDG 4	Keller Rd.	60.8	15.8	25.0	No	35.8	45	No
BLDG 4	Keller Rd.	63.9	18.9	25.0	No	38.9	45	No
BLDG 1-3	Keller Rd.	63.5	18.5	25.0	No	38.5	45	No
BLDG 27-28	Keller Rd.	62.0	17.0	25.0	No	37.0	45	No
BLDG 27	Keller Rd.	62.5	17.5	25.0	No	37.5	45	No
BLDG 26-22	Keller Rd.	62.5	17.5	25.0	No	37.5	45	No
BLDG 20-21	Keller Rd.	62.5	17.5	25.0	No	37.5	45	No

[1] Project site plan shown on Exhibit 1-B.
[2] Exterior noise level at the facade with a windows-closed condition and a means of mechanical ventilation (e.g., air conditioning). See Appendix 8.1.
[3] Noise reduction to satisfy the interior noise level threshold.
[4] A minimum of 25 dBA noise reduction is assumed with standard building construction and approximately 2 dBA less than the STC rating for upgraded windows.
[5] Does the required interior noise reduction trigger upgraded windows with a minimum STC rating of greater than 27?
[6] Estimated interior noise level with minimum STC rating for all windows.
[7] Interior noise level threshold: 45 dBA CNEL for residential use (California Code of Regulations, Title 24, Building Standards Administrative Code).

TABLE 8-4: THIRD-FLOOR INTERIOR NOISE LEVELS (CNEL)

Building	Roadway	Noise Level at Façade[2]	Required Interior Noise Reduction[3]	Estimated Interior Noise Reduction[4]	Upgraded Windows[5]	Interior Noise Level[6]	Threshold[7]	Threshold Exceeded?
BLDG 20	Keller Rd.	NA	NA	25.0	NA	NA	45	NA
BLDG 7-14	Keller Rd.	65.3	20.3	25.0	No	40.3	45	No
BLDG 6	Keller Rd.	65.3	20.3	25.0	No	40.3	45	No
BLDG 5-6	Keller Rd.	61.7	16.7	25.0	No	36.7	45	No
BLDG 4	Keller Rd.	60.4	15.4	25.0	No	35.4	45	No
BLDG 4	Keller Rd.	62.9	17.9	25.0	No	37.9	45	No
BLDG 1-3	Keller Rd.	62.6	17.6	25.0	No	37.6	45	No
BLDG 27-28	Keller Rd.	NA	NA	25.0	NA	NA	45	NA
BLDG 27	Keller Rd.	NA	NA	25.0	NA	NA	45	NA
BLDG 26-22	Keller Rd.	NA	NA	25.0	NA	NA	45	NA
BLDG 20-21	Keller Rd.	NA	NA	25.0	NA	NA	45	NA

[1] Project site plan shown on Exhibit 1-B.
[2] Exterior noise level at the facade with a windows-closed condition and a means of mechanical ventilation (e.g., air conditioning). See Appendix 8.1.
[3] Noise reduction to satisfy the interior noise level threshold.
[4] A minimum of 25 dBA noise reduction is assumed with standard building construction and approximately 2 dBA less than the STC rating for upgraded windows.
[5] Does the required interior noise reduction trigger upgraded windows with a minimum STC rating of greater than 27?
[6] Estimated interior noise level with minimum STC rating for all windows.
[7] Interior noise level threshold: 45 dBA CNEL for residential use (California Code of Regulations, Title 24, Building Standards Administrative Code).

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9 RECEIVER LOCATIONS

To assess the potential for long-term operational and short-term construction noise impacts, the following sensitive receiver locations, as shown in Exhibit 9-A, were identified as representative locations for analysis. Sensitive receivers are generally defined as locations where people reside or where the presence of unwanted sound could otherwise adversely affect the use of the land. Noise-sensitive land uses are generally considered to include schools, hospitals, single-family dwellings, mobile home parks, churches, libraries, and recreation areas. Moderately noise-sensitive land uses typically include multi-family dwellings, hotels, motels, dormitories, outpatient clinics, cemeteries, golf courses, country clubs, athletic/tennis clubs, and equestrian clubs. Land uses considered relatively insensitive to noise include business, commercial, and professional developments. Land uses typically unaffected by noise include industrial, manufacturing, utilities, agriculture, undeveloped land, parking lots, warehousing, liquid and solid waste facilities, salvage yards, and transit terminals.

To describe the potential off-site Project noise levels, six receiver locations in the vicinity of the Project site were identified. The selection of receiver locations is based on FHWA guidelines and is consistent with additional guidance provided by Caltrans and the FTA. Other sensitive land uses in the Project study area located at greater distances than those identified in this noise study will experience lower noise levels than those presented in this report due to the additional attenuation from distance and the shielding of intervening structures. Distance is measured in a straight line from the project boundary to each receiver location.

R1: Location R1 represents the future residential area east of Clifton Avenue, approximately 83 feet east of the Project site. Receptor R1 is placed at the nearest potential location for future housing facing the Project site.

R2: Location R2 represents the future residential area northeast of the intersection of Clifton Avenue and Chatham Street, approximately 92 feet northeast of the Project site. Receptor R2 is placed at the nearest potential location for future housing facing the Project site.

R3: Location R3 represents the future park north of Chatham Street, approximately 75 feet north of the Project site. Receptor R3 is placed at the nearest potential location within the park use facing the Project site.

R4: Location R4 represents an existing residence at 4508 S. Amherst Avenue, approximately 130 feet west of the Project site. Receptor R4 is placed at the private outdoor living areas (backyards) facing the Project site.

R5: Location R5 represents the existing residence at 4095 E. Amigos Privado, approximately 202 feet south of the Project site. Receptor R5 is placed at the private outdoor living areas (backyards) facing the Project site.

R6: Location R6 represents the existing residence at 4556 S. Afton Privado, approximately 142 feet southeast of the Project site. Receptor R6 is placed at the private outdoor living areas (backyards) facing the Project site.

EXHIBIT 9-A: RECEIVER LOCATIONS

10 OPERATIONAL NOISE ANALYSIS

The Project is considered a noise-sensitive receiving land use and is not expected to include any specific type of operational noise levels beyond those typically associated with residential land uses in the Project study area. Additionally, Section 21085 of the California Public Resources Code states in part, "…for residential projects, the effects of noise generated by project occupants and their guests on human beings is not a significant effect on the environment." (29) A review of the legislative record indicates the author's intent for Section 21085 was to "remove the potential for litigants to challenge residential development based on the speculation that the new residents will create unwanted noises. It would also reestablish existing precedent that minor and intermittent noise nuisances, such as from unamplified human voices, be addressed through local nuisance ordinances and not via CEQA. Consequently, activities solely associated with occupants and quests, such as the swimming pool/spa activities, dog park activities, and outdoor activities in common spaces, are not considered part of this operational noise analysis for CEQA." Based on the intent of the author of Section 21085, the operational noise sources are limited to the mechanical and non-verbal noise sources that occur onsite, including air conditioning units, trash enclosure activity, and parking lot movements.

Therefore, this section analyzes the potential operational noise impacts at the nearby receiver locations, identified in Section 9, resulting from the operation of air conditioning units, trash enclosure activity, and parking lot movements. Exhibit 10-A identifies the noise source locations used to assess the equivalent Leq operational noise levels.

10.1 OPERATIONAL NOISE SOURCES

The proposed development is considered a noise-sensitive receiving land use and is not expected to include any operational noise source activities that would impact existing residential land uses. Operational noise sources associated with residential development are generally limited to Project construction and maintenance. However, to assess the potential operational noise source activities from the Project, this section analyzes the noise impacts resulting from the operation associated with the proposed air conditioning units, trash enclosure activity, and parking lot movements.

AIR CONDITIONING UNITS

To assess the noise levels generated by the air conditioning units, reference noise levels were taken from equipment specifications for a 3- to 5-ton residential packaged air conditioning unit (Carrier 24ABC6); see Appendix 10.1. The air conditioning units were modeled as operating 45 minutes per hour during the daytime and 30 minutes at night, representing the typical maximum operating time for properly sized AC systems. The air conditioning units are anticipated to be located 3 feet above ground level. At a uniform reference distance of 50 feet, the units would generate a reference noise level of 44.4 dBA L_{eq}.

EXHIBIT 10-A: OPERATIONAL NOISE SOURCE LOCATIONS

TRASH ENCLOSURE ACTIVITY

To describe the noise levels associated with trash enclosure activity, Urban Crossroads collected a reference noise level measurement at an existing trash enclosure containing two dumpster bins at the Old Town West Parking structure in the City of Orange. The trash enclosure noise levels describe metal gates opening and closing, metal scraping against concrete floor sounds, dumpster movement on metal wheels, and trash dropping into the metal dumpster. The reference noise levels describe trash enclosure noise activities when trash is dropped into an empty metal dumpster, as would occur at the Project site. The measured reference noise level at the uniform 50-foot reference distance is 72.7 dBA L_{max} and 57.4 dBA L_{eq} for the trash enclosure activity. The reference noise level describes the expected noise source activities associated with the Project trash enclosures. Typical trash enclosure activities are estimated to occur for 10 minutes per hour.

PARKING LOT ACTIVITIES

Parking activities are based on the area of the parking spaces. The Project includes approximately 56 new uncovered surface parking spaces on-site. The surface parking spaces are assumed to have up to 2 movements per hour for 112 events per hour. Based on studies conducted in Europe and Australia, the average parking procedure, which included movement associated with either entering or exiting the parking area, parking the vehicles, and opening and closing doors, resulted in a sound power level of approximately 63 dBA L_w/square meter per event (24) (25).

10.2 REFERENCE NOISE LEVELS

To estimate the operational noise impacts, reference noise level measurements were collected from similar types of activities to represent the noise levels expected with the development of the Project. While sound pressure levels (e.g., L_{eq}) quantify in decibels the intensity of given sound sources at a reference distance, sound power levels (L_w) are connected to the sound source and are independent of distance. Sound pressure levels vary substantially with distance from the source and diminish because of intervening obstacles (e.g., walls, buildings, etc.), air absorption, wind, and other factors. Sound power is the acoustic energy emitted by the sound source and is an absolute value not affected by the environment. The reference project operational noise levels are based on the Project related noise sources shown in Exhibit 10-A. The reference Project's operational sound power levels are summarized in Table 10-1.

TABLE 10-1: REFERENCE NOISE LEVELS

Noise Source	Noise Source Height (Feet)	Min./Hour[4]			Sound Power Level (dBA)[6]
		Day	Night	@ 50 Feet	
Air Conditioning Units[1]	3'	45	30	44.4	76.0
Trash Enclosure Activity[2]	8'	10	10	57.4	89.0
Parking Lot Movements[3]	5'	60	60	31.4	63.0

[1] Carrier 25HBC5 air conditioning unit, see Appendix 10.1.
[2] As measured by Urban Crossroads, Inc.
[3] Parking Area Noise, 2007.
[4] Anticipated duration (minutes within the hour) of noise activity during typical hourly conditions expected at the Project site.
"Daytime" = 7:00 a.m. to 10:00 p.m.; "Nighttime" = 10:00 p.m. to 7:00 a.m.

10.3 CADNAA NOISE PREDICTION MODEL

To fully describe the exterior operational noise levels from the Project, Urban Crossroads, Inc. developed a noise prediction model using the CadnaA (Computer Aided Noise Abatement) computer program. CadnaA can analyze multiple types of noise sources using the spatially accurate Project site plan, georeferenced Nearmap aerial imagery, topography, buildings, and barriers in its calculations to predict outdoor noise levels.

Using the ISO 9613 protocol, CadnaA will calculate the distance from each noise source to the noise receiver locations, using the ground absorption, distance, and barrier/building attenuation inputs to provide a summary of the noise level at each receiver and the partial noise level contributions by noise source. Consistent with the ISO 9613 protocol, the CadnaA noise prediction model relies on the reference sound power level (L_w) to describe individual noise sources. While sound pressure levels (e.g., L_{eq}) quantify in decibels the intensity of given sound sources at a reference distance, sound power levels (L_w) are connected to the sound source and are independent of distance. Sound pressure levels vary substantially with distance from the source and diminish because of intervening obstacles (e.g., walls, buildings, terrain, etc.), air absorption, wind, and other factors. Sound power is the acoustic energy emitted by the sound source and is an absolute value not affected by the environment.

The operational noise level calculations in this noise study account for the distance attenuation provided due to geometric spreading, when sound from a localized stationary source (i.e., a point source) propagates uniformly outward in a spherical pattern. A default ground attenuation factor of 0.5 was used in the noise analysis to account for mixed ground representing a combination of hard and soft surfaces. Appendix 10.2 includes the detailed noise model inputs used to estimate the Project operational noise levels presented in this section.

10.4 PROJECT OPERATIONAL NOISE LEVELS

Using the reference noise levels to represent the Project operations that include air conditioning units, trash enclosure activity, and parking lot movements, Urban Crossroads, Inc. calculated the unmitigated operational source noise levels expected to be generated at the Project site and the Project-related noise level increases that would be experienced at each of

the sensitive receiver locations. Table 10-2 shows the Project's operational daytime noise levels. The hourly noise levels at the off-site receiver locations are expected to range from 38.3 to 46.4 dBA L_{eq}. Appendix 10.2 includes the detailed noise model inputs used to estimate the Project operational noise levels presented in this section.

TABLE 10-2: PROJECT DAYTIME OPERATIONAL NOISE LEVELS

Noise Source[1]	Operational Noise Levels by Receiver Location (dBA L_{eq})					
	R1	R2	R3	R4	R5	R6
Air Conditioning Units	45.7	37.4	39.8	43.3	38.8	37.9
Trash Enclosure Activity	37.9	30.5	30.3	34.1	29.6	27.9
Parking Lot Movements	27.5	18.6	20.5	24.9	20.8	19.2
Total (All Noise Sources)	**46.4**	**38.3**	**40.3**	**43.8**	**39.4**	**38.4**

[1] See Exhibit 10-A for the noise source locations. CadnaA noise model calculations are included in Appendix 10.2.

Table 10-3 shows the Project operational noise levels during the nighttime hours of 10:00 p.m. to 7:00 a.m. The nighttime hourly noise levels at the off-site receiver locations are expected to range from 35.8 to 44.1 dBA L_{eq}. Appendix 10.2 includes the detailed noise model inputs.

TABLE 10-3: PROJECT NIGHTTIME OPERATIONAL NOISE LEVELS

Noise Source[1]	Operational Noise Levels by Receiver Location (dBA L_{eq})					
	R1	R2	R3	R4	R5	R6
Air Conditioning Units	43.0	34.7	37.0	40.5	36.0	35.1
Trash Enclosure Activity	36.9	29.6	29.3	33.1	28.6	26.9
Parking Lot Movements	27.5	18.6	20.5	24.9	20.8	19.2
Total (All Noise Sources)	**44.1**	**36.0**	**37.8**	**41.3**	**36.8**	**35.8**

[1] See Exhibit 10-A for the noise source locations. CadnaA noise model calculations are included in Appendix 10.2.

10.5 PROJECT OPERATIONAL NOISE LEVEL COMPLIANCE

To demonstrate compliance with local noise regulations, the Project-only operational noise levels are evaluated against exterior noise level thresholds based on the City of Ontario exterior noise level standards at the nearest noise-sensitive receiver locations. Table 10-4 shows the operational noise levels associated with the Project will satisfy the City of Ontario 65 dBA L_{eq} daytime and 45 dBA L_{eq} nighttime exterior noise level standards at all the nearest receiver locations. Therefore, the operational noise impacts are considered *less than significant* at the nearest noise-sensitive receiver locations.

TABLE 10-4: OPERATIONAL NOISE LEVEL COMPLIANCE

Receiver Location[1]	Project Operational Noise Levels (dBA Leq)[2]		Noise Level Standards (dBA Leq)[3]		Noise Level Standards Exceeded?[4]	
	Daytime	Nighttime	Daytime	Nighttime	Daytime	Nighttime
R1	46.4	44.1	65	45	No	No
R2	38.3	36.0	65	45	No	No
R3	40.3	37.8	65	45	No	No
R4	43.8	41.3	65	45	No	No
R5	39.4	36.8	65	45	No	No
R6	38.4	35.8	65	45	No	No

[1] See Exhibit 9-A for the receiver locations.
[2] Project operational noise levels as shown in Tables 10-2 and 10-3.
[3] City of Ontario Municipal Code, Section 5-29.04 (Appendix 3.1)
[4] Do the estimated Project operational noise source activities exceed the noise level standards?
"Daytime" = 7:00 a.m. to 10:00 p.m.; "Nighttime" = 10:00 p.m. to 7:00 a.m.

10.6 PROJECT OPERATIONAL NOISE LEVEL INCREASES

To describe the Project operational noise level increases, the Project operational noise levels are combined with the existing ambient noise level measurements for the nearest receiver locations potentially impacted by Project operational noise sources. Since the units used to measure noise, decibels (dB), are logarithmic units, the Project-operational and existing ambient noise levels cannot be combined using standard arithmetic equations. (2) Instead, they must be logarithmically added using the following base equation:

$$SPL_{Total} = 10\log_{10}[10^{SPL1/10} + 10^{SPL2/10} + \ldots 10^{SPLn/10}]$$

Where "SPL1," "SPL2," etc. are equal to the sound pressure levels being combined, or in this case, the Project-operational and existing ambient noise levels. The difference between the combined Project and ambient noise levels describes the Project noise level increases to the existing ambient noise environment. Noise levels that would be experienced at receiver locations when Project-source noise is added to the daytime and nighttime ambient conditions are presented in Tables 10-2 and 10-3, respectively.

As indicated in Table 10-5, the Project will generate daytime operational noise level increases ranging from less than 0.1 to 0.8 dBA L_{eq} at the nearest receiver locations. According to Table 10-6, the Project will generate nighttime operational noise level increases ranging from approximately 0.1 to 4.7 dBA L_{eq} at the nearest receiver locations. In effect, the amount to which a given noise level increase is considered acceptable is reduced based on existing ambient noise conditions. Based on the result shown in Tables 10-5 and 10-6, the Project-related operational noise level increases will satisfy the operational noise level increase criteria at the nearest sensitive receiver locations, and noise level increases will be *less than significant.*

TABLE 10-5: DAYTIME PROJECT OPERATIONAL NOISE LEVEL INCREASES

Receiver Location[1]	Total Project Operational Noise Level[2]	Measurement Location[3]	Reference Ambient Noise Levels[4]	Combined Project and Ambient[5]	Project Increase[6]	Existing Noise Sensitive Land Use?	Increase Criteria[7]	Increase Criteria Exceeded?[7]
R1	46.4	L1	67.9	67.9	0.0	Yes	1.5	No
R2	38.3	L2	45.1	45.9	0.8	Yes	5.0	No
R3	40.3	L3	47.4	48.2	0.8	Yes	5.0	No
R4	43.8	L4	53.2	53.7	0.5	Yes	5.0	No
R5	39.4	L5	60.3	60.3	0.0	Yes	3.0	No
R6	38.4	L6	66.0	66.0	0.0	Yes	1.5	No

[1] See Exhibit 9-A for the receiver locations.
[2] Total Project daytime operational noise levels as shown in Table 10-3.
[3] Reference noise level measurement locations as shown in Exhibit 5-A.
[4] Observed daytime ambient noise levels as shown in Table 5-1.
[5] Represents the combined ambient conditions plus the Project activities.
[6] The noise level increase expected with the addition of the proposed Project activities.
[7] Significance increase criteria as shown in Table 4-1.

TABLE 10-6: NIGHTTIME OPERATIONAL NOISE LEVEL INCREASES

Receiver Location[1]	Total Project Operational Noise Level[2]	Measurement Location[3]	Reference Ambient Noise Levels[4]	Combined Project and Ambient[5]	Project Increase[6]	Noise Sensitive Land Use?	Increase Criteria[7]	Increase Criteria Exceeded?[7]
R1	44.1	L1	55.3	55.6	0.3	Yes	5.0	No
R2	36.0	L2	36.9	39.5	2.6	Yes	5.0	No
R3	37.8	L3	34.9	39.6	4.7	Yes	5.0	No
R4	41.3	L4	53.3	53.6	0.3	Yes	5.0	No
R5	36.8	L5	53.4	53.5	0.1	Yes	5.0	No
R6	35.8	L6	45.2	45.7	0.5	Yes	5.0	No

[1] See Exhibit 9-A for the receiver locations.
[2] Total Project nighttime operational noise levels as shown in Table 10-3.
[3] Reference noise level measurement locations as shown in Exhibit 5-A.
[4] Observed nighttime ambient noise levels as shown in Table 5-1.
[5] Represents the combined ambient conditions plus the Project activities.
[6] The noise level increase expected with the addition of the proposed Project activities.
[7] Significance increase criteria as shown in Table 4-1.

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11 CONSTRUCTION ANALYSIS

This section analyzes potential impacts resulting from the short-term construction activities associated with the development of the Project. Exhibit 11-A shows the construction activity boundaries in relation to the nearest sensitive receiver locations previously described in Section 9.

To prevent high levels of construction noise from impacting noise-sensitive land uses, section 5-29.09 of the Ontario Municipal Code states: *No person, while engaged in construction, remodeling, digging, grading, demolition or any other related building activity, shall operate any tool, equipment or machine in a manner that produces loud noise that disturbs a person of normal sensitivity who works or resides in the vicinity, or a Police or Code Enforcement Officer, on any weekday except between the hours of 7:00 a.m. and 6:00 p.m. or on Saturday or Sunday between the hours of 9:00 a.m. and 6:00 p.m.* (12)

While the City establishes limits to the hours during which construction activity may take place, it does not identify specific noise level limits for construction noise levels at potentially affected receiver locations for CEQA analysis purposes. Therefore, a numerical construction threshold based on the Federal Transit Administration (FTA) Transit Noise and Vibration Impact Assessment Manual is used for the analysis of daytime construction impacts. The FTA considers a daytime exterior construction noise level of 80 dBA L_{eq} as a reasonable threshold for noise-sensitive residential land use. (8 p. 179).

11.1 CONSTRUCTION NOISE LEVELS

The FTA *Transit Noise and Vibration Impact Assessment Manual* recognizes that construction projects are accomplished in several different stages and outlines the procedures for assessing noise impacts during construction. Each stage has a specific equipment mix, depending on the work to be completed during that stage. As a result of the equipment mix, each stage has its own noise characteristics; some stages have higher continuous noise levels than others, and some have higher impact noise levels than others. The Project construction activities are expected to occur in the following stages:

- Site Preparation
- Grading
- Building Construction
- Paving
- Architectural Coating

11.2 CONSTRUCTION REFERENCE NOISE LEVELS

To describe construction noise activities, this construction noise analysis was prepared using reference construction equipment noise levels from the Federal Highway Administration (FHWA) published the Roadway Construction Noise Model (RCNM), which includes a national database of construction equipment reference noise emission levels. (26) The RCNM equipment database provides a comprehensive list of the noise-generating characteristics for specific types of construction equipment. In addition, the database provides an acoustical usage

factor to estimate the fraction of time each piece of construction equipment is operating at full power (i.e., its loudest condition) during a construction operation.

EXHIBIT 11-A: CONSTRUCTION NOISE SOURCE LOCATIONS

TABLE 11-1: CONSTRUCTION REFERENCE NOISE LEVELS

Construction Stage	Reference Construction Equipmnet[1]	Reference Noise Level @ 50 Feet (dBA L_{eq})	Composite Reference Noise Level (dBA L_{eq})	Reference Power Level (dBA L_w)
Site Preparation	Tractor	80.0	82.9	114.5
	Front End Loader	75.0		
	Dozer	78.0		
Grading	Tractor	80.0	84.2	115.9
	Grader	81.0		
	Compactor (ground)	76.0		
Building Construction	Crane	73.0	82.1	113.7
	Generator	78.0		
	Gradall	79.0		
Paving	Paver	74.0	77.8	109.5
	Dump Truck	72.0		
	Roller	73.0		
Architectural Coating	Man Lift	68.0	76.2	107.8
	Compressor (air)	74.0		
	Generator (<25kVA)	70.0		

[1] FHWA Road Construction Noise Model.

11.3 CONSTRUCTION NOISE ANALYSIS

Using the reference construction equipment noise levels and the CadnaA noise prediction model, calculations of the Project construction noise level impacts at the nearby sensitive receiver locations were completed. Consistent with FTA guidance for general construction noise assessment, Table 11-1 presents the combined noise levels for the loudest construction equipment, assuming they operate at the same time. As shown in Table 11-2, the construction noise levels are expected to range from 59.5 to 67.6 dBA L_{eq} at the nearby receiver locations. Appendix 11.1 includes the detailed CadnaA construction noise model inputs.

TABLE 11-2: CONSTRUCTION EQUIPMENT NOISE LEVEL SUMMARY

Receiver Location[1]	Construction Noise Levels (dBA L_{eq})					
	Site Preparation	Grading	Building Construction	Paving	Architectural Coating	Highest Levels[2]
R1	64.0	65.3	63.2	58.9	57.2	67.6
R2	62.5	63.8	61.7	57.4	55.7	66.1
R3	63.0	64.3	62.2	57.9	56.2	66.6
R4	59.7	61.0	58.9	54.6	52.9	63.3
R5	55.9	57.2	55.1	50.8	49.1	59.5
R6	60.7	62.0	59.9	55.6	53.9	64.3

[1] Noise receiver locations are shown in Exhibit 9-A.
[2] Construction noise level calculations are based on distance from the construction activity, measured from the Project site boundary to the nearest receiver locations. CadnaA construction noise model inputs are included in Appendix 11.1.

11.4 CONSTRUCTION NOISE LEVEL COMPLIANCE

To evaluate whether the Project will generate potentially significant short-term noise levels at the nearest receiver locations, a construction-related daytime noise level threshold of 80 dBA L_{eq} is used as a reasonable threshold to assess the daytime construction noise level impacts. The construction noise analysis shows that the nearest receiver locations will satisfy the reasonable daytime 80 dBA L_{eq} significance threshold during Project construction activities, as shown in Table 11-3. Therefore, the noise impacts due to Project construction noise are considered *less than significant* at all receiver locations.

TABLE 11-3: CONSTRUCTION NOISE LEVEL COMPLIANCE

Receiver Location[1]	Construction Noise Levels (dBA L_{eq})		
	Highest Construction Noise Levels[2]	Threshold[3]	Threshold Exceeded?[4]
R1	67.6	80	No
R2	66.1	80	No
R3	66.6	80	No
R4	63.3	80	No
R5	59.5	80	No
R6	64.3	80	No

[1] Noise receiver locations are shown in Exhibit 9-A.
[2] Highest construction noise level calculations based on distance from the construction noise source activity to the nearest receiver locations, as shown in Table 11-2.
[3] Construction noise level thresholds as shown in Table 4-1.
[4] Do the estimated Project construction noise levels exceed the construction noise level threshold?

11.5 CONSTRUCTION VIBRATION ANALYSIS

Construction activity can result in varying degrees of ground vibration, depending on the equipment and methods employed. Operation of construction equipment causes ground vibrations that spread through the ground and diminish in strength with distance. Ground vibration levels associated with various types of construction equipment are summarized in Table 11-4. Based on the representative vibration levels presented for various construction equipment types, it is possible to estimate the potential for human response (annoyance) and building damage using the following vibration assessment methods defined by the FTA. To describe the vibration impacts, the FTA provides the following equation: $PPV_{equip} = PPV_{ref} \times (25/D)^{1.5}$

TABLE 11-4: VIBRATION SOURCE LEVELS FOR CONSTRUCTION EQUIPMENT

Equipment	PPV (in/sec) at 25 feet
Small bulldozer	0.003
Jackhammer	0.035
Loaded Trucks	0.076
Large bulldozer	0.089

Federal Transit Administration, Transit Noise and Vibration Impact Assessment Manual

Table 11-5 presents the expected Project related vibration levels at the nearby receiver locations. At distances ranging from 75 to 202 feet from Project construction activities, construction vibration velocity levels are estimated to range from less than 0.01 to 0.02 in/sec PPV. Based on the maximum acceptable continuous vibration threshold of 0.30 PPV (in/sec), the typical Project construction vibration levels will fall below the building damage thresholds at all the receiver locations. Therefore, the Project-related vibration impacts are considered *less than significant* during typical construction activities at the Project site. Moreover, the vibration levels reported at the sensitive receiver locations are unlikely to be sustained during the entire construction period but will occur rather only during the times that heavy construction equipment is operating adjacent to the Project site perimeter.

Moreover, the impacts at the site of the nearest sensitive receiver locations are unlikely to be sustained during the entire construction period but will occur rather only during the times that heavy construction equipment is operating adjacent to the Project site perimeter.

TABLE 11-5: PROJECT CONSTRUCTION VIBRATION LEVELS

Receiver[1]	Distance to Const. Activity (Feet)[2]	Typical Construction Vibration Levels PPV (in/sec)[3]					Thresholds PPV (in/sec)[4]	Thresholds Exceeded?[5]
		Small bulldozer	Jackhammer	Loaded Trucks	Large bulldozer	Highest Vibration Level		
R1	82'	0.00	0.01	0.01	0.01	0.01	0.3	No
R2	92'	0.00	0.00	0.01	0.01	0.01	0.3	No
R3	75'	0.00	0.01	0.01	0.02	0.02	0.3	No
R4	130'	0.00	0.00	0.01	0.01	0.01	0.3	No
R5	202'	0.00	0.00	0.00	0.00	0.00	0.3	No
R6	142'	0.00	0.00	0.01	0.01	0.01	0.3	No

[1] Receiver locations are shown in Exhibit 9-A.
[2] Distance from receiver location to Project construction boundary.
[3] Based on the Vibration Source Levels of Construction Equipment (Table 10-4).
[4] Caltrans Transportation and Construction Vibration Guidance Manual, April 2020, Table 19, p. 38.
[5] Does the peak vibration exceed the acceptable vibration thresholds?
"PPV" = Peak Particle Velocity

12 REFERENCES

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5. **U.S. Department of Transportation Federal Highway Administration.** *Highway Noise Barrier Design Handbook.* 2001.
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21. **California Department of Transportation Environmental Program, Office of Environmental Engineering.** *Use of California Vehicle Noise Reference Energy Mean Emission Levels (Calveno REMELs) in FHWA Highway Traffic Noise Prediction.* September 1995. TAN 95-03.

22. **Urban Crossroads, Inc.** *Esperanza Specific Plan Trip Generation Assessment.* 2024.

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25. *Prediction of parking area noise in Australian conditions.* **Johnson, Laurence Nicol and Paul.** Paper Number 39, s.l. : Gold Coast, Australia, 2-4 November 2011, Vol. Proceedings of ACOUSTICS 2011.

26. **U.S. Department of Transportation, Federal Highway Administration, Office of Environment and Planning.** *FHWA Roadway Construction Noise Model.* January, 2006.

13 CERTIFICATIONS

The contents of this noise study report represent an accurate depiction of the noise environment and impacts associated with the Esperanza Specific Plan Amendment Project. The information contained in this noise study report is based on the best available data at the time of preparation. If you have any questions, please contact me directly at (619) 788-1971.

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EDUCATION

Bachelor of Science in Urban and Regional Planning
California Polytechnic State University, Pomona • June 2000

PROFESSIONAL AFFILIATIONS

INCE – Institute of Noise Control Engineers, Member
ASA – Acoustical Society of America
AEP – Association of Environmental Planners
AWMA – Air and Waste Management Association

PROFESSIONAL CERTIFICATIONS

Approved Acoustical Consultant • County of San Diego
FHWA Traffic Noise Model of Training • November 2004
CadnaA Basic and Advanced Training Certificate • October 2008.

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APPENDIX 3.1:

CITY OF ONTARIO MUNICIPAL CODE

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CHAPTER 29: NOISE

5-29.01 Declaration of findings and policy

5-29.02 Definitions

5-29.03 Designated noise zones

5-29.04 Exterior noise standards

5-29.05 Interior noise standards

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5-29.07 Loud and disturbing noise

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5-29.15 Noise level measurement

5-29.16 Prima facie violation

5-29.17 Penalty

5-29.18 Enforcement and administration

5-29.19 City Manager waiver

5-29.20 Noise abatement program

Sec. 5-29.01. Declaration of findings and policy.

It is hereby found and declared that:

(a) The making and creation of excessive, unnecessary or unusually loud noises within the limits of the City is a condition that has existed for some time, however, the extent and volume of such noises is increasing;

(b) The making, creation or maintenance of such excessive, unnecessary, unnatural or unusually loud noises that are prolonged, unusual and unnatural in their time, place and use affect and are a detriment to public health, comfort, convenience, safety, welfare and prosperity of the residents of the City; and

(c) The necessity in the public interest for the provisions and prohibitions hereinafter contained and enacted, is declared as a matter of legislative determination and public policy, and it is further declared that the provisions and prohibitions hereinafter contained and enacted are in pursuance of and for the purpose of securing and promoting the public health, comfort, convenience, safety, welfare and prosperity and the peace and quiet of the residents of the City.

(§ 2, Ord. 2888, eff. March 6, 2008)

Sec. 5-29.02. Definitions.

As used in this chapter, specific words and phrases are defined as follows:

(a) "Ambient noise level" shall mean the all-encompassing noise level associated with a given environment and is a composite of sounds from all sources, excluding the alleged offensive noise or excessive sound, at the location and approximate time at which a comparison with the alleged offensive noise is to be made.

(b) "Applicable (noise) zone" shall mean the noise zone category based on the actual use of the property, provided that the actual use is a legal use in the City.

(c) "A-weighted sound level" shall mean the sound pressure level in decibels (dBAs) as measured with a sound level meter using the A-weighted filter network (scale) at slow response and at a pressure of twenty (20) micropascals. The A-weighted filter de-emphasizes the very low and a very high frequency component of sound in a manner similar to the response of the human ear, and is a numerical method of rating human judgment of loudness.

(d) "Decibel (dBA)" shall mean a unit for measuring the amplitude of a sound, equal to twenty (20) times the logarithm to the base ten (10) of the ratio of pressure of the sound measured to the reference pressure of twenty (20) micropascals.

(e) "Equivalent sound or noise level (Leq)" shall mean the International Electrotechnical Commission (IEC) 60804 Standard for measurement, or the most recent revision thereof, for the sound level corresponding to a steady state noise level over a given sample period with the same amount of acoustic energy as the actual time varying noise level or the energy average noise level during the sample period. The measurement period for the purposes of this chapter is fifteen (15) minutes.

(f) "Impulsive noise" shall mean a noise of short duration usually less than one (1) second and of high intensity, with an abrupt onset and rapid decay. Such objectionable noises may also be repetitive.

(g) "Intrusive noise" shall mean that noise that intrudes over and above the ambient noise at a given location. The relative intrusiveness of a sound depends upon its amplitude, duration, frequency, time of occurrence and tonal information content, as well as the prevailing ambient noise level.

(h) "Maintenance" shall mean the upkeep, repair or preservation of existing property or structures.

(i) "Noise" shall mean any unwanted sound or sound that is undesirable because it interferes with speech and hearing, or is intense enough to damage hearing or is otherwise annoying.

(j) "Noise level (sound level)" shall mean the weighted sound pressure level obtained by use of a sound level meter having a standard frequency filter for attenuating part of the sound spectrum. For purposes of this chapter, all noise levels (sound levels) shall be A-weighted sound pressure level.

(k) "Noise (sound) level meter" shall mean an instrument, including a microphone, an amplifier, an output meter and frequency weighting networks for the measurement and determination of noise and sound levels. For the purposes of this chapter, the sound level meter must meet the International Electrotechnical Commission (IEC) 60651 and 60804 Standards, or the most recent revisions thereof, for Type 1 sound level meters or an instrument and the associated recording and analyzing equipment that will provide equivalent data.

(§ 2, Ord. 2888, eff. March 6, 2008)

Sec. 5-29.03. Designated noise zones.

The properties hereinafter described shall be assigned to the following noise zones:

Noise Zone I:	All single-family residential properties;
Noise Zone II:	All multi-family residential properties and mobile home parks;
Noise Zone III:	All commercial property;
Noise Zone IV:	The residential portion of mixed use properties;
Noise Zone V:	All manufacturing or industrial properties and all other uses.

The actual use of the property, and not necessarily its zoning designation, shall be the determining factor in establishing whether a property is in Noise Zone I, II, III, IV or V, provided that the actual use is a legal use within the applicable zone.

(§ 2, Ord. 2888, eff. March 6, 2008)

Sec. 5-29.04. Exterior noise standards.

(a) The following exterior noise standards, unless otherwise specifically indicated, shall apply to all properties within a designated noise zone.

Allowable Exterior Noise Level (1)		***Allowed Equivalent Noise Level, Leq. (2)***	
Noise Zone	***Type of Land Use***	***7 a.m. to 10 p.m.***	***10 p.m. to 7 a.m.***
I	Single-Family Residential	65 dBA	45 dBA
II	Multi-Family Residential, Mobile Home Parks	65 dBA	50 dBA
III	Commercial Property	65 dBA	60 dBA
IV	Residential Portion of Mixed Use	70 dBA	70 dBA
V	Manufacturing and Industrial, Other Uses	70 dBA	70 dBA

(1) If the ambient noise level exceeds the resulting standard, the ambient noise level shall be the standard.

(2) Measurements for compliance are made on the affected property pursuant to § 5-29.15.

(b) It is unlawful for any person at any location within the incorporated area of the City to create noise, or to allow the creation of any noise on property owned, leased, occupied or otherwise controlled by such person, which noise causes the noise level, when measured at any location on any other property, to exceed either of the following:

(1) The noise standard for the applicable zone for any fifteen-minute (15) period; and

(2) A maximum instantaneous (single instance) noise level equal to the value of the noise standard plus twenty (20) dBA for any period of time (measured using A-weighted slow response).

(c) In the event the ambient noise level exceeds the noise standard, the maximum allowable noise level under such category shall be increased to reflect the maximum ambient noise level.

(d) The Noise Zone IV standard shall apply to that portion of residential property falling within one hundred (100) feet of a commercial property or use, if the noise originates from that commercial property or use.

(e) If the measurement location is on a boundary between two (2) different noise zones, the lower noise level standard applicable to the noise zone shall apply.

(§ 2, Ord. 2888, eff. March 6, 2008)

Sec. 5-29.05. Interior noise standards.

(a) The following interior noise standards, unless otherwise specifically indicated, shall apply to all properties within a designated noise zone.

Allowable Interior Noise Level (1)		**Allowed Equivalent Noise Level, Leq.** (2)	
Noise Zone	***Type of Land Use***	***7 a.m. to 10 p.m.***	***10 p.m. to 7 a.m.***
I	Single-Family Residential	45 dBA	40 dBA
II	Multi-Family Residential, Mobile Home Parks	45 dBA	40 dBA
IV	Residential Portion of Mixed Use	45 dBA	40 dBA

(1) If the ambient noise level exceeds the resulting standard, the ambient noise level shall be the standard.

(2) Measurements for compliance are made on the affected property pursuant to § 5-29.15.

(b) It is unlawful for any person at any location within the incorporated area of the City to create noise, or to allow the creation of any noise on property owned, leased, occupied or otherwise controlled by such person, which noise causes the noise level, when measured at any location on any other property, to exceed either of the following:

(1) The noise standard for the applicable zone for any fifteen-minute (15) period;

(2) A maximum instantaneous (single instance) noise level equal to the value of the noise standard plus twenty (20) dBA for any period of time (measured using A-weighted slow response).

(c) In the event the ambient noise level exceeds the noise standard, the maximum allowable noise level under such category shall be increased to reflect the maximum ambient noise level.

(d) The Noise Zone IV standard shall apply to that portion of residential property falling within one hundred (100) feet of a commercial property or use, if the noise originates from that commercial property or use.

(e) If the measurement location is on a boundary between two (2) different noise zones, the lower noise level standard applicable to the noise zone shall apply.

(§ 2, Ord. 2888, eff. March 6, 2008)

Sec. 5-29.06. Exemptions.

The following activities shall be exempted from the provisions of this chapter:

(a) Any activity conducted on public property, or on private property with the consent of the owner, by any public entity or its officers, employees, representatives, agents, subcontractors, permittees, licensees or lessees that the public entity has authorized are exempt from the provisions of this chapter. This includes, without limitation, sporting and recreational activities that are sponsored, co-sponsored, permitted or allowed by the City or any school district within the City's jurisdictional boundaries. This also includes, without limitation, occasional outdoor gatherings, public dances, shows or sporting and entertainment events, provided such events are conducted pursuant to an approval, authorization, contract, lease, permit or sublease by the appropriate public entity, specifically the planning commission or City Council;

(b) Occasional outdoor gatherings, public dances, show, sporting and entertainment events, provided said events are conducted pursuant to a permit or license issued by the appropriate jurisdiction relative to the staging of said events;

(c) Any mechanical device, apparatus or equipment used, related to or connected with emergency machinery, vehicle, work or warning alarm or bell, provided the sounding of any bell or alarm on any building or motor vehicle shall terminate its operation within forty-five (45) minutes in any hour of its being activated;

(d) Noise sources associated with construction, repair, remodeling, demolition or grading of any real property. Such activities shall instead be subject to the provisions of § 5-29.09;

(e) Noise sources associated with construction, repair, remodeling, demolition or grading of public rights-of-way or during authorized seismic surveys;

(f) All mechanical devices, apparatus or equipment associated with agriculture operations provided that:

(1) Operations do not take place between 8:00 p.m. and 7:00 a.m.;

(2) Such operations and equipment are utilized for the protection or salvage of agricultural crops during periods of potential or actual frost damage or other adverse weather conditions; or

(3) Such operations and equipment are associated with agricultural pest control through pesticide application, provided the application is made in accordance with permits issued by or regulations enforced by the California Department of Agriculture;

(g) Noise sources associated with the maintenance of real property. Such activities shall instead be subject to the provisions of § 5-29.08;

(h) Any activity to the extent regulation thereof has been preempted by state or federal law;

(i) Any noise sources associated with people and/or music associated with a party at a residential property. Such noise shall be subject to the provisions of OMC § 5-29.07;

(j) Any noise source emanating from an ice cream truck within the City. Such noise shall be subject to the provisions of OMC § 4-18.04;

(k) Any noise sources associated with barking dogs or other intermittent noises made by animals on any properly within the City. Such noise shall be subject to the provisions of OMC Chapter 1, Title 6;

(l) Noise sources related to uses approved by a permit or development agreement adopted prior to the date of adoption of this chapter and that contains acoustic or noise standard conditions of approval. This exemption shall only be applicable during the effective period of the City-approved permit or development agreement.

(§ 2, Ord. 2888, eff. March 6, 2008)

Sec. 5-29.07. Loud and disturbing noise.

(a) It is unlawful for any person or property owner within the City to make, cause or allow to be made any loud, excessive, impulsive or intrusive noise, disturbance or commotion that disturbs the peace or quiet of any area or that causes discomfort or annoyance to any reasonable person of normal sensitivities in the area, after a Police or Code Enforcement Officer has first requested that the person or property owner cease and desist from making such noise. The types of loud, disturbing, excessive, impulsive or intrusive noise may include, but shall not be limited to, yelling, shouting, hooting, whistling, singing, playing a musical instrument, or emitting or transmitting any loud music or noise from any mechanical or electrical sound making or sound-amplifying device.

(b) The factors, standards, and conditions that may be considered in determining whether a violation of the provisions of this section has been committed, included, but not limited to, the following:

(1) The level of the noise;

(2) The level and intensity of the background (ambient) noise, if any;

(3) The proximity of the noise to residential or commercial sleeping areas;

(4) The nature and zoning of the area within which the noise emanates;

(5) The density of inhabitation of the area within which the noise emanates;

(6) The time of day and night the noise occurs;

(7) The duration of the noise;

(8) Whether the noise is constant, recurrent or intermittent;

(9) Whether the noise is produced by a commercial or noncommercial activity; and

(10) Whether the use is lawful under the provisions of Title 5 of this Code and whether the noise is one that could reasonably be expected from the activity or allowed use.

(§ 2, Ord. 2888, eff. March 6, 2008)

Sec. 5-29.08. Real property maintenance noise regulations.

(a) No person, while engaged in maintenance of real property, shall operate any tool, equipment or machine in a manner that produces loud noise that disturbs a person of normal sensitivity who works or resides in the vicinity, or a Police or Code Enforcement Officer, except between the hours of 8:00 a.m. and 6:00 p.m.

(b) Trimming or pruning that requires the use of chainsaws or mulching machines shall only be allowed between the hours of 8:00 a.m. and 6:00 p.m. on a weekday and between the hours of 9:00 a.m. and 5:00 p.m. on Saturday or Sunday.

(c) The use of electrical or gasoline powered blowers, such as commonly used by gardeners or other persons for cleaning lawns, yards, driveways, gutters and other property shall only be allowed between the hours of 8:00 a.m. and 6:00 p.m. on a weekday and between the hours of 9:00 a.m. and 5:00 p.m. on Saturday or Sunday.

(d) No landowner, gardener, property maintenance service, contractor, subcontractor or employer shall permit or allow any person or persons working under his or her direction or control to operate any tool, equipment or machine in violation of the provisions of this section.

(e) Exceptions. The provisions of this section shall not apply to the following:

(1) Emergency property maintenance required by the building official;

(2) The maintenance, repair or improvement of any public work or facility by public employees, by any person or persons acting pursuant to a public works contract, or by any person or persons performing such work or pursuant to the direction of, or on behalf of, any public agency; provided, however, this exception shall not apply to the City, or its employees, contractors or agents, unless:

(i) The City Manager or department head determines that the maintenance, repair or improvement is immediately necessary to maintain public service,

(ii) The maintenance, repair or improvement is of a nature that cannot feasibly be conducted during normal business hours, or

(iii) The City Council has approved project specifications, contract provisions, or an environmental document that specifically authorizes maintenance during hours of the day that would otherwise be prohibited pursuant to this section; and

(3) Any maintenance that complies with the noise limits specified in § 5-29.04.

(§ 2, Ord. 2888, eff. March 6, 2008)

Sec. 5-29.09. Construction activity noise regulations.

(a) No person, while engaged in construction, remodeling, digging, grading, demolition or any other related building activity, shall operate any tool, equipment or machine in a manner that produces loud noise that disturbs a person of normal sensitivity who works or resides in the vicinity, or a Police or Code Enforcement Officer, on any weekday except between the hours of 7:00 a.m. and 6:00 p.m. or on Saturday or Sunday between the hours of 9:00 a.m. and 6:00 p.m.

(b) No landowner, construction company owner, contractor, subcontractor, or employer shall permit or allow any person or persons working under their direction and control to operate any tool, equipment or machine in violation of the provisions of this section.

(c) Exceptions.

(1) The provisions of this section shall not apply to emergency construction work performed by a private party when authorized by the City Manager or his or her designee;

(2) The maintenance, repair or improvement of any public work or facility by public employees, by any person or persons acting pursuant to a public works contract, or by any person or persons performing such

work or pursuant to the direction of, or on behalf of, any public agency; provided, however, this exception shall not apply to the City, or its employees, contractors or agents, unless:

(i) The City Manager or a department head determines that the maintenance, repair or improvement is immediately necessary to maintain public services,

(ii) The maintenance, repair or improvement is of a nature that cannot feasibly be conducted during normal business hours, or

(iii) The City Council has approved project specifications, contract provisions, or an environmental document that specifically authorizes construction during hours of the day that would otherwise be prohibited pursuant to this section; and

(3) Any construction that complies with the noise limits specified in §§ 5-29.04 or 5-29.05.

(§ 2, Ord. 2888, eff. March 6, 2008)

Sec. 5-29.10. Other public agency exceptions.

The provisions of this chapter shall not be construed to prohibit any work at different hours by or under the direction of any other public agency or public or private utility companies in cases of necessity or emergency.

(§ 2, Ord. 2888, eff. March 6, 2008)

Sec. 5-29.11. Schools, day care centers, churches, libraries, museums, health care institutions; Special provisions.

It is unlawful for any person to create any noise that causes the outdoor noise level at any school, day care center, hospital or similar health care institution, church, library or museum while the same is in use, to exceed the noise standards specified in § 5-29.04 prescribed for the assigned Noise Zone I.

(§ 2, Ord. 2888, eff. March 6, 2008)

Sec. 5-29.12. Sound amplifying equipment.

Loudspeakers, sound amplifiers, public address systems or similar devices used to amplify sounds shall be subject to the provisions of § 5-29.13. Such sound amplifying equipment shall not be construed to include electronic devices, including but not limited to, radios, tape players, tape recorders, compact disc players, MP3 players, electric keyboards, music synthesizers, record players or televisions, which are designed and operated for personal use, or used entirely within a building and are not designed or used to convey the human voice, music or any other sound to an audience outside such building, or which are used in vehicles and heard only by occupants of the vehicle in which installed.

(§ 2, Ord. 2888, eff. March 6, 2008)

Sec. 5-29.13. Amplified sound.

(a) The City Council enacts the following legislation for the sole purpose of securing and promoting the public health, comfort, safety and welfare for its citizenry. While recognizing that the use of sound amplifying equipment may be entitled to certain protection by the constitutional rights of freedom of speech and assembly, the City Council finds that in order to protect the public safety and the correlative rights of the citizens of this community to privacy and freedom from public nuisance of loud and unnecessary noise, reasonable regulation of the time, place and manner of the use of amplifying equipment is necessary. In no event shall approval or authorization required herein be withheld by reason of the constitutionally protected content of any material proposed to be broadcast through amplifying equipment.

(b) It is unlawful for any person, other than personnel of law enforcement or governmental agencies, to install, use or operate a loudspeaker or sound amplifying device in a fixed or movable position or mounted upon any vehicle within the City for the purpose of giving instructions, directions, talks, addresses or lectures to any persons or assemblages of persons in or upon any street, alley, sidewalk, park, place or public property without a permit to do so from the Police Chief or his or her designee. Notwithstanding any other provision of this chapter, the provisions of this section shall also apply to the use of sound amplifying equipment upon public or private property when used in connection with outdoor or indoor public or private events, whether or

not admission is charged or food or beverages are sold, when such activity is to be attended by more than one hundred (100) persons and the noise emanating from the event will be audible at the property plane, or in the case of a street dance or concert on the nearest residential property. Those activities listed in § 5-29.06(a) are exempt from the requirements of this section.

(c) The Police Chief or his or her designee is authorized to approve and issue permits under this section.

(d) An application for a permit required by this section shall be filed with the Police Chief at least sixteen (16) days and no more than one hundred twenty (120) days prior to the date on which the sound amplifying equipment is intended to be used. Applications for events covered by the First Amendment of the United States Constitution are exempt from the time requirements of this section if it is shown that circumstances require a shorter filing period and the event will not constitute an unsafe condition. The application shall contain the following information:

(1) The name, address and telephone number of both the owner and the user of the sound amplifying equipment;

(2) The license number, if a sound truck is to be used;

(3) A general description of the sound amplifying equipment which is to be used;

(4) Whether sound amplifying equipment will be used for commercial or noncommercial purpose;

(5) The dates and times upon and within which, and the streets or property over or upon which, the equipment is proposed to be operated;

(6) The name or names of one (1) or more persons who will be present during the conduct of any activities for which registration is sought and who will have authority to reduce the volume of any sound amplifying equipment during the course of the activities if required pursuant to this chapter and, otherwise, to insure compliance with the provisions of this chapter;

(7) A statement by the applicant that he or she is willing and able to comply with the provisions of this chapter and the conditions of the permit; and

(8) A sketch of the area or facilities within which the activities are to be conducted, with approximate dimensions and illustration of the location and orientation of all sound-amplifying equipment.

(e) The Police Chief shall deny the permit application or revoke any permit if the chief finds any of the following:

(1) The application contains materially false or intentionally misleading information;

(2) The use of sound amplifying equipment at an event or activity proposed will be located in or upon a premises, building or structure that is hazardous to the health or safety of the employees or patrons of the premises, business, activity, or event, or the general public, under the standards established by the Uniform Building or Fire Codes, or other applicable codes, as set forth in OMC Titles 4 and 8;

(3) The use of sound amplifying equipment at an event or activity proposed in or upon a premises, building or structure that lacks adequate on-site parking for participants attending the proposed event or activity under the applicable standards set forth in OMC Title 9;

(4) The conditions of any motor vehicle movement are such that, in his or her opinion, the use of the equipment would constitute an unreasonable interference with traffic safety;

(5) The conditions of pedestrian movement are such that the use of the equipment would constitute a detriment to traffic safety;

(6) The application submitted by the applicant reveals that the applicant would violate the provisions of this section or any other provision of federal, state and/or local law;

(7) The applicant is unwilling or unable to comply with the provisions of this chapter or any conditions imposed upon any permit issued;

(8) There had already been a permitted event at the intended location, or within a two hundred (200) yard radius of the intended location and the prior permitted event was located on residentially zoned property or on

a street, alley, public parking lot or neighborhood park within three (3) months prior to the intended event. Community parks are exempt from this subsection (8); or

(9) The applicant or location has had previous violations within the past calendar year, and in the judgment of the Police Chief, issuance would be contrary to the intent of this section.

(f) In determining whether the use of the equipment would constitute an unreasonable interference with or detriment to traffic safety, the Police Chief shall consider, but shall not necessarily be limited to:

(1) The volumes, patterns and speed of vehicular and pedestrian traffic in the proposed area of use;

(2) The relationship of the proposed use of equipment and potential impacts upon traffic patterns;

(3) Availability of sufficient room for the operation of the equipment without significantly interfering with the traffic patterns;

(4) Proximity to schools, playgrounds and similar facilities where use of such equipment might attract children into traffic patterns; or

(5) Proximity to busy intersections or other potentially hazardous conditions where use of such equipment might constitute a hazard by reason of its tendency to distract drivers of vehicles or pedestrians.

(g) Issuance or denial.

(1) If the application is approved, the Police Chief shall return an approved copy of the application to the applicant and shall issue a permit. The permit shall constitute permission for the use of the sound amplifying equipment as requested.

(2) Any application filed shall be either approved or disapproved within five (5) days of the filing thereof.

(3) If the application is disapproved, the Police Chief shall return a disapproved copy forthwith to the applicant with a written statement on the reason for disapproval.

(i) Any person aggrieved by a decision of the Police Chief or his or her designee may file an appeal to the City Manager. A complete and proper appeal shall be filed with the City Clerk within ten (10) calendar days of the action that is the subject of the appeal. If the applicant fails to file an appeal within the ten (10) day filing period provided herein, denial shall take effect immediately upon expiration of such filing period. All appeals shall be in writing and shall contain the following information: (a) name(s) of the person filing the appeal, (b) a brief statement in ordinary and concise language of the relief sought, and (c) the signatures of all parties named as appellants and their mailing addresses. After receiving the appeal, the City Clerk shall immediately forward the matter to the City Manager for handling.

(ii) The City Manager shall, upon receipt of the appeal, set the matter for hearing before the City Manager or a hearing officer. Any hearing officer shall be a licensed attorney or recognized mediator designated by the City Manager. The hearing shall be set for not more than ten (10) calendar days after the receipt of the appeal unless a longer time is requested or consented to by the appellant. Notice of such hearing shall be given in writing and mailed at least five (5) calendar days prior to the date of the hearing, by U.S. mail, with a proof of service attached, addressed to the address listed on the permit application, or the written appeal if different from the permit application. The notice shall state the grounds of the complaint or reason for the denial and shall state the time and place where such hearing will be held.

(iii) The City Manager or hearing officer shall, within ten (10) calendar days following the conclusion of the hearing, make a written finding and decision, which shall be delivered to the City and the appellant by first class mail. Notwithstanding any provision in this Code, the decision of the City Manager or hearing officer shall be the final administrative decision of the City. Any party dissatisfied with the decision of the City Manager or hearing officer may seek review of such decision under the provisions of Code Civil Procedure, §§ 1094.5 and 1094.8, as amended from time to time.

(h) In addition to any other provisions of this Code, the use of sound-amplifying equipment and sound trucks in the City shall be subject to the following regulations:

(1) The only sounds permitted are music and human speech;

(2) Sound shall not be emitted within one hundred (100) yards of hospitals, churches, schools and City Hall;

(3) The volume of sound shall be controlled so that it will not be audible for a distance in excess of one hundred (100) feet from the sound amplifying equipment or sound truck, and so that the volume is not unreasonably loud, raucous, jarring, disturbing or a nuisance to persons within the range of allowed audibility; or

(4) The sound amplifying equipment or sound truck shall not be used between the hours of 8:00 p.m. and 8:00 a.m.

(§ 2, Ord. 2888, eff. March 6, 2008)

Sec. 5-29.14. Motor vehicles.

The use of any motor vehicle in such a condition as to create excessive, impulsive or intrusive noises is prohibited. The discharge into the open air of the exhaust of any internal combustion engine, stationary or mounted on wheels, motorboat or motor vehicle, including motor cycle, whether or not discharged through a muffler or other similar device, which discharge creates excessive, unusual, impulsive or intrusive noise is prohibited. Motor vehicles shall comply with the noise regulations of the California Vehicle Code.

(§ 2, Ord. 2888, eff. March 6, 2008)

Sec. 5-29.15. Noise level measurement.

(a) The location selected for measuring exterior noise levels in a residential area shall be at any part of a private yard, patio, deck or balcony normally used for human activity and identified by the owner or, if occupied by someone other than the owner, the occupant of the affected property as suspected of exceeding the noise level standard. This location may be the closest point in the private yard or patio, or on the deck or balcony, to the noise source, but should not be located in nonhuman activity areas such as trash container storage areas, planter beds, above or contacting a property line fence, or other areas not normally used as part of the yard, patio, deck or balcony. The location selected for measuring exterior noise levels in a nonresidential area shall be at the closest point to the noise source. The measurement microphone height shall be five (5) feet above finish elevation or, in the case of a deck or balcony, the measurement microphone height shall be five (5) feet above the finished floor level.

(b) The location selected for measuring interior noise levels shall be made within the affected residential unit. The measurements shall be made at a point at least four (4) feet from the wall, ceiling or floor, or within the frame of a window opening, nearest the noise source. The measurements shall be made with windows in an open position.

(c) Any decibel measurement made pursuant to the provisions of this chapter shall be measured in decibels (dBAs) as measured with a sound level meter using the A-weighted sound pressure level.

(§ 2, Ord. 2888, eff. March 6, 2008)

Sec. 5-29.16. Prima facie violation.

Any noise exceeding the noise level standard as specified in §§ 5-29.04 and 5-29.05, shall be deemed to be prima facie evidence of a violation of the provisions of this chapter.

(§ 2, Ord. 2888, eff. March 6, 2008)

Sec. 5-29.17. Penalty.

(a) Any person who negligently or knowingly violates any provision of this chapter shall be guilty of an infraction and upon conviction shall be punishable by a fine specified in OMC § 1-2.01. Each day a violation occurs shall constitute a separate offense and shall be punishable as such.

(b) Any person who negligently or knowingly violates any provision of this chapter may also be subject to fine(s) specified in the administrative citation schedule of fines set forth in OMC § 1-5.04. The manner of issuing administrative citations shall comply with all the procedures specified in OMC Chapter 5, Title 1.

(c) As an additional remedy, the operation or maintenance of any device, instrument, vehicle or machinery in violation of any provisions of this chapter, which operation or maintenance causes or creates sound levels exceeding the allowable standards as specified in this chapter, shall be deemed and is declared to be a public nuisance and may be subject to abatement by a restraining order or injunction issued by a court of competent jurisdiction.

(d) Any violation of this chapter is declared to be a public nuisance and may be abated in accordance with law. The expense of enforcing this chapter is declared to be public nuisance and may be by resolution of the City Council declared to be a lien and special assessment against the property on which such nuisance is maintained, and any such charge shall also be a personal obligation of the property owner.

(§ 2, Ord. 2888, eff. March 6, 2008)

Sec. 5-29.18. Enforcement and administration.

(a) It shall be the responsibility of Police or Code Enforcement Officers to enforce the provisions of this chapter and to perform all other functions required by this chapter. Such duties shall include, but not be limited to investigating potential violations, issuing warning notices and citations, and providing evidence to the City prosecutor for legal action.

(b) For violations of § 5-29.07, Police or Code Enforcement Officers shall obtain a declaration under penalty of perjury from two (2) declarants living in separate households within a sixty (60) day period stating in detail all of the following:

(1) That the declarant is a resident of a residential neighborhood located within two hundred (200) yards of the noise source; and

(2) Within the past month declarant has heard noise for substantially long periods to the extreme annoyance of the declarant.

(3) Declarations from two (2) declarants are required to prove a violation of § 5-29.07, but are not required to prove that a person has violated any other provision of this chapter.

(§ 2, Ord. 2888, eff. March 6, 2008)

Sec. 5-29.19. City Manager waiver.

The City Manager is authorized to grant a temporary waiver to the provisions of this chapter for a period of time necessary to correct the violations of this chapter, if such temporary waiver would be in the public interest and there is no feasible and prudent alternative to the activity, or the method of conducting the activity, for which the temporary waiver is sought. This time period may include a commitment to a program that includes placing necessary orders and entering into necessary contracts within thirty (30) days for repair or installation.

(§ 2, Ord. 2888, eff. March 6, 2008)

Sec. 5-29.20. Noise abatement program.

(a) In circumstances where adopted community-wide noise standards and policies prove impractical in controlling noise generated from a specific source, the City Council may establish a noise abatement program that recognizes the characteristics of the noise source and affected property and that incorporates specialized mitigation measures.

(b) Noise abatement programs shall set forth in detail the approved terms, conditions and requirements for achieving maximum compliance with noise standards and policies. Said terms, conditions and requirements may include, but shall not be limited to, limitations, restrictions, or prohibitions on operating hours, location of operations, and the types of equipment.

(§ 2, Ord. 2888, eff. March 6, 2008)

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APPENDIX 5.1:

STUDY AREA PHOTOS

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15662 - Esperanza Specific Plan

15662_L1_C 1.North
33, 59' 35.790000"117, 33' 43.600000"

15662_L1_C 2.South
33, 59' 35.780000"117, 33' 43.600000"

15662_L1_C 3.East
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15662_L1_C 4.West
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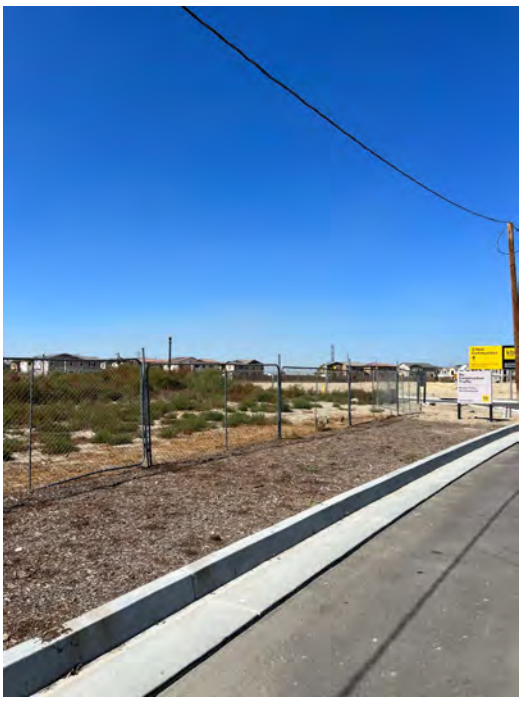

15662 - Esperanza Specific Plan

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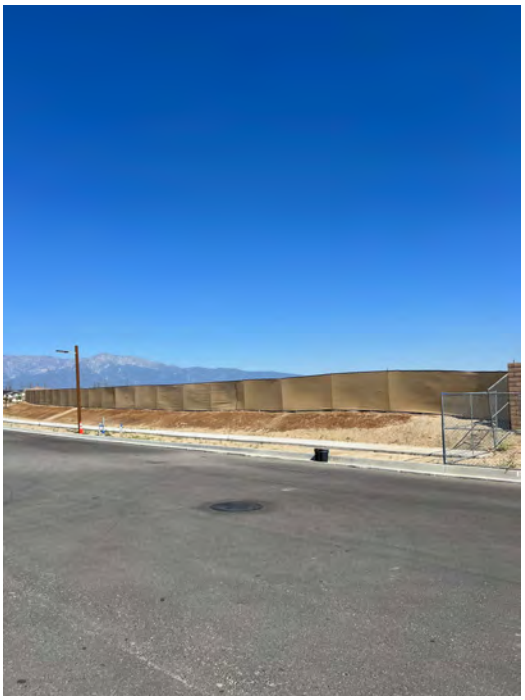

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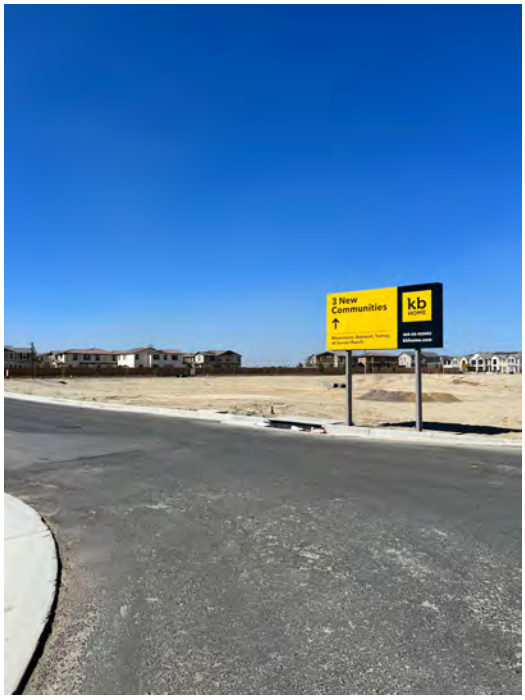

15662 - Esperanza Specific Plan

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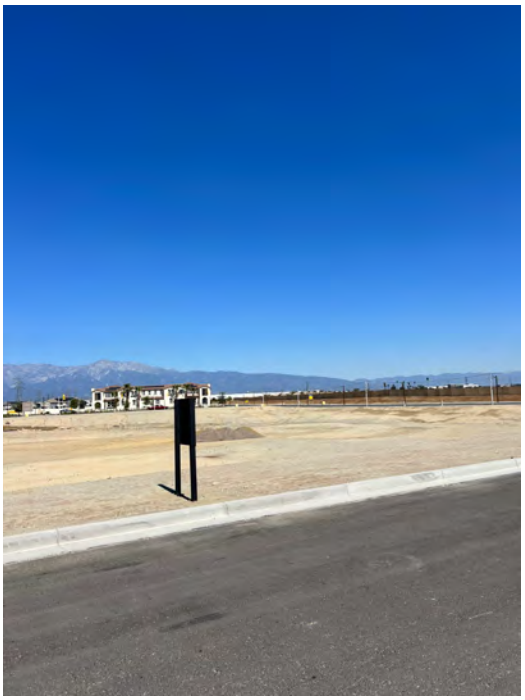

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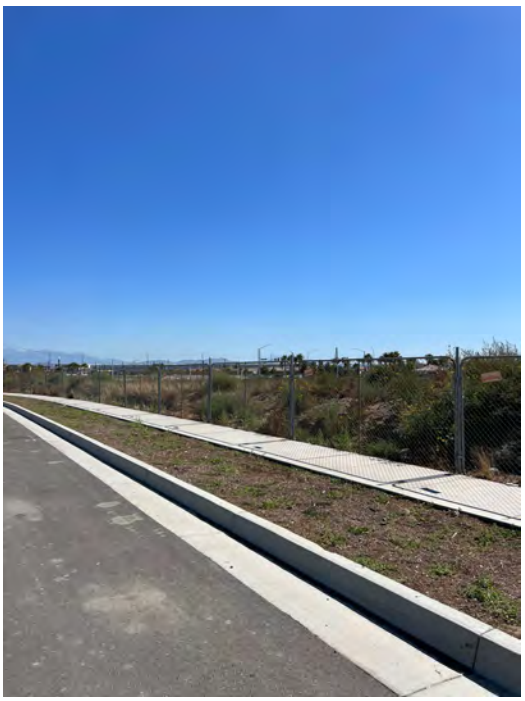

15662_L3_J 4.West
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15662 - Esperanza Specific Plan

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15662_L4_L 4.West
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15662 - Esperanza Specific Plan

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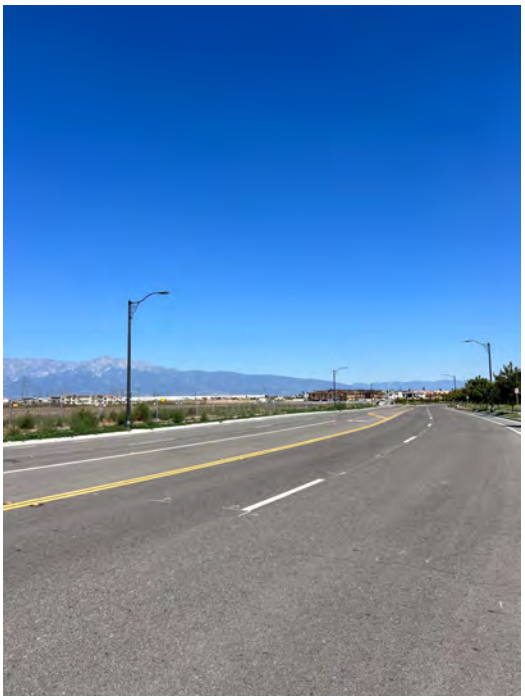

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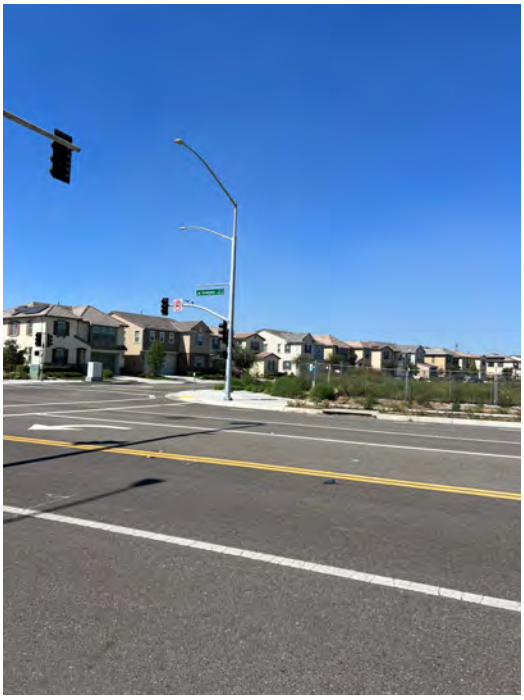

15662 - Esperanza Specific Plan

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15662_L6_S 3.East
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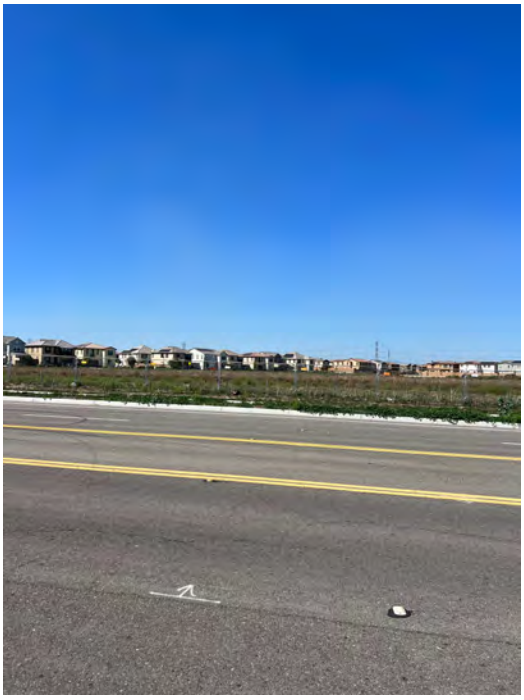

APPENDIX 5.2:

NOISE LEVEL MEASUREMENTS

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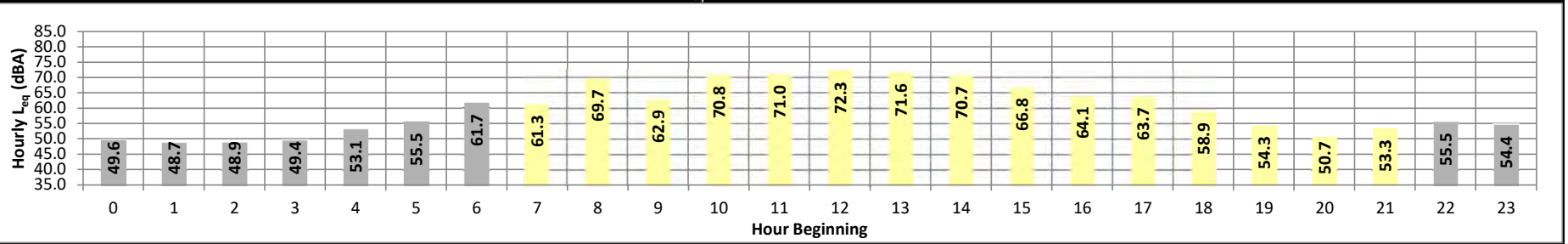
24-Hour Noise Level Measurement Summary

Date: Wednesday, October 4, 2023 | *Location:* L1 - Located East of the site at future residential | *Meter:* Piccolo II | *JN:* 15662

Project: Ontario Esperanza PA-11 | *Source:* | *Analyst:* Z. Ibrahim

Hourly L_{eq} dBA Readings (unadjusted)



Timeframe	Hour	L_{eq}	L_{max}	L_{min}	L1%	L2%	L5%	L8%	L25%	L50%	L90%	L95%	L99%	L_{eq}	Adj.	Adj. L_{eq}
Night	0	49.6	53.5	47.4	53.1	52.8	52.1	51.6	50.0	49.1	48.0	47.8	47.5	49.6	10.0	59.6
	1	48.7	52.5	46.7	52.3	51.9	51.1	50.4	49.1	48.3	47.3	47.1	46.8	48.7	10.0	58.7
	2	48.9	53.0	46.6	52.8	52.5	51.6	50.8	49.3	48.4	47.2	46.9	46.7	48.9	10.0	58.9
	3	49.4	52.8	47.5	52.6	52.3	51.6	51.2	49.9	49.1	48.0	47.8	47.5	49.4	10.0	59.4
	4	53.1	57.3	51.4	57.0	56.5	55.4	54.7	53.3	52.7	51.8	51.7	51.5	53.1	10.0	63.1
	5	55.5	62.5	53.0	61.9	61.2	59.4	58.0	55.4	54.4	53.5	53.3	53.1	55.5	10.0	65.5
	6	61.7	70.1	55.6	69.9	69.5	67.9	66.3	61.6	58.6	56.3	56.0	55.7	61.7	10.0	71.7
Day	7	61.3	69.3	57.3	69.0	68.5	66.9	65.5	60.9	59.1	57.7	57.6	57.4	61.3	0.0	61.3
	8	69.7	77.8	60.2	77.5	76.8	75.4	74.5	70.7	66.2	62.0	61.4	60.6	69.7	0.0	69.7
	9	62.9	71.7	57.3	71.3	70.7	68.8	67.5	62.4	60.1	58.0	57.7	57.4	62.9	0.0	62.9
	10	70.8	79.7	57.8	79.0	78.3	76.7	75.6	71.4	67.6	61.1	59.6	58.2	70.8	0.0	70.8
	11	71.0	80.3	57.6	79.5	78.7	76.6	75.4	71.7	68.1	61.5	60.2	58.3	71.0	0.0	71.0
	12	72.3	81.8	57.0	81.2	80.5	78.7	77.3	72.7	68.6	61.5	59.8	57.6	72.3	0.0	72.3
	13	71.6	80.2	57.3	79.6	78.9	77.4	76.4	72.4	68.6	62.0	60.3	58.0	71.6	0.0	71.6
	14	70.7	79.4	56.4	78.7	78.1	76.6	75.5	71.6	67.7	60.7	59.1	57.2	70.7	0.0	70.7
	15	66.8	74.9	54.0	74.3	73.6	72.2	71.4	67.9	64.3	57.9	56.4	54.6	66.8	0.0	66.8
	16	64.1	73.1	51.5	72.3	71.6	70.1	68.8	64.9	60.8	54.5	53.3	52.0	64.1	0.0	64.1
	17	63.7	72.5	51.8	72.0	71.2	69.3	68.2	64.6	60.9	54.6	53.6	52.2	63.7	0.0	63.7
	18	58.9	67.8	50.3	67.2	66.5	64.5	63.1	59.3	56.2	52.1	51.3	50.6	58.9	0.0	58.9
	19	54.3	60.8	51.0	60.3	59.7	58.4	57.5	54.6	52.9	51.5	51.3	51.1	54.3	5.0	59.3
	20	50.7	54.0	49.2	53.6	53.2	52.5	52.2	51.1	50.4	49.6	49.4	49.3	50.7	5.0	55.7
	21	53.3	56.7	51.8	56.5	56.2	55.3	54.8	53.6	53.0	52.2	52.0	51.9	53.3	5.0	58.3
Night	22	55.5	61.0	53.2	60.7	60.3	59.2	58.1	55.4	54.5	53.7	53.5	53.3	55.5	10.0	65.5
	23	54.4	57.0	52.7	56.7	56.5	56.0	55.8	54.9	54.2	53.3	53.1	52.8	54.4	10.0	64.4

Timeframe	Hour	L_{eq}	L_{max}	L_{min}	L1%	L2%	L5%	L8%	L25%	L50%	L90%	L95%	L99%
Day	Min	50.7	54.0	49.2	53.6	53.2	52.5	52.2	51.1	50.4	49.6	49.4	49.3
	Max	72.3	81.8	60.2	81.2	80.5	78.7	77.3	72.7	68.6	62.0	61.4	60.6
Energy Average		67.9	Average:		71.5	70.8	69.3	68.2	64.7	61.6	57.1	56.2	55.1
Night	Min	48.7	52.5	46.6	52.3	51.9	51.1	50.4	49.1	48.3	47.2	46.9	46.7
	Max	61.7	70.1	55.6	69.9	69.5	67.9	66.3	61.6	58.6	56.3	56.0	55.7
Energy Average		55.3	Average:		57.4	57.1	56.0	55.2	53.2	52.1	51.0	50.8	50.6

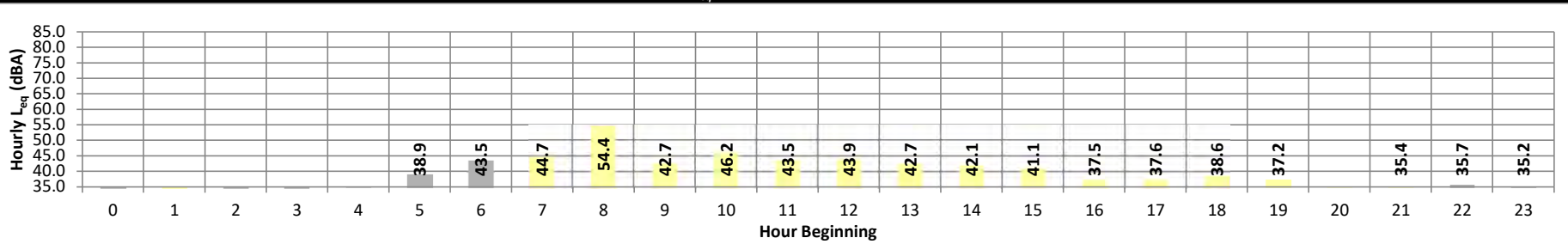
24-Hour CNEL	Leq (dBA) Daytime (7am-10pm)	Leq (dBA) Nighttime (10pm-7am)
67.1	67.9	55.3

24-Hour Noise Level Measurement Summary

Date: Wednesday, October 4, 2023 | *Location:* L2 - Located Northwest of the site at future residential | *Meter:* Piccolo II | *JN:* 15662

Project: Ontario Esperanza PA-11 | *Source:* | *Analyst:* Z. Ibrahim

Hourly L_{eq} dBA Readings (unadjusted)



Timeframe	Hour	L_{eq}	L_{max}	L_{min}	L1%	L2%	L5%	L8%	L25%	L50%	L90%	L95%	L99%	L_{eq}	Adj.	Adj. L_{eq}
Night	0	29.7	32.7	28.0	32.4	32.1	31.5	31.1	30.1	29.4	28.4	28.2	28.0	29.7	10.0	39.7
	1	30.7	33.8	28.9	33.6	33.3	32.6	32.2	31.1	30.5	29.4	29.2	29.0	30.7	10.0	40.7
	2	30.1	33.4	28.0	33.2	33.0	32.2	31.7	30.6	29.7	28.6	28.4	28.1	30.1	10.0	40.1
	3	30.1	32.9	28.6	32.7	32.5	32.0	31.6	30.4	29.9	29.0	28.9	28.7	30.1	10.0	40.1
	4	34.9	38.1	33.3	37.8	37.4	36.8	36.2	35.1	34.6	33.8	33.6	33.4	34.9	10.0	44.9
	5	38.9	49.8	34.5	48.9	47.7	45.1	42.5	36.7	35.7	34.9	34.8	34.6	38.9	10.0	48.9
	6	43.5	52.6	36.6	52.3	51.9	50.0	48.1	43.4	40.3	37.1	36.9	36.7	43.5	10.0	53.5
Day	7	44.7	55.1	38.4	54.5	53.7	51.5	49.5	43.7	40.2	38.8	38.7	38.5	44.7	0.0	44.7
	8	54.4	60.7	43.0	60.3	60.0	59.1	58.5	56.0	52.6	45.8	44.5	43.3	54.4	0.0	54.4
	9	42.7	53.5	34.7	53.1	52.5	50.6	48.4	39.6	36.7	35.1	35.0	34.8	42.7	0.0	42.7
	10	46.2	54.8	38.4	54.2	53.8	52.2	50.3	46.1	43.8	40.6	39.6	38.6	46.2	0.0	46.2
	11	43.5	52.8	32.1	52.2	51.5	49.6	48.3	44.1	40.2	34.5	33.6	32.5	43.5	0.0	43.5
	12	43.9	52.5	33.1	51.7	50.8	49.4	48.4	44.8	41.4	36.1	34.9	33.5	43.9	0.0	43.9
	13	42.7	51.5	32.3	50.7	49.9	48.0	46.9	43.5	40.3	34.9	33.8	32.7	42.7	0.0	42.7
	14	42.1	50.2	32.7	49.3	48.6	47.2	46.2	42.9	40.1	35.6	34.6	33.2	42.1	0.0	42.1
	15	41.1	49.3	31.5	48.7	48.0	46.4	45.2	41.8	38.9	34.0	33.1	32.0	41.1	0.0	41.1
	16	37.5	46.3	29.0	45.8	45.2	43.4	42.1	37.8	34.4	30.6	30.0	29.3	37.5	0.0	37.5
	17	37.6	46.6	29.5	46.1	45.5	43.3	41.9	37.9	34.7	31.1	30.5	29.7	37.6	0.0	37.6
	18	38.6	46.5	32.0	45.9	45.4	44.1	43.0	39.3	36.0	33.0	32.6	32.1	38.6	0.0	38.6
	19	37.2	40.3	35.9	40.1	39.8	38.8	38.3	37.4	37.0	36.3	36.2	36.0	37.2	5.0	42.2
	20	34.8	36.3	33.8	36.2	36.0	35.7	35.6	35.0	34.8	34.1	34.0	33.8	34.8	5.0	39.8
	21	35.4	38.5	34.1	38.2	37.9	37.1	36.5	35.5	35.1	34.4	34.3	34.1	35.4	5.0	40.4
Night	22	35.7	39.4	34.1	39.1	38.9	38.3	37.8	35.8	35.2	34.5	34.4	34.2	35.7	10.0	45.7
	23	35.2	37.2	33.8	37.0	36.8	36.5	36.2	35.5	35.0	34.3	34.1	33.8	35.2	10.0	45.2

Timeframe	Hour	L_{eq}	L_{max}	L_{min}	L1%	L2%	L5%	L8%	L25%	L50%	L90%	L95%	L99%
Day	Min	34.8	36.3	29.0	36.2	36.0	35.7	35.6	35.0	34.4	30.6	30.0	29.3
	Max	54.4	60.7	43.0	60.3	60.0	59.1	58.5	56.0	52.6	45.8	44.5	43.3
Energy Average		45.1	Average:		48.5	47.9	46.4	45.3	41.7	39.1	35.7	35.0	34.3
Night	Min	29.7	32.7	28.0	32.4	32.1	31.5	31.1	30.1	29.4	28.4	28.2	28.0
	Max	43.5	52.6	36.6	52.3	51.9	50.0	48.1	43.4	40.3	37.1	36.9	36.7
Energy Average		36.9	Average:		38.6	38.2	37.2	36.4	34.3	33.4	32.2	32.1	31.8

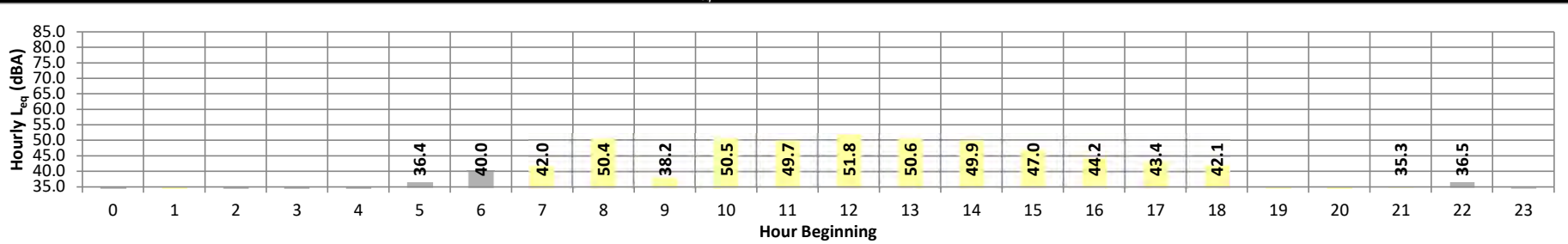
24-Hour CNEL	*Leq (dBA) Daytime (7am-10pm)*	*Leq (dBA) Nighttime (10pm-7am)*
46.0	**45.1**	**36.9**

24-Hour Noise Level Measurement Summary

Date: Wednesday, October 4, 2023 | *Location:* L3 - Located North of the site at future park site | *Meter:* Piccolo II | *JN:* 15662

Project: Ontario Esperanza PA-11 | *Source:* | *Analyst:* Z. Ibrahim

Hourly L_{eq} dBA Readings (unadjusted)



Timeframe	Hour	L_{eq}	L_{max}	L_{min}	L1%	L2%	L5%	L8%	L25%	L50%	L90%	L95%	L99%	L_{eq}	Adj.	Adj. L_{eq}
Night	0	29.5	32.6	27.8	32.4	32.0	31.5	31.2	29.9	29.2	28.3	28.1	27.8	29.5	10.0	39.5
	1	29.6	33.4	27.8	33.2	32.9	32.2	31.5	29.8	29.2	28.2	28.1	27.8	29.6	10.0	39.6
	2	29.9	32.7	28.1	32.5	32.2	31.7	31.4	30.4	29.6	28.6	28.4	28.2	29.9	10.0	39.9
	3	30.3	33.3	28.8	33.0	32.7	32.1	31.5	30.6	30.1	29.3	29.1	28.9	30.3	10.0	40.3
	4	34.1	38.1	32.3	37.7	37.4	36.6	35.9	34.3	33.5	32.8	32.6	32.4	34.1	10.0	44.1
	5	36.4	41.4	34.4	41.0	40.5	39.5	38.5	36.6	35.7	34.8	34.7	34.5	36.4	10.0	46.4
	6	40.0	47.3	36.2	47.1	46.9	45.4	44.0	39.6	37.8	36.7	36.5	36.3	40.0	10.0	50.0
Day	7	42.0	50.0	38.1	49.8	49.6	48.4	46.7	40.6	39.2	38.4	38.3	38.2	42.0	0.0	42.0
	8	50.4	57.0	40.1	56.7	56.3	55.4	54.6	51.6	48.3	43.0	41.7	40.3	50.4	0.0	50.4
	9	38.2	47.5	33.9	47.2	46.8	44.8	42.3	36.9	35.2	34.3	34.2	34.0	38.2	0.0	38.2
	10	50.5	57.2	42.4	56.7	56.2	55.0	54.2	51.6	49.2	45.0	44.1	42.8	50.5	0.0	50.5
	11	49.7	56.8	40.4	56.4	55.9	54.7	53.9	50.9	47.9	43.0	41.9	40.9	49.7	0.0	49.7
	12	51.8	58.6	43.0	58.1	57.3	56.2	55.4	52.8	50.4	46.0	45.1	43.6	51.8	0.0	51.8
	13	50.6	56.8	42.0	56.3	55.8	54.8	54.1	51.8	49.4	45.0	43.9	42.4	50.6	0.0	50.6
	14	49.9	56.1	41.6	55.6	55.3	54.3	53.5	51.1	48.7	44.5	43.4	42.1	49.9	0.0	49.9
	15	47.0	54.0	37.8	53.4	52.8	51.7	50.8	48.1	45.7	40.8	39.6	38.2	47.0	0.0	47.0
	16	44.2	50.9	35.6	50.4	49.9	48.7	48.0	45.4	42.9	38.3	37.3	36.0	44.2	0.0	44.2
	17	43.4	49.0	35.9	48.6	48.3	47.4	46.8	44.6	42.3	38.3	37.3	36.3	43.4	0.0	43.4
	18	42.1	53.8	32.4	52.6	51.6	47.1	45.0	42.3	38.5	33.9	33.4	32.7	42.1	0.0	42.1
	19	34.7	39.2	31.8	38.8	38.5	37.8	37.2	35.5	34.0	32.4	32.2	31.9	34.7	5.0	39.7
	20	31.5	35.0	30.2	34.8	34.5	33.6	33.0	31.8	31.1	30.5	30.4	30.2	31.5	5.0	36.5
	21	35.3	39.0	33.9	38.8	38.5	37.6	36.9	35.4	34.9	34.3	34.2	34.0	35.3	5.0	40.3
Night	22	36.5	42.3	34.2	41.9	41.5	40.3	39.4	36.2	35.4	34.6	34.5	34.3	36.5	10.0	46.5
	23	34.7	37.1	33.2	36.8	36.6	36.2	35.9	35.1	34.5	33.7	33.5	33.3	34.7	10.0	44.7

Timeframe	Hour	L_{eq}	L_{max}	L_{min}	L1%	L2%	L5%	L8%	L25%	L50%	L90%	L95%	L99%
Day	Min	31.5	35.0	30.2	34.8	34.5	33.6	33.0	31.8	31.1	30.5	30.4	30.2
	Max	51.8	58.6	43.0	58.1	57.3	56.2	55.4	52.8	50.4	46.0	45.1	43.6
Energy Average		47.4	Average:		50.3	49.8	48.5	47.5	44.7	42.5	39.2	38.5	37.6
Night	Min	29.5	32.6	27.8	32.4	32.0	31.5	31.2	29.8	29.2	28.2	28.1	27.8
	Max	40.0	47.3	36.2	47.1	46.9	45.4	44.0	39.6	37.8	36.7	36.5	36.3
Energy Average		34.9	Average:		37.3	37.0	36.2	35.5	33.6	32.8	31.9	31.7	31.5

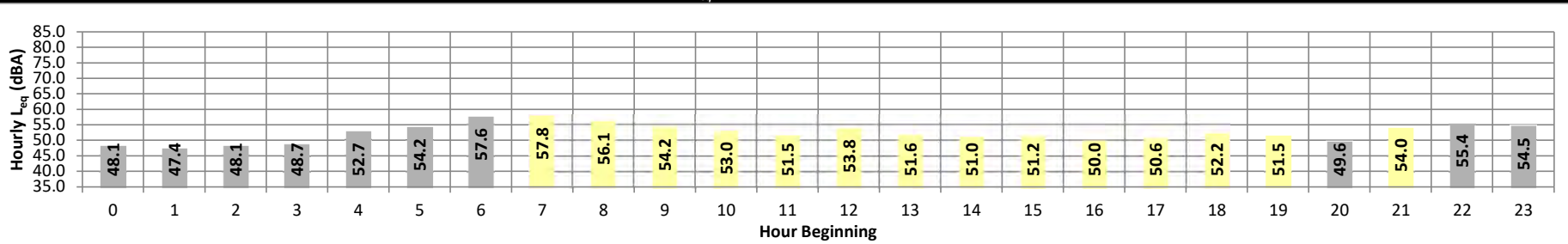
24-Hour CNEL	Leq (dBA) Daytime (7am-10pm)	Leq (dBA) Nighttime (10pm-7am)
46.7	**47.4**	**34.9**

24-Hour Noise Level Measurement Summary

Date: Wednesday, October 4, 2023 *Location:* L4 - Located West of the site near the residence at 4500 S. *Meter:* Piccolo II *JN:* 15662

Project: Ontario Esperanza PA-11 *Source:* Amherst Ave. *Analyst:* Z. Ibrahim

Hourly L_{eq} dBA Readings (unadjusted)



Timeframe	Hour	L_{eq}	L_{max}	L_{min}	L1%	L2%	L5%	L8%	L25%	L50%	L90%	L95%	L99%	L_{eq}	Adj.	Adj. L_{eq}
Night	0	48.1	52.1	46.1	51.8	51.4	50.4	50.0	48.5	47.7	46.6	46.4	46.2	48.1	10.0	58.1
	1	47.4	50.5	45.7	50.3	50.0	49.4	49.1	47.8	47.1	46.2	45.9	45.7	47.4	10.0	57.4
	2	48.1	51.4	46.1	51.1	50.9	50.3	49.8	48.6	47.6	46.5	46.4	46.1	48.1	10.0	58.1
	3	48.7	51.4	47.2	51.2	50.9	50.4	50.0	49.1	48.5	47.6	47.4	47.3	48.7	10.0	58.7
	4	52.7	57.3	50.8	56.8	56.5	55.6	54.7	53.0	52.0	51.2	51.1	50.9	52.7	10.0	62.7
	5	54.2	57.6	52.6	57.3	56.9	56.2	55.6	54.5	53.8	53.0	52.8	52.6	54.2	10.0	64.2
	6	57.6	63.7	54.8	63.4	63.1	62.2	61.3	57.3	56.1	55.3	55.1	54.9	57.6	10.0	67.6
Day	7	57.8	61.1	56.3	60.9	60.6	59.9	59.3	58.0	57.4	56.7	56.5	56.4	57.8	0.0	57.8
	8	56.1	58.3	54.5	58.1	57.8	57.4	57.2	56.5	55.9	55.0	54.8	54.6	56.1	0.0	56.1
	9	54.2	57.1	52.7	56.8	56.5	56.0	55.5	54.6	53.9	53.1	53.0	52.8	54.2	0.0	54.2
	10	53.0	58.5	50.5	57.9	57.4	56.1	55.4	53.3	52.1	51.0	50.8	50.6	53.0	0.0	53.0
	11	51.5	56.1	48.8	55.7	55.3	54.4	53.8	52.2	50.9	49.4	49.1	48.9	51.5	0.0	51.5
	12	53.8	60.9	48.8	60.4	59.7	58.6	57.7	54.7	51.6	49.5	49.2	48.9	53.8	0.0	53.8
	13	51.6	57.6	48.4	57.1	56.6	55.5	54.8	52.0	50.4	49.0	48.8	48.5	51.6	0.0	51.6
	14	51.0	56.5	48.2	56.1	55.7	54.4	53.6	51.3	50.2	48.9	48.6	48.3	51.0	0.0	51.0
	15	51.2	57.2	47.5	56.7	56.0	54.9	54.4	52.2	49.8	48.1	47.8	47.5	51.2	0.0	51.2
	16	50.0	56.1	46.9	55.4	54.9	53.5	52.5	50.6	49.0	47.5	47.2	47.0	50.0	0.0	50.0
	17	50.6	57.4	47.0	56.8	56.2	55.1	54.0	51.1	48.8	47.6	47.4	47.1	50.6	0.0	50.6
	18	52.2	59.9	48.3	59.5	59.2	57.7	56.6	51.6	50.1	48.8	48.6	48.4	52.2	0.0	52.2
	19	51.5	57.3	49.0	56.7	56.2	54.9	54.3	51.8	50.5	49.4	49.3	49.1	51.5	5.0	56.5
	20	49.6	54.4	47.4	53.8	53.3	52.4	51.9	50.2	48.7	47.8	47.7	47.5	49.6	5.0	54.6
	21	54.0	57.9	52.2	57.5	57.1	56.3	55.8	54.3	53.6	52.7	52.5	52.3	54.0	5.0	59.0
Night	22	55.4	60.3	53.2	60.0	59.6	58.5	57.7	55.5	54.7	53.7	53.6	53.3	55.4	10.0	65.4
	23	54.5	57.6	52.7	57.3	57.0	56.4	56.0	54.9	54.1	53.2	53.0	52.8	54.5	10.0	64.5

Timeframe	Hour	L_{eq}	L_{max}	L_{min}	L1%	L2%	L5%	L8%	L25%	L50%	L90%	L95%	L99%
Day	Min	49.6	54.4	46.9	53.8	53.3	52.4	51.9	50.2	48.7	47.5	47.2	47.0
	Max	57.8	61.1	56.3	60.9	60.6	59.9	59.3	58.0	57.4	56.7	56.5	56.4
Energy Average		53.2	Average:		57.3	56.8	55.8	55.1	53.0	51.5	50.3	50.1	49.9
Night	Min	47.4	50.5	45.7	50.3	50.0	49.4	49.1	47.8	47.1	46.2	45.9	45.7
	Max	57.6	63.7	54.8	63.4	63.1	62.2	61.3	57.3	56.1	55.3	55.1	54.9
Energy Average		53.3	Average:		55.5	55.1	54.4	53.8	52.1	51.3	50.4	50.2	50.0

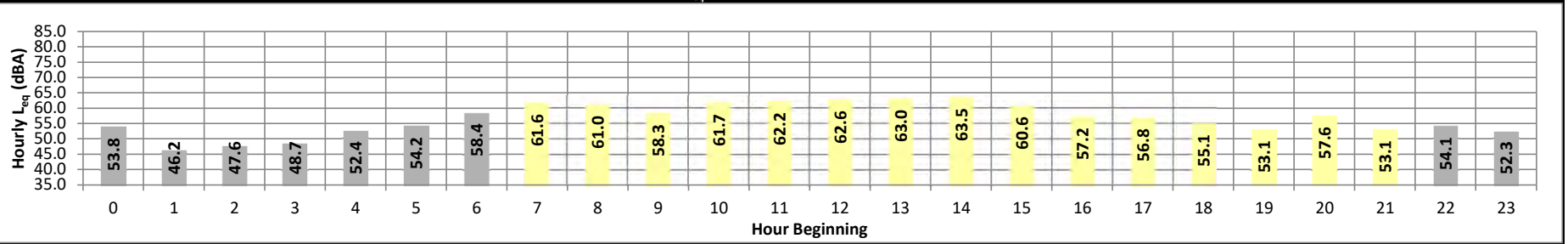
24-Hour CNEL	Leq (dBA) Daytime (7am-10pm)	Leq (dBA) Nighttime (10pm-7am)
59.9	53.2	53.3

24-Hour Noise Level Measurement Summary

Date: Wednesday, October 4, 2023 | *Location:* L5 - Located South of the site near the residence at 4576 S | *Meter:* Piccolo II | *JN:* 15662

Project: Ontario Esperanza PA-11 | *Source:* Afton Privado | *Analyst:* Z. Ibrahim

Hourly L_{eq} dBA Readings (unadjusted)



Timeframe	Hour	L_{eq}	L_{max}	L_{min}	L1%	L2%	L5%	L8%	L25%	L50%	L90%	L95%	L99%	L_{eq}	Adj.	Adj. L_{eq}
Night	0	53.8	57.1	51.9	56.9	56.7	55.8	55.3	54.4	53.4	52.5	52.3	52.1	53.8	10.0	63.8
	1	46.2	50.5	44.2	50.3	50.1	49.4	48.5	46.4	45.6	44.6	44.5	44.3	46.2	10.0	56.2
	2	47.6	51.1	45.7	50.9	50.6	49.9	49.3	48.0	47.1	46.1	45.9	45.8	47.6	10.0	57.6
	3	48.7	55.1	45.8	54.8	54.4	53.5	52.4	48.6	47.0	46.2	46.1	45.9	48.7	10.0	58.7
	4	52.4	59.4	49.7	59.0	58.6	56.8	55.3	52.1	51.0	50.1	49.9	49.7	52.4	10.0	62.4
	5	54.2	60.1	51.9	59.8	59.5	58.0	56.7	54.1	53.2	52.3	52.1	51.9	54.2	10.0	64.2
	6	58.4	66.9	53.6	66.6	66.3	64.3	62.6	57.9	55.5	54.1	53.9	53.7	58.4	10.0	68.4
Day	7	61.6	70.7	55.0	70.4	69.8	67.9	66.1	61.7	58.5	55.4	55.2	55.0	61.6	0.0	61.6
	8	61.0	72.7	53.7	72.1	71.2	67.9	65.3	58.8	55.8	54.2	54.0	53.8	61.0	0.0	61.0
	9	58.3	68.0	52.4	67.6	67.1	65.4	63.7	56.5	54.1	52.8	52.6	52.4	58.3	0.0	58.3
	10	61.7	70.2	54.1	69.5	68.8	67.2	66.2	62.1	59.2	55.8	55.2	54.4	61.7	0.0	61.7
	11	62.2	70.2	54.7	69.5	68.8	67.0	66.0	62.8	60.3	56.7	55.9	55.0	62.2	0.0	62.2
	12	62.6	70.4	54.2	69.9	69.4	67.8	66.6	63.3	60.7	56.3	55.4	54.5	62.6	0.0	62.6
	13	63.0	71.2	54.4	70.5	70.0	68.4	67.3	63.6	60.9	56.5	55.7	54.6	63.0	0.0	63.0
	14	63.5	71.6	54.7	71.1	70.6	68.9	67.8	64.3	61.3	56.9	56.0	54.9	63.5	0.0	63.5
	15	60.6	68.8	52.2	68.4	67.7	65.8	64.7	61.3	58.5	54.4	53.6	52.6	60.6	0.0	60.6
	16	57.2	65.5	49.9	65.1	64.6	62.6	61.2	57.5	54.9	51.4	50.7	50.0	57.2	0.0	57.2
	17	56.8	64.5	50.0	64.0	63.6	61.9	60.6	57.4	54.9	51.5	50.9	50.2	56.8	0.0	56.8
	18	55.1	63.0	49.6	62.6	62.1	60.4	59.2	55.3	52.8	50.5	50.2	49.7	55.1	0.0	55.1
	19	53.1	61.2	48.9	60.9	60.4	58.5	57.2	52.7	50.7	49.3	49.1	49.0	53.1	5.0	58.1
	20	57.6	68.8	52.3	68.1	67.1	64.6	61.4	55.2	54.1	52.8	52.7	52.5	57.6	5.0	62.6
	21	53.1	60.3	50.6	59.8	59.3	57.2	55.9	52.9	51.9	51.0	50.9	50.7	53.1	5.0	58.1
Night	22	54.1	62.5	50.9	62.2	61.6	59.0	57.1	53.5	52.2	51.3	51.2	51.0	54.1	10.0	64.1
	23	52.3	56.4	50.4	56.2	55.8	55.0	54.4	52.6	51.7	50.8	50.7	50.5	52.3	10.0	62.3

Timeframe	Hour	L_{eq}	L_{max}	L_{min}	L1%	L2%	L5%	L8%	L25%	L50%	L90%	L95%	L99%
Day	Min	53.1	60.3	48.9	59.8	59.3	57.2	55.9	52.7	50.7	49.3	49.1	49.0
	Max	63.5	72.7	55.0	72.1	71.2	68.9	67.8	64.3	61.3	56.9	56.0	55.0
Energy Average		60.3	Average:		67.3	66.7	64.8	63.3	59.0	56.6	53.7	53.2	52.6
Night	Min	46.2	50.5	44.2	50.3	50.1	49.4	48.5	46.4	45.6	44.6	44.5	44.3
	Max	58.4	66.9	53.6	66.6	66.3	64.3	62.6	57.9	55.5	54.1	53.9	53.7
Energy Average		53.4	Average:		57.4	57.1	55.8	54.6	52.0	50.7	49.8	49.6	49.4

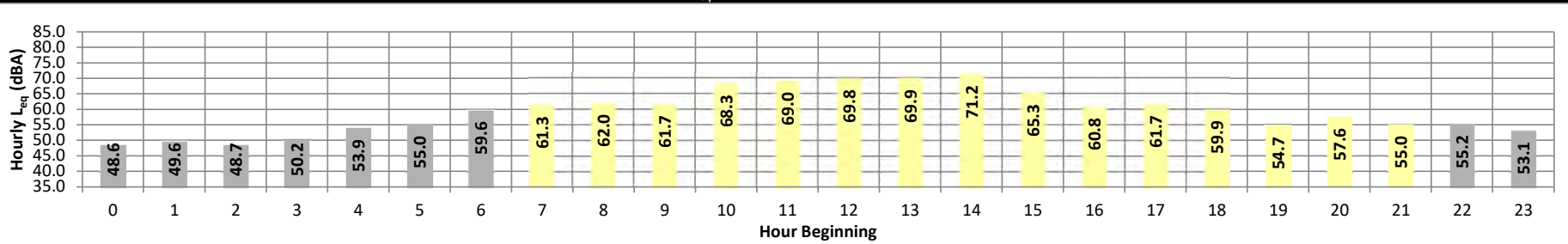
24-Hour CNEL	Leq (dBA) Daytime (7am-10pm)	Leq (dBA) Nighttime (10pm-7am)
62.0	**60.3**	**53.4**

24-Hour Noise Level Measurement Summary

Date: Wednesday, October 4, 2023 | *Location:* L6 - Located South of the site near the residence at 4554 S | *Meter:* Piccolo II | *JN:* 15662

Project: Ontario Esperanza PA-11 | *Source:* Afton Privado | *Analyst:* Z. Ibrahim

Hourly L_{eq} dBA Readings (unadjusted)



Timeframe	Hour	L_{eq}	L_{max}	L_{min}	L1%	L2%	L5%	L8%	L25%	L50%	L90%	L95%	L99%	L_{eq}	Adj.	Adj. L_{eq}
Night	0	48.6	56.5	45.2	56.2	55.6	53.0	51.3	48.4	47.2	45.8	45.6	45.3	48.6	10.0	58.6
	1	49.6	53.5	47.7	53.3	53.0	52.3	51.6	49.9	49.2	48.3	48.0	47.7	49.6	10.0	59.6
	2	48.7	53.5	46.1	53.3	53.0	52.0	51.2	49.1	47.8	46.6	46.4	46.1	48.7	10.0	58.7
	3	50.2	57.0	46.9	56.8	56.5	55.5	54.2	49.8	48.2	47.3	47.1	46.9	50.2	10.0	60.2
	4	53.9	61.8	50.8	61.6	61.1	58.9	56.9	53.3	52.2	51.3	51.1	50.9	53.9	10.0	63.9
	5	55.0	61.5	52.4	61.3	60.9	59.2	57.7	54.9	53.8	52.9	52.7	52.5	55.0	10.0	65.0
	6	59.6	68.9	53.9	68.7	68.3	66.2	64.1	58.5	55.9	54.4	54.1	53.9	59.6	10.0	69.6
Day	7	61.3	71.8	55.2	71.4	70.7	67.9	65.7	60.0	57.1	55.7	55.5	55.3	61.3	0.0	61.3
	8	62.0	73.6	54.1	73.3	72.4	69.1	66.2	59.7	56.3	54.5	54.4	54.2	62.0	0.0	62.0
	9	61.7	72.6	53.3	72.4	71.9	69.3	66.9	59.3	55.2	53.8	53.6	53.4	61.7	0.0	61.7
	10	68.3	77.4	54.8	76.9	76.3	75.1	73.5	68.5	64.0	57.5	56.4	55.1	68.3	0.0	68.3
	11	69.0	78.7	53.8	78.1	77.5	75.9	74.5	69.3	63.7	56.5	55.3	54.1	69.0	0.0	69.0
	12	69.8	78.7	54.4	78.2	77.6	76.2	75.1	70.7	66.0	57.2	56.1	54.8	69.8	0.0	69.8
	13	69.9	78.1	55.4	77.7	77.3	76.0	75.0	70.9	66.0	59.1	57.8	55.8	69.9	0.0	69.9
	14	71.2	79.7	56.7	79.3	78.9	77.3	76.1	72.2	67.7	60.9	59.5	57.4	71.2	0.0	71.2
	15	65.3	73.9	52.4	73.5	72.9	71.3	70.1	66.1	62.4	55.0	53.9	52.8	65.3	0.0	65.3
	16	60.8	70.4	49.6	69.9	69.1	67.0	65.5	61.0	57.4	51.9	51.0	50.0	60.8	0.0	60.8
	17	61.7	70.7	49.8	70.1	69.4	67.8	66.5	62.1	58.6	52.2	51.2	50.1	61.7	0.0	61.7
	18	59.9	70.3	50.2	69.4	68.6	65.9	64.3	59.6	56.5	52.0	51.2	50.4	59.9	0.0	59.9
	19	54.7	64.5	48.3	64.1	63.5	60.9	59.2	53.9	50.9	48.9	48.6	48.4	54.7	5.0	59.7
	20	57.6	70.3	48.0	69.9	69.0	65.0	61.4	53.7	50.4	48.5	48.3	48.1	57.6	5.0	62.6
	21	55.0	64.5	50.7	64.1	63.4	60.7	58.7	54.2	52.3	51.2	51.0	50.8	55.0	5.0	60.0
Night	22	55.2	64.4	51.0	63.9	63.1	60.5	58.6	54.6	52.6	51.5	51.3	51.1	55.2	10.0	65.2
	23	53.1	58.2	50.6	57.9	57.6	56.6	55.7	53.3	52.3	51.2	50.9	50.7	53.1	10.0	63.1

Timeframe	Hour	L_{eq}	L_{max}	L_{min}	L1%	L2%	L5%	L8%	L25%	L50%	L90%	L95%	L99%
Day	Min	54.7	64.5	48.0	64.1	63.4	60.7	58.7	53.7	50.4	48.5	48.3	48.1
	Max	71.2	79.7	56.7	79.3	78.9	77.3	76.1	72.2	67.7	60.9	59.5	57.4
Energy Average		66.0	Average:		72.6	71.9	69.7	67.9	62.8	59.0	54.3	53.6	52.7
Night	Min	48.6	53.5	45.2	53.3	53.0	52.0	51.2	48.4	47.2	45.8	45.6	45.3
	Max	59.6	68.9	53.9	68.7	68.3	66.2	64.1	58.5	55.9	54.4	54.1	53.9
Energy Average		54.2	Average:		59.2	58.8	57.1	55.7	52.4	51.0	49.9	49.7	49.5

24-Hour CNEL	Leq (dBA) Daytime (7am-10pm)	Leq (dBA) Nighttime (10pm-7am)
65.5	66.0	54.2

APPENDIX 8.1:

ON-SITE MODEL INPUTS

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FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL (CALVENO) - v10/31/19

Scenario: Backyard No Wall
Road Name: Eucalyptus Ave
Lot No: BLDG 20

Project Name: Esperanza Specific Plan
Job Number: 15662
Analyst: B. Maddux

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	21,700 vehicles
Peak Hour Percentage:	10%
Peak Hour Volume:	2,170 vehicles
Vehicle Speed:	40 mph
Near/Far Lane Distance:	40 feet

Site Data

Barrier Height:	**0.0 feet**
Barrier Type (0-Wall, 1-Berm):	0.0
Centerline Dist. to Barrier:	83.0 feet
Centerline Dist. to Observer:	105.0 feet
Barrier Distance to Observer:	22.0 feet
Observer Height (Above Pad):	5.0 feet
Pad Elevation:	0.0 feet
Road Elevation:	0.0 feet
Barrier Elevation:	0.0 feet
Road Grade:	1.0%

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	15
Medium Trucks (2 Axles):	15
Heavy Trucks (3+ Axles):	15

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	77.5%	12.9%	9.6%	97.42%
Medium Trucks:	84.8%	4.9%	10.3%	1.84%
Heavy Trucks:	86.5%	2.7%	10.8%	0.74%

Noise Source Elevations (in feet)

Autos:	0.00		
Medium Trucks:	2.30		
Heavy Trucks:	8.01	*Grade Adjustment:*	0.0

Lane Equivalent Distance (in feet)

Autos:	82.765
Medium Trucks:	82.658
Heavy Trucks:	82.668

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	67.36	1.93	-3.39	-1.20	*-0.41*	0.000	0.000
Medium Trucks:	76.31	-15.31	-3.38	-1.20	*-0.55*	0.000	0.000
Heavy Trucks:	81.16	-19.27	-3.38	-1.20	*-0.99*	0.000	0.000

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	64.7	62.8	61.0	55.0	63.6	64.2
Medium Trucks:	56.4	54.9	48.6	47.0	55.5	55.7
Heavy Trucks:	57.3	55.9	46.9	48.1	56.5	56.6
Vehicle Noise:	65.9	64.2	61.4	56.3	64.9	65.4

Mitigated Noise Levels (with Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	64.7	62.8	61.0	55.0	63.6	64.2
Medium Trucks:	56.4	54.9	48.6	47.0	55.5	55.7
Heavy Trucks:	57.3	55.9	46.9	48.1	56.5	56.6
Vehicle Noise:	65.9	64.2	61.4	56.3	64.9	65.4

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL (CALVENO) - v10/31/19

Scenario: Backyard No Wall
Road Name: Eucalyptus Ave
Lot No: BLDG 7-14

Project Name: Esperanza Specific Plan
Job Number: 15662
Analyst: B. Maddux

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	21,700 vehicles
Peak Hour Percentage:	10%
Peak Hour Volume:	2,170 vehicles
Vehicle Speed:	40 mph
Near/Far Lane Distance:	40 feet

Site Data

Barrier Height:	**0.0 feet**
Barrier Type (0-Wall, 1-Berm):	0.0
Centerline Dist. to Barrier:	83.0 feet
Centerline Dist. to Observer:	103.0 feet
Barrier Distance to Observer:	20.0 feet
Observer Height (Above Pad):	5.0 feet
Pad Elevation:	0.0 feet
Road Elevation:	0.0 feet
Barrier Elevation:	0.0 feet
Road Grade:	1.0%

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	15
Medium Trucks (2 Axles):	15
Heavy Trucks (3+ Axles):	15

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	77.5%	12.9%	9.6%	97.42%
Medium Trucks:	84.8%	4.9%	10.3%	1.84%
Heavy Trucks:	86.5%	2.7%	10.8%	0.74%

Noise Source Elevations (in feet)

Autos:	0.00		
Medium Trucks:	2.30		
Heavy Trucks:	8.01	*Grade Adjustment:*	0.0

Lane Equivalent Distance (in feet)

Autos:	80.709
Medium Trucks:	80.600
Heavy Trucks:	80.610

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	67.36	1.93	-3.22	-1.20	*-0.46*	0.000	0.000
Medium Trucks:	76.31	-15.31	-3.21	-1.20	*-0.60*	0.000	0.000
Heavy Trucks:	81.16	-19.27	-3.21	-1.20	*-1.04*	0.000	0.000

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	64.9	63.0	61.2	55.1	63.8	64.4
Medium Trucks:	56.6	55.1	48.7	47.2	55.6	55.9
Heavy Trucks:	57.5	56.1	47.0	48.3	56.6	56.7
Vehicle Noise:	66.1	64.3	61.6	56.5	65.1	65.6

Mitigated Noise Levels (with Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	64.9	63.0	61.2	55.1	63.8	64.4
Medium Trucks:	56.6	55.1	48.7	47.2	55.6	55.9
Heavy Trucks:	57.5	56.1	47.0	48.3	56.6	56.7
Vehicle Noise:	66.1	64.3	61.6	56.5	65.1	65.6

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL (CALVENO) - v10/31/19

Scenario: Backyard No Wall
Road Name: Eucalyptus Ave
Lot No: BLDG 6

Project Name: Esperanza Specific Plan
Job Number: 15662
Analyst: B. Maddux

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	21,700 vehicles
Peak Hour Percentage:	10%
Peak Hour Volume:	2,170 vehicles
Vehicle Speed:	40 mph
Near/Far Lane Distance:	40 feet

Site Data

Barrier Height:	**0.0 feet**
Barrier Type (0-Wall, 1-Berm):	0.0
Centerline Dist. to Barrier:	84.0 feet
Centerline Dist. to Observer:	104.0 feet
Barrier Distance to Observer:	20.0 feet
Observer Height (Above Pad):	5.0 feet
Pad Elevation:	0.0 feet
Road Elevation:	0.0 feet
Barrier Elevation:	0.0 feet
Road Grade:	1.0%

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	15
Medium Trucks (2 Axles):	15
Heavy Trucks (3+ Axles):	15

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	77.5%	12.9%	9.6%	97.42%
Medium Trucks:	84.8%	4.9%	10.3%	1.84%
Heavy Trucks:	86.5%	2.7%	10.8%	0.74%

Noise Source Elevations (in feet)

Autos:	0.00		
Medium Trucks:	2.30		
Heavy Trucks:	8.01	*Grade Adjustment:*	0.0

Lane Equivalent Distance (in feet)

Autos:	81.737
Medium Trucks:	81.629
Heavy Trucks:	81.640

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	67.36	1.93	-3.31	-1.20	*-0.46*	0.000	0.000
Medium Trucks:	76.31	-15.31	-3.30	-1.20	*-0.60*	0.000	0.000
Heavy Trucks:	81.16	-19.27	-3.30	-1.20	*-1.04*	0.000	0.000

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	64.8	62.9	61.1	55.1	63.7	64.3
Medium Trucks:	56.5	55.0	48.6	47.1	55.5	55.8
Heavy Trucks:	57.4	56.0	46.9	48.2	56.5	56.7
Vehicle Noise:	66.0	64.2	61.5	56.4	65.0	65.5

Mitigated Noise Levels (with Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	64.8	62.9	61.1	55.1	63.7	64.3
Medium Trucks:	56.5	55.0	48.6	47.1	55.5	55.8
Heavy Trucks:	57.4	56.0	46.9	48.2	56.5	56.7
Vehicle Noise:	66.0	64.2	61.5	56.4	65.0	65.5

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL (CALVENO) - v10/31/19

Scenario:	Backyard No Wall	*Project Name:*	Esperanza Specific Plan
Road Name:	Clifton Ave	*Job Number:*	15662
Lot No:	BLDG 5-6	*Analyst:*	B. Maddux

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	9,500 vehicles
Peak Hour Percentage:	10%
Peak Hour Volume:	950 vehicles
Vehicle Speed:	25 mph
Near/Far Lane Distance:	12 feet

Site Data

Barrier Height:	**0.0 feet**
Barrier Type (0-Wall, 1-Berm):	0.0
Centerline Dist. to Barrier:	31.0 feet
Centerline Dist. to Observer:	41.0 feet
Barrier Distance to Observer:	10.0 feet
Observer Height (Above Pad):	5.0 feet
Pad Elevation:	0.0 feet
Road Elevation:	0.0 feet
Barrier Elevation:	0.0 feet
Road Grade:	1.0%

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	15
Medium Trucks (2 Axles):	15
Heavy Trucks (3+ Axles):	15

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	77.5%	12.9%	9.6%	97.42%
Medium Trucks:	84.8%	4.9%	10.3%	1.84%
Heavy Trucks:	86.5%	2.7%	10.8%	0.74%

Noise Source Elevations (in feet)

Autos:	0.00		
Medium Trucks:	2.30		
Heavy Trucks:	8.01	*Grade Adjustment:*	0.0

Lane Equivalent Distance (in feet)

Autos:	34.843
Medium Trucks:	34.588
Heavy Trucks:	34.613

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	59.44	0.38	2.25	-1.20	*-0.81*	0.000	0.000
Medium Trucks:	71.09	-16.86	2.30	-1.20	*-1.16*	0.000	0.000
Heavy Trucks:	77.24	-20.82	2.29	-1.20	*-2.25*	0.000	0.000

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	60.9	59.0	57.2	51.1	59.8	60.4
Medium Trucks:	55.3	53.8	47.5	45.9	54.4	54.6
Heavy Trucks:	57.5	56.1	47.1	48.3	56.7	56.8
Vehicle Noise:	63.3	61.6	58.0	53.7	62.3	62.7

Mitigated Noise Levels (with Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	60.9	59.0	57.2	51.1	59.8	60.4
Medium Trucks:	55.3	53.8	47.5	45.9	54.4	54.6
Heavy Trucks:	57.5	56.1	47.1	48.3	56.7	56.8
Vehicle Noise:	63.3	61.6	58.0	53.7	62.3	62.7

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL (CALVENO) - v10/31/19

Scenario:	Backyard No Wall	*Project Name:*	Esperanza Specific Plan
Road Name:	Clifton Ave	*Job Number:*	15662
Lot No:	BLDG 4	*Analyst:*	B. Maddux

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	9,500 vehicles
Peak Hour Percentage:	10%
Peak Hour Volume:	950 vehicles
Vehicle Speed:	25 mph
Near/Far Lane Distance:	12 feet

Site Data

Barrier Height:	**0.0 feet**
Barrier Type (0-Wall, 1-Berm):	0.0
Centerline Dist. to Barrier:	32.0 feet
Centerline Dist. to Observer:	51.0 feet
Barrier Distance to Observer:	19.0 feet
Observer Height (Above Pad):	5.0 feet
Pad Elevation:	0.0 feet
Road Elevation:	0.0 feet
Barrier Elevation:	0.0 feet
Road Grade:	1.0%

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	15
Medium Trucks (2 Axles):	15
Heavy Trucks (3+ Axles):	15

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	77.5%	12.9%	9.6%	97.42%
Medium Trucks:	84.8%	4.9%	10.3%	1.84%
Heavy Trucks:	86.5%	2.7%	10.8%	0.74%

Noise Source Elevations (in feet)

Autos:	0.00		
Medium Trucks:	2.30		
Heavy Trucks:	8.01	*Grade Adjustment:*	0.0

Lane Equivalent Distance (in feet)

Autos:	44.878
Medium Trucks:	44.680
Heavy Trucks:	44.699

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	59.44	0.38	0.60	-1.20	*-0.36*	0.000	0.000
Medium Trucks:	71.09	-16.86	0.63	-1.20	*-0.65*	0.000	0.000
Heavy Trucks:	77.24	-20.82	0.63	-1.20	*-1.71*	0.000	0.000

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	59.2	57.3	55.6	49.5	58.1	58.7
Medium Trucks:	53.7	52.1	45.8	44.2	52.7	52.9
Heavy Trucks:	55.9	54.4	45.4	46.6	55.0	55.1
Vehicle Noise:	61.6	59.9	56.4	52.1	60.6	61.0

Mitigated Noise Levels (with Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	59.2	57.3	55.6	49.5	58.1	58.7
Medium Trucks:	53.7	52.1	45.8	44.2	52.7	52.9
Heavy Trucks:	55.9	54.4	45.4	46.6	55.0	55.1
Vehicle Noise:	61.6	59.9	56.4	52.1	60.6	61.0

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL (CALVENO) - v10/31/19

Scenario: Backyard No Wall
Road Name: Chatham St
Lot No: BLDG 4

Project Name: Esperanza Specific Plan
Job Number: 15662
Analyst: B. Maddux

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	9,500 vehicles
Peak Hour Percentage:	10%
Peak Hour Volume:	950 vehicles
Vehicle Speed:	25 mph
Near/Far Lane Distance:	12 feet

Site Data

Barrier Height:	**0.0 feet**
Barrier Type (0-Wall, 1-Berm):	0.0
Centerline Dist. to Barrier:	25.0 feet
Centerline Dist. to Observer:	33.0 feet
Barrier Distance to Observer:	8.0 feet
Observer Height (Above Pad):	5.0 feet
Pad Elevation:	0.0 feet
Road Elevation:	0.0 feet
Barrier Elevation:	0.0 feet
Road Grade:	1.0%

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	15
Medium Trucks (2 Axles):	15
Heavy Trucks (3+ Axles):	15

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	77.5%	12.9%	9.6%	97.42%
Medium Trucks:	84.8%	4.9%	10.3%	1.84%
Heavy Trucks:	86.5%	2.7%	10.8%	0.74%

Noise Source Elevations (in feet)

Autos:	0.00		
Medium Trucks:	2.30		
Heavy Trucks:	8.01	*Grade Adjustment:*	0.0

Lane Equivalent Distance (in feet)

Autos:	26.796
Medium Trucks:	26.463
Heavy Trucks:	26.496

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	59.44	0.38	3.96	-1.20	*-0.95*	0.000	0.000
Medium Trucks:	71.09	-16.86	4.04	-1.20	*-1.41*	0.000	0.000
Heavy Trucks:	77.24	-20.82	4.03	-1.20	*-2.82*	0.000	0.000

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	62.6	60.7	58.9	52.9	61.5	62.1
Medium Trucks:	57.1	55.6	49.2	47.7	56.1	56.3
Heavy Trucks:	59.3	57.8	48.8	50.1	58.4	58.5
Vehicle Noise:	65.0	63.3	59.7	55.5	64.0	64.4

Mitigated Noise Levels (with Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	62.6	60.7	58.9	52.9	61.5	62.1
Medium Trucks:	57.1	55.6	49.2	47.7	56.1	56.3
Heavy Trucks:	59.3	57.8	48.8	50.1	58.4	58.5
Vehicle Noise:	65.0	63.3	59.7	55.5	64.0	64.4

Wednesday, May 29, 2024

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL (CALVENO) - v10/31/19

Scenario:	Backyard No Wall	*Project Name:*	Esperanza Specific Plan
Road Name:	Chatham St	*Job Number:*	15662
Lot No:	BLDG 1-3	*Analyst:*	B. Maddux

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	9,500 vehicles
Peak Hour Percentage:	10%
Peak Hour Volume:	950 vehicles
Vehicle Speed:	25 mph
Near/Far Lane Distance:	12 feet

Site Data

Barrier Height:	**0.0 feet**
Barrier Type (0-Wall, 1-Berm):	0.0
Centerline Dist. to Barrier:	25.0 feet
Centerline Dist. to Observer:	35.0 feet
Barrier Distance to Observer:	10.0 feet
Observer Height (Above Pad):	5.0 feet
Pad Elevation:	0.0 feet
Road Elevation:	0.0 feet
Barrier Elevation:	0.0 feet
Road Grade:	1.0%

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	15
Medium Trucks (2 Axles):	15
Heavy Trucks (3+ Axles):	15

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	77.5%	12.9%	9.6%	97.42%
Medium Trucks:	84.8%	4.9%	10.3%	1.84%
Heavy Trucks:	86.5%	2.7%	10.8%	0.74%

Noise Source Elevations (in feet)

Autos:	0.00		
Medium Trucks:	2.30		
Heavy Trucks:	8.01	*Grade Adjustment:*	0.0

Lane Equivalent Distance (in feet)

Autos:	28.810
Medium Trucks:	28.501
Heavy Trucks:	28.531

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	59.44	0.38	3.49	-1.20	*-0.74*	0.000	0.000
Medium Trucks:	71.09	-16.86	3.56	-1.20	*-1.17*	0.000	0.000
Heavy Trucks:	77.24	-20.82	3.55	-1.20	*-2.59*	0.000	0.000

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	62.1	60.2	58.4	52.4	61.0	61.6
Medium Trucks:	56.6	55.1	48.7	47.2	55.6	55.9
Heavy Trucks:	58.8	57.4	48.3	49.6	57.9	58.1
Vehicle Noise:	64.5	62.8	59.2	55.0	63.5	63.9

Mitigated Noise Levels (with Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	62.1	60.2	58.4	52.4	61.0	61.6
Medium Trucks:	56.6	55.1	48.7	47.2	55.6	55.9
Heavy Trucks:	58.8	57.4	48.3	49.6	57.9	58.1
Vehicle Noise:	64.5	62.8	59.2	55.0	63.5	63.9

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL (CALVENO) - v10/31/19

Scenario: Backyard No Wall
Road Name: Chatham St
Lot No: BLDG 27-28

Project Name: Esperanza Specific Plan
Job Number: 15662
Analyst: B. Maddux

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	9,500 vehicles
Peak Hour Percentage:	10%
Peak Hour Volume:	950 vehicles
Vehicle Speed:	25 mph
Near/Far Lane Distance:	12 feet

Site Data

Barrier Height:	**0.0 feet**
Barrier Type (0-Wall, 1-Berm):	0.0
Centerline Dist. to Barrier:	25.0 feet
Centerline Dist. to Observer:	43.0 feet
Barrier Distance to Observer:	18.0 feet
Observer Height (Above Pad):	5.0 feet
Pad Elevation:	0.0 feet
Road Elevation:	0.0 feet
Barrier Elevation:	0.0 feet
Road Grade:	1.0%

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	15
Medium Trucks (2 Axles):	15
Heavy Trucks (3+ Axles):	15

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	77.5%	12.9%	9.6%	97.42%
Medium Trucks:	84.8%	4.9%	10.3%	1.84%
Heavy Trucks:	86.5%	2.7%	10.8%	0.74%

Noise Source Elevations (in feet)

Autos:	0.00		
Medium Trucks:	2.30		
Heavy Trucks:	8.01	*Grade Adjustment:*	0.0

Lane Equivalent Distance (in feet)

Autos:	36.851
Medium Trucks:	36.610
Heavy Trucks:	36.634

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	59.44	0.38	1.88	-1.20	*-0.34*	0.000	0.000
Medium Trucks:	71.09	-16.86	1.93	-1.20	*-0.71*	0.000	0.000
Heavy Trucks:	77.24	-20.82	1.92	-1.20	*-2.13*	0.000	0.000

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	60.5	58.6	56.8	50.8	59.4	60.0
Medium Trucks:	55.0	53.4	47.1	45.5	54.0	54.2
Heavy Trucks:	57.1	55.7	46.7	47.9	56.3	56.4
Vehicle Noise:	62.9	61.2	57.6	53.4	61.9	62.3

Mitigated Noise Levels (with Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	60.5	58.6	56.8	50.8	59.4	60.0
Medium Trucks:	55.0	53.4	47.1	45.5	54.0	54.2
Heavy Trucks:	57.1	55.7	46.7	47.9	56.3	56.4
Vehicle Noise:	62.9	61.2	57.6	53.4	61.9	62.3

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL (CALVENO) - v10/31/19

Scenario: Backyard No Wall
Road Name: Amherst Ave
Lot No: BLDG 27

Project Name: Esperanza Specific Plan
Job Number: 15662
Analyst: B. Maddux

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	9,500 vehicles
Peak Hour Percentage:	10%
Peak Hour Volume:	950 vehicles
Vehicle Speed:	25 mph
Near/Far Lane Distance:	12 feet

Site Data

Barrier Height:	**0.0 feet**
Barrier Type (0-Wall, 1-Berm):	0.0
Centerline Dist. to Barrier:	30.0 feet
Centerline Dist. to Observer:	40.0 feet
Barrier Distance to Observer:	10.0 feet
Observer Height (Above Pad):	5.0 feet
Pad Elevation:	0.0 feet
Road Elevation:	0.0 feet
Barrier Elevation:	0.0 feet
Road Grade:	1.0%

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	15
Medium Trucks (2 Axles):	15
Heavy Trucks (3+ Axles):	15

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	77.5%	12.9%	9.6%	97.42%
Medium Trucks:	84.8%	4.9%	10.3%	1.84%
Heavy Trucks:	86.5%	2.7%	10.8%	0.74%

Noise Source Elevations (in feet)

Autos:	0.00		
Medium Trucks:	2.30		
Heavy Trucks:	8.01	*Grade Adjustment:*	0.0

Lane Equivalent Distance (in feet)

Autos:	33.838
Medium Trucks:	33.575
Heavy Trucks:	33.601

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	59.44	0.38	2.44	-1.20	*-0.80*	0.000	0.000
Medium Trucks:	71.09	-16.86	2.49	-1.20	*-1.16*	0.000	0.000
Heavy Trucks:	77.24	-20.82	2.49	-1.20	*-2.30*	0.000	0.000

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	61.1	59.2	57.4	51.3	60.0	60.6
Medium Trucks:	55.5	54.0	47.6	46.1	54.6	54.8
Heavy Trucks:	57.7	56.3	47.3	48.5	56.9	57.0
Vehicle Noise:	63.5	61.8	58.2	53.9	62.5	62.9

Mitigated Noise Levels (with Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	61.1	59.2	57.4	51.3	60.0	60.6
Medium Trucks:	55.5	54.0	47.6	46.1	54.6	54.8
Heavy Trucks:	57.7	56.3	47.3	48.5	56.9	57.0
Vehicle Noise:	63.5	61.8	58.2	53.9	62.5	62.9

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL (CALVENO) - v10/31/19

Scenario: Backyard No Wall
Road Name: Amherst Ave
Lot No: BLDG 26-22

Project Name: Esperanza Specific Plan
Job Number: 15662
Analyst: B. Maddux

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	9,500 vehicles
Peak Hour Percentage:	10%
Peak Hour Volume:	950 vehicles
Vehicle Speed:	25 mph
Near/Far Lane Distance:	12 feet

Site Data

Barrier Height:	**0.0 feet**
Barrier Type (0-Wall, 1-Berm):	0.0
Centerline Dist. to Barrier:	30.0 feet
Centerline Dist. to Observer:	40.0 feet
Barrier Distance to Observer:	10.0 feet
Observer Height (Above Pad):	5.0 feet
Pad Elevation:	0.0 feet
Road Elevation:	0.0 feet
Barrier Elevation:	0.0 feet
Road Grade:	0.0%

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	15
Medium Trucks (2 Axles):	15
Heavy Trucks (3+ Axles):	15

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	77.5%	12.9%	9.6%	97.42%
Medium Trucks:	84.8%	4.9%	10.3%	1.84%
Heavy Trucks:	86.5%	2.7%	10.8%	0.74%

Noise Source Elevations (in feet)

Autos:	0.00		
Medium Trucks:	2.30		
Heavy Trucks:	8.01	*Grade Adjustment:*	0.0

Lane Equivalent Distance (in feet)

Autos:	33.838
Medium Trucks:	33.575
Heavy Trucks:	33.601

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	59.44	0.38	2.44	-1.20	*-0.80*	0.000	0.000
Medium Trucks:	71.09	-16.86	2.49	-1.20	*-1.16*	0.000	0.000
Heavy Trucks:	77.24	-20.82	2.49	-1.20	*-2.30*	0.000	0.000

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	61.1	59.2	57.4	51.3	60.0	60.6
Medium Trucks:	55.5	54.0	47.6	46.1	54.6	54.8
Heavy Trucks:	57.7	56.3	47.3	48.5	56.9	57.0
Vehicle Noise:	63.5	61.8	58.2	53.9	62.5	62.9

Mitigated Noise Levels (with Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	61.1	59.2	57.4	51.3	60.0	60.6
Medium Trucks:	55.5	54.0	47.6	46.1	54.6	54.8
Heavy Trucks:	57.7	56.3	47.3	48.5	56.9	57.0
Vehicle Noise:	63.5	61.8	58.2	53.9	62.5	62.9

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL (CALVENO) - v10/31/19

Scenario: Backyard No Wall
Road Name: Amherst Ave
Lot No: BLDG 20-21

Project Name: Esperanza Specific Plan
Job Number: 15662
Analyst: B. Maddux

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	9,500 vehicles
Peak Hour Percentage:	10%
Peak Hour Volume:	950 vehicles
Vehicle Speed:	25 mph
Near/Far Lane Distance:	12 feet

Site Data

Barrier Height:	**0.0 feet**
Barrier Type (0-Wall, 1-Berm):	0.0
Centerline Dist. to Barrier:	30.0 feet
Centerline Dist. to Observer:	40.0 feet
Barrier Distance to Observer:	10.0 feet
Observer Height (Above Pad):	5.0 feet
Pad Elevation:	0.0 feet
Road Elevation:	0.0 feet
Barrier Elevation:	0.0 feet
Road Grade:	0.0%

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	15
Medium Trucks (2 Axles):	15
Heavy Trucks (3+ Axles):	15

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	77.5%	12.9%	9.6%	97.42%
Medium Trucks:	84.8%	4.9%	10.3%	1.84%
Heavy Trucks:	86.5%	2.7%	10.8%	0.74%

Noise Source Elevations (in feet)

Autos:	0.00		
Medium Trucks:	2.30		
Heavy Trucks:	8.01	*Grade Adjustment:*	0.0

Lane Equivalent Distance (in feet)

Autos:	33.838
Medium Trucks:	33.575
Heavy Trucks:	33.601

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	59.44	0.38	2.44	-1.20	*-0.80*	0.000	0.000
Medium Trucks:	71.09	-16.86	2.49	-1.20	*-1.16*	0.000	0.000
Heavy Trucks:	77.24	-20.82	2.49	-1.20	*-2.30*	0.000	0.000

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	61.1	59.2	57.4	51.3	60.0	60.6
Medium Trucks:	55.5	54.0	47.6	46.1	54.6	54.8
Heavy Trucks:	57.7	56.3	47.3	48.5	56.9	57.0
Vehicle Noise:	63.5	61.8	58.2	53.9	62.5	62.9

Mitigated Noise Levels (with Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	61.1	59.2	57.4	51.3	60.0	60.6
Medium Trucks:	55.5	54.0	47.6	46.1	54.6	54.8
Heavy Trucks:	57.7	56.3	47.3	48.5	56.9	57.0
Vehicle Noise:	63.5	61.8	58.2	53.9	62.5	62.9

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL (CALVENO) - v10/31/19

Scenario: Backyard With Wall
Road Name: Eucalyptus Ave
Lot No: BLDG 20

Project Name: Esperanza Specific Plan
Job Number: 15662
Analyst: B. Maddux

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	21,700 vehicles
Peak Hour Percentage:	10%
Peak Hour Volume:	2,170 vehicles
Vehicle Speed:	40 mph
Near/Far Lane Distance:	40 feet

Site Data

Barrier Height:	**6.0 feet**
Barrier Type (0-Wall, 1-Berm):	0.0
Centerline Dist. to Barrier:	83.0 feet
Centerline Dist. to Observer:	105.0 feet
Barrier Distance to Observer:	22.0 feet
Observer Height (Above Pad):	5.0 feet
Pad Elevation:	0.0 feet
Road Elevation:	0.0 feet
Barrier Elevation:	0.0 feet
Road Grade:	1.0%

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	15
Medium Trucks (2 Axles):	15
Heavy Trucks (3+ Axles):	15

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	77.5%	12.9%	9.6%	97.42%
Medium Trucks:	84.8%	4.9%	10.3%	1.84%
Heavy Trucks:	86.5%	2.7%	10.8%	0.74%

Noise Source Elevations (in feet)

Autos:	0.00		
Medium Trucks:	2.30		
Heavy Trucks:	8.01	*Grade Adjustment:*	0.0

Lane Equivalent Distance (in feet)

Autos:	82.064
Medium Trucks:	81.878
Heavy Trucks:	81.797

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	67.36	1.93	-3.33	-1.20	*0.16*	-6.480	-9.480
Medium Trucks:	76.31	-15.31	-3.32	-1.20	*0.09*	-5.900	-8.900
Heavy Trucks:	81.16	-19.27	-3.31	-1.20	*0.00*	-4.900	-7.900

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	64.8	62.9	61.1	55.0	63.7	64.3
Medium Trucks:	56.5	55.0	48.6	47.1	55.5	55.8
Heavy Trucks:	57.4	56.0	46.9	48.2	56.5	56.7
Vehicle Noise:	66.0	64.2	61.5	56.4	65.0	65.5

Mitigated Noise Levels (with Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	58.3	56.4	54.6	48.6	57.2	57.8
Medium Trucks:	50.6	49.1	42.7	41.2	49.6	49.9
Heavy Trucks:	52.5	51.1	42.0	43.3	51.6	51.8
Vehicle Noise:	59.8	58.1	55.1	50.3	58.8	59.3

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL (CALVENO) - v10/31/19

Scenario: Backyard With Wall
Road Name: Eucalyptus Ave
Lot No: BLDG 7-14

Project Name: Esperanza Specific Plan
Job Number: 15662
Analyst: B. Maddux

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	21,700 vehicles
Peak Hour Percentage:	10%
Peak Hour Volume:	2,170 vehicles
Vehicle Speed:	40 mph
Near/Far Lane Distance:	40 feet

Site Data

Barrier Height:	**6.0 feet**
Barrier Type (0-Wall, 1-Berm):	0.0
Centerline Dist. to Barrier:	83.0 feet
Centerline Dist. to Observer:	103.0 feet
Barrier Distance to Observer:	20.0 feet
Observer Height (Above Pad):	5.0 feet
Pad Elevation:	0.0 feet
Road Elevation:	0.0 feet
Barrier Elevation:	0.0 feet
Road Grade:	1.0%

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	15
Medium Trucks (2 Axles):	15
Heavy Trucks (3+ Axles):	15

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	77.5%	12.9%	9.6%	97.42%
Medium Trucks:	84.8%	4.9%	10.3%	1.84%
Heavy Trucks:	86.5%	2.7%	10.8%	0.74%

Noise Source Elevations (in feet)

Autos:	0.00		
Medium Trucks:	2.30		
Heavy Trucks:	8.01	*Grade Adjustment:*	0.0

Lane Equivalent Distance (in feet)

Autos:	80.067
Medium Trucks:	79.881
Heavy Trucks:	79.800

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	67.36	1.93	-3.17	-1.20	*0.16*	-6.480	-9.480
Medium Trucks:	76.31	-15.31	-3.16	-1.20	*0.09*	-5.900	-8.900
Heavy Trucks:	81.16	-19.27	-3.15	-1.20	*0.00*	-4.900	-7.900

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	64.9	63.0	61.2	55.2	63.8	64.4
Medium Trucks:	56.6	55.1	48.8	47.2	55.7	55.9
Heavy Trucks:	57.5	56.1	47.1	48.3	56.7	56.8
Vehicle Noise:	66.2	64.4	61.6	56.5	65.1	65.6

Mitigated Noise Levels (with Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	58.4	56.5	54.8	48.7	57.3	57.9
Medium Trucks:	50.7	49.2	42.9	41.3	49.8	50.0
Heavy Trucks:	52.6	51.2	42.2	43.4	51.8	51.9
Vehicle Noise:	60.0	58.2	55.3	50.4	59.0	59.4

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL (CALVENO) - v10/31/19

Scenario: Backyard With Wall
Road Name: Eucalyptus Ave
Lot No: BLDG 6

Project Name: Esperanza Specific Plan
Job Number: 15662
Analyst: B. Maddux

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	21,700 vehicles
Peak Hour Percentage:	10%
Peak Hour Volume:	2,170 vehicles
Vehicle Speed:	40 mph
Near/Far Lane Distance:	40 feet

Site Data

Barrier Height:	**6.0 feet**
Barrier Type (0-Wall, 1-Berm):	0.0
Centerline Dist. to Barrier:	84.0 feet
Centerline Dist. to Observer:	104.0 feet
Barrier Distance to Observer:	20.0 feet
Observer Height (Above Pad):	5.0 feet
Pad Elevation:	0.0 feet
Road Elevation:	0.0 feet
Barrier Elevation:	0.0 feet
Road Grade:	1.0%

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	15
Medium Trucks (2 Axles):	15
Heavy Trucks (3+ Axles):	15

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	77.5%	12.9%	9.6%	97.42%
Medium Trucks:	84.8%	4.9%	10.3%	1.84%
Heavy Trucks:	86.5%	2.7%	10.8%	0.74%

Noise Source Elevations (in feet)

Autos:	0.00		
Medium Trucks:	2.30		
Heavy Trucks:	8.01	*Grade Adjustment:*	0.0

Lane Equivalent Distance (in feet)

Autos:	81.115
Medium Trucks:	80.932
Heavy Trucks:	80.853

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	67.36	1.93	-3.26	-1.20	*0.15*	-6.400	-9.400
Medium Trucks:	76.31	-15.31	-3.24	-1.20	*0.09*	-5.900	-8.900
Heavy Trucks:	81.16	-19.27	-3.23	-1.20	*0.00*	-4.900	-7.900

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	64.8	62.9	61.2	55.1	63.7	64.3
Medium Trucks:	56.6	55.1	48.7	47.1	55.6	55.8
Heavy Trucks:	57.5	56.0	47.0	48.2	56.6	56.7
Vehicle Noise:	66.1	64.3	61.6	56.5	65.0	65.5

Mitigated Noise Levels (with Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	58.4	56.5	54.8	48.7	57.3	57.9
Medium Trucks:	50.7	49.2	42.8	41.2	49.7	49.9
Heavy Trucks:	52.6	51.1	42.1	43.3	51.7	51.8
Vehicle Noise:	60.0	58.2	55.2	50.4	58.9	59.4

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL (CALVENO) - v10/31/19

Scenario: Backyard With Wall
Road Name: Clifton Ave
Lot No: BLDG 5-6

Project Name: Esperanza Specific Plan
Job Number: 15662
Analyst: B. Maddux

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	9,500 vehicles
Peak Hour Percentage:	10%
Peak Hour Volume:	950 vehicles
Vehicle Speed:	25 mph
Near/Far Lane Distance:	12 feet

Site Data

Barrier Height:	**0.0 feet**
Barrier Type (0-Wall, 1-Berm):	0.0
Centerline Dist. to Barrier:	31.0 feet
Centerline Dist. to Observer:	41.0 feet
Barrier Distance to Observer:	10.0 feet
Observer Height (Above Pad):	5.0 feet
Pad Elevation:	0.0 feet
Road Elevation:	0.0 feet
Barrier Elevation:	0.0 feet
Road Grade:	1.0%

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	15
Medium Trucks (2 Axles):	15
Heavy Trucks (3+ Axles):	15

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	77.5%	12.9%	9.6%	97.42%
Medium Trucks:	84.8%	4.9%	10.3%	1.84%
Heavy Trucks:	86.5%	2.7%	10.8%	0.74%

Noise Source Elevations (in feet)

Autos:	0.00		
Medium Trucks:	2.30		
Heavy Trucks:	8.01	*Grade Adjustment:*	0.0

Lane Equivalent Distance (in feet)

Autos:	34.843
Medium Trucks:	34.588
Heavy Trucks:	34.613

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	59.44	0.38	2.25	-1.20	*-0.81*	0.000	0.000
Medium Trucks:	71.09	-16.86	2.30	-1.20	*-1.16*	0.000	0.000
Heavy Trucks:	77.24	-20.82	2.29	-1.20	*-2.25*	0.000	0.000

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	60.9	59.0	57.2	51.1	59.8	60.4
Medium Trucks:	55.3	53.8	47.5	45.9	54.4	54.6
Heavy Trucks:	57.5	56.1	47.1	48.3	56.7	56.8
Vehicle Noise:	63.3	61.6	58.0	53.7	62.3	62.7

Mitigated Noise Levels (with Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	60.9	59.0	57.2	51.1	59.8	60.4
Medium Trucks:	55.3	53.8	47.5	45.9	54.4	54.6
Heavy Trucks:	57.5	56.1	47.1	48.3	56.7	56.8
Vehicle Noise:	63.3	61.6	58.0	53.7	62.3	62.7

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL (CALVENO) - v10/31/19

Scenario: Backyard With Wall
Road Name: Clifton Ave
Lot No: BLDG 4

Project Name: Esperanza Specific Plan
Job Number: 15662
Analyst: B. Maddux

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	9,500 vehicles
Peak Hour Percentage:	10%
Peak Hour Volume:	950 vehicles
Vehicle Speed:	25 mph
Near/Far Lane Distance:	12 feet

Site Data

Barrier Height:	**0.0 feet**
Barrier Type (0-Wall, 1-Berm):	0.0
Centerline Dist. to Barrier:	32.0 feet
Centerline Dist. to Observer:	51.0 feet
Barrier Distance to Observer:	19.0 feet
Observer Height (Above Pad):	5.0 feet
Pad Elevation:	0.0 feet
Road Elevation:	0.0 feet
Barrier Elevation:	0.0 feet
Road Grade:	1.0%

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	15
Medium Trucks (2 Axles):	15
Heavy Trucks (3+ Axles):	15

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	77.5%	12.9%	9.6%	97.42%
Medium Trucks:	84.8%	4.9%	10.3%	1.84%
Heavy Trucks:	86.5%	2.7%	10.8%	0.74%

Noise Source Elevations (in feet)

Autos:	0.00		
Medium Trucks:	2.30		
Heavy Trucks:	8.01	*Grade Adjustment:*	0.0

Lane Equivalent Distance (in feet)

Autos:	44.878
Medium Trucks:	44.680
Heavy Trucks:	44.699

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	59.44	0.38	0.60	-1.20	*-0.36*	0.000	0.000
Medium Trucks:	71.09	-16.86	0.63	-1.20	*-0.65*	0.000	0.000
Heavy Trucks:	77.24	-20.82	0.63	-1.20	*-1.71*	0.000	0.000

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	59.2	57.3	55.6	49.5	58.1	58.7
Medium Trucks:	53.7	52.1	45.8	44.2	52.7	52.9
Heavy Trucks:	55.9	54.4	45.4	46.6	55.0	55.1
Vehicle Noise:	61.6	59.9	56.4	52.1	60.6	61.0

Mitigated Noise Levels (with Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	59.2	57.3	55.6	49.5	58.1	58.7
Medium Trucks:	53.7	52.1	45.8	44.2	52.7	52.9
Heavy Trucks:	55.9	54.4	45.4	46.6	55.0	55.1
Vehicle Noise:	61.6	59.9	56.4	52.1	60.6	61.0

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL (CALVENO) - v10/31/19

Scenario: Backyard With Wall
Road Name: Chatham St
Lot No: BLDG 4

Project Name: Esperanza Specific Plan
Job Number: 15662
Analyst: B. Maddux

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	9,500 vehicles
Peak Hour Percentage:	10%
Peak Hour Volume:	950 vehicles
Vehicle Speed:	25 mph
Near/Far Lane Distance:	12 feet

Site Data

Barrier Height:	**0.0 feet**
Barrier Type (0-Wall, 1-Berm):	0.0
Centerline Dist. to Barrier:	25.0 feet
Centerline Dist. to Observer:	33.0 feet
Barrier Distance to Observer:	8.0 feet
Observer Height (Above Pad):	5.0 feet
Pad Elevation:	0.0 feet
Road Elevation:	0.0 feet
Barrier Elevation:	0.0 feet
Road Grade:	1.0%

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	15
Medium Trucks (2 Axles):	15
Heavy Trucks (3+ Axles):	15

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	77.5%	12.9%	9.6%	97.42%
Medium Trucks:	84.8%	4.9%	10.3%	1.84%
Heavy Trucks:	86.5%	2.7%	10.8%	0.74%

Noise Source Elevations (in feet)

Autos:	0.00		
Medium Trucks:	2.30		
Heavy Trucks:	8.01	*Grade Adjustment:*	0.0

Lane Equivalent Distance (in feet)

Autos:	26.796
Medium Trucks:	26.463
Heavy Trucks:	26.496

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	59.44	0.38	3.96	-1.20	*-0.95*	0.000	0.000
Medium Trucks:	71.09	-16.86	4.04	-1.20	*-1.41*	0.000	0.000
Heavy Trucks:	77.24	-20.82	4.03	-1.20	*-2.82*	0.000	0.000

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	62.6	60.7	58.9	52.9	61.5	62.1
Medium Trucks:	57.1	55.6	49.2	47.7	56.1	56.3
Heavy Trucks:	59.3	57.8	48.8	50.1	58.4	58.5
Vehicle Noise:	65.0	63.3	59.7	55.5	64.0	64.4

Mitigated Noise Levels (with Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	62.6	60.7	58.9	52.9	61.5	62.1
Medium Trucks:	57.1	55.6	49.2	47.7	56.1	56.3
Heavy Trucks:	59.3	57.8	48.8	50.1	58.4	58.5
Vehicle Noise:	65.0	63.3	59.7	55.5	64.0	64.4

Wednesday, May 29, 2024

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL (CALVENO) - v10/31/19

Scenario: Backyard With Wall
Road Name: Chatham St
Lot No: BLDG 1-3

Project Name: Esperanza Specific Plan
Job Number: 15662
Analyst: B. Maddux

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	9,500 vehicles
Peak Hour Percentage:	10%
Peak Hour Volume:	950 vehicles
Vehicle Speed:	25 mph
Near/Far Lane Distance:	12 feet

Site Data

Barrier Height:	**0.0 feet**
Barrier Type (0-Wall, 1-Berm):	0.0
Centerline Dist. to Barrier:	25.0 feet
Centerline Dist. to Observer:	35.0 feet
Barrier Distance to Observer:	10.0 feet
Observer Height (Above Pad):	5.0 feet
Pad Elevation:	0.0 feet
Road Elevation:	0.0 feet
Barrier Elevation:	0.0 feet
Road Grade:	1.0%

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	15
Medium Trucks (2 Axles):	15
Heavy Trucks (3+ Axles):	15

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	77.5%	12.9%	9.6%	97.42%
Medium Trucks:	84.8%	4.9%	10.3%	1.84%
Heavy Trucks:	86.5%	2.7%	10.8%	0.74%

Noise Source Elevations (in feet)

Autos:	0.00		
Medium Trucks:	2.30		
Heavy Trucks:	8.01	*Grade Adjustment:*	0.0

Lane Equivalent Distance (in feet)

Autos:	28.810
Medium Trucks:	28.501
Heavy Trucks:	28.531

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	59.44	0.38	3.49	-1.20	*-0.74*	0.000	0.000
Medium Trucks:	71.09	-16.86	3.56	-1.20	*-1.17*	0.000	0.000
Heavy Trucks:	77.24	-20.82	3.55	-1.20	*-2.59*	0.000	0.000

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	62.1	60.2	58.4	52.4	61.0	61.6
Medium Trucks:	56.6	55.1	48.7	47.2	55.6	55.9
Heavy Trucks:	58.8	57.4	48.3	49.6	57.9	58.1
Vehicle Noise:	64.5	62.8	59.2	55.0	63.5	63.9

Mitigated Noise Levels (with Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	62.1	60.2	58.4	52.4	61.0	61.6
Medium Trucks:	56.6	55.1	48.7	47.2	55.6	55.9
Heavy Trucks:	58.8	57.4	48.3	49.6	57.9	58.1
Vehicle Noise:	64.5	62.8	59.2	55.0	63.5	63.9

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL (CALVENO) - v10/31/19

Scenario: Backyard With Wall
Road Name: Chatham St
Lot No: BLDG 27-28

Project Name: Esperanza Specific Plan
Job Number: 15662
Analyst: B. Maddux

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	9,500 vehicles
Peak Hour Percentage:	10%
Peak Hour Volume:	950 vehicles
Vehicle Speed:	25 mph
Near/Far Lane Distance:	12 feet

Site Data

Barrier Height:	**0.0 feet**
Barrier Type (0-Wall, 1-Berm):	0.0
Centerline Dist. to Barrier:	25.0 feet
Centerline Dist. to Observer:	43.0 feet
Barrier Distance to Observer:	18.0 feet
Observer Height (Above Pad):	5.0 feet
Pad Elevation:	0.0 feet
Road Elevation:	0.0 feet
Barrier Elevation:	0.0 feet
Road Grade:	1.0%

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	15
Medium Trucks (2 Axles):	15
Heavy Trucks (3+ Axles):	15

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	77.5%	12.9%	9.6%	97.42%
Medium Trucks:	84.8%	4.9%	10.3%	1.84%
Heavy Trucks:	86.5%	2.7%	10.8%	0.74%

Noise Source Elevations (in feet)

Autos:	0.00		
Medium Trucks:	2.30		
Heavy Trucks:	8.01	*Grade Adjustment:*	0.0

Lane Equivalent Distance (in feet)

Autos:	36.851
Medium Trucks:	36.610
Heavy Trucks:	36.634

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	59.44	0.38	1.88	-1.20	*-0.34*	0.000	0.000
Medium Trucks:	71.09	-16.86	1.93	-1.20	*-0.71*	0.000	0.000
Heavy Trucks:	77.24	-20.82	1.92	-1.20	*-2.13*	0.000	0.000

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	60.5	58.6	56.8	50.8	59.4	60.0
Medium Trucks:	55.0	53.4	47.1	45.5	54.0	54.2
Heavy Trucks:	57.1	55.7	46.7	47.9	56.3	56.4
Vehicle Noise:	62.9	61.2	57.6	53.4	61.9	62.3

Mitigated Noise Levels (with Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	60.5	58.6	56.8	50.8	59.4	60.0
Medium Trucks:	55.0	53.4	47.1	45.5	54.0	54.2
Heavy Trucks:	57.1	55.7	46.7	47.9	56.3	56.4
Vehicle Noise:	62.9	61.2	57.6	53.4	61.9	62.3

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL (CALVENO) - v10/31/19

Scenario: Backyard With Wall
Road Name: Amherst Ave
Lot No: BLDG 27

Project Name: Esperanza Specific Plan
Job Number: 15662
Analyst: B. Maddux

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	9,500 vehicles
Peak Hour Percentage:	10%
Peak Hour Volume:	950 vehicles
Vehicle Speed:	25 mph
Near/Far Lane Distance:	12 feet

Site Data

Barrier Height:	**0.0 feet**
Barrier Type (0-Wall, 1-Berm):	0.0
Centerline Dist. to Barrier:	30.0 feet
Centerline Dist. to Observer:	40.0 feet
Barrier Distance to Observer:	10.0 feet
Observer Height (Above Pad):	5.0 feet
Pad Elevation:	0.0 feet
Road Elevation:	0.0 feet
Barrier Elevation:	0.0 feet
Road Grade:	1.0%

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	15
Medium Trucks (2 Axles):	15
Heavy Trucks (3+ Axles):	15

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	77.5%	12.9%	9.6%	97.42%
Medium Trucks:	84.8%	4.9%	10.3%	1.84%
Heavy Trucks:	86.5%	2.7%	10.8%	0.74%

Noise Source Elevations (in feet)

Autos:	0.00		
Medium Trucks:	2.30		
Heavy Trucks:	8.01	*Grade Adjustment:*	0.0

Lane Equivalent Distance (in feet)

Autos:	33.838
Medium Trucks:	33.575
Heavy Trucks:	33.601

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	59.44	0.38	2.44	-1.20	*-0.80*	0.000	0.000
Medium Trucks:	71.09	-16.86	2.49	-1.20	*-1.16*	0.000	0.000
Heavy Trucks:	77.24	-20.82	2.49	-1.20	*-2.30*	0.000	0.000

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	61.1	59.2	57.4	51.3	60.0	60.6
Medium Trucks:	55.5	54.0	47.6	46.1	54.6	54.8
Heavy Trucks:	57.7	56.3	47.3	48.5	56.9	57.0
Vehicle Noise:	63.5	61.8	58.2	53.9	62.5	62.9

Mitigated Noise Levels (with Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	61.1	59.2	57.4	51.3	60.0	60.6
Medium Trucks:	55.5	54.0	47.6	46.1	54.6	54.8
Heavy Trucks:	57.7	56.3	47.3	48.5	56.9	57.0
Vehicle Noise:	63.5	61.8	58.2	53.9	62.5	62.9

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL (CALVENO) - v10/31/19

Scenario: Backyard With Wall
Road Name: Amherst Ave
Lot No: BLDG 26-22

Project Name: Esperanza Specific Plan
Job Number: 15662
Analyst: B. Maddux

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	9,500 vehicles
Peak Hour Percentage:	10%
Peak Hour Volume:	950 vehicles
Vehicle Speed:	25 mph
Near/Far Lane Distance:	12 feet

Site Data

Barrier Height:	**0.0 feet**
Barrier Type (0-Wall, 1-Berm):	0.0
Centerline Dist. to Barrier:	30.0 feet
Centerline Dist. to Observer:	40.0 feet
Barrier Distance to Observer:	10.0 feet
Observer Height (Above Pad):	5.0 feet
Pad Elevation:	0.0 feet
Road Elevation:	0.0 feet
Barrier Elevation:	0.0 feet
Road Grade:	0.0%

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	15
Medium Trucks (2 Axles):	15
Heavy Trucks (3+ Axles):	15

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	77.5%	12.9%	9.6%	97.42%
Medium Trucks:	84.8%	4.9%	10.3%	1.84%
Heavy Trucks:	86.5%	2.7%	10.8%	0.74%

Noise Source Elevations (in feet)

Autos:	0.00		
Medium Trucks:	2.30		
Heavy Trucks:	8.01	*Grade Adjustment:*	0.0

Lane Equivalent Distance (in feet)

Autos:	33.838
Medium Trucks:	33.575
Heavy Trucks:	33.601

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	59.44	0.38	2.44	-1.20	*-0.80*	0.000	0.000
Medium Trucks:	71.09	-16.86	2.49	-1.20	*-1.16*	0.000	0.000
Heavy Trucks:	77.24	-20.82	2.49	-1.20	*-2.30*	0.000	0.000

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	61.1	59.2	57.4	51.3	60.0	60.6
Medium Trucks:	55.5	54.0	47.6	46.1	54.6	54.8
Heavy Trucks:	57.7	56.3	47.3	48.5	56.9	57.0
Vehicle Noise:	63.5	61.8	58.2	53.9	62.5	62.9

Mitigated Noise Levels (with Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	61.1	59.2	57.4	51.3	60.0	60.6
Medium Trucks:	55.5	54.0	47.6	46.1	54.6	54.8
Heavy Trucks:	57.7	56.3	47.3	48.5	56.9	57.0
Vehicle Noise:	63.5	61.8	58.2	53.9	62.5	62.9

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL (CALVENO) - v10/31/19

Scenario: Backyard With Wall
Road Name: Amherst Ave
Lot No: BLDG 20-21

Project Name: Esperanza Specific Plan
Job Number: 15662
Analyst: B. Maddux

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	9,500 vehicles
Peak Hour Percentage:	10%
Peak Hour Volume:	950 vehicles
Vehicle Speed:	25 mph
Near/Far Lane Distance:	12 feet

Site Data

Barrier Height:	**0.0 feet**
Barrier Type (0-Wall, 1-Berm):	0.0
Centerline Dist. to Barrier:	30.0 feet
Centerline Dist. to Observer:	40.0 feet
Barrier Distance to Observer:	10.0 feet
Observer Height (Above Pad):	5.0 feet
Pad Elevation:	0.0 feet
Road Elevation:	0.0 feet
Barrier Elevation:	0.0 feet
Road Grade:	0.0%

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	15
Medium Trucks (2 Axles):	15
Heavy Trucks (3+ Axles):	15

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	77.5%	12.9%	9.6%	97.42%
Medium Trucks:	84.8%	4.9%	10.3%	1.84%
Heavy Trucks:	86.5%	2.7%	10.8%	0.74%

Noise Source Elevations (in feet)

Autos:	0.00		
Medium Trucks:	2.30		
Heavy Trucks:	8.01	*Grade Adjustment:*	0.0

Lane Equivalent Distance (in feet)

Autos:	33.838
Medium Trucks:	33.575
Heavy Trucks:	33.601

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	59.44	0.38	2.44	-1.20	*-0.80*	0.000	0.000
Medium Trucks:	71.09	-16.86	2.49	-1.20	*-1.16*	0.000	0.000
Heavy Trucks:	77.24	-20.82	2.49	-1.20	*-2.30*	0.000	0.000

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	61.1	59.2	57.4	51.3	60.0	60.6
Medium Trucks:	55.5	54.0	47.6	46.1	54.6	54.8
Heavy Trucks:	57.7	56.3	47.3	48.5	56.9	57.0
Vehicle Noise:	63.5	61.8	58.2	53.9	62.5	62.9

Mitigated Noise Levels (with Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	61.1	59.2	57.4	51.3	60.0	60.6
Medium Trucks:	55.5	54.0	47.6	46.1	54.6	54.8
Heavy Trucks:	57.7	56.3	47.3	48.5	56.9	57.0
Vehicle Noise:	63.5	61.8	58.2	53.9	62.5	62.9

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL (CALVENO) - v10/31/19

Scenario: First Floor With Wall
Road Name: Eucalyptus Ave
Lot No: BLDG 20

Project Name: Esperanza Specific Plan
Job Number: 15662
Analyst: B. Maddux

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	21,700 vehicles
Peak Hour Percentage:	10%
Peak Hour Volume:	2,170 vehicles
Vehicle Speed:	40 mph
Near/Far Lane Distance:	40 feet

Site Data

Barrier Height:	**6.0 feet**
Barrier Type (0-Wall, 1-Berm):	0.0
Centerline Dist. to Barrier:	83.0 feet
Centerline Dist. to Observer:	105.0 feet
Barrier Distance to Observer:	22.0 feet
Observer Height (Above Pad):	5.0 feet
Pad Elevation:	0.0 feet
Road Elevation:	0.0 feet
Barrier Elevation:	0.0 feet
Road Grade:	1.0%

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	15
Medium Trucks (2 Axles):	15
Heavy Trucks (3+ Axles):	15

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	77.5%	12.9%	9.6%	97.42%
Medium Trucks:	84.8%	4.9%	10.3%	1.84%
Heavy Trucks:	86.5%	2.7%	10.8%	0.74%

Noise Source Elevations (in feet)

Autos:	0.00		
Medium Trucks:	2.30		
Heavy Trucks:	8.01	*Grade Adjustment:*	0.0

Lane Equivalent Distance (in feet)

Autos:	82.064
Medium Trucks:	81.878
Heavy Trucks:	81.797

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	67.36	1.93	-3.33	-1.20	*0.16*	-6.480	-9.480
Medium Trucks:	76.31	-15.31	-3.32	-1.20	*0.09*	-5.900	-8.900
Heavy Trucks:	81.16	-19.27	-3.31	-1.20	*0.00*	-4.900	-7.900

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	64.8	62.9	61.1	55.0	63.7	64.3
Medium Trucks:	56.5	55.0	48.6	47.1	55.5	55.8
Heavy Trucks:	57.4	56.0	46.9	48.2	56.5	56.7
Vehicle Noise:	66.0	64.2	61.5	56.4	65.0	65.5

Mitigated Noise Levels (with Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	58.3	56.4	54.6	48.6	57.2	57.8
Medium Trucks:	50.6	49.1	42.7	41.2	49.6	49.9
Heavy Trucks:	52.5	51.1	42.0	43.3	51.6	51.8
Vehicle Noise:	59.8	58.1	55.1	50.3	58.8	59.3

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL (CALVENO) - v10/31/19

Scenario: First Floor With Wall
Road Name: Eucalyptus Ave
Lot No: BLDG 7-14

Project Name: Esperanza Specific Plan
Job Number: 15662
Analyst: B. Maddux

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	21,700 vehicles
Peak Hour Percentage:	10%
Peak Hour Volume:	2,170 vehicles
Vehicle Speed:	40 mph
Near/Far Lane Distance:	40 feet

Site Data

Barrier Height:	**6.0 feet**
Barrier Type (0-Wall, 1-Berm):	0.0
Centerline Dist. to Barrier:	83.0 feet
Centerline Dist. to Observer:	103.0 feet
Barrier Distance to Observer:	20.0 feet
Observer Height (Above Pad):	5.0 feet
Pad Elevation:	0.0 feet
Road Elevation:	0.0 feet
Barrier Elevation:	0.0 feet
Road Grade:	1.0%

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	15
Medium Trucks (2 Axles):	15
Heavy Trucks (3+ Axles):	15

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	77.5%	12.9%	9.6%	97.42%
Medium Trucks:	84.8%	4.9%	10.3%	1.84%
Heavy Trucks:	86.5%	2.7%	10.8%	0.74%

Noise Source Elevations (in feet)

Autos:	0.00		
Medium Trucks:	2.30		
Heavy Trucks:	8.01	*Grade Adjustment:*	0.0

Lane Equivalent Distance (in feet)

Autos:	80.067
Medium Trucks:	79.881
Heavy Trucks:	79.800

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	67.36	1.93	-3.17	-1.20	*0.16*	-6.480	-9.480
Medium Trucks:	76.31	-15.31	-3.16	-1.20	*0.09*	-5.900	-8.900
Heavy Trucks:	81.16	-19.27	-3.15	-1.20	*0.00*	-4.900	-7.900

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	64.9	63.0	61.2	55.2	63.8	64.4
Medium Trucks:	56.6	55.1	48.8	47.2	55.7	55.9
Heavy Trucks:	57.5	56.1	47.1	48.3	56.7	56.8
Vehicle Noise:	66.2	64.4	61.6	56.5	65.1	65.6

Mitigated Noise Levels (with Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	58.4	56.5	54.8	48.7	57.3	57.9
Medium Trucks:	50.7	49.2	42.9	41.3	49.8	50.0
Heavy Trucks:	52.6	51.2	42.2	43.4	51.8	51.9
Vehicle Noise:	60.0	58.2	55.3	50.4	59.0	59.4

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL (CALVENO) - v10/31/19

Scenario: First Floor With Wall
Road Name: Eucalyptus Ave
Lot No: BLDG 6

Project Name: Esperanza Specific Plan
Job Number: 15662
Analyst: B. Maddux

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	21,700 vehicles
Peak Hour Percentage:	10%
Peak Hour Volume:	2,170 vehicles
Vehicle Speed:	40 mph
Near/Far Lane Distance:	40 feet

Site Data

Barrier Height:	**6.0 feet**
Barrier Type (0-Wall, 1-Berm):	0.0
Centerline Dist. to Barrier:	84.0 feet
Centerline Dist. to Observer:	104.0 feet
Barrier Distance to Observer:	20.0 feet
Observer Height (Above Pad):	5.0 feet
Pad Elevation:	0.0 feet
Road Elevation:	0.0 feet
Barrier Elevation:	0.0 feet
Road Grade:	1.0%

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	15
Medium Trucks (2 Axles):	15
Heavy Trucks (3+ Axles):	15

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	77.5%	12.9%	9.6%	97.42%
Medium Trucks:	84.8%	4.9%	10.3%	1.84%
Heavy Trucks:	86.5%	2.7%	10.8%	0.74%

Noise Source Elevations (in feet)

Autos:	0.00		
Medium Trucks:	2.30		
Heavy Trucks:	8.01	*Grade Adjustment:*	0.0

Lane Equivalent Distance (in feet)

Autos:	81.115
Medium Trucks:	80.932
Heavy Trucks:	80.853

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	67.36	1.93	-3.26	-1.20	*0.15*	-6.400	-9.400
Medium Trucks:	76.31	-15.31	-3.24	-1.20	*0.09*	-5.900	-8.900
Heavy Trucks:	81.16	-19.27	-3.23	-1.20	*0.00*	-4.900	-7.900

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	64.8	62.9	61.2	55.1	63.7	64.3
Medium Trucks:	56.6	55.1	48.7	47.1	55.6	55.8
Heavy Trucks:	57.5	56.0	47.0	48.2	56.6	56.7
Vehicle Noise:	66.1	64.3	61.6	56.5	65.0	65.5

Mitigated Noise Levels (with Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	58.4	56.5	54.8	48.7	57.3	57.9
Medium Trucks:	50.7	49.2	42.8	41.2	49.7	49.9
Heavy Trucks:	52.6	51.1	42.1	43.3	51.7	51.8
Vehicle Noise:	60.0	58.2	55.2	50.4	58.9	59.4

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL (CALVENO) - v10/31/19

Scenario: First Floor With Wall
Road Name: Clifton Ave
Lot No: BLDG 5-6

Project Name: Esperanza Specific Plan
Job Number: 15662
Analyst: B. Maddux

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	9,500 vehicles
Peak Hour Percentage:	10%
Peak Hour Volume:	950 vehicles
Vehicle Speed:	25 mph
Near/Far Lane Distance:	12 feet

Site Data

Barrier Height:	**0.0 feet**
Barrier Type (0-Wall, 1-Berm):	0.0
Centerline Dist. to Barrier:	31.0 feet
Centerline Dist. to Observer:	41.0 feet
Barrier Distance to Observer:	10.0 feet
Observer Height (Above Pad):	5.0 feet
Pad Elevation:	0.0 feet
Road Elevation:	0.0 feet
Barrier Elevation:	0.0 feet
Road Grade:	1.0%

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	15
Medium Trucks (2 Axles):	15
Heavy Trucks (3+ Axles):	15

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	77.5%	12.9%	9.6%	97.42%
Medium Trucks:	84.8%	4.9%	10.3%	1.84%
Heavy Trucks:	86.5%	2.7%	10.8%	0.74%

Noise Source Elevations (in feet)

Autos:	0.00		
Medium Trucks:	2.30		
Heavy Trucks:	8.01	*Grade Adjustment:*	0.0

Lane Equivalent Distance (in feet)

Autos:	34.843
Medium Trucks:	34.588
Heavy Trucks:	34.613

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	59.44	0.38	2.25	-1.20	*-0.81*	0.000	0.000
Medium Trucks:	71.09	-16.86	2.30	-1.20	*-1.16*	0.000	0.000
Heavy Trucks:	77.24	-20.82	2.29	-1.20	*-2.25*	0.000	0.000

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	60.9	59.0	57.2	51.1	59.8	60.4
Medium Trucks:	55.3	53.8	47.5	45.9	54.4	54.6
Heavy Trucks:	57.5	56.1	47.1	48.3	56.7	56.8
Vehicle Noise:	63.3	61.6	58.0	53.7	62.3	62.7

Mitigated Noise Levels (with Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	60.9	59.0	57.2	51.1	59.8	60.4
Medium Trucks:	55.3	53.8	47.5	45.9	54.4	54.6
Heavy Trucks:	57.5	56.1	47.1	48.3	56.7	56.8
Vehicle Noise:	63.3	61.6	58.0	53.7	62.3	62.7

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL (CALVENO) - v10/31/19

Scenario: First Floor With Wall
Road Name: Clifton Ave
Lot No: BLDG 4

Project Name: Esperanza Specific Plan
Job Number: 15662
Analyst: B. Maddux

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	9,500 vehicles
Peak Hour Percentage:	10%
Peak Hour Volume:	950 vehicles
Vehicle Speed:	25 mph
Near/Far Lane Distance:	12 feet

Site Data

Barrier Height:	**0.0 feet**
Barrier Type (0-Wall, 1-Berm):	0.0
Centerline Dist. to Barrier:	32.0 feet
Centerline Dist. to Observer:	51.0 feet
Barrier Distance to Observer:	19.0 feet
Observer Height (Above Pad):	5.0 feet
Pad Elevation:	0.0 feet
Road Elevation:	0.0 feet
Barrier Elevation:	0.0 feet
Road Grade:	1.0%

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	15
Medium Trucks (2 Axles):	15
Heavy Trucks (3+ Axles):	15

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	77.5%	12.9%	9.6%	97.42%
Medium Trucks:	84.8%	4.9%	10.3%	1.84%
Heavy Trucks:	86.5%	2.7%	10.8%	0.74%

Noise Source Elevations (in feet)

Autos:	0.00		
Medium Trucks:	2.30		
Heavy Trucks:	8.01	*Grade Adjustment:*	0.0

Lane Equivalent Distance (in feet)

Autos:	44.878
Medium Trucks:	44.680
Heavy Trucks:	44.699

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	59.44	0.38	0.60	-1.20	*-0.36*	0.000	0.000
Medium Trucks:	71.09	-16.86	0.63	-1.20	*-0.65*	0.000	0.000
Heavy Trucks:	77.24	-20.82	0.63	-1.20	*-1.71*	0.000	0.000

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	59.2	57.3	55.6	49.5	58.1	58.7
Medium Trucks:	53.7	52.1	45.8	44.2	52.7	52.9
Heavy Trucks:	55.9	54.4	45.4	46.6	55.0	55.1
Vehicle Noise:	61.6	59.9	56.4	52.1	60.6	61.0

Mitigated Noise Levels (with Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	59.2	57.3	55.6	49.5	58.1	58.7
Medium Trucks:	53.7	52.1	45.8	44.2	52.7	52.9
Heavy Trucks:	55.9	54.4	45.4	46.6	55.0	55.1
Vehicle Noise:	61.6	59.9	56.4	52.1	60.6	61.0

Wednesday, May 29, 2024

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL (CALVENO) - v10/31/19

Scenario: First Floor With Wall
Road Name: Chatham St
Lot No: BLDG 4

Project Name: Esperanza Specific Plan
Job Number: 15662
Analyst: B. Maddux

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	9,500 vehicles
Peak Hour Percentage:	10%
Peak Hour Volume:	950 vehicles
Vehicle Speed:	25 mph
Near/Far Lane Distance:	12 feet

Site Data

Barrier Height:	**0.0 feet**
Barrier Type (0-Wall, 1-Berm):	0.0
Centerline Dist. to Barrier:	25.0 feet
Centerline Dist. to Observer:	33.0 feet
Barrier Distance to Observer:	8.0 feet
Observer Height (Above Pad):	5.0 feet
Pad Elevation:	0.0 feet
Road Elevation:	0.0 feet
Barrier Elevation:	0.0 feet
Road Grade:	1.0%

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	15
Medium Trucks (2 Axles):	15
Heavy Trucks (3+ Axles):	15

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	77.5%	12.9%	9.6%	97.42%
Medium Trucks:	84.8%	4.9%	10.3%	1.84%
Heavy Trucks:	86.5%	2.7%	10.8%	0.74%

Noise Source Elevations (in feet)

Autos:	0.00		
Medium Trucks:	2.30		
Heavy Trucks:	8.01	*Grade Adjustment:*	0.0

Lane Equivalent Distance (in feet)

Autos:	26.796
Medium Trucks:	26.463
Heavy Trucks:	26.496

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	59.44	0.38	3.96	-1.20	*-0.95*	0.000	0.000
Medium Trucks:	71.09	-16.86	4.04	-1.20	*-1.41*	0.000	0.000
Heavy Trucks:	77.24	-20.82	4.03	-1.20	*-2.82*	0.000	0.000

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	62.6	60.7	58.9	52.9	61.5	62.1
Medium Trucks:	57.1	55.6	49.2	47.7	56.1	56.3
Heavy Trucks:	59.3	57.8	48.8	50.1	58.4	58.5
Vehicle Noise:	65.0	63.3	59.7	55.5	64.0	64.4

Mitigated Noise Levels (with Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	62.6	60.7	58.9	52.9	61.5	62.1
Medium Trucks:	57.1	55.6	49.2	47.7	56.1	56.3
Heavy Trucks:	59.3	57.8	48.8	50.1	58.4	58.5
Vehicle Noise:	65.0	63.3	59.7	55.5	64.0	64.4

Wednesday, May 29, 2024

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL (CALVENO) - v10/31/19

Scenario: First Floor With Wall
Road Name: Chatham St
Lot No: BLDG 1-3

Project Name: Esperanza Specific Plan
Job Number: 15662
Analyst: B. Maddux

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	9,500 vehicles
Peak Hour Percentage:	10%
Peak Hour Volume:	950 vehicles
Vehicle Speed:	25 mph
Near/Far Lane Distance:	12 feet

Site Data

Barrier Height:	**0.0 feet**
Barrier Type (0-Wall, 1-Berm):	0.0
Centerline Dist. to Barrier:	25.0 feet
Centerline Dist. to Observer:	35.0 feet
Barrier Distance to Observer:	10.0 feet
Observer Height (Above Pad):	5.0 feet
Pad Elevation:	0.0 feet
Road Elevation:	0.0 feet
Barrier Elevation:	0.0 feet
Road Grade:	1.0%

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	15
Medium Trucks (2 Axles):	15
Heavy Trucks (3+ Axles):	15

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	77.5%	12.9%	9.6%	97.42%
Medium Trucks:	84.8%	4.9%	10.3%	1.84%
Heavy Trucks:	86.5%	2.7%	10.8%	0.74%

Noise Source Elevations (in feet)

Autos:	0.00		
Medium Trucks:	2.30		
Heavy Trucks:	8.01	*Grade Adjustment:*	0.0

Lane Equivalent Distance (in feet)

Autos:	28.810
Medium Trucks:	28.501
Heavy Trucks:	28.531

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	59.44	0.38	3.49	-1.20	*-0.74*	0.000	0.000
Medium Trucks:	71.09	-16.86	3.56	-1.20	*-1.17*	0.000	0.000
Heavy Trucks:	77.24	-20.82	3.55	-1.20	*-2.59*	0.000	0.000

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	62.1	60.2	58.4	52.4	61.0	61.6
Medium Trucks:	56.6	55.1	48.7	47.2	55.6	55.9
Heavy Trucks:	58.8	57.4	48.3	49.6	57.9	58.1
Vehicle Noise:	64.5	62.8	59.2	55.0	63.5	63.9

Mitigated Noise Levels (with Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	62.1	60.2	58.4	52.4	61.0	61.6
Medium Trucks:	56.6	55.1	48.7	47.2	55.6	55.9
Heavy Trucks:	58.8	57.4	48.3	49.6	57.9	58.1
Vehicle Noise:	64.5	62.8	59.2	55.0	63.5	63.9

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL (CALVENO) - v10/31/19

Scenario: First Floor With Wall
Road Name: Chatham St
Lot No: BLDG 27-28

Project Name: Esperanza Specific Plan
Job Number: 15662
Analyst: B. Maddux

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	9,500 vehicles
Peak Hour Percentage:	10%
Peak Hour Volume:	950 vehicles
Vehicle Speed:	25 mph
Near/Far Lane Distance:	12 feet

Site Data

Barrier Height:	**0.0 feet**
Barrier Type (0-Wall, 1-Berm):	0.0
Centerline Dist. to Barrier:	25.0 feet
Centerline Dist. to Observer:	43.0 feet
Barrier Distance to Observer:	18.0 feet
Observer Height (Above Pad):	5.0 feet
Pad Elevation:	0.0 feet
Road Elevation:	0.0 feet
Barrier Elevation:	0.0 feet
Road Grade:	1.0%

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	15
Medium Trucks (2 Axles):	15
Heavy Trucks (3+ Axles):	15

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	77.5%	12.9%	9.6%	97.42%
Medium Trucks:	84.8%	4.9%	10.3%	1.84%
Heavy Trucks:	86.5%	2.7%	10.8%	0.74%

Noise Source Elevations (in feet)

Autos:	0.00		
Medium Trucks:	2.30		
Heavy Trucks:	8.01	*Grade Adjustment:*	0.0

Lane Equivalent Distance (in feet)

Autos:	36.851
Medium Trucks:	36.610
Heavy Trucks:	36.634

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	59.44	0.38	1.88	-1.20	*-0.34*	0.000	0.000
Medium Trucks:	71.09	-16.86	1.93	-1.20	*-0.71*	0.000	0.000
Heavy Trucks:	77.24	-20.82	1.92	-1.20	*-2.13*	0.000	0.000

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	60.5	58.6	56.8	50.8	59.4	60.0
Medium Trucks:	55.0	53.4	47.1	45.5	54.0	54.2
Heavy Trucks:	57.1	55.7	46.7	47.9	56.3	56.4
Vehicle Noise:	62.9	61.2	57.6	53.4	61.9	62.3

Mitigated Noise Levels (with Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	60.5	58.6	56.8	50.8	59.4	60.0
Medium Trucks:	55.0	53.4	47.1	45.5	54.0	54.2
Heavy Trucks:	57.1	55.7	46.7	47.9	56.3	56.4
Vehicle Noise:	62.9	61.2	57.6	53.4	61.9	62.3

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL (CALVENO) - v10/31/19

Scenario: First Floor With Wall
Road Name: Amherst Ave
Lot No: BLDG 27

Project Name: Esperanza Specific Plan
Job Number: 15662
Analyst: B. Maddux

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	9,500 vehicles
Peak Hour Percentage:	10%
Peak Hour Volume:	950 vehicles
Vehicle Speed:	25 mph
Near/Far Lane Distance:	12 feet

Site Data

Barrier Height:	**0.0 feet**
Barrier Type (0-Wall, 1-Berm):	0.0
Centerline Dist. to Barrier:	30.0 feet
Centerline Dist. to Observer:	40.0 feet
Barrier Distance to Observer:	10.0 feet
Observer Height (Above Pad):	5.0 feet
Pad Elevation:	0.0 feet
Road Elevation:	0.0 feet
Barrier Elevation:	0.0 feet
Road Grade:	1.0%

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	15
Medium Trucks (2 Axles):	15
Heavy Trucks (3+ Axles):	15

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	77.5%	12.9%	9.6%	97.42%
Medium Trucks:	84.8%	4.9%	10.3%	1.84%
Heavy Trucks:	86.5%	2.7%	10.8%	0.74%

Noise Source Elevations (in feet)

Autos:	0.00		
Medium Trucks:	2.30		
Heavy Trucks:	8.01	*Grade Adjustment:*	0.0

Lane Equivalent Distance (in feet)

Autos:	33.838
Medium Trucks:	33.575
Heavy Trucks:	33.601

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	59.44	0.38	2.44	-1.20	*-0.80*	0.000	0.000
Medium Trucks:	71.09	-16.86	2.49	-1.20	*-1.16*	0.000	0.000
Heavy Trucks:	77.24	-20.82	2.49	-1.20	*-2.30*	0.000	0.000

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	61.1	59.2	57.4	51.3	60.0	60.6
Medium Trucks:	55.5	54.0	47.6	46.1	54.6	54.8
Heavy Trucks:	57.7	56.3	47.3	48.5	56.9	57.0
Vehicle Noise:	63.5	61.8	58.2	53.9	62.5	62.9

Mitigated Noise Levels (with Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	61.1	59.2	57.4	51.3	60.0	60.6
Medium Trucks:	55.5	54.0	47.6	46.1	54.6	54.8
Heavy Trucks:	57.7	56.3	47.3	48.5	56.9	57.0
Vehicle Noise:	63.5	61.8	58.2	53.9	62.5	62.9

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL (CALVENO) - v10/31/19

Scenario: First Floor With Wall
Road Name: Amherst Ave
Lot No: BLDG 26-22

Project Name: Esperanza Specific Plan
Job Number: 15662
Analyst: B. Maddux

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	9,500 vehicles
Peak Hour Percentage:	10%
Peak Hour Volume:	950 vehicles
Vehicle Speed:	25 mph
Near/Far Lane Distance:	12 feet

Site Data

Barrier Height:	**0.0 feet**
Barrier Type (0-Wall, 1-Berm):	0.0
Centerline Dist. to Barrier:	30.0 feet
Centerline Dist. to Observer:	40.0 feet
Barrier Distance to Observer:	10.0 feet
Observer Height (Above Pad):	5.0 feet
Pad Elevation:	0.0 feet
Road Elevation:	0.0 feet
Barrier Elevation:	0.0 feet
Road Grade:	0.0%

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	15
Medium Trucks (2 Axles):	15
Heavy Trucks (3+ Axles):	15

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	77.5%	12.9%	9.6%	97.42%
Medium Trucks:	84.8%	4.9%	10.3%	1.84%
Heavy Trucks:	86.5%	2.7%	10.8%	0.74%

Noise Source Elevations (in feet)

Autos:	0.00		
Medium Trucks:	2.30		
Heavy Trucks:	8.01	*Grade Adjustment:*	0.0

Lane Equivalent Distance (in feet)

Autos:	33.838
Medium Trucks:	33.575
Heavy Trucks:	33.601

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	59.44	0.38	2.44	-1.20	*-0.80*	0.000	0.000
Medium Trucks:	71.09	-16.86	2.49	-1.20	*-1.16*	0.000	0.000
Heavy Trucks:	77.24	-20.82	2.49	-1.20	*-2.30*	0.000	0.000

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	61.1	59.2	57.4	51.3	60.0	60.6
Medium Trucks:	55.5	54.0	47.6	46.1	54.6	54.8
Heavy Trucks:	57.7	56.3	47.3	48.5	56.9	57.0
Vehicle Noise:	63.5	61.8	58.2	53.9	62.5	62.9

Mitigated Noise Levels (with Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	61.1	59.2	57.4	51.3	60.0	60.6
Medium Trucks:	55.5	54.0	47.6	46.1	54.6	54.8
Heavy Trucks:	57.7	56.3	47.3	48.5	56.9	57.0
Vehicle Noise:	63.5	61.8	58.2	53.9	62.5	62.9

Wednesday, May 29, 2024

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL (CALVENO) - v10/31/19

Scenario: First Floor With Wall
Road Name: Amherst Ave
Lot No: BLDG 20-21

Project Name: Esperanza Specific Plan
Job Number: 15662
Analyst: B. Maddux

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	9,500 vehicles
Peak Hour Percentage:	10%
Peak Hour Volume:	950 vehicles
Vehicle Speed:	25 mph
Near/Far Lane Distance:	12 feet

Site Data

Barrier Height:	**0.0 feet**
Barrier Type (0-Wall, 1-Berm):	0.0
Centerline Dist. to Barrier:	30.0 feet
Centerline Dist. to Observer:	40.0 feet
Barrier Distance to Observer:	10.0 feet
Observer Height (Above Pad):	5.0 feet
Pad Elevation:	0.0 feet
Road Elevation:	0.0 feet
Barrier Elevation:	0.0 feet
Road Grade:	0.0%

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	15
Medium Trucks (2 Axles):	15
Heavy Trucks (3+ Axles):	15

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	77.5%	12.9%	9.6%	97.42%
Medium Trucks:	84.8%	4.9%	10.3%	1.84%
Heavy Trucks:	86.5%	2.7%	10.8%	0.74%

Noise Source Elevations (in feet)

Autos:	0.00		
Medium Trucks:	2.30		
Heavy Trucks:	8.01	*Grade Adjustment:*	0.0

Lane Equivalent Distance (in feet)

Autos:	33.838
Medium Trucks:	33.575
Heavy Trucks:	33.601

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	59.44	0.38	2.44	-1.20	*-0.80*	0.000	0.000
Medium Trucks:	71.09	-16.86	2.49	-1.20	*-1.16*	0.000	0.000
Heavy Trucks:	77.24	-20.82	2.49	-1.20	*-2.30*	0.000	0.000

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	61.1	59.2	57.4	51.3	60.0	60.6
Medium Trucks:	55.5	54.0	47.6	46.1	54.6	54.8
Heavy Trucks:	57.7	56.3	47.3	48.5	56.9	57.0
Vehicle Noise:	63.5	61.8	58.2	53.9	62.5	62.9

Mitigated Noise Levels (with Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	61.1	59.2	57.4	51.3	60.0	60.6
Medium Trucks:	55.5	54.0	47.6	46.1	54.6	54.8
Heavy Trucks:	57.7	56.3	47.3	48.5	56.9	57.0
Vehicle Noise:	63.5	61.8	58.2	53.9	62.5	62.9

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL (CALVENO) - v10/31/19

Scenario: Second Floor With Wall
Road Name: Eucalyptus Ave
Lot No: BLDG 20

Project Name: Esperanza Specific Plan
Job Number: 15662
Analyst: B. Maddux

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	21,700 vehicles
Peak Hour Percentage:	10%
Peak Hour Volume:	2,170 vehicles
Vehicle Speed:	40 mph
Near/Far Lane Distance:	40 feet

Site Data

Barrier Height:	**6.0 feet**
Barrier Type (0-Wall, 1-Berm):	0.0
Centerline Dist. to Barrier:	83.0 feet
Centerline Dist. to Observer:	105.0 feet
Barrier Distance to Observer:	22.0 feet
Observer Height (Above Pad):	14.0 feet
Pad Elevation:	0.0 feet
Road Elevation:	0.0 feet
Barrier Elevation:	0.0 feet
Road Grade:	1.0%

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	15
Medium Trucks (2 Axles):	15
Heavy Trucks (3+ Axles):	15

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	77.5%	12.9%	9.6%	97.42%
Medium Trucks:	84.8%	4.9%	10.3%	1.84%
Heavy Trucks:	86.5%	2.7%	10.8%	0.74%

Noise Source Elevations (in feet)

Autos:	0.00		
Medium Trucks:	2.30		
Heavy Trucks:	8.01	*Grade Adjustment:*	0.0

Lane Equivalent Distance (in feet)

Autos:	83.791
Medium Trucks:	83.438
Heavy Trucks:	82.831

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	67.36	1.93	-3.47	-1.20	*-0.54*	0.000	0.000
Medium Trucks:	76.31	-15.31	-3.44	-1.20	*-0.70*	0.000	0.000
Heavy Trucks:	81.16	-19.27	-3.39	-1.20	*-1.20*	0.000	0.000

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	64.6	62.7	61.0	54.9	63.5	64.1
Medium Trucks:	56.4	54.9	48.5	46.9	55.4	55.6
Heavy Trucks:	57.3	55.9	46.8	48.1	56.4	56.6
Vehicle Noise:	65.9	64.1	61.3	56.3	64.8	65.3

Mitigated Noise Levels (with Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	64.6	62.7	61.0	54.9	63.5	64.1
Medium Trucks:	56.4	54.9	48.5	46.9	55.4	55.6
Heavy Trucks:	57.3	55.9	46.8	48.1	56.4	56.6
Vehicle Noise:	65.9	64.1	61.3	56.3	64.8	65.3

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL (CALVENO) - v10/31/19

Scenario: Second Floor With Wall
Road Name: Eucalyptus Ave
Lot No: BLDG 7-14

Project Name: Esperanza Specific Plan
Job Number: 15662
Analyst: B. Maddux

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	21,700 vehicles
Peak Hour Percentage:	10%
Peak Hour Volume:	2,170 vehicles
Vehicle Speed:	40 mph
Near/Far Lane Distance:	40 feet

Site Data

Barrier Height:	**6.0 feet**
Barrier Type (0-Wall, 1-Berm):	0.0
Centerline Dist. to Barrier:	83.0 feet
Centerline Dist. to Observer:	103.0 feet
Barrier Distance to Observer:	20.0 feet
Observer Height (Above Pad):	14.0 feet
Pad Elevation:	0.0 feet
Road Elevation:	0.0 feet
Barrier Elevation:	0.0 feet
Road Grade:	1.0%

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	15
Medium Trucks (2 Axles):	15
Heavy Trucks (3+ Axles):	15

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	77.5%	12.9%	9.6%	97.42%
Medium Trucks:	84.8%	4.9%	10.3%	1.84%
Heavy Trucks:	86.5%	2.7%	10.8%	0.74%

Noise Source Elevations (in feet)

Autos:	0.00		
Medium Trucks:	2.30		
Heavy Trucks:	8.01	*Grade Adjustment:*	0.0

Lane Equivalent Distance (in feet)

Autos:	81.762
Medium Trucks:	81.400
Heavy Trucks:	80.777

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	67.36	1.93	-3.31	-1.20	*-0.64*	0.000	0.000
Medium Trucks:	76.31	-15.31	-3.28	-1.20	*-0.81*	0.000	0.000
Heavy Trucks:	81.16	-19.27	-3.23	-1.20	*-1.33*	0.000	0.000

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	64.8	62.9	61.1	55.1	63.7	64.3
Medium Trucks:	56.5	55.0	48.7	47.1	55.6	55.8
Heavy Trucks:	57.5	56.0	47.0	48.3	56.6	56.7
Vehicle Noise:	66.0	64.2	61.5	56.4	65.0	65.5

Mitigated Noise Levels (with Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	64.8	62.9	61.1	55.1	63.7	64.3
Medium Trucks:	56.5	55.0	48.7	47.1	55.6	55.8
Heavy Trucks:	57.5	56.0	47.0	48.3	56.6	56.7
Vehicle Noise:	66.0	64.2	61.5	56.4	65.0	65.5

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL (CALVENO) - v10/31/19

Scenario: Second Floor With Wall
Road Name: Eucalyptus Ave
Lot No: BLDG 6

Project Name: Esperanza Specific Plan
Job Number: 15662
Analyst: B. Maddux

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	21,700 vehicles
Peak Hour Percentage:	10%
Peak Hour Volume:	2,170 vehicles
Vehicle Speed:	40 mph
Near/Far Lane Distance:	40 feet

Site Data

Barrier Height:	**6.0 feet**
Barrier Type (0-Wall, 1-Berm):	0.0
Centerline Dist. to Barrier:	84.0 feet
Centerline Dist. to Observer:	104.0 feet
Barrier Distance to Observer:	20.0 feet
Observer Height (Above Pad):	14.0 feet
Pad Elevation:	0.0 feet
Road Elevation:	0.0 feet
Barrier Elevation:	0.0 feet
Road Grade:	1.0%

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	15
Medium Trucks (2 Axles):	15
Heavy Trucks (3+ Axles):	15

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	77.5%	12.9%	9.6%	97.42%
Medium Trucks:	84.8%	4.9%	10.3%	1.84%
Heavy Trucks:	86.5%	2.7%	10.8%	0.74%

Noise Source Elevations (in feet)

Autos:	0.00		
Medium Trucks:	2.30		
Heavy Trucks:	8.01	*Grade Adjustment:*	0.0

Lane Equivalent Distance (in feet)

Autos:	82.777
Medium Trucks:	82.419
Heavy Trucks:	81.804

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	67.36	1.93	-3.39	-1.20	*-0.65*	0.000	0.000
Medium Trucks:	76.31	-15.31	-3.36	-1.20	*-0.82*	0.000	0.000
Heavy Trucks:	81.16	-19.27	-3.31	-1.20	*-1.33*	0.000	0.000

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	64.7	62.8	61.0	55.0	63.6	64.2
Medium Trucks:	56.4	54.9	48.6	47.0	55.5	55.7
Heavy Trucks:	57.4	56.0	46.9	48.2	56.5	56.7
Vehicle Noise:	66.0	64.2	61.4	56.3	64.9	65.4

Mitigated Noise Levels (with Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	64.7	62.8	61.0	55.0	63.6	64.2
Medium Trucks:	56.4	54.9	48.6	47.0	55.5	55.7
Heavy Trucks:	57.4	56.0	46.9	48.2	56.5	56.7
Vehicle Noise:	66.0	64.2	61.4	56.3	64.9	65.4

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL (CALVENO) - v10/31/19

Scenario: Second Floor With Wall
Road Name: Clifton Ave
Lot No: BLDG 5-6

Project Name: Esperanza Specific Plan
Job Number: 15662
Analyst: B. Maddux

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	9,500 vehicles
Peak Hour Percentage:	10%
Peak Hour Volume:	950 vehicles
Vehicle Speed:	25 mph
Near/Far Lane Distance:	12 feet

Site Data

Barrier Height:	**0.0 feet**
Barrier Type (0-Wall, 1-Berm):	0.0
Centerline Dist. to Barrier:	31.0 feet
Centerline Dist. to Observer:	41.0 feet
Barrier Distance to Observer:	10.0 feet
Observer Height (Above Pad):	14.0 feet
Pad Elevation:	0.0 feet
Road Elevation:	0.0 feet
Barrier Elevation:	0.0 feet
Road Grade:	1.0%

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	15
Medium Trucks (2 Axles):	15
Heavy Trucks (3+ Axles):	15

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	77.5%	12.9%	9.6%	97.42%
Medium Trucks:	84.8%	4.9%	10.3%	1.84%
Heavy Trucks:	86.5%	2.7%	10.8%	0.74%

Noise Source Elevations (in feet)

Autos:	0.00		
Medium Trucks:	2.30		
Heavy Trucks:	8.01	*Grade Adjustment:*	0.0

Lane Equivalent Distance (in feet)

Autos:	37.216
Medium Trucks:	36.414
Heavy Trucks:	34.999

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	59.44	0.38	1.82	-1.20	*-4.41*	0.000	0.000
Medium Trucks:	71.09	-16.86	1.96	-1.20	*-5.29*	0.000	0.000
Heavy Trucks:	77.24	-20.82	2.22	-1.20	*-7.77*	0.000	0.000

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	60.4	58.5	56.8	50.7	59.3	59.9
Medium Trucks:	55.0	53.5	47.1	45.6	54.0	54.3
Heavy Trucks:	57.4	56.0	47.0	48.2	56.6	56.7
Vehicle Noise:	63.0	61.3	57.6	53.4	62.0	62.4

Mitigated Noise Levels (with Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	60.4	58.5	56.8	50.7	59.3	59.9
Medium Trucks:	55.0	53.5	47.1	45.6	54.0	54.3
Heavy Trucks:	57.4	56.0	47.0	48.2	56.6	56.7
Vehicle Noise:	63.0	61.3	57.6	53.4	62.0	62.4

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL (CALVENO) - v10/31/19

Scenario: Second Floor With Wall
Road Name: Clifton Ave
Lot No: BLDG 4

Project Name: Esperanza Specific Plan
Job Number: 15662
Analyst: B. Maddux

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	9,500 vehicles
Peak Hour Percentage:	10%
Peak Hour Volume:	950 vehicles
Vehicle Speed:	25 mph
Near/Far Lane Distance:	12 feet

Site Data

Barrier Height:	**0.0 feet**
Barrier Type (0-Wall, 1-Berm):	0.0
Centerline Dist. to Barrier:	32.0 feet
Centerline Dist. to Observer:	51.0 feet
Barrier Distance to Observer:	19.0 feet
Observer Height (Above Pad):	14.0 feet
Pad Elevation:	0.0 feet
Road Elevation:	0.0 feet
Barrier Elevation:	0.0 feet
Road Grade:	1.0%

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	15
Medium Trucks (2 Axles):	15
Heavy Trucks (3+ Axles):	15

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	77.5%	12.9%	9.6%	97.42%
Medium Trucks:	84.8%	4.9%	10.3%	1.84%
Heavy Trucks:	86.5%	2.7%	10.8%	0.74%

Noise Source Elevations (in feet)

Autos:	0.00		
Medium Trucks:	2.30		
Heavy Trucks:	8.01	*Grade Adjustment:*	0.0

Lane Equivalent Distance (in feet)

Autos:	46.744
Medium Trucks:	46.108
Heavy Trucks:	44.999

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	59.44	0.38	0.34	-1.20	*-2.42*	0.000	0.000
Medium Trucks:	71.09	-16.86	0.42	-1.20	*-3.14*	0.000	0.000
Heavy Trucks:	77.24	-20.82	0.58	-1.20	*-5.29*	0.000	0.000

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	59.0	57.1	55.3	49.2	57.9	58.5
Medium Trucks:	53.5	51.9	45.6	44.0	52.5	52.7
Heavy Trucks:	55.8	54.4	45.4	46.6	55.0	55.1
Vehicle Noise:	61.4	59.7	56.1	51.9	60.4	60.8

Mitigated Noise Levels (with Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	59.0	57.1	55.3	49.2	57.9	58.5
Medium Trucks:	53.5	51.9	45.6	44.0	52.5	52.7
Heavy Trucks:	55.8	54.4	45.4	46.6	55.0	55.1
Vehicle Noise:	61.4	59.7	56.1	51.9	60.4	60.8

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL (CALVENO) - v10/31/19

Scenario: Second Floor With Wall
Road Name: Chatham St
Lot No: BLDG 4

Project Name: Esperanza Specific Plan
Job Number: 15662
Analyst: B. Maddux

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	9,500 vehicles
Peak Hour Percentage:	10%
Peak Hour Volume:	950 vehicles
Vehicle Speed:	25 mph
Near/Far Lane Distance:	12 feet

Site Data

Barrier Height:	**0.0 feet**
Barrier Type (0-Wall, 1-Berm):	0.0
Centerline Dist. to Barrier:	25.0 feet
Centerline Dist. to Observer:	33.0 feet
Barrier Distance to Observer:	8.0 feet
Observer Height (Above Pad):	14.0 feet
Pad Elevation:	0.0 feet
Road Elevation:	0.0 feet
Barrier Elevation:	0.0 feet
Road Grade:	1.0%

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	15
Medium Trucks (2 Axles):	15
Heavy Trucks (3+ Axles):	15

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	77.5%	12.9%	9.6%	97.42%
Medium Trucks:	84.8%	4.9%	10.3%	1.84%
Heavy Trucks:	86.5%	2.7%	10.8%	0.74%

Noise Source Elevations (in feet)

Autos:	0.00		
Medium Trucks:	2.30		
Heavy Trucks:	8.01	*Grade Adjustment:*	0.0

Lane Equivalent Distance (in feet)

Autos:	29.816
Medium Trucks:	28.809
Heavy Trucks:	26.999

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	59.44	0.38	3.26	-1.20	*-4.61*	0.000	0.000
Medium Trucks:	71.09	-16.86	3.49	-1.20	*-5.71*	0.000	0.000
Heavy Trucks:	77.24	-20.82	3.91	-1.20	*-8.89*	0.000	0.000

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	61.9	60.0	58.2	52.2	60.8	61.4
Medium Trucks:	56.5	55.0	48.6	47.1	55.6	55.8
Heavy Trucks:	59.1	57.7	48.7	49.9	58.3	58.4
Vehicle Noise:	64.5	62.8	59.1	55.0	63.5	63.9

Mitigated Noise Levels (with Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	61.9	60.0	58.2	52.2	60.8	61.4
Medium Trucks:	56.5	55.0	48.6	47.1	55.6	55.8
Heavy Trucks:	59.1	57.7	48.7	49.9	58.3	58.4
Vehicle Noise:	64.5	62.8	59.1	55.0	63.5	63.9

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL (CALVENO) - v10/31/19

Scenario: Second Floor With Wall
Road Name: Chatham St
Lot No: BLDG 1-3

Project Name: Esperanza Specific Plan
Job Number: 15662
Analyst: B. Maddux

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	9,500 vehicles
Peak Hour Percentage:	10%
Peak Hour Volume:	950 vehicles
Vehicle Speed:	25 mph
Near/Far Lane Distance:	12 feet

Site Data

Barrier Height:	**0.0 feet**
Barrier Type (0-Wall, 1-Berm):	0.0
Centerline Dist. to Barrier:	25.0 feet
Centerline Dist. to Observer:	35.0 feet
Barrier Distance to Observer:	10.0 feet
Observer Height (Above Pad):	14.0 feet
Pad Elevation:	0.0 feet
Road Elevation:	0.0 feet
Barrier Elevation:	0.0 feet
Road Grade:	1.0%

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	15
Medium Trucks (2 Axles):	15
Heavy Trucks (3+ Axles):	15

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	77.5%	12.9%	9.6%	97.42%
Medium Trucks:	84.8%	4.9%	10.3%	1.84%
Heavy Trucks:	86.5%	2.7%	10.8%	0.74%

Noise Source Elevations (in feet)

Autos:	0.00		
Medium Trucks:	2.30		
Heavy Trucks:	8.01	*Grade Adjustment:*	0.0

Lane Equivalent Distance (in feet)

Autos:	31.639
Medium Trucks:	30.691
Heavy Trucks:	28.999

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	59.44	0.38	2.88	-1.20	*-3.92*	0.000	0.000
Medium Trucks:	71.09	-16.86	3.08	-1.20	*-4.96*	0.000	0.000
Heavy Trucks:	77.24	-20.82	3.45	-1.20	*-8.03*	0.000	0.000

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	61.5	59.6	57.8	51.8	60.4	61.0
Medium Trucks:	56.1	54.6	48.2	46.7	55.2	55.4
Heavy Trucks:	58.7	57.2	48.2	49.5	57.8	57.9
Vehicle Noise:	64.1	62.4	58.7	54.6	63.1	63.5

Mitigated Noise Levels (with Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	61.5	59.6	57.8	51.8	60.4	61.0
Medium Trucks:	56.1	54.6	48.2	46.7	55.2	55.4
Heavy Trucks:	58.7	57.2	48.2	49.5	57.8	57.9
Vehicle Noise:	64.1	62.4	58.7	54.6	63.1	63.5

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL (CALVENO) - v10/31/19

Scenario: Second Floor With Wall
Road Name: Chatham St
Lot No: BLDG 27-28

Project Name: Esperanza Specific Plan
Job Number: 15662
Analyst: B. Maddux

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	9,500 vehicles
Peak Hour Percentage:	10%
Peak Hour Volume:	950 vehicles
Vehicle Speed:	25 mph
Near/Far Lane Distance:	12 feet

Site Data

Barrier Height:	**0.0 feet**
Barrier Type (0-Wall, 1-Berm):	0.0
Centerline Dist. to Barrier:	25.0 feet
Centerline Dist. to Observer:	43.0 feet
Barrier Distance to Observer:	18.0 feet
Observer Height (Above Pad):	14.0 feet
Pad Elevation:	0.0 feet
Road Elevation:	0.0 feet
Barrier Elevation:	0.0 feet
Road Grade:	1.0%

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	15
Medium Trucks (2 Axles):	15
Heavy Trucks (3+ Axles):	15

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	77.5%	12.9%	9.6%	97.42%
Medium Trucks:	84.8%	4.9%	10.3%	1.84%
Heavy Trucks:	86.5%	2.7%	10.8%	0.74%

Noise Source Elevations (in feet)

Autos:	0.00		
Medium Trucks:	2.30		
Heavy Trucks:	8.01	*Grade Adjustment:*	0.0

Lane Equivalent Distance (in feet)

Autos:	39.102
Medium Trucks:	38.340
Heavy Trucks:	36.999

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	59.44	0.38	1.50	-1.20	*-2.19*	0.000	0.000
Medium Trucks:	71.09	-16.86	1.63	-1.20	*-3.07*	0.000	0.000
Heavy Trucks:	77.24	-20.82	1.86	-1.20	*-5.81*	0.000	0.000

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	60.1	58.2	56.5	50.4	59.0	59.6
Medium Trucks:	54.7	53.1	46.8	45.2	53.7	53.9
Heavy Trucks:	57.1	55.7	46.6	47.9	56.2	56.4
Vehicle Noise:	62.6	60.9	57.3	53.1	61.6	62.0

Mitigated Noise Levels (with Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	60.1	58.2	56.5	50.4	59.0	59.6
Medium Trucks:	54.7	53.1	46.8	45.2	53.7	53.9
Heavy Trucks:	57.1	55.7	46.6	47.9	56.2	56.4
Vehicle Noise:	62.6	60.9	57.3	53.1	61.6	62.0

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL (CALVENO) - v10/31/19

Scenario: Second Floor With Wall
Road Name: Amherst Ave
Lot No: BLDG 27

Project Name: Esperanza Specific Plan
Job Number: 15662
Analyst: B. Maddux

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	9,500 vehicles
Peak Hour Percentage:	10%
Peak Hour Volume:	950 vehicles
Vehicle Speed:	25 mph
Near/Far Lane Distance:	12 feet

Site Data

Barrier Height:	**0.0 feet**
Barrier Type (0-Wall, 1-Berm):	0.0
Centerline Dist. to Barrier:	30.0 feet
Centerline Dist. to Observer:	40.0 feet
Barrier Distance to Observer:	10.0 feet
Observer Height (Above Pad):	14.0 feet
Pad Elevation:	0.0 feet
Road Elevation:	0.0 feet
Barrier Elevation:	0.0 feet
Road Grade:	1.0%

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	15
Medium Trucks (2 Axles):	15
Heavy Trucks (3+ Axles):	15

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	77.5%	12.9%	9.6%	97.42%
Medium Trucks:	84.8%	4.9%	10.3%	1.84%
Heavy Trucks:	86.5%	2.7%	10.8%	0.74%

Noise Source Elevations (in feet)

Autos:	0.00		
Medium Trucks:	2.30		
Heavy Trucks:	8.01	*Grade Adjustment:*	0.0

Lane Equivalent Distance (in feet)

Autos:	36.277
Medium Trucks:	35.454
Heavy Trucks:	33.999

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	59.44	0.38	1.99	-1.20	*-4.34*	0.000	0.000
Medium Trucks:	71.09	-16.86	2.14	-1.20	*-5.24*	0.000	0.000
Heavy Trucks:	77.24	-20.82	2.41	-1.20	*-7.81*	0.000	0.000

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	60.6	58.7	56.9	50.9	59.5	60.1
Medium Trucks:	55.2	53.7	47.3	45.8	54.2	54.4
Heavy Trucks:	57.6	56.2	47.2	48.4	56.8	56.9
Vehicle Noise:	63.1	61.4	57.8	53.6	62.1	62.5

Mitigated Noise Levels (with Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	60.6	58.7	56.9	50.9	59.5	60.1
Medium Trucks:	55.2	53.7	47.3	45.8	54.2	54.4
Heavy Trucks:	57.6	56.2	47.2	48.4	56.8	56.9
Vehicle Noise:	63.1	61.4	57.8	53.6	62.1	62.5

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL (CALVENO) - v10/31/19

Scenario: Second Floor With Wall
Road Name: Amherst Ave
Lot No: BLDG 26-22

Project Name: Esperanza Specific Plan
Job Number: 15662
Analyst: B. Maddux

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	9,500 vehicles
Peak Hour Percentage:	10%
Peak Hour Volume:	950 vehicles
Vehicle Speed:	25 mph
Near/Far Lane Distance:	12 feet

Site Data

Barrier Height:	**0.0 feet**
Barrier Type (0-Wall, 1-Berm):	0.0
Centerline Dist. to Barrier:	30.0 feet
Centerline Dist. to Observer:	40.0 feet
Barrier Distance to Observer:	10.0 feet
Observer Height (Above Pad):	14.0 feet
Pad Elevation:	0.0 feet
Road Elevation:	0.0 feet
Barrier Elevation:	0.0 feet
Road Grade:	0.0%

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	15
Medium Trucks (2 Axles):	15
Heavy Trucks (3+ Axles):	15

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	77.5%	12.9%	9.6%	97.42%
Medium Trucks:	84.8%	4.9%	10.3%	1.84%
Heavy Trucks:	86.5%	2.7%	10.8%	0.74%

Noise Source Elevations (in feet)

Autos:	0.00		
Medium Trucks:	2.30		
Heavy Trucks:	8.01	*Grade Adjustment:*	0.0

Lane Equivalent Distance (in feet)

Autos:	36.277
Medium Trucks:	35.454
Heavy Trucks:	33.999

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	59.44	0.38	1.99	-1.20	*-4.34*	0.000	0.000
Medium Trucks:	71.09	-16.86	2.14	-1.20	*-5.24*	0.000	0.000
Heavy Trucks:	77.24	-20.82	2.41	-1.20	*-7.81*	0.000	0.000

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	60.6	58.7	56.9	50.9	59.5	60.1
Medium Trucks:	55.2	53.7	47.3	45.8	54.2	54.4
Heavy Trucks:	57.6	56.2	47.2	48.4	56.8	56.9
Vehicle Noise:	63.1	61.4	57.8	53.6	62.1	62.5

Mitigated Noise Levels (with Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	60.6	58.7	56.9	50.9	59.5	60.1
Medium Trucks:	55.2	53.7	47.3	45.8	54.2	54.4
Heavy Trucks:	57.6	56.2	47.2	48.4	56.8	56.9
Vehicle Noise:	63.1	61.4	57.8	53.6	62.1	62.5

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL (CALVENO) - v10/31/19

Scenario: Second Floor With Wall
Road Name: Amherst Ave
Lot No: BLDG 20-21

Project Name: Esperanza Specific Plan
Job Number: 15662
Analyst: B. Maddux

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	9,500 vehicles
Peak Hour Percentage:	10%
Peak Hour Volume:	950 vehicles
Vehicle Speed:	25 mph
Near/Far Lane Distance:	12 feet

Site Data

Barrier Height:	**0.0 feet**
Barrier Type (0-Wall, 1-Berm):	0.0
Centerline Dist. to Barrier:	30.0 feet
Centerline Dist. to Observer:	40.0 feet
Barrier Distance to Observer:	10.0 feet
Observer Height (Above Pad):	14.0 feet
Pad Elevation:	0.0 feet
Road Elevation:	0.0 feet
Barrier Elevation:	0.0 feet
Road Grade:	0.0%

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	15
Medium Trucks (2 Axles):	15
Heavy Trucks (3+ Axles):	15

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	77.5%	12.9%	9.6%	97.42%
Medium Trucks:	84.8%	4.9%	10.3%	1.84%
Heavy Trucks:	86.5%	2.7%	10.8%	0.74%

Noise Source Elevations (in feet)

Autos:	0.00		
Medium Trucks:	2.30		
Heavy Trucks:	8.01	*Grade Adjustment:*	0.0

Lane Equivalent Distance (in feet)

Autos:	36.277
Medium Trucks:	35.454
Heavy Trucks:	33.999

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	59.44	0.38	1.99	-1.20	*-4.34*	0.000	0.000
Medium Trucks:	71.09	-16.86	2.14	-1.20	*-5.24*	0.000	0.000
Heavy Trucks:	77.24	-20.82	2.41	-1.20	*-7.81*	0.000	0.000

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	60.6	58.7	56.9	50.9	59.5	60.1
Medium Trucks:	55.2	53.7	47.3	45.8	54.2	54.4
Heavy Trucks:	57.6	56.2	47.2	48.4	56.8	56.9
Vehicle Noise:	63.1	61.4	57.8	53.6	62.1	62.5

Mitigated Noise Levels (with Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	60.6	58.7	56.9	50.9	59.5	60.1
Medium Trucks:	55.2	53.7	47.3	45.8	54.2	54.4
Heavy Trucks:	57.6	56.2	47.2	48.4	56.8	56.9
Vehicle Noise:	63.1	61.4	57.8	53.6	62.1	62.5

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL (CALVENO) - v10/31/19

Scenario: Third Floor With Wall
Road Name: Eucalyptus Ave
Lot No: BLDG 20

Project Name: Esperanza Specific Plan
Job Number: 15662
Analyst: B. Maddux

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	21,700 vehicles
Peak Hour Percentage:	10%
Peak Hour Volume:	2,170 vehicles
Vehicle Speed:	40 mph
Near/Far Lane Distance:	40 feet

Site Data

Barrier Height:	**6.0 feet**
Barrier Type (0-Wall, 1-Berm):	0.0
Centerline Dist. to Barrier:	83.0 feet
Centerline Dist. to Observer:	105.0 feet
Barrier Distance to Observer:	22.0 feet
Observer Height (Above Pad):	23.0 feet
Pad Elevation:	0.0 feet
Road Elevation:	0.0 feet
Barrier Elevation:	0.0 feet
Road Grade:	1.0%

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	15
Medium Trucks (2 Axles):	15
Heavy Trucks (3+ Axles):	15

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	77.5%	12.9%	9.6%	97.42%
Medium Trucks:	84.8%	4.9%	10.3%	1.84%
Heavy Trucks:	86.5%	2.7%	10.8%	0.74%

Noise Source Elevations (in feet)

Autos:	0.00		
Medium Trucks:	2.30		
Heavy Trucks:	8.01	*Grade Adjustment:*	0.0

Lane Equivalent Distance (in feet)

Autos:	85.755
Medium Trucks:	85.168
Heavy Trucks:	83.963

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	67.36	1.93	-3.62	-1.20	*-2.97*	0.000	0.000
Medium Trucks:	76.31	-15.31	-3.57	-1.20	*-3.35*	0.000	0.000
Heavy Trucks:	81.16	-19.27	-3.48	-1.20	*-4.42*	0.000	0.000

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	64.5	62.6	60.8	54.7	63.4	64.0
Medium Trucks:	56.2	54.7	48.4	46.8	55.3	55.5
Heavy Trucks:	57.2	55.8	46.8	48.0	56.4	56.5
Vehicle Noise:	65.7	63.9	61.2	56.1	64.7	65.2

Mitigated Noise Levels (with Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	64.5	62.6	60.8	54.7	63.4	64.0
Medium Trucks:	56.2	54.7	48.4	46.8	55.3	55.5
Heavy Trucks:	57.2	55.8	46.8	48.0	56.4	56.5
Vehicle Noise:	65.7	63.9	61.2	56.1	64.7	65.2

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL (CALVENO) - v10/31/19

Scenario: Third Floor With Wall
Road Name: Eucalyptus Ave
Lot No: BLDG 7-14

Project Name: Esperanza Specific Plan
Job Number: 15662
Analyst: B. Maddux

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	21,700 vehicles
Peak Hour Percentage:	10%
Peak Hour Volume:	2,170 vehicles
Vehicle Speed:	40 mph
Near/Far Lane Distance:	40 feet

Site Data

Barrier Height:	**6.0 feet**
Barrier Type (0-Wall, 1-Berm):	0.0
Centerline Dist. to Barrier:	83.0 feet
Centerline Dist. to Observer:	103.0 feet
Barrier Distance to Observer:	20.0 feet
Observer Height (Above Pad):	23.0 feet
Pad Elevation:	0.0 feet
Road Elevation:	0.0 feet
Barrier Elevation:	0.0 feet
Road Grade:	1.0%

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	15
Medium Trucks (2 Axles):	15
Heavy Trucks (3+ Axles):	15

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	77.5%	12.9%	9.6%	97.42%
Medium Trucks:	84.8%	4.9%	10.3%	1.84%
Heavy Trucks:	86.5%	2.7%	10.8%	0.74%

Noise Source Elevations (in feet)

Autos:	0.00		
Medium Trucks:	2.30		
Heavy Trucks:	8.01	*Grade Adjustment:*	0.0

Lane Equivalent Distance (in feet)

Autos:	83.774
Medium Trucks:	83.172
Heavy Trucks:	81.938

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	67.36	1.93	-3.47	-1.20	*-3.33*	0.000	0.000
Medium Trucks:	76.31	-15.31	-3.42	-1.20	*-3.73*	0.000	0.000
Heavy Trucks:	81.16	-19.27	-3.32	-1.20	*-4.83*	0.000	0.000

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	64.6	62.7	61.0	54.9	63.5	64.1
Medium Trucks:	56.4	54.9	48.5	47.0	55.4	55.7
Heavy Trucks:	57.4	55.9	46.9	48.2	56.5	56.6
Vehicle Noise:	65.9	64.1	61.4	56.3	64.8	65.3

Mitigated Noise Levels (with Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	64.6	62.7	61.0	54.9	63.5	64.1
Medium Trucks:	56.4	54.9	48.5	47.0	55.4	55.7
Heavy Trucks:	57.4	55.9	46.9	48.2	56.5	56.6
Vehicle Noise:	65.9	64.1	61.4	56.3	64.8	65.3

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL (CALVENO) - v10/31/19

Scenario: Third Floor With Wall
Road Name: Eucalyptus Ave
Lot No: BLDG 6

Project Name: Esperanza Specific Plan
Job Number: 15662
Analyst: B. Maddux

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	21,700 vehicles
Peak Hour Percentage:	10%
Peak Hour Volume:	2,170 vehicles
Vehicle Speed:	40 mph
Near/Far Lane Distance:	40 feet

Site Data

Barrier Height:	**6.0 feet**
Barrier Type (0-Wall, 1-Berm):	0.0
Centerline Dist. to Barrier:	84.0 feet
Centerline Dist. to Observer:	104.0 feet
Barrier Distance to Observer:	20.0 feet
Observer Height (Above Pad):	23.0 feet
Pad Elevation:	0.0 feet
Road Elevation:	0.0 feet
Barrier Elevation:	0.0 feet
Road Grade:	1.0%

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	15
Medium Trucks (2 Axles):	15
Heavy Trucks (3+ Axles):	15

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	77.5%	12.9%	9.6%	97.42%
Medium Trucks:	84.8%	4.9%	10.3%	1.84%
Heavy Trucks:	86.5%	2.7%	10.8%	0.74%

Noise Source Elevations (in feet)

Autos:	0.00		
Medium Trucks:	2.30		
Heavy Trucks:	8.01	*Grade Adjustment:*	0.0

Lane Equivalent Distance (in feet)

Autos:	84.764
Medium Trucks:	84.170
Heavy Trucks:	82.951

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	67.36	1.93	-3.54	-1.20	*-3.36*	0.000	0.000
Medium Trucks:	76.31	-15.31	-3.50	-1.20	*-3.76*	0.000	0.000
Heavy Trucks:	81.16	-19.27	-3.40	-1.20	*-4.85*	0.000	0.000

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	64.5	62.6	60.9	54.8	63.4	64.1
Medium Trucks:	56.3	54.8	48.4	46.9	55.4	55.6
Heavy Trucks:	57.3	55.9	46.8	48.1	56.4	56.6
Vehicle Noise:	65.8	64.0	61.3	56.2	64.8	65.3

Mitigated Noise Levels (with Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	64.5	62.6	60.9	54.8	63.4	64.1
Medium Trucks:	56.3	54.8	48.4	46.9	55.4	55.6
Heavy Trucks:	57.3	55.9	46.8	48.1	56.4	56.6
Vehicle Noise:	65.8	64.0	61.3	56.2	64.8	65.3

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL (CALVENO) - v10/31/19

Scenario: Third Floor With Wall
Road Name: Clifton Ave
Lot No: BLDG 5-6

Project Name: Esperanza Specific Plan
Job Number: 15662
Analyst: B. Maddux

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	9,500 vehicles
Peak Hour Percentage:	10%
Peak Hour Volume:	950 vehicles
Vehicle Speed:	25 mph
Near/Far Lane Distance:	12 feet

Site Data

Barrier Height:	**0.0 feet**
Barrier Type (0-Wall, 1-Berm):	0.0
Centerline Dist. to Barrier:	31.0 feet
Centerline Dist. to Observer:	41.0 feet
Barrier Distance to Observer:	10.0 feet
Observer Height (Above Pad):	23.0 feet
Pad Elevation:	0.0 feet
Road Elevation:	0.0 feet
Barrier Elevation:	0.0 feet
Road Grade:	1.0%

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	15
Medium Trucks (2 Axles):	15
Heavy Trucks (3+ Axles):	15

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	77.5%	12.9%	9.6%	97.42%
Medium Trucks:	84.8%	4.9%	10.3%	1.84%
Heavy Trucks:	86.5%	2.7%	10.8%	0.74%

Noise Source Elevations (in feet)

Autos:	0.00		
Medium Trucks:	2.30		
Heavy Trucks:	8.01	*Grade Adjustment:*	0.0

Lane Equivalent Distance (in feet)

Autos:	41.449
Medium Trucks:	40.220
Heavy Trucks:	37.601

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	59.44	0.38	1.12	-1.20	*-8.02*	0.000	0.000
Medium Trucks:	71.09	-16.86	1.31	-1.20	*-9.31*	0.000	0.000
Heavy Trucks:	77.24	-20.82	1.75	-1.20	*-12.97*	0.000	0.000

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	59.7	57.8	56.1	50.0	58.6	59.2
Medium Trucks:	54.3	52.8	46.5	44.9	53.4	53.6
Heavy Trucks:	57.0	55.6	46.5	47.8	56.1	56.3
Vehicle Noise:	62.3	60.6	56.9	52.8	61.3	61.7

Mitigated Noise Levels (with Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	59.7	57.8	56.1	50.0	58.6	59.2
Medium Trucks:	54.3	52.8	46.5	44.9	53.4	53.6
Heavy Trucks:	57.0	55.6	46.5	47.8	56.1	56.3
Vehicle Noise:	62.3	60.6	56.9	52.8	61.3	61.7

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL (CALVENO) - v10/31/19

Scenario: Third Floor With Wall
Road Name: Clifton Ave
Lot No: BLDG 4

Project Name: Esperanza Specific Plan
Job Number: 15662
Analyst: B. Maddux

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	9,500 vehicles
Peak Hour Percentage:	10%
Peak Hour Volume:	950 vehicles
Vehicle Speed:	25 mph
Near/Far Lane Distance:	12 feet

Site Data

Barrier Height:	**0.0 feet**
Barrier Type (0-Wall, 1-Berm):	0.0
Centerline Dist. to Barrier:	32.0 feet
Centerline Dist. to Observer:	51.0 feet
Barrier Distance to Observer:	19.0 feet
Observer Height (Above Pad):	23.0 feet
Pad Elevation:	0.0 feet
Road Elevation:	0.0 feet
Barrier Elevation:	0.0 feet
Road Grade:	1.0%

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	15
Medium Trucks (2 Axles):	15
Heavy Trucks (3+ Axles):	15

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	77.5%	12.9%	9.6%	97.42%
Medium Trucks:	84.8%	4.9%	10.3%	1.84%
Heavy Trucks:	86.5%	2.7%	10.8%	0.74%

Noise Source Elevations (in feet)

Autos:	0.00		
Medium Trucks:	2.30		
Heavy Trucks:	8.01	*Grade Adjustment:*	0.0

Lane Equivalent Distance (in feet)

Autos:	50.180
Medium Trucks:	49.169
Heavy Trucks:	47.051

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	59.44	0.38	-0.13	-1.20	*-5.18*	0.000	0.000
Medium Trucks:	71.09	-16.86	0.01	-1.20	*-6.26*	0.000	0.000
Heavy Trucks:	77.24	-20.82	0.29	-1.20	*-9.40*	0.000	0.000

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	58.5	56.6	54.8	48.8	57.4	58.0
Medium Trucks:	53.0	51.5	45.2	43.6	52.1	52.3
Heavy Trucks:	55.5	54.1	45.1	46.3	54.7	54.8
Vehicle Noise:	61.0	59.3	55.7	51.5	60.0	60.4

Mitigated Noise Levels (with Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	58.5	56.6	54.8	48.8	57.4	58.0
Medium Trucks:	53.0	51.5	45.2	43.6	52.1	52.3
Heavy Trucks:	55.5	54.1	45.1	46.3	54.7	54.8
Vehicle Noise:	61.0	59.3	55.7	51.5	60.0	60.4

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL (CALVENO) - v10/31/19

Scenario: Third Floor With Wall
Road Name: Chatham St
Lot No: BLDG 4

Project Name: Esperanza Specific Plan
Job Number: 15662
Analyst: B. Maddux

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	9,500 vehicles
Peak Hour Percentage:	10%
Peak Hour Volume:	950 vehicles
Vehicle Speed:	25 mph
Near/Far Lane Distance:	12 feet

Site Data

Barrier Height:	**0.0 feet**
Barrier Type (0-Wall, 1-Berm):	0.0
Centerline Dist. to Barrier:	25.0 feet
Centerline Dist. to Observer:	33.0 feet
Barrier Distance to Observer:	8.0 feet
Observer Height (Above Pad):	23.0 feet
Pad Elevation:	0.0 feet
Road Elevation:	0.0 feet
Barrier Elevation:	0.0 feet
Road Grade:	1.0%

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	15
Medium Trucks (2 Axles):	15
Heavy Trucks (3+ Axles):	15

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	77.5%	12.9%	9.6%	97.42%
Medium Trucks:	84.8%	4.9%	10.3%	1.84%
Heavy Trucks:	86.5%	2.7%	10.8%	0.74%

Noise Source Elevations (in feet)

Autos:	0.00		
Medium Trucks:	2.30		
Heavy Trucks:	8.01	*Grade Adjustment:*	0.0

Lane Equivalent Distance (in feet)

Autos:	34.957
Medium Trucks:	33.491
Heavy Trucks:	30.296

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	59.44	0.38	2.23	-1.20	*-7.71*	0.000	0.000
Medium Trucks:	71.09	-16.86	2.51	-1.20	*-9.26*	0.000	0.000
Heavy Trucks:	77.24	-20.82	3.16	-1.20	*-13.78*	0.000	0.000

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	60.8	58.9	57.2	51.1	59.7	60.4
Medium Trucks:	55.5	54.0	47.7	46.1	54.6	54.8
Heavy Trucks:	58.4	57.0	47.9	49.2	57.5	57.7
Vehicle Noise:	63.5	61.9	58.1	54.0	62.5	62.9

Mitigated Noise Levels (with Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	60.8	58.9	57.2	51.1	59.7	60.4
Medium Trucks:	55.5	54.0	47.7	46.1	54.6	54.8
Heavy Trucks:	58.4	57.0	47.9	49.2	57.5	57.7
Vehicle Noise:	63.5	61.9	58.1	54.0	62.5	62.9

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL (CALVENO) - v10/31/19

Scenario: Third Floor With Wall
Road Name: Chatham St
Lot No: BLDG 1-3

Project Name: Esperanza Specific Plan
Job Number: 15662
Analyst: B. Maddux

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	9,500 vehicles
Peak Hour Percentage:	10%
Peak Hour Volume:	950 vehicles
Vehicle Speed:	25 mph
Near/Far Lane Distance:	12 feet

Site Data

Barrier Height:	**0.0 feet**
Barrier Type (0-Wall, 1-Berm):	0.0
Centerline Dist. to Barrier:	25.0 feet
Centerline Dist. to Observer:	35.0 feet
Barrier Distance to Observer:	10.0 feet
Observer Height (Above Pad):	23.0 feet
Pad Elevation:	0.0 feet
Road Elevation:	0.0 feet
Barrier Elevation:	0.0 feet
Road Grade:	1.0%

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	15
Medium Trucks (2 Axles):	15
Heavy Trucks (3+ Axles):	15

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	77.5%	12.9%	9.6%	97.42%
Medium Trucks:	84.8%	4.9%	10.3%	1.84%
Heavy Trucks:	86.5%	2.7%	10.8%	0.74%

Noise Source Elevations (in feet)

Autos:	0.00		
Medium Trucks:	2.30		
Heavy Trucks:	8.01	*Grade Adjustment:*	0.0

Lane Equivalent Distance (in feet)

Autos:	36.524
Medium Trucks:	35.123
Heavy Trucks:	32.091

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	59.44	0.38	1.94	-1.20	*-6.91*	0.000	0.000
Medium Trucks:	71.09	-16.86	2.20	-1.20	*-8.40*	0.000	0.000
Heavy Trucks:	77.24	-20.82	2.79	-1.20	*-12.77*	0.000	0.000

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	60.6	58.7	56.9	50.8	59.5	60.1
Medium Trucks:	55.2	53.7	47.4	45.8	54.3	54.5
Heavy Trucks:	58.0	56.6	47.6	48.8	57.2	57.3
Vehicle Noise:	63.2	61.5	57.8	53.7	62.2	62.6

Mitigated Noise Levels (with Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	60.6	58.7	56.9	50.8	59.5	60.1
Medium Trucks:	55.2	53.7	47.4	45.8	54.3	54.5
Heavy Trucks:	58.0	56.6	47.6	48.8	57.2	57.3
Vehicle Noise:	63.2	61.5	57.8	53.7	62.2	62.6

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL (CALVENO) - v10/31/19

Scenario: Third Floor With Wall
Road Name: Chatham St
Lot No: BLDG 27-28

Project Name: Esperanza Specific Plan
Job Number: 15662
Analyst: B. Maddux

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	9,500 vehicles
Peak Hour Percentage:	10%
Peak Hour Volume:	950 vehicles
Vehicle Speed:	25 mph
Near/Far Lane Distance:	12 feet

Site Data

Barrier Height:	**0.0 feet**
Barrier Type (0-Wall, 1-Berm):	0.0
Centerline Dist. to Barrier:	25.0 feet
Centerline Dist. to Observer:	43.0 feet
Barrier Distance to Observer:	18.0 feet
Observer Height (Above Pad):	23.0 feet
Pad Elevation:	0.0 feet
Road Elevation:	0.0 feet
Barrier Elevation:	0.0 feet
Road Grade:	1.0%

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	15
Medium Trucks (2 Axles):	15
Heavy Trucks (3+ Axles):	15

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	77.5%	12.9%	9.6%	97.42%
Medium Trucks:	84.8%	4.9%	10.3%	1.84%
Heavy Trucks:	86.5%	2.7%	10.8%	0.74%

Noise Source Elevations (in feet)

Autos:	0.00		
Medium Trucks:	2.30		
Heavy Trucks:	8.01	*Grade Adjustment:*	0.0

Lane Equivalent Distance (in feet)

Autos:	43.151
Medium Trucks:	41.972
Heavy Trucks:	39.469

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	59.44	0.38	0.86	-1.20	*-4.54*	0.000	0.000
Medium Trucks:	71.09	-16.86	1.04	-1.20	*-5.82*	0.000	0.000
Heavy Trucks:	77.24	-20.82	1.44	-1.20	*-9.69*	0.000	0.000

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	59.5	57.6	55.8	49.8	58.4	59.0
Medium Trucks:	54.1	52.6	46.2	44.7	53.1	53.3
Heavy Trucks:	56.7	55.2	46.2	47.5	55.8	55.9
Vehicle Noise:	62.1	60.4	56.7	52.5	61.1	61.5

Mitigated Noise Levels (with Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	59.5	57.6	55.8	49.8	58.4	59.0
Medium Trucks:	54.1	52.6	46.2	44.7	53.1	53.3
Heavy Trucks:	56.7	55.2	46.2	47.5	55.8	55.9
Vehicle Noise:	62.1	60.4	56.7	52.5	61.1	61.5

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL (CALVENO) - v10/31/19

Scenario: Third Floor With Wall
Road Name: Amherst Ave
Lot No: BLDG 27

Project Name: Esperanza Specific Plan
Job Number: 15662
Analyst: B. Maddux

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	9,500 vehicles
Peak Hour Percentage:	10%
Peak Hour Volume:	950 vehicles
Vehicle Speed:	25 mph
Near/Far Lane Distance:	12 feet

Site Data

Barrier Height:	**0.0 feet**
Barrier Type (0-Wall, 1-Berm):	0.0
Centerline Dist. to Barrier:	30.0 feet
Centerline Dist. to Observer:	40.0 feet
Barrier Distance to Observer:	10.0 feet
Observer Height (Above Pad):	23.0 feet
Pad Elevation:	0.0 feet
Road Elevation:	0.0 feet
Barrier Elevation:	0.0 feet
Road Grade:	1.0%

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	15
Medium Trucks (2 Axles):	15
Heavy Trucks (3+ Axles):	15

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	77.5%	12.9%	9.6%	97.42%
Medium Trucks:	84.8%	4.9%	10.3%	1.84%
Heavy Trucks:	86.5%	2.7%	10.8%	0.74%

Noise Source Elevations (in feet)

Autos:	0.00		
Medium Trucks:	2.30		
Heavy Trucks:	8.01	*Grade Adjustment:*	0.0

Lane Equivalent Distance (in feet)

Autos:	40.608
Medium Trucks:	39.352
Heavy Trucks:	36.672

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	59.44	0.38	1.25	-1.20	*-7.86*	0.000	0.000
Medium Trucks:	71.09	-16.86	1.46	-1.20	*-9.18*	0.000	0.000
Heavy Trucks:	77.24	-20.82	1.92	-1.20	*-12.94*	0.000	0.000

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	59.9	58.0	56.2	50.2	58.8	59.4
Medium Trucks:	54.5	53.0	46.6	45.1	53.5	53.8
Heavy Trucks:	57.1	55.7	46.7	47.9	56.3	56.4
Vehicle Noise:	62.5	60.8	57.1	53.0	61.5	61.9

Mitigated Noise Levels (with Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	59.9	58.0	56.2	50.2	58.8	59.4
Medium Trucks:	54.5	53.0	46.6	45.1	53.5	53.8
Heavy Trucks:	57.1	55.7	46.7	47.9	56.3	56.4
Vehicle Noise:	62.5	60.8	57.1	53.0	61.5	61.9

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL (CALVENO) - v10/31/19

Scenario: Third Floor With Wall
Road Name: Amherst Ave
Lot No: BLDG 26-22

Project Name: Esperanza Specific Plan
Job Number: 15662
Analyst: B. Maddux

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	9,500 vehicles
Peak Hour Percentage:	10%
Peak Hour Volume:	950 vehicles
Vehicle Speed:	25 mph
Near/Far Lane Distance:	12 feet

Site Data

Barrier Height:	**0.0 feet**
Barrier Type (0-Wall, 1-Berm):	0.0
Centerline Dist. to Barrier:	30.0 feet
Centerline Dist. to Observer:	40.0 feet
Barrier Distance to Observer:	10.0 feet
Observer Height (Above Pad):	23.0 feet
Pad Elevation:	0.0 feet
Road Elevation:	0.0 feet
Barrier Elevation:	0.0 feet
Road Grade:	0.0%

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	15
Medium Trucks (2 Axles):	15
Heavy Trucks (3+ Axles):	15

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	77.5%	12.9%	9.6%	97.42%
Medium Trucks:	84.8%	4.9%	10.3%	1.84%
Heavy Trucks:	86.5%	2.7%	10.8%	0.74%

Noise Source Elevations (in feet)

Autos:	0.00		
Medium Trucks:	2.30		
Heavy Trucks:	8.01	*Grade Adjustment:*	0.0

Lane Equivalent Distance (in feet)

Autos:	40.608
Medium Trucks:	39.352
Heavy Trucks:	36.672

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	59.44	0.38	1.25	-1.20	*-7.86*	0.000	0.000
Medium Trucks:	71.09	-16.86	1.46	-1.20	*-9.18*	0.000	0.000
Heavy Trucks:	77.24	-20.82	1.92	-1.20	*-12.94*	0.000	0.000

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	59.9	58.0	56.2	50.2	58.8	59.4
Medium Trucks:	54.5	53.0	46.6	45.1	53.5	53.8
Heavy Trucks:	57.1	55.7	46.7	47.9	56.3	56.4
Vehicle Noise:	62.5	60.8	57.1	53.0	61.5	61.9

Mitigated Noise Levels (with Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	59.9	58.0	56.2	50.2	58.8	59.4
Medium Trucks:	54.5	53.0	46.6	45.1	53.5	53.8
Heavy Trucks:	57.1	55.7	46.7	47.9	56.3	56.4
Vehicle Noise:	62.5	60.8	57.1	53.0	61.5	61.9

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL (CALVENO) - v10/31/19

Scenario: Third Floor With Wall
Road Name: Amherst Ave
Lot No: BLDG 20-21

Project Name: Esperanza Specific Plan
Job Number: 15662
Analyst: B. Maddux

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	9,500 vehicles
Peak Hour Percentage:	10%
Peak Hour Volume:	950 vehicles
Vehicle Speed:	25 mph
Near/Far Lane Distance:	12 feet

Site Data

Barrier Height:	**0.0 feet**
Barrier Type (0-Wall, 1-Berm):	0.0
Centerline Dist. to Barrier:	30.0 feet
Centerline Dist. to Observer:	40.0 feet
Barrier Distance to Observer:	10.0 feet
Observer Height (Above Pad):	23.0 feet
Pad Elevation:	0.0 feet
Road Elevation:	0.0 feet
Barrier Elevation:	0.0 feet
Road Grade:	0.0%

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	15
Medium Trucks (2 Axles):	15
Heavy Trucks (3+ Axles):	15

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	77.5%	12.9%	9.6%	97.42%
Medium Trucks:	84.8%	4.9%	10.3%	1.84%
Heavy Trucks:	86.5%	2.7%	10.8%	0.74%

Noise Source Elevations (in feet)

Autos:	0.00		
Medium Trucks:	2.30		
Heavy Trucks:	8.01	*Grade Adjustment:*	0.0

Lane Equivalent Distance (in feet)

Autos:	40.608
Medium Trucks:	39.352
Heavy Trucks:	36.672

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	59.44	0.38	1.25	-1.20	*-7.86*	0.000	0.000
Medium Trucks:	71.09	-16.86	1.46	-1.20	*-9.18*	0.000	0.000
Heavy Trucks:	77.24	-20.82	1.92	-1.20	*-12.94*	0.000	0.000

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	59.9	58.0	56.2	50.2	58.8	59.4
Medium Trucks:	54.5	53.0	46.6	45.1	53.5	53.8
Heavy Trucks:	57.1	55.7	46.7	47.9	56.3	56.4
Vehicle Noise:	62.5	60.8	57.1	53.0	61.5	61.9

Mitigated Noise Levels (with Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	59.9	58.0	56.2	50.2	58.8	59.4
Medium Trucks:	54.5	53.0	46.6	45.1	53.5	53.8
Heavy Trucks:	57.1	55.7	46.7	47.9	56.3	56.4
Vehicle Noise:	62.5	60.8	57.1	53.0	61.5	61.9

APPENDIX 10.1:

HVAC MANUFACTURES SPECIFICATIONS

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24ABC6
Comfort™ 16 Air Conditioner with Puron® Refrigerant 1–1/2 to 5 Nominal Tons

Carrier turn to the experts

Product Data

Puron™ the environmentally sound refrigerant

Comfort SERIES

Carrier's Air Conditioners with Puron® refrigerant provide a collection of features unmatched by any other family of equipment. The 24ABC has been designed utilizing Carrier's Puron refrigerant. The environmentally sound refrigerant allows you to make a responsible decision in the protection of the earth's ozone layer.

This product has been designed and manufactured to meet Energy Star® criteria for energy efficiency when matched with appropriate coil components. Refer to the combination ratings in the Product Data for system combinations that meet Energy Star® guidelines.

NOTE: Ratings contained in this document are subject to change at any time. Always refer to the AHRI directory (www.ahridirectory.org) for the most up-to-date ratings information.

INDUSTRY LEADING FEATURES / BENEFITS

Efficiency

- 14 - 16.5 SEER/11.0- 13.5 EER
- Microtube Technology™ refrigeration system
- Indoor air quality accessories available

Sound

- Sound level as low as 76 dBA
- Sound level as low as 74 dBA with accessory sound blanket

Comfort

- System supports Edge® Thermidistat™ or standard thermostat controls

Reliability

- Puron® refrigerant - environmentally sound, won't deplete the ozone layer and low lifetime servce cost.
- Scroll compressor
- Internal pressure relief valve
- Internal thermal overload
- Filter drier
- Balanced refrigeration system for maximum reliability

Durability

WeatherArmor™ protection package:

- Solid, durable sheet metal construction
- Dense wire coil guard standard
- Baked-on, complete outer coverage, powder paint

Applications

- Long-line - up to 250 feet (76.20 m) total equivalent length, up to 200 feet (60.96 m) condenser above evaporator, or up to 80 ft. (24.38 m) evaporator above condenser (See Longline Guide for more information.)
- Low ambient (down to -20°F/-28.9°C)) with accessory kit

MODEL NUMBER NOMENCLATURE

1	2	3	4	5	6	7	8	9	10	11	12	13
N	N	A	A	A/N	N	N	N	A/N	A/N	A/N	N	N
2	**4**	**A**	**B**	**C**	**6**	**3**	**6**	**A**	**0**	**0**	**3**	0
Product Series		Product Family	Tier	Major Series	SEER	Cooling Capacity		Grille Variations	Open	Open	Voltage	Series
24=AC		A=RES AC	B=Comfort	C=Puron	6=16 SEER			A = Dense W = Standard	0=Not Defined	0=Not Defined	3=208/230–1	0 = Original Series

Puron™ the environmentally sound refrigerant

AHRI CERTIFIED™ www.ahridirectory.org

Use of the AHRI Certified TM Mark indicates a manufacturer's participation in the program For verification of certification for individual products, go to www.ahridirectory.org.

Certified System™

ISO 9001 QMI-SAI Global

c UL us

ENERGY STAR

This product has been designed and manufactured to meet Energy Star® criteria for energy efficiency when matched with appropriate coil components. However, proper refrigerant charge and proper air flow are critical to achieve rated capacity and efficiency. Installation of this product should follow all manufacturing refrigerant charging and air flow instructions. **Failure to confirm proper charge and air flow may reduce energy efficiency and shorten equipment life.**

24ABC6

STANDARD FEATURES

Feature	**18**	**24**	**30**	**36**	**42**	**48 / 49**	**60 / 61**
Puron Refrigerant	X	X	X	X	X	X	X
Maximum SEER *	16.0	16.0	16.5	16.5	16.0	16.0	16.0
Scroll Compressor	X	X	X	X	X	X	X
Field Installed Filter Drier	X	X	X	X	X	X	X
Front Seating Service Valves	X	X	X	X	X	X	X
Internal Pressure Relief Valve	X	X	X	X	X	X	X
Internal Thermal Overload	X	X	X	X	X	X	X
Long Line capability	X	X	X	X	X	X	X
Low Ambient capability with Kit	X	X	X	X	X	X	X
Dense Grille	X	X	X	X	X	X	X

* With approved combinations

X = Standard

PHYSICAL DATA

UNIT SIZE–VOLTAGE, SERIES	**18–31**	**24–30**	**30–30**	**36–30**	**42–30**	**48–31**	**49–30**	**60–30**	**61–30**
Operating Weight lb (kg)	125 (56.7)	147 (66.5)	153 (69.3)	165 (74.8)	213 (96.4)	264 (119.7)	231 (104.8)	272 (123.4)	272 (123.4)
Shipping Weight lb (kg)	154 (69.9)	183 (82.8)	188 (85.2)	204 (92.5)	254 (115.2)	317 (143.8)	269 (222.0)	310 (140.6)	310 (140.6)
Compressor Type	Scroll								
REFRIGERANT	Puron® (R–410A)								
Control	TXV (Puron® Hard Shutoff)								
Charge lb (kg)	4.60 (2.09)	6.00 (2.72)	6.81 (3.09)	7.00 (3.18)	8.62 (3.91)	13.0 (5.90)	9.00 (4.08)	14.50 (6.58)	14.50 (6.58)
COND FAN	Propeller Type, Direct Drive								
Air Discharge	Vertical								Vertical
Air Qty (CFM)	1881	2614	2614	3223	3810	4046	4046	4046	4046
Motor HP	1/12	1/10	1/10	1/12	1/5	1/4	1/4	1/4	1/4
Motor RPM	1100	1100	1100	800	800	800	800	800	800
COND COIL									
Face Area (Sq ft)	11.50	15.10	17.20	17.60	25.15	25.15	25.15	30.15	30.15
Fins per In.	25	25	25	25	25	20	20	20	20
Rows	1	1	1	1	1	2	1	2	2
Circuits	3	4	4	4	6	7	7	8	8
VALVE CONNECT. (In. ID)									
Vapor	3/4	3/4	3/4	7/8	7/8	7/8	7/8	7/8	7/8
Liquid	3/8	3/8	3/8	3/8	3/8	3/8	3/8	3/8	3/8
REFRIGERANT TUBES (In. OD)									
Rated Vapor*	3/4			7/8				1–1/8	
Max Liquid Line †	3/8								

* Units are rated with 25 ft (7.6 m) of lineset length. See Vapor Line Sizing and Cooling Capacity Loss table when using other sizes and lengths of lineset.
Note: See unit Installation Instruction for proper installation.

† See *Liquid Line Sizing For Cooling Only Systems with Puron Refrigerant* tables.

REFRIGERANT PIPING LENGTH LIMITATIONS

Liquid Line Sizing and Maximum Total Equivalent Lengths† for Cooling Only Systems with Puron® Refrigerant:

The maximum allowable length of a residential split system depends on the liquid line diameter and vertical separation between indoor and outdoor units.

See Table below for liquid line sizing and maximum lengths :

Maximum Total Equivalent Length
Outdoor Unit BELOW Indoor Unit

Size	Liquid Line Connection	Liquid Line Diam. w/ TXV	AC with Puron Refrigerant Maximum Total Equivalent Length†: Outdoor unit BELOW Indoor Vertical Separation ft (m)								
			0–5 (0–1.5)	6–10 (1.8–3.0)	11–20 (3.4–6.1)	21–30 (6.4–9.1)	31–40 (9.4–12.2)	41–50 (12.5–15.2)	51–60 (15.5–18.3)	61–70 (18.6–21.3)	71–80 (21.6–24.4)
18000 AC with Puron	3/8	1/4	150	150	125	100	100	75	– –	– –	– –
		5/16	250*	250*	250*	250*	250*	250*	250*	225*	150
		3/8	250*	250*	250*	250*	250*	250*	250*	250*	250*
24000 AC with Puron	3/8	1/4	75	75	75	50	50	– –	– –	– –	– –
		5/16	250*	250*	250*	250*	250*	225*	175	125	100
		3/8	250*	250*	250*	250*	250*	250*	250*	250*	250*
30000 AC with Puron	3/8	1/4	30	– –	– –	– –	– –	– –	– –	– –	– –
		5/16	175	225*	200	175	125	100	75	– –	– –
		3/8	250*	250*	250*	250*	250*	250*	250*	250*	250*
36000 AC with Puron	3/8	5/16	175	150	150	100	100	100	75	– –	– –
		3//8	250*	250*	250*	250*	250*	250*	250*	250*	250*
42000 AC with Puron	3/8	5/16	125	100	100	75	75	50	– –	– –	– –
		3/8	250*	250*	250*	250*	250*	250*	250*	250*	150
48000 AC with Puron	3/8	3/8	250*	250*	250*	250*	250*	250*	230	160	– –
49000 AC with Puron	3/8	3/8	250*	250*	250*	250*	250*	250*	230	160	– –
60000 AC with Puron	3/8	3/8	250*	250*	250*	225*	190	150	110	– –	– –
61000 AC with Puron	3/8	3/8	250*	250*	250*	225*	190	150	110	– –	– –

*** Maximum actual length not to exceed 200 ft (61 m)**

† Total equivalent length accounts for losses due to elbows or fitting. See the Long Line Guideline for details.

– – = outside acceptable range

Maximum Total Equivalent Length
Outdoor Unit ABOVE Indoor Unit

Size	Liquid Line Connection	Liquid Line Diam. w/ TXV	AC with Puron Refrigerant Maximum Total Equivalent Length†: Outdoor unit ABOVE Indoor Vertical Separation ft (m)							
			25 (7.6)	26–50 (7.9–15.2)	51–75 (15.5–22.9)	76–100 (23.2–30.5)	101–125 (30.8–38.1)	126–150 (38.4–45.7)	151–175 (46.0–53.3)	176–200 (53.6–61.0)
18000 AC with Puron	3/8	1/4	175	250*	250*	250*	250*	250*	250*	250*
		5/16	250*	250*	250*	250*	250*	250*	250*	250*
		3/8	250*	250*	250*	250*	250*	250*	250*	250*
24000 AC with Puron	3/8	1/4	100	125	175	200	225*	250*	250*	250*
		5/16	250*	250*	250*	250*	250*	250*	250*	250*
		3/8	250*	250*	250*	250*	250*	250*	250*	250*
30000 AC with Puron	3/8	1/4	30	– –	– –	– –	– –	– –	– –	– –
		5/16	250*	250*	250*	250*	250*	250*	250*	250*
		3/8	250*	250*	250*	250*	250*	250*	250*	250*
36000 AC with Puron	3/8	5/16	225*	250*	250*	250*	250*	250*	250*	250*
		3/8	250*	250*	250*	250*	250*	250*	250*	250*
42000 AC with Puron	3/8	5/16	175	200	250*	250*	250*	250*	250*	250*
		3/8	250*	250*	250*	250*	250*	250*	250*	250*
48000 AC with Puron	3/8	3/8	250*	250*	250*	250*	250*	250*	250*	250*
49000 AC with Puron	3/8	3/8	250*	250*	250*	250*	250*	250*	250*	250*
60000 AC with Puron	3/8	3/8	250*	250*	250*	250*	250*	250*	250*	250*
61000 AC with Puron	3/8	3/8	250*	250*	250*	250*	250*	250*	250*	250*

*** Maximum actual length not to exceed 200 ft (61 m)**

† Total equivalent length accounts for losses due to elbows or fitting. See the Long Line Guideline for details.

– – = outside acceptable range

REFRIGERANT CHARGE ADJUSTMENTS

Liquid Line Size	Puron Charge oz/ft
3/8	0.60 (Factory charge for lineset = 9 oz)
5/16	0.40
1/4	0.27

Units are factory charged for 15 ft (4.6 m) of 3/8" liquid line. The factory charge for 3/8" lineset 9 oz. When using other length or diameter liquid lines, charge adjustments are required per the chart above.

Charging Formula:

[(Lineset oz/ft x total length) – (factory charge for lineset)] = charge adjustment

Example 1: System has 15 ft of line set using existing 1/4" liquid line. What charge adjustment is required?

Formula: (.27 oz/ft x 15ft) – (9 oz) = (-4.95) oz.

Net result is to remove 4.95 oz of refrigerant from the system

Example 2: System has 45 ft of existing 5/16" liquid line. What is the charge adjustment?

Formula: (.40 oz/ft. x 45ft) – (9 oz.) = 9 oz.

Net result is to add 9 oz of refrigerant to the system

LONG LINE APPLICATIONS

An application is considered Long Line, when the refrigerant level in the system requires the use of accessories to maintain acceptable refrigerant management for systems reliability. See Accessory Usage Guideline table for required accessories. Defining a system as long line depends on the liquid line diameter, actual length of the tubing, and vertical separation between the indoor and outdoor units.

For Air Conditioner systems, the chart below shows when an application is considered Long Line.

AC WITH PURON® REFRIGERANT LONG LINE DESCRIPTION ft (m)
Beyond these lengths, long line accessories are required

Liquid Line Size	Units On Same Level	Outdoor Below Indoor	Outdoor Above Indoor
1/4	No accessories needed within allowed lengths	No accessories needed within allowed lengths	175 (53.3)
5/16	120 (36.6)	50 (15.2)	120 (36.6)
3/8	80 (24.4)	35 (10.7)	80 (24.4)

Note: See Long Line Guideline for details

VAPOR LINE SIZING AND COOLING CAPACITY LOSS

Acceptable vapor line diameters provide adequate oil return to the compressor while avoiding excessive capacity loss. The suction line diameters shown in the chart below are acceptable for AC systems with Puron refrigerant:

Unit Nominal Size (Btuh)	Maximum Liquid Line Diameters (In. OD)	Vapor Line Diameters (In. OD)	Cooling Capacity Loss (%) Total Equivalent Line Length ft. (m)								
			26–50 (7.9–15.2)	51–80 (15.5–24.4)	81–100 (24.7–30.5)	101–125 (30.8–38.1)	126–150 (38.4–45.7)	151–175 (46.0–53.3)	176–200 (53.6–61.0)	201–225 (61.3–68.6)	226–250 (68.9–76.2)
18000 1 Stage AC with Puron	3/8	1/2	1	2	3	5	6	7	8	9	11
		5/8	0	1	1	1	2	2	2	3	3
		3/4	0	0	0	0	1	1	1	1	1
24000 1 Stage AC with Puron	3/8	5/8	0	1	2	2	3	3	4	5	5
		3/4	0	0	1	1	1	1	1	2	2
		7/8	0	0	0	0	0	1	1	1	1
30000 1 Stage AC with Puron	3/8	5/8	1	2	3	3	4	5	6	7	8
		3/4	0	0	1	1	1	2	2	2	3
		7/8	0	0	0	0	1	1	1	1	1
36000 1 Stage AC with Puron	3/8	5/8	1	2	4	5	6	8	9	10	12
		3/4	0	1	1	2	2	3	3	4	4
		7/8	0	0	0	1	1	1	1	2	2
42000 1 Stage AC with Puron	3/8	3/4	0	1	2	2	3	4	4	5	6
		7/8	0	0	1	1	1	2	2	2	3
		1 1/8	0	0	0	0	0	0	0	0	0
48000, 49000 1 Stage AC with Puron	3/8	3/4	0	1	2	3	4	5	5	6	7
		7/8	0	0	1	1	2	2	2	3	3
		1 1/8	0	0	0	0	0	0	0	1	1
60000, 61000 1 Stage AC with Puron	3/8	3/4	1	2	4	5	6	7	9	10	11
		7/8	0	1	2	2	3	4	4	5	5
		1 1/8	0	0	0	1	1	1	1	1	1

Applications in this area may be long line and may have height restrictions. See the *Residential Piping and Long Line Guideline*.

ACCESSORY THERMOSTATS

PART NUMBER	PROGRAM	GAS	ELECTRIC	HEAT PUMP	HEAT	COOL
Comfort						
TC–PAC01	5–2 Day	√	√		1	1
TC–NAC01	NP	√	√		1	1
TCSNAC01	NP	√	√		1	1

THERMOSTAT ACCESSORIES		
PART NUMBER	**DESCRIPTION**	**THERMOSTATS USED WITH**
TSTATXXCNV10‡	Thermostat Conversion Kit (4 to 5 wire) – 10 pack	All Carrier® branded thermostats
TX–LBP01	Large Decorative Backplate	TP–Pxx, TP–Nxx, TC–Pxx
TX–MBP01	Medium Decorative Backplate	TC–Nxx, TB–Pxx

ACCESSORIES

KIT NUMBER	DESCRIPTION	Unit Sizes – Series								
		18–31	24–30	30–30	36–30	42–30	48–31	49–30	60–30	61–30
KAAFT0101AAA	FREEZE THERMOSTAT	X	X	X	X	X	X	X	X	X
KAATD0101TDR	TIME DELAY RELAY	X	X	X	X	X	X	X	X	X
KSALA0301410	LOW AMBIENT PSW	X	X	X	X	X	X	X	X	X
KSALA0601AAA†	MOTORMASTER 230V	X	X	X	X	X	X	X	X	X
HC32GE234	MOTOR FAN BALL BEARING	X								
HC34GE240	MOTOR FAN BALL BEARING		X	X						
HC32GE229	MOTOR FAN BALL BEARING				X					
HC38GE228	MOTOR FAN BALL BEARING					X				
HC40GE228	MOTOR FAN BALL BEARING						X	X	X	X
KSAHS1701AAA	HARD START (CAP / RELAY)	X	X	X	X	X	X	X	X	X
KSACY0101AAA	CYCLE PROTECTOR	X	X	X	X	X	X	X	X	X
KSASF0101AAA	SUPPORT FEET	X	X	X	X	X	X	X	X	X
KAACS0201PTC	START ASSIST PTC	X	X	X	X	X	X	X	X	X
KAALS0201LLS	LIQUID LINE SOLENOID	X	X	X	X	X	X	X	X	X
KAAWS0101AAA	WINTER START	X	X	X	X	X	X	X	X	X
KAACH1701AAA	CRANKCASE HTR	X	X	X	X					
KAACH1601AAA	CRANKCASE HTR					X	S	S	S	S
KSATX0201PUR	TXV PURON HSO	X	X	X						
KSATX0301PUR	TXV PURON HSO				X					
KSATX0401PUR	TXV PURON HSO					X		X		
KSATX0501PUR	TXV PURON HSO						X		X	X
KSASH0601COP	SOUND HOOD	X	X	X	X			X		
KSASH2101COP	SOUND HOOD					X	X		X	X
KAALP0401PUR	LOW PRESSURE SWITCH	X	X	X	X	X	X	X	X	X
KAAHI0501PUR	HIGH PRESSURE SWITCH	X	X	X	X	X	X	X	X	X

† Required accessories include ball bearing fan motor, compressor start assist (CAP / Relay), crankcase heater, evaporator freeze stat, hard shut–off TXV.
X = Accessory / S – Standard

ACCESSORY USAGE GUIDELINE

ACCESSORY	REQUIRED FOR LOW–AMBIENT COOLING APPLICATIONS (Below 55°F/12.8°C)	REQUIRED FOR LONG LINE APPLICATIONS* (Over 80 ft./24.38 m)	REQUIRED FOR SEA COAST APPLICATIONS (Within 2 miles/3.22 km)
Ball Bearing Fan Motor	Yes†	No	No
Compressor Start Assist Capacitor and Relay	Yes	Yes	No
Crankcase Heater	Yes	Yes	No
Evaporator Freeze Thermostat	Yes	No	No
Hard Shut–Off TXV	Yes	Yes	Yes
Liquid Line Solenoid Valve	No	No	No
Motor Master® Control or Low–ambient Pressure Switch	Yes	No	No
Support Feet	Recommended	No	Recommended
Winter Start Control	Yes	No	No

* For tubing line sets between 80 and 200 ft. (24.38 and 60.96 m) and/or 20 ft. (6.09 m) vertical differential, refer to Residential Split–System Longline Application Guideline.

† Required for Low–Ambient Controller (full modulation feature) MotorMaster® Control.

Accessory Description and Usage (Listed Alphabetically)

1. Ball-Bearing Fan Motor

A fan motor with ball bearings which permits speed reduction while maintaining bearing lubrication.

Usage Guideline:

Required on all units when MotorMaster® is used.

2. Compressor Start Assist - Capacitor and Relay

Start capacitor and relay gives a ”hard” boost to compressor motor at each start up.

Usage Guideline:

Required for reciprocating compressors in the following applications:

Long line

Low ambient cooling

Hard shut off expansion valve on indoor coil

Liquid line solenoid on indoor coil

Required for single-phase scroll compressors in the following applications:

Long line

Low ambient cooling

Suggested for all compressors in areas with a history of low voltage problems.

3. Compressor Start Assist — PTC Type

Solid state electrical device which gives a ”soft” boost to the compressor at each start-up.

Usage Guideline:

Suggested in installations with marginal power supply.

4. Crankcase Heater

An electric resistance heater which mounts to the base of the compressor to keep the lubricant warm during off cycles. Improves compressor lubrication on restart and minimizes the chance of liquid slugging.

Usage Guideline:

Required in low ambient cooling applications.

Required in long line applications.

Suggested in all commercial applications.

5. Cycle Protector

The cycle protector is designed to prevent compressor short cycling. This control provides an approximate 5-minute delay after power to the compressor has been interrupted for any reason, including power outage, protector control trip, thermostat jiggling, or normal cycling.

6. Evaporator Freeze Thermostat

An SPST temperature-actuated switch that stops unit operation when evaporator reaches freeze-up conditions.

Usage Guideline:

Required when low ambient kit has been added.

7. Low-Ambient Pressure Switch Kit

A long life pressure switch which is mounted to outdoor unit service valve. It is designed to cycle the outdoor fan motor in order to maintain head pressure within normal operating limits (approximately 100 psig to 225 psig). The control will maintain working head pressure at low-ambient temperatures down to 0°F (-18°C) when properly installed.

Usage Guideline:

A Low-Ambient Pressure Switch or MotorMaster® Low-Ambient Controller must be used when cooling operation is used at outdoor temperatures below 55°F (12.8°C).

8. MotorMaster® Low-Ambient Controller

A fan-speed control device activated by a temperature sensor, designed to control condenser fan motor speed in response to the saturated, condensing temperature during operation in cooling mode only. For outdoor temperatures down to -20°F (-28.9°C), it maintains condensing temperature at 100°F ±10°F (37.8°C ± 5.5°C).

Usage Guideline:

A MotorMaster® Low Ambient Controller or Low-Ambient Pressure Switch must be used when cooling operation is used at outdoor temperatures below 55°F (12.8°C).

Suggested for all commercial applications.

9. Outdoor Air Temperature Sensor

Designed for use with Carrier Thermostats listed in this publication. This device enables the thermostat to display the outdoor temperature. This device also

is required to enable special thermostat features such as auxiliary heat lock out.

Usage Guideline:

Suggested for all Carrier thermostats listed in this publication.

Accessory Description and Usage (Listed Alphabetically) (Continued)

10. Sound Hood

Wraparound sound reducing cover for the compressor. Reduces the sound level by about 2 dBA.

Usage Guideline:

Suggested when unit is installed closer than 15 ft (4.57 m) to quiet areas, bedrooms, etc.

Suggested when unit is installed between two houses less than 10 ft (3.05 m) apart.

11. Support Feet

Four stick-on plastic feet that raise the unit 4 in. (101.6 mm) above the mounting pad. This allows sand, dirt, and other debris to be flushed from the unit base, minimizing corrosion.

Usage Guideline:

Suggested in the following applications:

Coastal installations.

Windy areas or where debris is normally circulating.

Rooftop installations.

For improved sound ratings.

12. Thermostatic Expansion Valve (TXV)

A modulating flow-control valve which meters refrigerant liquid flow rate into the evaporator in response to the superheat of the refrigerant gas leaving the evaporator.

Kit includes valve, adapter tubes, and external equalizer tube. Hard shut off types are available.

NOTE: When using a hard shut off TXV with single phase reciprocating compressors, a Compressor Start Assist Capacitor and Relay is required.

Usage Guideline:

Required to achieve AHRI ratings in certain equipment combinations. Refer to combination ratings.

Hard shut off TXV or LLS required in air conditioner long line applications.

Required for use on all zoning systems.

13. Time-Delay Relay

An SPST delay relay which briefly continues operation of indoor blower motor to provide additional cooling after the compressor cycles off.

NOTE: Most indoor unit controls include this feature. For those that do not, use the guideline below.

Usage Guideline:

For improved efficiency ratings for certain combinations of indoor and outdoor units. Refer to AHRI Unitary Directory.

14. Winter Start Control

This control is designed to alleviate nuisance opening of the low-pressure switch by bypassing it for the first 3 minutes of operation.

ELECTRICAL DATA

UNIT SIZE	V/PH	OPER VOLTS*		COMPR		FAN	MCA	MIN WIRE SIZE† 60° C	MIN WIRE SIZE† 75° C	MAX LENGTH ft. (m)‡ 60° C	MAX LENGTH ft. (m)‡ 75° C	MAX FUSE** or CKT BRK AMPS
		MAX	MIN	LRA	RLA	FLA						
18–31	208/230/1–60	253	197	48.0	9.0	0.50	11.8	14	14	67 (20.4)	64 (19.5)	20
24–30				58.3	13.5	0.75	17.7	14	14	46 (14.0)	43 (13..1)	25
30–30				64.0	12.8	0.75	16.8	14	14	44 (13.4)	41 (12.5)	25
36–30				77.0	14.1	0.50	18.1	12	12	57 (17.4)	54 (16.5)	30
42–30				112.0	17.9	1.20	23.6	10	10	85 (25.9)	81 (24.7)	40
48–31				109.0	19.9	1.20	26.1	10	10	70 (21.3)	67 (20.4)	40
49–30				117.0	21.8	1.20	26.1	10	10	70 (21.3)	67 (20.4)	40
60–30				135.0	21.4	1.20	28.0	8	10	91 (27.7)	56 (17.1)	40
61–30				134.0	25.0	1.20	32.5	8	10	94 (28.7)	58 (17.7)	50

* Permissible limits of the voltage range at which the unit will operate satisfactorily

† If wire is applied at ambient greater than 30°C, consult table 310–16 of the NEC (NFPA 70). The ampacity of non–metallic–sheathed cable (NM), trade name ROMEX, shall be that of 60°C conditions, per the NEC (NFPA 70) Article 334–80. If other than uncoated (no–plated), 60 or 75°C insulation, copper wire (solid wire for 10 AWG or smaller, stranded wire for larger than 10 AWG) is used, consult applicable tables of the NEC (NFPA 70).

‡ Length shown is as measured one way along wire path between unit and service panel for voltage drop not to exceed 2%.

** Time–Delay fuse.

FLA – Full Load Amps

LRA – Locked Rotor Amps

MCA – Minimum Circuit Amps

RLA – Rated Load Amps

NOTE: Control circuit is 24–V on all units and requires external power source. Copper wire must be used from service disconnect to unit. All motors/compressors contain internal overload protection.

Complies with 2007 requirements of ASHRAE Standards 90.1

24ABC6

A–WEIGHTED SOUND POWER LEVEL (dBA)

Unit Size – Voltage, Series	Standard Rating (dBA)	TYPICAL OCTAVE BAND SPECTRUM (dBA without tone adjustment)						
		125	250	500	1000	2000	4000	8000
018–31	76	52.5	59.0	65.5	70.5	64.5	59.0	54.5
024–30	76	57.5	64.0	69.0	71.0	69.0	64.5	60.0
030–30	76	55.0	63.5	68.0	69.5	67.0	63.5	58.5
036–30	76	50.5	59.5	64.5	70.5	62.0	59.5	54.5
042–30	78	52.5	62.0	66.0	73.5	68.0	62.0	55.5
048–31	78	57.5	61.5	66.0	70.5	65.5	59.5	53.5
049–30	78	51.5	62.0	67.5	73.5	69.0	64.5	62.0
060–30	78	55.0	62.5	67.5	70.5	65.0	61.0	53.5
061–30	78	56.5	63.0	65.5	69.0	67.0	61.5	56.0

NOTE: Tested in accordance with AHRI Standard 270–08 (not listed in AHRI).

A–WEIGHTED SOUND POWER LEVEL (dBA) WITH SOUND SHIELD

Unit Size – Voltage, Series	Standard Rating (dBA)	TYPICAL OCTAVE BAND SPECTRUM (dBA without tone adjustment)						
		125	250	500	1000	2000	4000	8000
018–31	74	55.5	59.0	65.0	68.5	63.5	58.0	52.0
024–30	75	58.0	64.0	69.0	70.5	68.5	64.5	59.5
030–30	75	55.5	63.0	68.0	69.0	67.0	63.0	58.5
036–30	74	51.5	58.5	62.0	65.0	61.0	58.0	52.0
042–30	76	53.0	62.0	65.5	72.0	65.0	61.0	54.0
048–31	76	58.5	61.5	66.0	69.0	64.0	58.5	51.0
049–30	76	53.0	61.5	67.5	72.0	68.0	61.5	59.0
060–30	75	56.5	62.5	66.5	68.0	63.0	59.5	51.5
061–30	75	57.0	63.0	65.5	67.0	65.5	59.0	52.5

NOTE: Tested in accordance with AHRI Standard 270–08 (not listed in AHRI).

CHARGING SUBCOOLING (TXV–TYPE EXPANSION DEVICE)

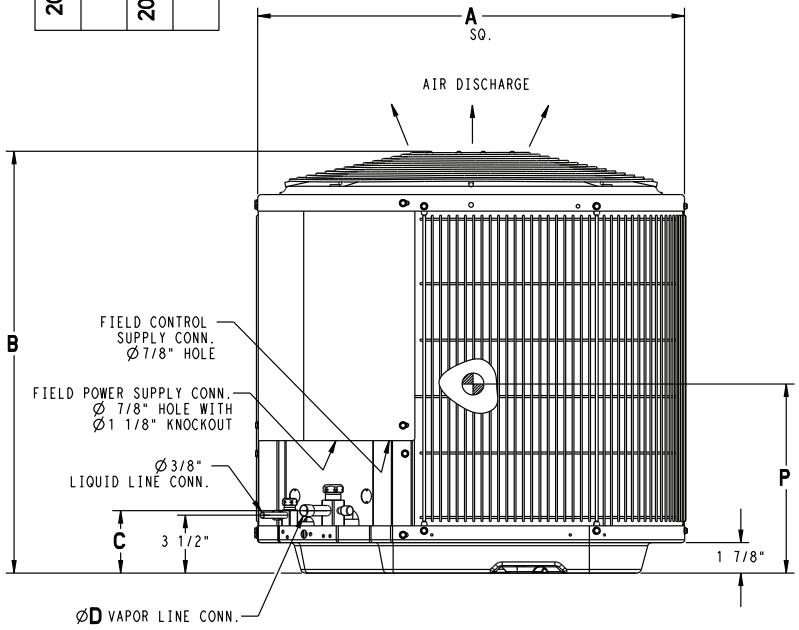
UNIT SIZE–VOLTAGE, SERIES	REQUIRED SUBCOOLING °F (°C)
18–31	10 (5.6)
24–30	10 (5.6)
30–30	10 (5.6)
36–30	10 (5.6)
42–30	9 (5.0)
48–31	10 (5.6)
49–30	8 (4.4)
60–30	9 (5.0)
61–30	9 (5.0)

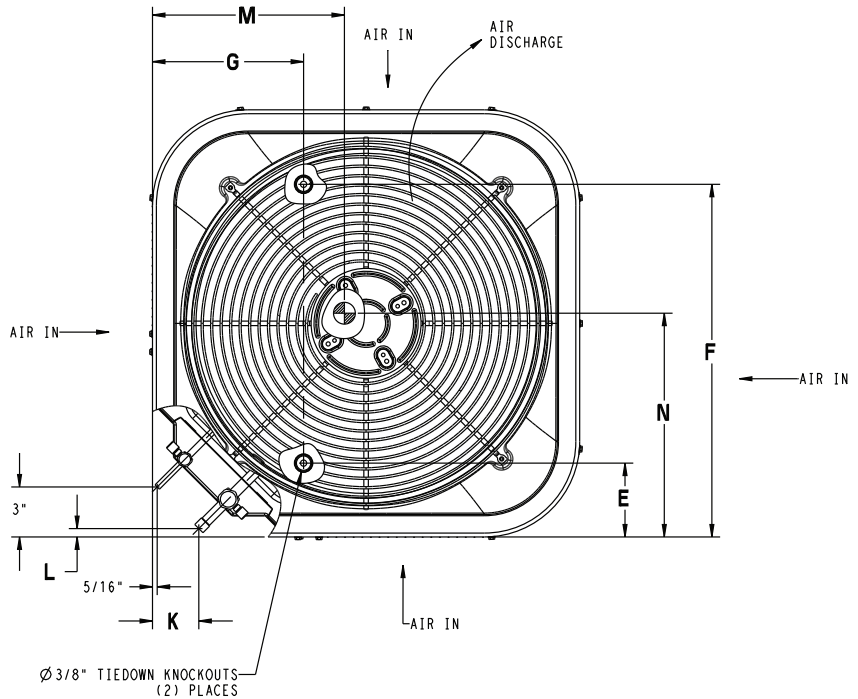
DIMENSIONS – ENGLISH

UNIT	SERIES	ELECTRICAL CHARACTERISTICS				A	B	C	D	E	F	G	K	L	M	N	P	OPERATING WEIGHT (lbs)	SHIPPING WEIGHT (lbs)	SHIPPING DIMENSIONS (L x W x H)
24ABC618	0	X	O	O	O	23 1/8"	28 11/16"	3 3/4"	3/4"	4 7/16"	18 1/16"	7 13/16"	2 13/16"	1/2"	13"	12"	13"	118	141	24 1/4" X 27 3/8" X 32 9/16"
24ABC624	0	X	O	O	O	31 3/16"	28 5/16"	3 3/4"	3/4"	6 9/16"	24 11/16"	9 1/8"	2 13/16"	1/2"	16"	16"	13"	147	183	32 3/8" X 35 1/2" X 32 9/16"
24ABC630	0	X	O	O	O	31 3/16"	32 5/16"	3 3/4"	3/4"	6 9/16"	24 11/16"	9 1/8"	2 13/16"	1/2"	15 1/2"	16"	14 1/4"	153	188	32 3/8" X 35 1/2" X 35 15/16"
24ABC636	0	X	O	O	O	35"	28 5/16"	3 7/8"	7/8"	6 9/16"	28 7/16"	9 1/8"	2 15/16"	5/8"	16"	16"	13"	165	204	36 1/8" X 39 5/16" X 32 9/16"
24ABC642	0	X	O	O	O	35"	39 1/8"	3 7/8"	7/8"	6 9/16"	28 7/16"	9 1/8"	2 15/16"	5/8"	16 1/2"	17 1/2"	17 1/2"	213	254	36 1/8" X 39 5/16" X 42 3/4"
24ABC648	0	X	O	O	O	35"	32 5/16"	3 7/8"	7/8"	6 9/16"	28 7/16"	9 1/8"	2 15/16"	5/8"	17"	17 1/2"	14 1/4"	231	274	36 1/8" X 39 5/16" X 35 15/16"
24ABC660	0	X	O	O	O	35"	45 15/16"	3 7/8"	7/8"	6 9/16"	28 7/16"	9 1/8"	2 15/16"	5/8"	16 1/2"	17"	16 1/4"	272	310	36 1/8" X 39 5/16" X 49 9/16"
24ABC618	1	X	O	O	O	25 3/4"	28 11/16"	3 3/4"	3/4"	4 7/16"	21 1/4"	7 13/16"	2 13/16"	1/2"	13 5/8"	13 1/2"	12 3/4"	125	154	26 7/8" X 30 1/16" X 32 9/16"
24ABC661	0	X	O	O	O	35"	45 15/16"	3 7/8"	7/8"	6 9/16"	28 7/16"	9 1/8"	2 15/16"	5/8"	16 1/2"	17"	16 1/4"	272	310	36 1/8" X 39 5/16" X 49 9/16"
24ABC648	1	X	O	O	O	35"	39 1/8"	3 7/8"	7/8"	6 9/16"	28 7/16"	9 1/8"	2 15/16"	5/8"	17 1/2"	16 1/2"	15"	264	317	36 1/8" X 39 5/16" X 42 3/4"
24ABC649	0	X	O	O	O	35"	39 1/8"	3 7/8"	7/8"	6 9/16"	28 7/16"	9 1/8"	2 15/16"	5/8"	17 1/2"	16 1/2"	15"	231	269	36 1/8" X 39 5/16" X 42 3/4"

208-230-1-60	230-1-60	208/230-3-60	460-3-60

X = YES
O = NO



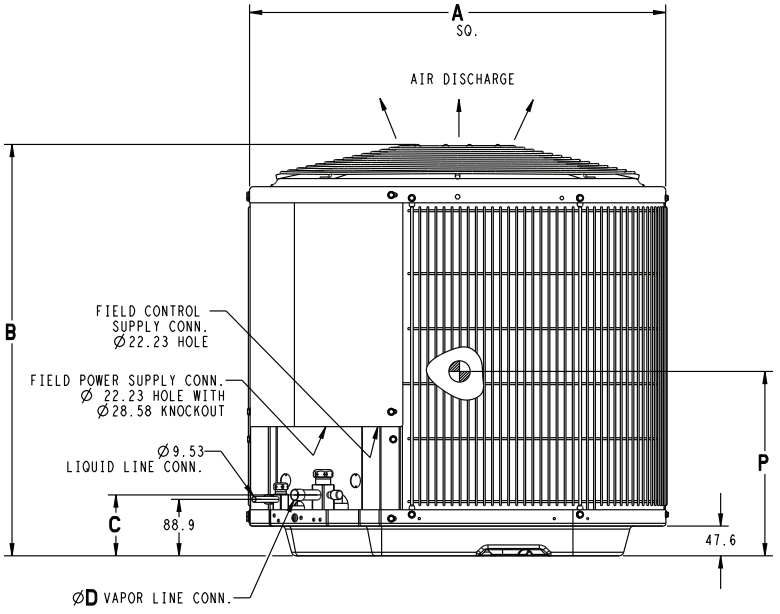


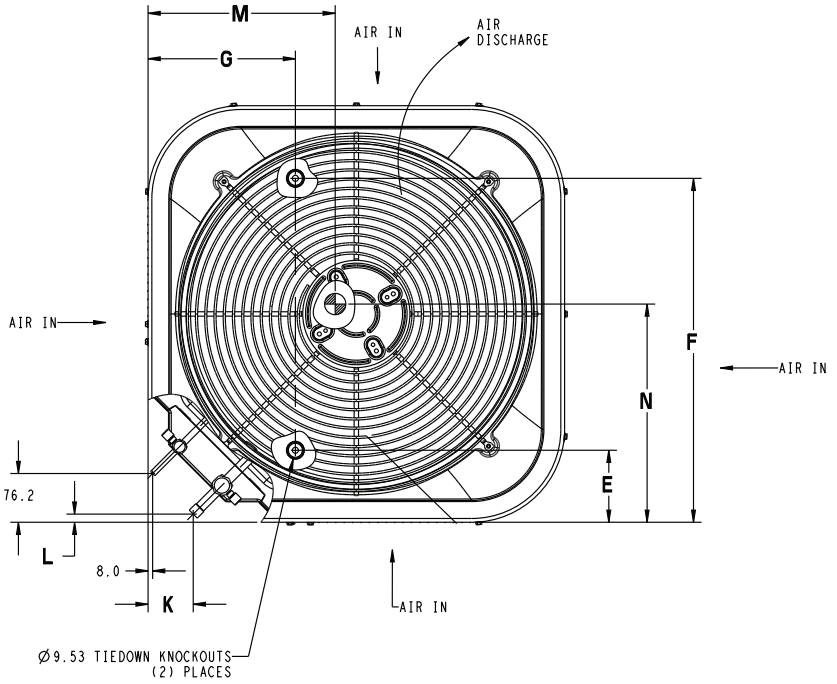
UNIT SIZE	MINIMUM MOUNTING PAD DIMENSIONS
18	26" X 26"
24,30	31 1/2" X 31 1/2"
36, 48, 49, 60, 61	35" X 35"

DIMENSIONS – SI

UNIT	SERIES	ELECTRICAL CHARACTERISTICS				A	B	C	D	E	F	G	K	L	M	N	P	OPERATING WEIGHT (Kgs)	SHIPPING WEIGHT (Kgs)	SHIPPING DIMENSIONS (L x W x H)
24ABC618	0	X	O	O	O	587.3	728.7	95.2	19.0	112.7	458.8	198.4	71.4	12.7	330.2	304.8	330.2	53.4	64.0	616.0 X 695.3 X 827.1
24ABC624	0	X	O	O	O	792.2	719.2	95.2	19.0	166.7	627.1	231.8	71.4	12.7	406.4	406.4	330.2	66.5	82.8	822.3 X 901.7 X 827.1
24ABC630	0	X	O	O	O	792.2	820.8	95.2	19.0	166.7	627.1	231.8	71.4	12.7	393.7	406.4	362.0	69.3	85.2	822.3 X 901.7 X 912.8
24ABC636	0	X	O	O	O	889.0	719.2	98.6	22.2	166.7	722.3	231.8	74.6	15.9	406.4	406.4	330.2	74.8	92.5	917.6 X 998.6 X 827.1
24ABC642	0	X	O	O	O	889.0	993.8	98.6	22.2	166.7	722.3	231.8	74.6	15.9	419.1	444.5	444.5	96.4	115.2	917.6 X 998.6 X 1085.8
24ABC648	0	X	O	O	O	889.0	820.8	98.6	22.2	166.7	722.3	231.8	74.6	15.9	431.8	444.5	362.0	104.8	124.3	917.6 X 998.6 X 912.8
24ABC660	0	X	O	O	O	889.0	1166.8	98.6	22.2	166.7	722.3	231.8	74.6	15.9	419.1	431.8	412.8	123.4	140.6	917.6 X 998.6 X 1258.9
24ABC618	1	X	O	O	O	654.0	728.7	95.2	19.0	112.7	539.8	198.4	71.4	12.7	346.1	342.9	323.9	56.7	69.9	682.6 X 763.6 X 827.1
24ABC661	0	X	O	O	O	889.0	1166.8	98.6	22.2	166.7	722.3	231.8	74.6	15.9	419.1	431.8	412.8	123.4	140.6	917.6 X 998.6 X 1258.9
24ABC648	1	X	O	O	O	889.0	993.8	98.6	22.2	166.7	722.3	231.8	74.6	15.9	444.5	419.1	381.0	119.7	143.8	917.6 X 998.6 X 1085.8
24ABC649	0	X	O	O	O	889.0	993.8	98.6	22.2	166.7	722.3	231.8	74.6	15.9	444.5	419.1	381.0	104.8	122.0	917.6 X 998.6 X 1085.8
		208-230-1-60	230-1-60	208/230-3-60	460-3-60															

X = YES
O = NO

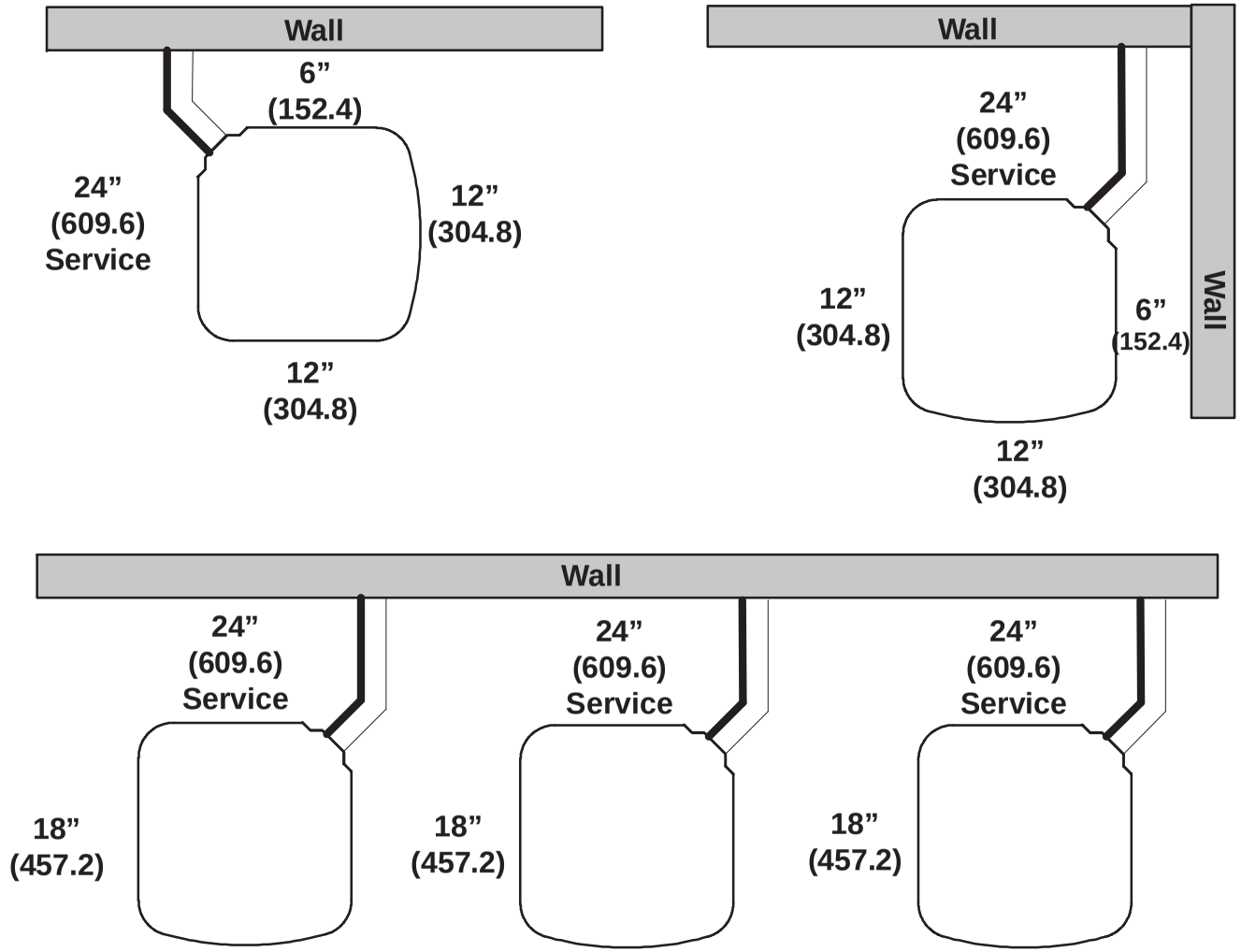




UNIT SIZE	MINIMUM MOUNTING PAD DIMENSIONS
18	660.4 X 660.4
24,30	800.1 X 800.1
36, 48, 49, 60, 61	889.0 X 889.0

CLEARANCES

Clearances (various examples)



Note: Numbers in ( ) = mm

IMPORTANT: When installing multiple units in an alcove, roof well, or partially enclosed area, ensure there is adequate ventilation to prevent re-circulation of discharge air.

APPENDIX 10.2:

CADNAA OPERATION NOISE MODEL INPUTS

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15662 - Ontario Esperanza PA-11

CadnaA Noise Prediction Model: 15662-05_Operation.cna
Date: 24.04.25
Analyst: B. Maddux

Calculation Configuration

Configuration	
Parameter	**Value**
General	
Max. Error (dB)	**0.00**
Max. Search Radius (ft)	**6561.70**
Min. Dist Src to Rcvr	**0.00**
Partition	
Raster Factor	**0.50**
Max. Length of Section (ft)	**3280.80**
Min. Length of Section (ft)	**3.30**
Min. Length of Section (%)	**0.00**
Proj. Line Sources	**On**
Proj. Area Sources	**On**
Ref. Time	
Daytime Penalty (dB)	**0.00**
Recr. Time Penalty (dB)	**5.00**
Night-time Penalty (dB)	**10.00**
DTM	
Standard Height (m)	**0.00**
Model of Terrain	**Triangulation**
Reflection	
max. Order of Reflection	**2**
Search Radius Src	**328.08**
Search Radius Rcvr	**328.08**
Max. Distance Source - Rcvr	**3280.84 3280.84**
Min. Distance Rvcr - Reflector	**3.28 3.28**
Min. Distance Source - Reflector	**0.33**
Industrial (ISO 9613 (1996))	
Lateral Diffraction	**some Obj**
Obst. within Area Src do not shield	**On**
Screening	**Incl. Ground Att. over Barrier**
	Dz with limit (20/25)
Barrier Coefficients C1,2,3	**3.0 20.0 0.0**
Temperature (°F)	**50**
rel. Humidity (%)	**70**
Ground Absorption G	**0.50**
Wind Speed for Dir. (mph)	**6.7**
Roads (TNM)	
Railways (FTA/FRA)	
Aircraft (???)	
Strictly acc. to AzB	

Receiver Noise Levels

Name	M.	ID	Level Lr			Limit. Value			Land Use			Height		Coordinates			
			Day	Night	CNEL	Day	Night	CNEL	Type	Auto	Noise Type			X	Y	Z	
			(dBA)	(dBA)	(dBA)	(dBA)	(dBA)	(dBA)				(ft)		(ft)	(ft)	(ft)	
R1		R1	46.4	44.1	50.7	0.0	0.0	0.0		x	Total	5.00	r	6164064.26	2307541.04	5.00	
R2		R2	38.3	35.9	42.6	0.0	0.0	0.0		x	Total	5.00	r	6163933.45	2307702.79	5.00	
R3		R3	40.3	37.8	44.5	0.0	0.0	0.0		x	Total	5.00	r	6163414.11	2307485.36	5.00	
R4		R4	43.8	41.4	48.0	0.0	0.0	0.0		x	Total	5.00	r	6163268.40	2307065.85	5.00	
R5		R5	39.3	36.9	43.5	0.0	0.0	0.0		x	Total	5.00	r	6163701.04	2306426.26	5.00	
R6		R6	38.3	35.8	42.5	0.0	0.0	0.0		x	Total	5.00	r	6164053.38	2306904.23	5.00	

Point Source(s)

Name	M.	ID	Result. PWL			Lw / Li			Operating Time			Height		Coordinates		
			Day	Evening	Night	Type	Value	norm.	Day	Special	Night			X	Y	Z
			(dBA)	(dBA)	(dBA)			dB(A)	(min)	(min)	(min)	(ft)		(ft)	(ft)	(ft)
AC001		AC001	76.0	76.0	76.0	Lw	76		675.00	0.00	270.00	3.00	g	6163563.62	2307448.24	3.00
AC002		AC002	76.0	76.0	76.0	Lw	76		675.00	0.00	270.00	3.00	g	6163577.17	2307419.34	3.00
AC003		AC003	76.0	76.0	76.0	Lw	76		675.00	0.00	270.00	3.00	g	6163584.98	2307404.23	3.00
AC004		AC004	76.0	76.0	76.0	Lw	76		675.00	0.00	270.00	3.00	g	6163594.09	2307384.44	3.00
AC005		AC005	76.0	76.0	76.0	Lw	76		675.00	0.00	270.00	3.00	g	6163603.21	2307364.91	3.00
AC006		AC006	76.0	76.0	76.0	Lw	76		675.00	0.00	270.00	3.00	g	6163613.10	2307344.34	3.00
AC007		AC007	76.0	76.0	76.0	Lw	76		675.00	0.00	270.00	3.00	g	6163660.76	2307490.95	3.00
AC008		AC008	76.0	76.0	76.0	Lw	76		675.00	0.00	270.00	3.00	g	6163710.24	2307387.05	3.00
AC009		AC009	76.0	76.0	76.0	Lw	76		675.00	0.00	270.00	3.00	g	6163674.30	2307462.05	3.00
AC010		AC010	76.0	76.0	76.0	Lw	76		675.00	0.00	270.00	3.00	g	6163682.11	2307446.94	3.00
AC011		AC011	76.0	76.0	76.0	Lw	76		675.00	0.00	270.00	3.00	g	6163700.34	2307407.62	3.00
AC012		AC012	76.0	76.0	76.0	Lw	76		675.00	0.00	270.00	3.00	g	6163691.23	2307427.15	3.00
AC013		AC013	76.0	76.0	76.0	Lw	76		675.00	0.00	270.00	3.00	g	6163700.34	2307467.77	3.00
AC014		AC014	76.0	76.0	76.0	Lw	76		675.00	0.00	270.00	3.00	g	6163717.27	2307432.88	3.00

Name	M.	ID	Result. PWL			Lw / Li			Operating Time			Height		Coordinates		
			Day	Evening	Night	Type	Value	norm.	Day	Special	Night			X	Y	Z
			(dBA)	(dBA)	(dBA)			dB(A)	(min)	(min)	(min)	(ft)		(ft)	(ft)	(ft)
AC015		AC015	76.0	76.0	76.0	Lw	76		675.00	0.00	270.00	3.00	g	6163686.80	2307496.68	3.00
AC016		AC016	76.0	76.0	76.0	Lw	76		675.00	0.00	270.00	3.00	g	6163726.38	2307413.35	3.00
AC017		AC017	76.0	76.0	76.0	Lw	76		675.00	0.00	270.00	3.00	g	6163708.16	2307452.67	3.00
AC018		AC018	76.0	76.0	76.0	Lw	76		675.00	0.00	270.00	3.00	g	6163769.37	2307535.59	3.00
AC019		AC019	76.0	76.0	76.0	Lw	76		675.00	0.00	270.00	3.00	g	6163942.93	2307518.44	3.00
AC020		AC020	76.0	76.0	76.0	Lw	76		675.00	0.00	270.00	3.00	g	6163927.11	2307533.08	3.00
AC021		AC021	76.0	76.0	76.0	Lw	76		675.00	0.00	270.00	3.00	g	6163971.78	2307492.52	3.00
AC022		AC022	76.0	76.0	76.0	Lw	76		675.00	0.00	270.00	3.00	g	6163995.23	2307470.86	3.00
AC023		AC023	76.0	76.0	76.0	Lw	76		675.00	0.00	270.00	3.00	g	6163958.84	2307503.55	3.00
AC024		AC024	76.0	76.0	76.0	Lw	76		675.00	0.00	270.00	3.00	g	6163782.64	2307542.61	3.00
AC025		AC025	76.0	76.0	76.0	Lw	76		675.00	0.00	270.00	3.00	g	6163802.12	2307551.84	3.00
AC026		AC026	76.0	76.0	76.0	Lw	76		675.00	0.00	270.00	3.00	g	6163821.86	2307561.07	3.00
AC027		AC027	76.0	76.0	76.0	Lw	76		675.00	0.00	270.00	3.00	g	6163865.74	2307582.68	3.00
AC028		AC028	76.0	76.0	76.0	Lw	76		675.00	0.00	270.00	3.00	g	6163836.92	2307568.97	3.00
AC029		AC029	76.0	76.0	76.0	Lw	76		675.00	0.00	270.00	3.00	g	6163845.61	2307440.92	3.00
AC030		AC030	76.0	76.0	76.0	Lw	76		675.00	0.00	270.00	3.00	g	6163861.45	2307425.96	3.00
AC031		AC031	76.0	76.0	76.0	Lw	76		675.00	0.00	270.00	3.00	g	6163897.69	2307393.10	3.00
AC032		AC032	76.0	76.0	76.0	Lw	76		675.00	0.00	270.00	3.00	g	6163829.86	2307455.64	3.00
AC033		AC033	76.0	76.0	76.0	Lw	76		675.00	0.00	270.00	3.00	g	6163874.34	2307414.86	3.00
AC034		AC034	76.0	76.0	76.0	Lw	76		675.00	0.00	270.00	3.00	g	6164078.91	2307393.77	3.00
AC035		AC035	76.0	76.0	76.0	Lw	76		675.00	0.00	270.00	3.00	g	6164049.95	2307419.57	3.00
AC036		AC036	76.0	76.0	76.0	Lw	76		675.00	0.00	270.00	3.00	g	6164111.78	2307363.96	3.00
AC037		AC037	76.0	76.0	76.0	Lw	76		675.00	0.00	270.00	3.00	g	6164062.93	2307408.59	3.00
AC038		AC038	76.0	76.0	76.0	Lw	76		675.00	0.00	270.00	3.00	g	6164026.40	2307441.13	3.00
AC039		AC039	76.0	76.0	76.0	Lw	76		675.00	0.00	270.00	3.00	g	6164094.79	2307379.20	3.00
AC040		AC040	76.0	76.0	76.0	Lw	76		675.00	0.00	270.00	3.00	g	6163973.23	2307337.23	3.00
AC041		AC041	76.0	76.0	76.0	Lw	76		675.00	0.00	270.00	3.00	g	6163991.78	2307326.26	3.00
AC042		AC042	76.0	76.0	76.0	Lw	76		675.00	0.00	270.00	3.00	g	6164052.98	2307290.85	3.00
AC043		AC043	76.0	76.0	76.0	Lw	76		675.00	0.00	270.00	3.00	g	6163953.44	2307348.61	3.00
AC044		AC044	76.0	76.0	76.0	Lw	76		675.00	0.00	270.00	3.00	g	6164010.49	2307315.09	3.00
AC045		AC045	76.0	76.0	76.0	Lw	76		675.00	0.00	270.00	3.00	g	6164025.47	2307307.04	3.00
AC046		AC046	76.0	76.0	76.0	Lw	76		675.00	0.00	270.00	3.00	g	6163919.84	2307246.34	3.00
AC047		AC047	76.0	76.0	76.0	Lw	76		675.00	0.00	270.00	3.00	g	6163957.10	2307224.20	3.00
AC048		AC048	76.0	76.0	76.0	Lw	76		675.00	0.00	270.00	3.00	g	6163938.40	2307235.38	3.00
AC049		AC049	76.0	76.0	76.0	Lw	76		675.00	0.00	270.00	3.00	g	6163900.05	2307257.72	3.00
AC050		AC050	76.0	76.0	76.0	Lw	76		675.00	0.00	270.00	3.00	g	6163999.59	2307199.96	3.00
AC051		AC051	76.0	76.0	76.0	Lw	76		675.00	0.00	270.00	3.00	g	6163972.09	2307216.16	3.00
AC052		AC052	76.0	76.0	76.0	Lw	76		675.00	0.00	270.00	3.00	g	6163925.12	2307211.42	3.00
AC053		AC053	76.0	76.0	76.0	Lw	76		675.00	0.00	270.00	3.00	g	6163906.56	2307222.38	3.00
AC054		AC054	76.0	76.0	76.0	Lw	76		675.00	0.00	270.00	3.00	g	6163986.31	2307176.01	3.00
AC055		AC055	76.0	76.0	76.0	Lw	76		675.00	0.00	270.00	3.00	g	6163943.82	2307200.24	3.00
AC056		AC056	76.0	76.0	76.0	Lw	76		675.00	0.00	270.00	3.00	g	6163958.80	2307192.20	3.00
AC057		AC057	76.0	76.0	76.0	Lw	76		675.00	0.00	270.00	3.00	g	6163886.77	2307233.76	3.00
AC058		AC058	76.0	76.0	76.0	Lw	76		675.00	0.00	270.00	3.00	g	6163906.46	2307100.01	3.00
AC059		AC059	76.0	76.0	76.0	Lw	76		675.00	0.00	270.00	3.00	g	6163872.77	2307119.23	3.00
AC060		AC060	76.0	76.0	76.0	Lw	76		675.00	0.00	270.00	3.00	g	6163891.48	2307108.06	3.00
AC061		AC061	76.0	76.0	76.0	Lw	76		675.00	0.00	270.00	3.00	g	6163854.22	2307130.20	3.00
AC062		AC062	76.0	76.0	76.0	Lw	76		675.00	0.00	270.00	3.00	g	6163933.97	2307083.82	3.00
AC063		AC063	76.0	76.0	76.0	Lw	76		675.00	0.00	270.00	3.00	g	6163834.42	2307141.57	3.00
AC064		AC064	76.0	76.0	76.0	Lw	76		675.00	0.00	270.00	3.00	g	6163889.53	2307077.88	3.00
AC065		AC065	76.0	76.0	76.0	Lw	76		675.00	0.00	270.00	3.00	g	6163817.50	2307119.44	3.00
AC066		AC066	76.0	76.0	76.0	Lw	76		675.00	0.00	270.00	3.00	g	6163874.55	2307085.92	3.00
AC067		AC067	76.0	76.0	76.0	Lw	76		675.00	0.00	270.00	3.00	g	6163917.04	2307061.68	3.00
AC068		AC068	76.0	76.0	76.0	Lw	76		675.00	0.00	270.00	3.00	g	6163855.85	2307097.10	3.00
AC069		AC069	76.0	76.0	76.0	Lw	76		675.00	0.00	270.00	3.00	g	6163837.29	2307108.06	3.00
AC070		AC070	76.0	76.0	76.0	Lw	76		675.00	0.00	270.00	3.00	g	6163824.81	2306992.95	3.00
AC071		AC071	76.0	76.0	76.0	Lw	76		675.00	0.00	270.00	3.00	g	6163867.30	2306968.71	3.00
AC072		AC072	76.0	76.0	76.0	Lw	76		675.00	0.00	270.00	3.00	g	6163806.11	2307004.13	3.00
AC073		AC073	76.0	76.0	76.0	Lw	76		675.00	0.00	270.00	3.00	g	6163767.76	2307026.47	3.00
AC074		AC074	76.0	76.0	76.0	Lw	76		675.00	0.00	270.00	3.00	g	6163787.55	2307015.09	3.00
AC075		AC075	76.0	76.0	76.0	Lw	76		675.00	0.00	270.00	3.00	g	6163839.79	2306984.91	3.00
AC076		AC076	76.0	76.0	76.0	Lw	76		675.00	0.00	270.00	3.00	g	6163751.87	2307004.33	3.00
AC077		AC077	76.0	76.0	76.0	Lw	76		675.00	0.00	270.00	3.00	g	6163851.42	2306946.58	3.00
AC078		AC078	76.0	76.0	76.0	Lw	76		675.00	0.00	270.00	3.00	g	6163771.66	2306992.96	3.00
AC079		AC079	76.0	76.0	76.0	Lw	76		675.00	0.00	270.00	3.00	g	6163790.22	2306981.99	3.00
AC080		AC080	76.0	76.0	76.0	Lw	76		675.00	0.00	270.00	3.00	g	6163808.93	2306970.82	3.00
AC081		AC081	76.0	76.0	76.0	Lw	76		675.00	0.00	270.00	3.00	g	6163823.91	2306962.77	3.00
AC082		AC082	76.0	76.0	76.0	Lw	76		675.00	0.00	270.00	3.00	g	6163753.98	2306880.19	3.00
AC083		AC083	76.0	76.0	76.0	Lw	76		675.00	0.00	270.00	3.00	g	6163796.47	2306855.95	3.00
AC084		AC084	76.0	76.0	76.0	Lw	76		675.00	0.00	270.00	3.00	g	6163735.27	2306891.37	3.00
AC085		AC085	76.0	76.0	76.0	Lw	76		675.00	0.00	270.00	3.00	g	6163716.72	2306902.33	3.00
AC086		AC086	76.0	76.0	76.0	Lw	76		675.00	0.00	270.00	3.00	g	6163768.96	2306872.15	3.00
AC087		AC087	76.0	76.0	76.0	Lw	76		675.00	0.00	270.00	3.00	g	6163696.03	2307278.49	3.00
AC088		AC088	76.0	76.0	76.0	Lw	76		675.00	0.00	270.00	3.00	g	6163759.94	2307308.73	3.00
AC089		AC089	76.0	76.0	76.0	Lw	76		675.00	0.00	270.00	3.00	g	6163655.85	2307259.63	3.00
AC090		AC090	76.0	76.0	76.0	Lw	76		675.00	0.00	270.00	3.00	g	6163676.46	2307269.45	3.00
AC091		AC091	76.0	76.0	76.0	Lw	76		675.00	0.00	270.00	3.00	g	6163715.85	2307287.54	3.00

Name	M.	ID	Result. PWL			Lw / Li			Operating Time			Height		Coordinates		
			Day	Evening	Night	Type	Value	norm.	Day	Special	Night			X	Y	Z
			(dBA)	(dBA)	(dBA)			dB(A)	(min)	(min)	(min)	(ft)		(ft)	(ft)	(ft)
AC092		AC092	76.0	76.0	76.0	Lw	76		675.00	0.00	270.00	3.00	g	6163730.98	2307295.30	3.00
AC093		AC093	76.0	76.0	76.0	Lw	76		675.00	0.00	270.00	3.00	g	6163852.22	2307373.65	3.00
AC094		AC094	76.0	76.0	76.0	Lw	76		675.00	0.00	270.00	3.00	g	6163842.06	2307356.20	3.00
AC095		AC095	76.0	76.0	76.0	Lw	76		675.00	0.00	270.00	3.00	g	6163831.91	2307338.23	3.00
AC096		AC096	76.0	76.0	76.0	Lw	76		675.00	0.00	270.00	3.00	g	6163821.49	2307320.53	3.00
AC097		AC097	76.0	76.0	76.0	Lw	76		675.00	0.00	270.00	3.00	g	6163811.33	2307302.30	3.00
AC098		AC098	76.0	76.0	76.0	Lw	76		675.00	0.00	270.00	3.00	g	6163799.61	2307284.07	3.00
AC099		AC099	76.0	76.0	76.0	Lw	76		675.00	0.00	270.00	3.00	g	6163725.66	2307156.72	3.00
AC100		AC100	76.0	76.0	76.0	Lw	76		675.00	0.00	270.00	3.00	g	6163747.53	2307193.18	3.00
AC101		AC101	76.0	76.0	76.0	Lw	76		675.00	0.00	270.00	3.00	g	6163757.95	2307210.89	3.00
AC102		AC102	76.0	76.0	76.0	Lw	76		675.00	0.00	270.00	3.00	g	6163778.26	2307246.31	3.00
AC103		AC103	76.0	76.0	76.0	Lw	76		675.00	0.00	270.00	3.00	g	6163737.37	2307174.95	3.00
AC104		AC104	76.0	76.0	76.0	Lw	76		675.00	0.00	270.00	3.00	g	6163768.10	2307228.86	3.00
AC105		AC105	76.0	76.0	76.0	Lw	76		675.00	0.00	270.00	3.00	g	6163703.78	2307118.96	3.00
AC106		AC106	76.0	76.0	76.0	Lw	76		675.00	0.00	270.00	3.00	g	6163662.89	2307047.61	3.00
AC107		AC107	76.0	76.0	76.0	Lw	76		675.00	0.00	270.00	3.00	g	6163673.05	2307065.84	3.00
AC108		AC108	76.0	76.0	76.0	Lw	76		675.00	0.00	270.00	3.00	g	6163683.47	2307083.55	3.00
AC109		AC109	76.0	76.0	76.0	Lw	76		675.00	0.00	270.00	3.00	g	6163693.62	2307101.52	3.00
AC110		AC110	76.0	76.0	76.0	Lw	76		675.00	0.00	270.00	3.00	g	6163727.86	2306729.15	3.00
AC111		AC111	76.0	76.0	76.0	Lw	76		675.00	0.00	270.00	3.00	g	6163659.25	2306681.20	3.00
AC112		AC112	76.0	76.0	76.0	Lw	76		675.00	0.00	270.00	3.00	g	6163694.31	2306705.26	3.00
AC113		AC113	76.0	76.0	76.0	Lw	76		675.00	0.00	270.00	3.00	g	6163744.35	2306740.79	3.00
AC114		AC114	76.0	76.0	76.0	Lw	76		675.00	0.00	270.00	3.00	g	6163677.49	2306692.91	3.00
AC115		AC115	76.0	76.0	76.0	Lw	76		675.00	0.00	270.00	3.00	g	6163711.15	2306717.03	3.00
AC116		AC116	76.0	76.0	76.0	Lw	76		675.00	0.00	270.00	3.00	g	6163584.78	2306798.64	3.00
AC117		AC117	76.0	76.0	76.0	Lw	76		675.00	0.00	270.00	3.00	g	6163566.54	2306786.93	3.00
AC118		AC118	76.0	76.0	76.0	Lw	76		675.00	0.00	270.00	3.00	g	6163618.44	2306822.76	3.00
AC119		AC119	76.0	76.0	76.0	Lw	76		675.00	0.00	270.00	3.00	g	6163635.15	2306834.88	3.00
AC120		AC120	76.0	76.0	76.0	Lw	76		675.00	0.00	270.00	3.00	g	6163601.60	2306810.99	3.00
AC121		AC121	76.0	76.0	76.0	Lw	76		675.00	0.00	270.00	3.00	g	6163651.64	2306846.52	3.00
AC122		AC122	76.0	76.0	76.0	Lw	76		675.00	0.00	270.00	3.00	g	6163586.17	2306859.96	3.00
AC123		AC123	76.0	76.0	76.0	Lw	76		675.00	0.00	270.00	3.00	g	6163547.62	2306842.03	3.00
AC124		AC124	76.0	76.0	76.0	Lw	76		675.00	0.00	270.00	3.00	g	6163623.20	2306877.98	3.00
AC125		AC125	76.0	76.0	76.0	Lw	76		675.00	0.00	270.00	3.00	g	6163567.54	2306850.56	3.00
AC126		AC126	76.0	76.0	76.0	Lw	76		675.00	0.00	270.00	3.00	g	6163641.39	2306886.73	3.00
AC127		AC127	76.0	76.0	76.0	Lw	76		675.00	0.00	270.00	3.00	g	6163604.72	2306868.79	3.00
AC128		AC128	76.0	76.0	76.0	Lw	76		675.00	0.00	270.00	3.00	g	6163507.12	2306977.12	3.00
AC129		AC129	76.0	76.0	76.0	Lw	76		675.00	0.00	270.00	3.00	g	6163562.79	2307004.54	3.00
AC130		AC130	76.0	76.0	76.0	Lw	76		675.00	0.00	270.00	3.00	g	6163544.31	2306995.35	3.00
AC131		AC131	76.0	76.0	76.0	Lw	76		675.00	0.00	270.00	3.00	g	6163487.20	2306968.59	3.00
AC132		AC132	76.0	76.0	76.0	Lw	76		675.00	0.00	270.00	3.00	g	6163525.75	2306986.52	3.00
AC133		AC133	76.0	76.0	76.0	Lw	76		675.00	0.00	270.00	3.00	g	6163580.98	2307013.30	3.00
AC134		AC134	76.0	76.0	76.0	Lw	76		675.00	0.00	270.00	3.00	g	6163502.64	2307082.33	3.00
AC135		AC135	76.0	76.0	76.0	Lw	76		675.00	0.00	270.00	3.00	g	6163539.31	2307100.28	3.00
AC136		AC136	76.0	76.0	76.0	Lw	76		675.00	0.00	270.00	3.00	g	6163521.12	2307091.52	3.00
AC137		AC137	76.0	76.0	76.0	Lw	76		675.00	0.00	270.00	3.00	g	6163465.46	2307064.10	3.00
AC138		AC138	76.0	76.0	76.0	Lw	76		675.00	0.00	270.00	3.00	g	6163484.09	2307073.50	3.00
AC139		AC139	76.0	76.0	76.0	Lw	76		675.00	0.00	270.00	3.00	g	6163445.54	2307055.57	3.00
AC140		AC140	76.0	76.0	76.0	Lw	76		675.00	0.00	270.00	3.00	g	6163421.85	2307181.32	3.00
AC141		AC141	76.0	76.0	76.0	Lw	76		675.00	0.00	270.00	3.00	g	6163383.30	2307163.38	3.00
AC142		AC142	76.0	76.0	76.0	Lw	76		675.00	0.00	270.00	3.00	g	6163477.07	2307208.09	3.00
AC143		AC143	76.0	76.0	76.0	Lw	76		675.00	0.00	270.00	3.00	g	6163458.88	2307199.33	3.00
AC144		AC144	76.0	76.0	76.0	Lw	76		675.00	0.00	270.00	3.00	g	6163403.22	2307171.91	3.00
AC145		AC145	76.0	76.0	76.0	Lw	76		675.00	0.00	270.00	3.00	g	6163440.40	2307190.14	3.00
AC146		AC146	76.0	76.0	76.0	Lw	76		675.00	0.00	270.00	3.00	g	6163479.14	2307402.21	3.00
AC147		AC147	76.0	76.0	76.0	Lw	76		675.00	0.00	270.00	3.00	g	6163516.21	2307327.17	3.00
AC148		AC148	76.0	76.0	76.0	Lw	76		675.00	0.00	270.00	3.00	g	6163525.24	2307309.11	3.00
AC149		AC149	76.0	76.0	76.0	Lw	76		675.00	0.00	270.00	3.00	g	6163506.75	2307345.51	3.00
AC150		AC150	76.0	76.0	76.0	Lw	76		675.00	0.00	270.00	3.00	g	6163497.65	2307363.93	3.00
AC151		AC151	76.0	76.0	76.0	Lw	76		675.00	0.00	270.00	3.00	g	6163487.96	2307382.41	3.00
AC152		AC152	76.0	76.0	76.0	Lw	76		675.00	0.00	270.00	3.00	g	6163323.99	2307328.85	3.00
AC153		AC153	76.0	76.0	76.0	Lw	76		675.00	0.00	270.00	3.00	g	6163379.52	2307356.54	3.00
AC154		AC154	76.0	76.0	76.0	Lw	76		675.00	0.00	270.00	3.00	g	6163304.11	2307320.23	3.00
AC155		AC155	76.0	76.0	76.0	Lw	76		675.00	0.00	270.00	3.00	g	6163342.57	2307338.35	3.00
AC156		AC156	76.0	76.0	76.0	Lw	76		675.00	0.00	270.00	3.00	g	6163361.08	2307347.26	3.00
AC157		AC157	76.0	76.0	76.0	Lw	76		675.00	0.00	270.00	3.00	g	6163452.83	2307238.05	3.00
AC158		AC158	76.0	76.0	76.0	Lw	76		675.00	0.00	270.00	3.00	g	6163396.13	2307211.28	3.00
AC159		AC159	76.0	76.0	76.0	Lw	76		675.00	0.00	270.00	3.00	g	6163414.71	2307220.77	3.00
AC160		AC160	76.0	76.0	76.0	Lw	76		675.00	0.00	270.00	3.00	g	6163376.25	2307202.65	3.00
AC161		AC161	76.0	76.0	76.0	Lw	76		675.00	0.00	270.00	3.00	g	6163433.22	2307229.68	3.00
AC162		AC162	76.0	76.0	76.0	Lw	76		675.00	0.00	270.00	3.00	g	6163585.42	2307213.44	3.00
TRASH1		TRASH1	89.0	89.0	89.0	Lw	89		150.00	0.00	90.00	8.00	a	6163795.92	2307459.32	8.00
TRASH2		TRASH2	89.0	89.0	89.0	Lw	89		150.00	0.00	90.00	8.00	a	6163959.98	2307388.14	8.00
TRASH3		TRASH3	89.0	89.0	89.0	Lw	89		150.00	0.00	90.00	8.00	a	6163682.21	2306944.12	8.00
TRASH4		TRASH4	89.0	89.0	89.0	Lw	89		150.00	0.00	90.00	8.00	a	6163542.88	2307206.28	8.00

Line Source(s)

Name	M.	ID	Result. PWL			Result. PWL'			Lw / Li			Operating Time			Moving Pt. Src				Height
			Day	Evening	Night	Day	Evening	Night	Type	Value	norm.	Day	Special	Night	Number			Speed	
			(dBA)	(dBA)	(dBA)	(dBA)	(dBA)	(dBA)			dB(A)	(min)	(min)	(min)	Day	Evening	Night	(mph)	(ft)

Name	ID	Height		Coordinates			
		Begin	End	x	y	z	Ground
		(ft)	(ft)	(ft)	(ft)	(ft)	(ft)

Area Source(s)

Name	M.	ID	Result. PWL			Result. PWL''			Lw / Li			Operating Time			Height	
			Day	Evening	Night	Day	Evening	Night	Type	Value	norm.	Day	Special	Night	(ft)	
			(dBA)	(dBA)	(dBA)	(dBA)	(dBA)	(dBA)			dB(A)	(min)	(min)	(min)		
PARK1		PARK1	79.0	79.0	79.0	53.8	53.8	53.8	Lw	79					0.	a
PARK2		PARK2	76.0	76.0	76.0	54.2	54.2	54.2	Lw	76					0.	a
PARK3		PARK3	73.0	73.0	73.0	55.4	55.4	55.4	Lw	73					0.	a
PARK4		PARK4	76.0	76.0	76.0	54.1	54.1	54.1	Lw	76					0.	a
PARK5		PARK5	76.0	76.0	76.0	54.5	54.5	54.5	Lw	76					0.	a
PARK6		PARK6	76.0	76.0	76.0	54.0	54.0	54.0	Lw	76					0.	a

Name	ID	Height		Coordinates			
		Begin	End	x	y	z	Ground
		(ft)	(ft)	(ft)	(ft)	(ft)	(ft)
PARK1	PARK1	0.00	a	6163565.58	2307196.74	0.00	0.00
				6163651.82	2307015.82	0.00	0.00
				6163634.80	2307008.01	0.00	0.00
				6163550.39	2307189.36	0.00	0.00
PARK2	PARK2	0.00	a	6163987.43	2307389.83	0.00	0.00
				6164054.62	2307329.15	0.00	0.00
				6164041.86	2307316.65	0.00	0.00
				6163975.45	2307376.28	0.00	0.00
PARK3	PARK3	0.00	a	6163692.31	2306935.77	0.00	0.00
				6163678.25	2306943.93	0.00	0.00
				6163694.92	2306975.87	0.00	0.00
				6163710.72	2306967.02	0.00	0.00
PARK4	PARK4	0.00	a	6163764.18	2307355.75	0.00	0.00
				6163778.61	2307366.60	0.00	0.00
				6163789.24	2307380.92	0.00	0.00
				6163792.93	2307389.28	0.00	0.00
				6163796.29	2307406.96	0.00	0.00
				6163794.67	2307425.52	0.00	0.00
				6163811.70	2307429.10	0.00	0.00
				6163813.76	2307417.60	0.00	0.00
				6163813.00	2307394.59	0.00	0.00
				6163809.97	2307383.20	0.00	0.00
				6163798.57	2307362.58	0.00	0.00
				6163782.62	2307346.31	0.00	0.00
				6163772.86	2307339.91	0.00	0.00
PARK5	PARK5	0.00	a	6163624.85	2307269.15	0.00	0.00
				6163557.44	2307235.25	0.00	0.00
				6163548.11	2307252.83	0.00	0.00
				6163616.17	2307286.95	0.00	0.00
PARK6	PARK6	0.00	a	6163789.05	2306789.91	0.00	0.00
				6163773.95	2306778.80	0.00	0.00
				6163715.46	2306857.75	0.00	0.00
				6163730.57	2306867.65	0.00	0.00
				6163761.06	2306823.92	0.00	0.00

Barrier(s)

Name	Sel.	M.	ID	Absorption		Z-Ext.	Cantilever		Height		Coordinates			
				left	right		horz.	vert.	Begin	End	x	y	z	Ground
						(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(ft)
B1			B1						6.00 r		6163422.44	2307554.16	6.00	0.00
											6163448.92	2307497.30	6.00	0.00
											6163448.48	2307486.02	6.00	0.00
											6163382.51	2307453.47	6.00	0.00
											6163330.86	2307430.03	6.00	0.00
											6163284.42	2307405.72	6.00	0.00
											6163260.55	2307396.61	6.00	0.00
											6163235.81	2307452.60	6.00	0.00
B2			B2						6.00 r		6164064.80	2307742.52	6.00	0.00
											6163927.82	2307674.29	6.00	0.00
											6163892.41	2307729.50	6.00	0.00
											6163859.07	2307792.00	6.00	0.00
											6163840.32	2307837.31	6.00	0.00
B3			B3						6.00 r		6163869.37	2306484.47	6.00	0.00
											6163820.54	2306538.72	6.00	0.00
											6163819.46	2306558.25	6.00	0.00

Name	Sel.	M.	ID	Absorption		Z-Ext.	Cantilever		Height			Coordinates			
				left	right		horz.	vert.	Begin		End	x	y	z	Ground
						(ft)	(ft)	(ft)	(ft)		(ft)	(ft)	(ft)	(ft)	(ft)
												6163883.48	2306635.29	6.00	0.00
												6163954.01	2306747.05	6.00	0.00
												6164021.28	2306864.24	6.00	0.00
												6164087.47	2306979.26	6.00	0.00
												6164158.00	2307088.85	6.00	0.00
												6164187.30	2307150.70	6.00	0.00
												6164229.62	2307215.80	6.00	0.00
												6164307.74	2307159.38	6.00	0.00

Building(s)

Name	Sel.	M.	ID	RB	Residents	Absorption	Height		Coordinates			
							Begin		x	y	z	Ground
							(ft)		(ft)	(ft)	(ft)	(ft)
2-Story10			2-Story10	x	0		0.00	a	6163582.07	2307021.44	0.00	0.00
									6163605.68	2306972.49	0.00	0.00
									6163494.57	2306918.67	0.00	0.00
									6163470.61	2306967.97	0.00	0.00
2-Story09			2-Story09	x	0		0.00	a	6163626.17	2306931.17	0.00	0.00
									6163649.78	2306881.17	0.00	0.00
									6163536.58	2306827.69	0.00	0.00
									6163512.63	2306878.04	0.00	0.00
2-Story08			2-Story08	x	0		0.00	a	6163524.43	2307149.22	0.00	0.00
									6163550.13	2307095.75	0.00	0.00
									6163434.85	2307040.89	0.00	0.00
									6163408.81	2307094.71	0.00	0.00
2-Story07			2-Story07	x	0		0.00	a	6163487.97	2307221.10	0.00	0.00
									6163511.24	2307170.75	0.00	0.00
									6163398.74	2307118.32	0.00	0.00
									6163375.13	2307169.01	0.00	0.00
2-Story06			2-Story06	x	0		0.00	a	6163436.39	2307281.40	0.00	0.00
									6163458.62	2307231.75	0.00	0.00
									6163364.52	2307186.96	0.00	0.00
									6163341.95	2307236.96	0.00	0.00
2-Story05			2-Story05	x	0		0.00	a	6163392.64	2307372.18	0.00	0.00
									6163416.86	2307321.77	0.00	0.00
									6163321.38	2307277.67	0.00	0.00
									6163297.07	2307326.71	0.00	0.00
2-Story04			2-Story04	x	0		0.00	a	6163483.46	2307412.11	0.00	0.00
									6163537.27	2307300.65	0.00	0.00
									6163488.66	2307277.39	0.00	0.00
									6163434.15	2307388.85	0.00	0.00
2-Story03			2-Story03	x	0		0.00	a	6163660.19	2306862.34	0.00	0.00
									6163691.03	2306816.52	0.00	0.00
									6163588.29	2306744.78	0.00	0.00
									6163557.05	2306790.88	0.00	0.00
2-Story02			2-Story02	x	0		0.00	a	6163719.51	2306781.66	0.00	0.00
									6163751.77	2306736.49	0.00	0.00
									6163649.27	2306664.36	0.00	0.00
									6163616.60	2306709.81	0.00	0.00
2-Story01			2-Story01	x	0		0.00	a	6163704.59	2307136.36	0.00	0.00
									6163754.58	2307109.35	0.00	0.00
									6163702.78	2307020.87	0.00	0.00
									6163654.02	2307045.49	0.00	0.00
3-Story01			3-Story01	x	0		0.00	a	6163826.31	2306882.61	0.00	0.00
									6163803.31	2306842.89	0.00	0.00
									6163704.57	2306899.97	0.00	0.00
									6163727.14	2306939.46	0.00	0.00
3-Story02			3-Story02	x	0		0.00	a	6163853.04	2307393.24	0.00	0.00
									6163905.21	2307365.01	0.00	0.00
									6163841.59	2307256.36	0.00	0.00
									6163788.93	2307284.67	0.00	0.00
3-Story03			3-Story03	x	0		0.00	a	6163778.22	2307265.75	0.00	0.00
									6163826.50	2307236.85	0.00	0.00
									6163765.26	2307128.86	0.00	0.00
									6163717.34	2307156.34	0.00	0.00
3-Story04			3-Story04	x	0		0.00	a	6163892.17	2307512.56	0.00	0.00
									6163922.42	2307546.46	0.00	0.00
									6164006.72	2307469.00	0.00	0.00
									6163977.59	2307435.47	0.00	0.00
3-Story05			3-Story05	x	0		0.00	a	6163873.42	2307594.07	0.00	0.00
									6163893.48	2307553.44	0.00	0.00
									6163770.82	2307494.59	0.00	0.00
									6163751.55	2307535.99	0.00	0.00
3-Story06			3-Story06	x	0		0.00	a	6163864.51	2306946.84	0.00	0.00
									6163841.50	2306907.13	0.00	0.00
									6163724.10	2306975.49	0.00	0.00

Name	Sel.	M.	ID	RB	Residents	Absorption	Height		Coordinates			
							Begin		x	y	z	Ground
							(ft)		(ft)	(ft)	(ft)	(ft)
									6163746.67	2307014.99	0.00	0.00
3-Story07			3-Story07	x	0		0.00	a	6163893.15	2306998.49	0.00	0.00
									6163870.15	2306958.78	0.00	0.00
									6163752.74	2307027.14	0.00	0.00
									6163775.31	2307066.64	0.00	0.00
3-Story08			3-Story08	x	0		0.00	a	6163931.78	2307063.60	0.00	0.00
									6163908.78	2307023.88	0.00	0.00
									6163791.37	2307092.24	0.00	0.00
									6163813.94	2307131.74	0.00	0.00
3-Story09			3-Story09	x	0		0.00	a	6163959.99	2307113.94	0.00	0.00
									6163936.99	2307074.23	0.00	0.00
									6163819.58	2307142.59	0.00	0.00
									6163842.15	2307182.09	0.00	0.00
3-Story10			3-Story10	x	0		0.00	a	6163997.32	2307178.61	0.00	0.00
									6163974.31	2307138.90	0.00	0.00
									6163856.91	2307207.26	0.00	0.00
									6163879.48	2307246.76	0.00	0.00
3-Story11			3-Story11	x	0		0.00	a	6164024.66	2307227.66	0.00	0.00
									6164001.66	2307187.95	0.00	0.00
									6163884.25	2307256.31	0.00	0.00
									6163906.82	2307295.80	0.00	0.00
3-Story12			3-Story12	x	0		0.00	a	6164065.89	2307293.20	0.00	0.00
									6164042.89	2307253.48	0.00	0.00
									6163925.49	2307321.84	0.00	0.00
									6163948.06	2307361.34	0.00	0.00
3-Story13			3-Story13	x	0		0.00	a	6163994.00	2307420.11	0.00	0.00
									6164024.24	2307454.02	0.00	0.00
									6164124.17	2307362.23	0.00	0.00
									6164095.04	2307328.70	0.00	0.00
3-Story14			3-Story14	x	0		0.00	a	6163817.44	2307456.04	0.00	0.00
									6163847.68	2307489.95	0.00	0.00
									6163931.72	2307411.45	0.00	0.00
									6163902.59	2307377.92	0.00	0.00
3-Story15			3-Story15	x	0		0.00	a	6163766.91	2307418.02	0.00	0.00
									6163725.51	2307398.75	0.00	0.00
									6163676.55	2307502.14	0.00	0.00
									6163717.17	2307521.67	0.00	0.00
3-Story16			3-Story16	x	0		0.00	a	6163719.26	2307380.26	0.00	0.00
									6163677.85	2307360.99	0.00	0.00
									6163622.12	2307482.87	0.00	0.00
									6163662.75	2307502.40	0.00	0.00
3-Story17			3-Story17	x	0		0.00	a	6163652.33	2307347.19	0.00	0.00
									6163610.92	2307327.92	0.00	0.00
									6163555.20	2307449.79	0.00	0.00
									6163595.82	2307469.33	0.00	0.00
3-Story18			3-Story18	x	0		0.00	a	6163653.70	2307247.61	0.00	0.00
									6163633.71	2307288.68	0.00	0.00
									6163754.61	2307346.50	0.00	0.00
									6163774.84	2307306.22	0.00	0.00
PoolBLDG			PoolBLDG	x	0		0.00	a	6163574.38	2307220.04	0.00	0.00
									6163628.55	2307245.56	0.00	0.00
									6163637.66	2307227.33	0.00	0.00
									6163582.97	2307201.81	0.00	0.00

Ground Absorption(s)

Name	Sel.	M.	ID	G	Coordinates	
					x	y
					(ft)	(ft)

Contour(s)

Name	Sel.	M.	ID	OnlyPts	Height		Coordinates		
					Begin	End	x	y	z
					(ft)	(ft)	(ft)	(ft)	(ft)

Vertical Area Source(s)

Name	ID	Height				Coordinates			
		Begin		End		x	y	z	Ground
		(ft)		(ft)		(ft)	(ft)	(ft)	(ft)

Rail

Name	Sel.	M.	ID	Lw'		Train Class	Correct.	Vmax
				Day	Night		Track	
				(dBA)	(dBA)		(dB)	(km(mph)

Sound Level Spectra

Name	ID	Type	Oktave Spectrum (dB)											Source
			Weight.	31.5	63	125	250	500	1000	2000	4000	8000	A	lin	

Roads

Name	Sel.	M.	ID	Lme			Count Data		exact Count Data						Speed Limit		SCS	Surface		Gradient	Mult. Reflection		
				Day	Evening	Night	DTV	Str.class.	M			p (%)			Auto	Truck	Dist.	Dstro	Type		Drefl	Hbuild	Dist.
				(dBA)	(dBA)	(dBA)			Day	Evening	Night	Day	Evening	Night	(mph)	(mph)		(dB)		(%)	(dB)	(ft)	(ft)

RoadsGeo

Name	Height		Coordinates				Dist	LSlope
	Begin	End	x	y	z	Ground	(ft)	(%)
	(ft)	(ft)	(ft)	(ft)	(ft)	(ft)		

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APPENDIX 11.1:

CADNAA CONSTRUCTION NOISE MODEL INPUTS

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15662 - Ontario Esperanza PA-11

CadnaA Noise Prediction Model: 15662-05_Construction.cna
Date: 24.04.25
Analyst: B. Maddux

Calculation Configuration

Configuration	
Parameter	**Value**
General	
Max. Error (dB)	**0.00**
Max. Search Radius (ft)	**6561.70**
Min. Dist Src to Rcvr	**0.00**
Partition	
Raster Factor	**0.50**
Max. Length of Section (ft)	**3280.80**
Min. Length of Section (ft)	**3.30**
Min. Length of Section (%)	**0.00**
Proj. Line Sources	**On**
Proj. Area Sources	**On**
Ref. Time	
Daytime Penalty (dB)	**0.00**
Recr. Time Penalty (dB)	**5.00**
Night-time Penalty (dB)	**10.00**
DTM	
Standard Height (m)	**0.00**
Model of Terrain	**Triangulation**
Reflection	
max. Order of Reflection	**2**
Search Radius Src	**328.08**
Search Radius Rcvr	**328.08**
Max. Distance Source - Rcvr	**3280.84 3280.84**
Min. Distance Rvcr - Reflector	**3.28 3.28**
Min. Distance Source - Reflector	**0.33**
Industrial (ISO 9613 (1996))	
Lateral Diffraction	**some Obj**
Obst. within Area Src do not shield	**On**
Screening	**Incl. Ground Att. over Barrier**
	Dz with limit (20/25)
Barrier Coefficients C1,2,3	**3.0 20.0 0.0**
Temperature (°F)	**50**
rel. Humidity (%)	**70**
Ground Absorption G	**0.50**
Wind Speed for Dir. (mph)	**6.7**
Roads (TNM)	
Railways (FTA/FRA)	
Aircraft (???)	
Strictly acc. to AzB	

Receiver Noise Levels

Name	M.	ID	Level Lr			Limit. Value			Land Use			Height		Coordinates		
			Day	Night	CNEL	Day	Night	CNEL	Type	Auto	Noise Type			X	Y	Z
			(dBA)	(dBA)	(dBA)	(dBA)	(dBA)	(dBA)				(ft)		(ft)	(ft)	(ft)
R1		R1	65.3	-34.7	62.3	0.0	0.0	0.0		x	Total	5.00	r	6164064.26	2307541.04	5.00
R2		R2	63.8	-36.2	60.8	0.0	0.0	0.0		x	Total	5.00	r	6163960.44	2307660.13	5.00
R3		R3	64.3	-35.7	61.3	0.0	0.0	0.0		x	Total	5.00	r	6163414.11	2307485.36	5.00
R4		R4	61.0	-39.0	58.0	0.0	0.0	0.0		x	Total	5.00	r	6163268.40	2307065.85	5.00
R5		R5	57.2	-42.8	54.2	0.0	0.0	0.0		x	Total	5.00	r	6163701.04	2306426.26	5.00
R6		R6	62.0	-38.0	59.0	0.0	0.0	0.0		x	Total	5.00	r	6164053.38	2306904.23	5.00

Point Source(s)

Name	M.	ID	Result. PWL			Lw / Li			Operating Time			Height		Coordinates		
			Day	Evening	Night	Type	Value	norm.	Day	Special	Night			X	Y	Z
			(dBA)	(dBA)	(dBA)			dB(A)	(min)	(min)	(min)	(ft)		(ft)	(ft)	(ft)

Line Source(s)

Name	M.	ID	Result. PWL			Result. PWL'			Lw / Li			Operating Time			Moving Pt. Src				Height	
			Day	Evening	Night	Day	Evening	Night	Type	Value	norm.	Day	Special	Night	Number			Speed		
			(dBA)	(dBA)	(dBA)	(dBA)	(dBA)	(dBA)			dB(A)	(min)	(min)	(min)	Day	Evening	Night	(mph)	(ft)	

Name	ID	Height		Coordinates			
		Begin	End	x	y	z	Ground
		(ft)	(ft)	(ft)	(ft)	(ft)	(ft)

Area Source(s)

Name	M.	ID	Result. PWL			Result. PWL''			Lw / Li			Operating Time			Height	
			Day	Evening	Night	Day	Evening	Night	Type	Value	norm.	Day	Special	Night	(ft)	
			(dBA)	(dBA)	(dBA)	(dBA)	(dBA)	(dBA)			dB(A)	(min)	(min)	(min)		
CA		CA1	115.6	15.6	15.6	69.3	-30.7	-30.7	PWL-Pt	115.6					8	a

Name	ID	Height			Coordinates			
		Begin		End	x	y	z	Ground
		(ft)		(ft)	(ft)	(ft)	(ft)	(ft)
CA	CA1	8.00	a		6164168.97	2307351.23	8.00	0.00
					6164154.42	2307333.20	8.00	0.00
					6164143.16	2307318.49	8.00	0.00
					6164119.04	2307284.49	8.00	0.00
					6164103.94	2307261.15	8.00	0.00
					6163938.77	2306975.94	8.00	0.00
					6163830.57	2306788.91	8.00	0.00
					6163786.70	2306725.09	8.00	0.00
					6163759.41	2306691.81	8.00	0.00
					6163730.15	2306660.25	8.00	0.00
					6163697.34	2306660.26	8.00	0.00
					6163657.03	2306705.64	8.00	0.00
					6163627.35	2306743.01	8.00	0.00
					6163607.82	2306770.12	8.00	0.00
					6163591.91	2306793.94	8.00	0.00
					6163579.27	2306814.18	8.00	0.00
					6163569.55	2306830.61	8.00	0.00
					6163406.23	2307166.18	8.00	0.00
					6163313.54	2307360.00	8.00	0.00
					6163319.66	2307377.33	8.00	0.00
					6163454.49	2307441.81	8.00	0.00
					6163628.11	2307524.84	8.00	0.00
					6163661.12	2307538.03	8.00	0.00
					6163757.66	2307569.42	8.00	0.00
					6163771.15	2307574.13	8.00	0.00
					6163797.44	2307585.28	8.00	0.00
					6163827.58	2307601.59	8.00	0.00
					6163844.32	2307612.52	8.00	0.00
					6163888.91	2307643.60	8.00	0.00
					6163908.95	2307642.78	8.00	0.00
					6163952.01	2307592.23	8.00	0.00
					6163999.21	2307545.54	8.00	0.00
					6164171.37	2307389.23	8.00	0.00

Barrier(s)

Name	Sel.	M.	ID	Absorption		Z-Ext.	Cantilever		Height		Coordinates			
				left	right		horz.	vert.	Begin	End	x	y	z	Ground
						(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(ft)

Building(s)

Name	Sel.	M.	ID	RB	Residents	Absorption	Height	Coordinates				
							Begin	x	y	z	Ground	
							(ft)	(ft)	(ft)	(ft)	(ft)	

Ground Absorption(s)

Name	Sel.	M.	ID	G	Coordinates	
					x	y
					(ft)	(ft)

Contour(s)

Name	Sel.	M.	ID	OnlyPts	Height		Coordinates		
					Begin	End	x	y	z
					(ft)	(ft)	(ft)	(ft)	(ft)

Vertical Area Source(s)

Name	ID	Height			Coordinates			
		Begin		End	x	y	z	Ground
		(ft)		(ft)	(ft)	(ft)	(ft)	(ft)

Rail

Name	Sel.	M.	ID	Lw'		Train Class	Correct.	Vmax
				Day	Night		Track	
				(dBA)	(dBA)		(dB)	(km(mph)

Sound Level Spectra

Name	ID	Type	Oktave Spectrum (dB)												Source
			Weight.	31.5	63	125	250	500	1000	2000	4000	8000	A	lin	

Roads

Name	Sel.	M.	ID	Lme			Count Data		exact Count Data						Speed Limit		SCS	Surface		Gradient	Mult. Reflection		
				Day	Evening	Night	DTV	Str.class.	M			p (%)			Auto	Truck	Dist.	Dstro	Type		Drefl	Hbuild	Dist.
				(dBA)	(dBA)	(dBA)			Day	Evening	Night	Day	Evening	Night	(mph)	(mph)		(dB)		(%)	(dB)	(ft)	(ft)

RoadsGeo

Name	Height				Coordinates				Dist	LSlope
	Begin		End		x	y	z	Ground	(ft)	(%)
	(ft)		(ft)		(ft)	(ft)	(ft)	(ft)		

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MEMORANDUM

URBAN | CROSSROADS

DATE: May 29, 2024
TO: Dave Waters, Genstar Development Company/GDCI-13
FROM: Charlene So, Urban Crossroads
JOB NO: 15662-04 TG Letter

ESPERANZA SPECIFIC PLAN TRIP GENERATION ASSESSMENT

Urban Crossroads, Inc. is pleased to submit the following Trip Generation Assessment for Esperanza Specific Plan development (Project) to support the proposed Specific Plan Amendment (SPA), located on the northeast corner of Eucalyptus Avenue and Amherst Avenue in the City of Ontario. This letter describes the proposed Project trip generation methodology and determines whether any traffic operations analysis is required based on San Bernardino County's Transportation Impact Study Guidelines (July 9, 2019, County Guidelines). The County Guidelines have been utilized as the City does not have their own adopted guidelines.

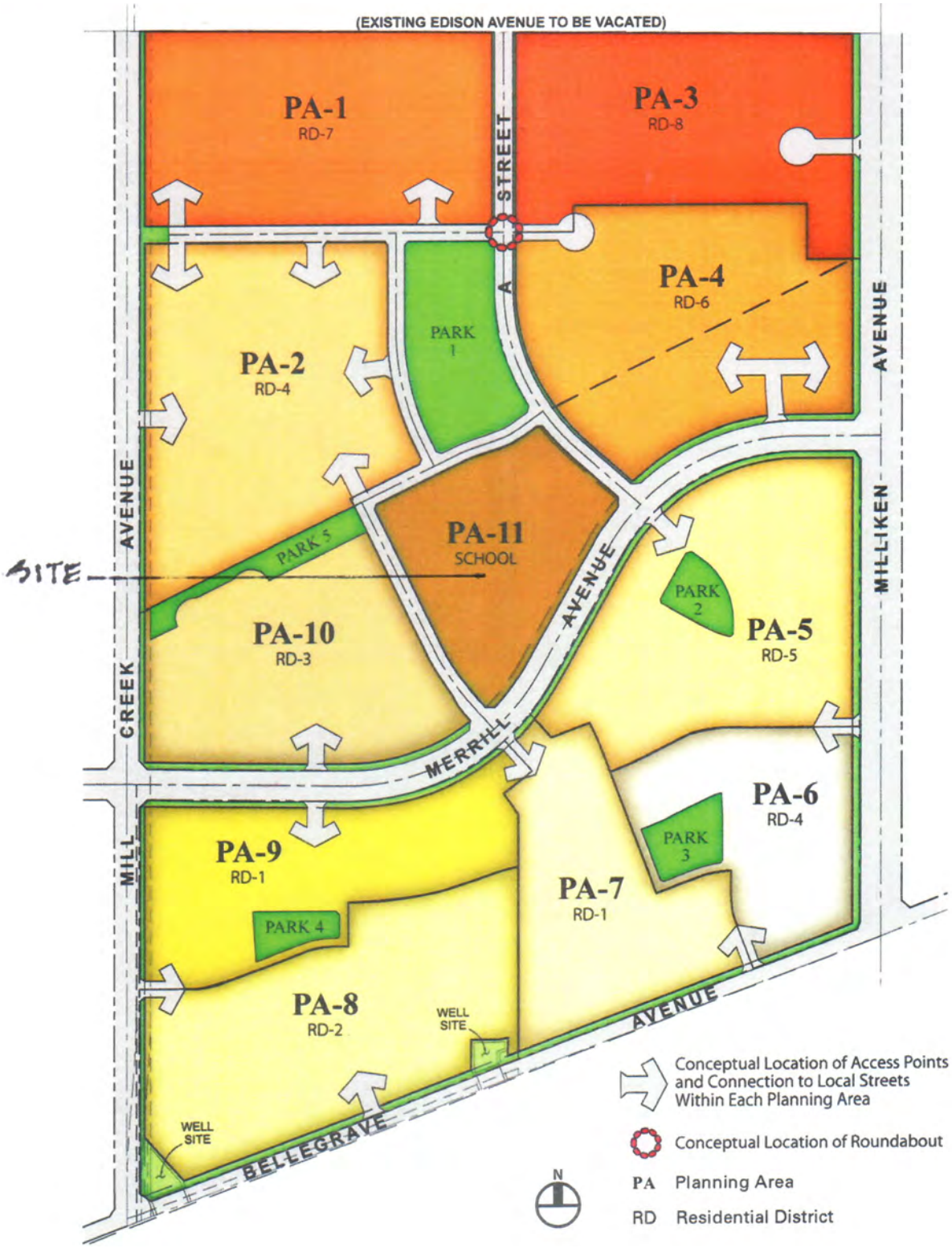
PROPOSED PROJECT

It is our understanding that the proposed Project is to consist of 161 multi-family residential dwelling units (with a density of approximately 16.1 dwelling units to the net acre). The Project is located within the Esperanza Specific Plan. The original currently-approved Specific Plan contemplated a 736-student elementary school within Planning Area 11. The land use will be updated from "School" to "MDR Medium Density Residential" consistent with the adjacent land use to the northeast.

Exhibit 1 shows the preliminary site plan. For comparison purposes, Exhibit 2 shows the currently-approved land use plan identifying Planning Area 11 with a school.

EXHIBIT 1: PRELIMINARY SITE PLAN

EXHIBIT 2: CURRENTLY APPROVED LAND USE PLAN



TRIP GENERATION

Trip generation represents the amount of traffic, which is both attracted to, and produced by, a development. Determining traffic generation for a specific project is therefore based upon forecasting the amount of traffic that is expected to be both attracted to, and produced by, the specific land uses being proposed for a given development.

APPROVED SPECIFIC PLAN

As noted previously, the site is located within the Esperanza Specific Plan. Specifically, the Project is located within Planning Area 11, which was approved with a 736-student elementary school. The Esperanza Specific Plan Traffic Impact Study Report (prepared by Albert A. Webb Associates, dated November 10, 2005, referred to as **2005 Traffic Study**) evaluated the 736-student elementary school within Planning Area 11. The trip generation is summarized in Table 1 and excerpts from the 2005 Traffic Study are included in Attachment A. The approved elementary school site is anticipated to generate an average of 949 two-way trips per day, with 309 trips during the AM peak hour and 206 trips during the PM peak hour.

TABLE 1: APPROVED SP TRIP GENERATION FOR PLANNING AREA 11

			AM Peak Hour			PM Peak Hour			
Land Use	Quantity	Units[1]	In	Out	Total	In	Out	Total	Daily
PA 11: Elementary School	736	STU	169	140	309	96	110	206	949

Source: Esperanza Specific Plan Traffic Impact Study Report (prepared by Albert A. Webb Associates, dated November 10, 2005).

[1] STU = Students

PROPOSED PROJECT

The proposed Project consists of 161 multi-family (low-rise) residential dwelling units. In order to develop the traffic characteristics of the proposed Project, trip-generation statistics published in the Institute of Transportation Engineers (ITE) Trip Generation Manual (11th Edition, 2021) were used for the Project. Table 2 summarizes the trip generation rates for Multifamily (Low-Rise) Residential (ITE Code 220).

The trip generation summary illustrating daily, and peak hour trip generation estimates for the proposed Project are also summarized in Table 2. The proposed Project is anticipated to generate 944 vehicle trip-ends per day with 108 AM peak hour trips and 125 PM peak hour trips.

TABLE 2: PROPOSED PROJECT TRIP GENERATION SUMMARY

Land Use[1]	Units[2]	ITE LU Code	AM Peak Hour In	AM Peak Hour Out	AM Peak Hour Total	PM Peak Hour In	PM Peak Hour Out	PM Peak Hour Total	Daily
Multifamily (Low-Rise) Residential	DU	220	0.17	0.50	0.67	0.45	0.33	0.78	5.86

[1] Trip Generation Source: Institute of Transportation Engineers (ITE), Trip Generation Manual, 11th Edition (2021).

[2] DU = dwelling units

Land Use	Quantity	Units[1]	AM Peak Hour In	AM Peak Hour Out	AM Peak Hour Total	PM Peak Hour In	PM Peak Hour Out	PM Peak Hour Total	Daily
PA 11: Esperanza Multi-Family	161	DU	27	81	108	72	53	125	944

[1] DU = dwelling units

TRIP GENERATION COMPARISON

Table 3 shows the trip generation comparison between the approved use (elementary school) and proposed Project (multi-family residential) and identifies the resulting net change in trips. As shown, the Project is anticipated to generate a net reduction of 5 two-way trips per day with a reduction of 201 AM peak hour trips and 81 fewer PM peak hour trips as compared to the approved elementary school use.

TABLE 3: TRIP GENERATION COMPARISON

Project	AM Peak Hour In	AM Peak Hour Out	AM Peak Hour Total	PM Peak Hour In	PM Peak Hour Out	PM Peak Hour Total	Daily
Esperanza SP: Elementary School	169	140	309	96	110	206	949
Proposed Project: Multifamily Residential	27	81	108	72	53	125	944
Net Change in Trips	**-142**	**-59**	**-201**	**-24**	**-57**	**-81**	**-5**

FINDINGS

The City of Ontario adheres to the County Guidelines, which have been used to determine whether additional traffic analysis is necessary for the proposed Project. The County Guidelines indicate that development projects that generate a net increase of 100 or more peak hour vehicle trips (without pass-by reductions) would require the preparation and submittal of a Transportation Impact Analysis.

The Project is anticipated to generate fewer than 100 net new peak hour trips during the morning and evening peak hours (Project results in a net reduction from the currently approved land use). The Project would therefore contribute fewer than 50 net new peak hour trips to any off-site intersection. As such, additional peak hour traffic operations analysis is not necessary based on the County Guidelines.

If you have any questions or comments, I can be reached at cso@urbanxroads.com.

ATTACHMENT A: ESPERANZA SPECIFIC PLAN
TRIP GENERATION EXCERPTS

SECTION 4 - PROJECTED TRAFFIC

SITE TRAFFIC

Trip Generation

Trip generation represents the amount of traffic traveling to and from the proposed project. The traffic generation figures determined for the project are based upon the development of 765 single family residential dwelling units, 645 multi-family residential dwelling units, and a 736 student elementary school as currently proposed. Trip generation rates are based upon a publication entitled "Trip Generation" by the Institute of Transportation Engineers (ITE), seventh edition.

Table 4-1 shows the peak hour trip generation rates for the proposed project. The peak hour rates are based on the average peak hour generation rate multiplied by the directional distribution provided in ITE's trip generation publication referenced above.

Table 4-1 – Trip Generation Rates

Land Use	Unit of Measurement	AM Peak Hour			PM Peak Hour			Daily
		Total	In	Out	Total	In	Out	
Single Family Detached Land Use Category: 210	DU	0.75	0.19	0.56	1.01	0.64	0.37	9.57
Residential Condominium/Townhouse Land Use Category: 230	DU	0.44	0.07	0.37	0.52	0.35	0.17	5.86
Elementary School Land Use Category: 520	Students	0.42	0.23	0.19	0.28	0.13	0.15	1.29

Trip generation from *Trip Generation Manual, 7th Edition* by the Institute of Transportation Engineers (ITE), 2003.
DU – Dwelling Units, TSF – Thousand Square Feet

Table 4-2 shows the daily and peak hour trip generation for the proposed project. The project is estimated to generate approximately 12,050 daily trip-ends, including 1,166 trip-ends during the AM Peak hour and 1,315 trip-ends during the PM Peak hour.

Table 4-2 – Project Trip Generation

Land Use	Unit	Qty	AM Peak Hour			PM Peak Hour			Daily
			Total	In	Out	Total	In	Out	
Single Family Detached	DU	765	573	145	428	773	490	283	7,321
Residential Condominium/Townhouse	DU	645	284	45	239	336	226	110	3,780
Elementary School	Students	736	309	169	140	206	96	110	949
TOTAL			**1,166**	**359**	**807**	**1,315**	**812**	**503**	**12,050**

DU – Dwelling Units
TSF – Thousand Square Feet

The current City of Ontario General Plan circulation element is shown on Figure 4-1.

Trip Distribution

Trip distribution represents the directional orientation of traffic to and from the project site. Trip distribution is influenced by the geographical location of the site, type of land use in the study area, such as shopping centers and recreational sites, and proximity to the regional freeway system. The directional distribution of traffic for the proposed project was determined based upon the 2015 New Model Colony Traffic Forecast (Figure 4-2).

Modal Split

The traffic reducing potential of public transit has not been considered in this study. Therefore, the traffic projections provided in this report are considered conservative since public transit could reduce traffic volumes in the project area.

Trip Assignment

Trip assignment is the result of using the previously discussed trip generation numbers and trip distribution percentages. Figure 4-3 shows the project related traffic volumes, which are based upon the identified project traffic generation and distribution. AM and PM peak hour intersection turning movement volumes for the proposed project are shown on Figures 4-4 and 4-5, respectively.

MEMORANDUM

URBAN | CROSSROADS

DATE: May 29, 2024
TO: Dave Waters, Genstar Development Company/GDCI-13
FROM: Alex So, Urban Crossroads, Inc.
JOB NO: 15662-03 VMT

PA-11 OF THE ESPERANZA SPECIFIC PLAN VEHICLE MILES TRAVELED (VMT) ANALYSIS

Urban Crossroads, Inc. is pleased to provide the following Vehicle Miles Traveled (VMT) Analysis for PA-11 of The Esperanza Specific Plan (**Project**), located on the northeast corner of Amherst Avenue and Eucalyptus Avenue in the City of Ontario.

PROJECT OVERVIEW

It is our understanding that the Project proposes a General Plan Amendment to change the land use from Public School to Medium Density Residential (MDR 11.1-24 du/ac) and an amendment to the Esperanza Specific Plan to change the land use designation for Planning Area 11 from Public School to Residential Development 9 (RD-9). More specifically the proposes 161 multi-family (townhome) residential dwelling units with a density of approximately 16.1 dwelling units to the net acre that would replace a 736-student elementary school. A preliminary site plan can be found in Attachment A.

BACKGROUND

The California Environmental Quality Act (CEQA) mandates that all lead agencies use VMT as the measure for identifying transportation impacts in land use projects. In June 2020, the City of Ontario developed and adopted its VMT methodologies and thresholds (Resolution No. 2020-071) (**City Guidelines**) (1). This VMT analysis is based on the adopted City Guidelines.

VMT ANALYSIS

TRAFFIC MODELING METHODOLOGY

Consistent with City Guidelines, a project-level VMT analysis shall be conducted using the San Bernardino Traffic Analysis Model (SBTAM) as the appropriate tool for conducting VMT analysis for land use projects within the City of Ontario. SBTAM is a useful tool to estimate VMT as it considers interaction between different land uses based on socio-economic data such as population, households, and employment.

As part of The Ontario Plan (TOP) 2050 implementation, the City of Ontario recently adopted an updated version of SBTAM, also referred to as the TOP model. This updated version includes the latest roadway network and socio-economic data specific to the City of Ontario, in alignment with the City's recently-adopted TOP. The model encompasses a base year of 2019 and a General Plan Buildout projection for 2050.

VMT ANALYSIS METHODOLOGY

As stated within the City's Guidelines, the analysis should include 'project-generated VMT' and 'project effect on VMT' estimates for the project transportation/traffic analysis zone (TAZ) for baseline and cumulative conditions. For the purposes of this analysis, Project VMT estimates have been prepared using the Origin/Destination (OD) method to estimate project-generated VMT and Boundary method to estimate project effect on VMT. VMT has been presented as total VMT and total VMT per service population (i.e., population and employees).

ORIGIN/DESTINATION (OD) VMT

The OD method for calculating VMT sums all weekday VMT generated by trips with at least one trip-end in the study area (i.e., Project boundary or City boundary) and tracks those trips to their origin or destination. Origins are all vehicle trips that start in a specific TAZ, while destinations are all vehicle trips that end in a specific TAZ. The OD method accounts for all trips (i.e., both passenger cars and trucks) and trip purposes (i.e., total VMT).

BOUNDARY VMT METHOD

The boundary method is the sum of all weekday VMT on the roadway network within a designated boundary (i.e., City boundary or other designated geographic area). The boundary method estimates VMT by multiplying vehicle trips on each roadway segment within the boundary by that segment's length. This approach consists of all trips, including those trips that do not begin or end in the designated boundary. Consistent with City VMT Guidelines, the City of Ontario was used as the boundary for this assessment. In addition, as the Project is located near the southeastern edge of the City, an additional assessment of a ten-mile boundary area surrounding the Project site has also been conducted to ensure trips associated with the Project are not omitted.

VMT METRIC AND SIGNIFICANCE THRESHOLD

The City of Ontario has adopted the following thresholds of significance related to VMT for land use projects:

The SBTAM model should be used to forecast total daily VMT per Service Population (SP) and is the required method for estimating VMT.

- A significant impact would occur if the project VMT per SP exceeds the Citywide average VMT per SP under General Plan Buildout Conditions.
- A significant impact would occur if the project caused total daily VMT per SP within the City to be higher than the no project scenario under cumulative conditions.

The City of Ontario's average VMT per SP under General Plan Buildout conditions has been calculated using the TOP General Plan Buildout (2050) model. Table 1 presents the Citywide average VMT per SP for General Plan Buildout (2050) conditions.

TABLE 1: CITYWIDE VMT PER SERVICE POPULATION

Ontario	TOP 2050
Service Population	707,369
VMT	19,506,377
VMT per SP	27.6

As shown in Table 1, the City of Ontario's VMT per SP for General Plan Buildout (2050) conditions has been calculated as **27.6 VMT per SP**.

VMT ESTIMATES

To estimate project-generated VMT, standard land use information such as the number of residential dwelling units must first be converted into a SBTAM compatible dataset. The SBTAM model utilizes socio-economic data (SED) (e.g., population, households, and employment) for the purposes of vehicle trip estimation. Table 2 summarizes the SED inputs used to represent the Project. Project SED data was then coded into the Project's TAZ to obtain project-generated VMT.

TABLE 2: POPULATION ESTIMATES

Land Use	Quantity	Conversion Factor[1]	Estimated Population
Residential	161 Dwelling Units	3.5 people per household	564

PROJECT-GENERATED VMT

Project-level VMT estimates were extracted from SBTAM using the OD trip matrices, which includes project-generated VMT for all vehicle trips (both passenger cars and trucks) and trip purposes. Project-generated VMT estimates for the Project are presented in Table 3.

TABLE 3: PROJECT-GENERATED VMT SUMMARY

	Baseline	General Plan Buildout Year (2050)
SP[1]	564	564
OD VMT	12,582	13,364
OD VMT per SP	22.3	23.7
City Threshold	27.6	27.6
Potentially Significant?	No	No

[1] SP = Service Population which refers to the Project's population estimate.

As shown in Table 3, project-generated VMT is forecast to be below the City's adopted threshold.

[1] Factors obtained consistent with land use assumptions within the TOP 2050 model.

PROJECT EFFECT ON VMT

The Project's effect on VMT has been calculated using the boundary method. Land use information representing the proposed land use changes contemplated by the Project were coded into the Project TAZ to represent the "With Project" condition. Table 4 summarizes the boundary VMT under the No Project and With Project scenarios for both baseline and cumulative conditions using the City boundary and a 10-mile radius from the Project site.

TABLE 4: GENERAL PLAN BUILDOUT (2050) BOUNDARY VMT RESULTS

	City Boundary		10-Mile Boundary	
Scenario	No Project	With Project	No Project	With Project
Service Population	706,494	707,058	2,579,062	2,579,626
Boundary VMT	9,602,250	9,598,040	41,605,554	41,614,834
VMT per SP	13.6	13.6	16.1	16.1
Change in VMT	0.0		0.0	
Potentially Significant?	No		No	

The boundary VMT is found to increase under the With Project scenario for both the baseline and cumulative conditions, as expected when increases in development are added to the model. However, to measure the efficiency of a land use project or land use plan, the boundary VMT is divided by the service population to frame an efficiency metric. The resulting VMT per service population was found to remain unchanged in the With Project scenario. The Project does not result in an increase total daily VMT per SP as compared to the No Project scenario.

ACTIVE TRANSPORTATION AND PUBLIC TRANSIT REVIEW

Potential impacts to:

- Circulation system
- Public transit
- Pedestrian facilities and travel
- Bicycle facilities

Were analyzed to determine if the proposed Project conflicts with adopted policies, plans, programs, and if the Project has the potential to decrease the performance or safety of such facilities.

CIRCULATION SYSTEM

Traffic is anticipated to be distributed through the City of Ontario, extending into the neighboring jurisdiction of the City of Eastvale. In general, the study area has a moderate level of active transportation facilities and transit service. Bicycle and pedestrian facilities are proposed as part of the City of Ontario and City of Eastvale General Plans on most roadways throughout the study area.

CITY OF ONTARIO GENERAL PLAN CIRCULATION ELEMENT EVALUATION

The Project site is located within the City of Ontario. Exhibit 1 shows The Ontario Plan 2050 mobility element. (2)

Principal Arterials serve the major centers and corridor of activity, carry the highest volumes of traffic, and serve the longest trips of all city roadways. The study area roadways that are classified as 8-lane Principal Arterials are identified as having four lanes of travel in each direction. The following study area roadway within the City of Ontario is classified as an 8-lane Principal Arterial:

- Ontario Ranch Road

The study area roadways that are classified as 6-lane Principal Arterials are identified as having three lanes of travel in each direction. The following study area roadway within the City of Ontario is classified as a 6-lane Principal Arterial:

- Hamner Avenue

The study area roadways that are classified as 4-lane Principal Arterials are identified as having two lanes of travel in each direction. The following study area roadway within the City of Ontario is classified as a 4-lane Principal Arterial:

- Haven Avenue

Minor Arterials accommodate less traffic than Principal Arterials and are for trips of moderate length. Minor Arterials allow more access to abutting properties and connect the community. The study area roadway that is classified as a 4-lane Minor Arterial is identified as having two lanes of travel in each direction. The following study area roadway within the City of Ontario is classified as a 6-lane Minor Arterial:

- Bellegrave Avenue

Collector streets provide access to abutting properties and traffic circulation within residential neighborhoods and business areas. Collector streets allow access to local and arterial roadways. The study area roadways that are classified as 4-lane Collector Streets are identified as having two lanes of travel in each direction. The following study area roadways within the City of Ontario are classified as 4-lane Collector Streets:

- Mill Creek Avenue
- Eucalyptus Avenue
- Merrill Avenue

CITY OF EASTVALE GENERAL PLAN CIRCULATION ELEMENT

Exhibit 2 shows the City of Eastvale General Plan Circulation Element. (3)

BICYCLE FACILITIES

There are four bicycle facility classifications recognized by the City of Ontario. The four bicycle facility classifications are as follows:

Class I Bikeways (Bike Paths)

Class I bikeways are dedicated for exclusive use by bicyclists along rivers, channels, and utility right-of-way.

Class II Bikeways (Bike Lanes)

Class II bikeways are dedicated lanes along streets, with no parking allowed in the bike lane.

Class III Bikeways (Bike Routes)

Class III bikeways are bike routes normally shared with motor vehicles on the street or with pedestrians on sidewalks, and parking is allowed.

Class IV Bikeways (Separated Bikeways)

Class IV bikeways are dedicated for exclusive use of bicycles and are physically separated from motor traffic with a vertical feature.

Many of the City of Ontario's bicycle paths are combined with sidewalks along each side of major streets.

The City of Ontario and City of Eastvale bike networks are shown on Exhibits 3 and 4, respectively. Adjacent to the Project site, there is a Class II bike lane along Eucalyptus Avenue. A Class I bike path is proposed along Hamner Avenue, east of the Project site. Many bicycle facilities are either existing or proposed within the study area on most major streets. As the study area builds out consistent with the City's proposed trail and bicycle facilities, the Project will be part of a well-connected bicycle network.

PEDESTRIAN FACILITIES

Pedestrian facilities include sidewalks, crosswalks, pedestrian signals, and multi-use trails. Exhibit 5 illustrates the existing crosswalks throughout the study area. As shown in Exhibit 5, pedestrian facilities are built out along portions of Eucalyptus Avenue, Hamner Avenue, and many other study area roadways. Under the assumption that pedestrian facilities will continue to be constructed as the study area develops, the Project will be part of a safe and efficient pedestrian network. The Project is to develop the sidewalks along the roadways adjacent to the Project.

PUBLIC TRANSIT REVIEW

There are bus and regional transit service options available to the City of Ontario. Limited routes and transit options are available near the Project site. It is anticipated that new routes will be proposed to support the future development, but those routes have not been identified at this time. Existing transit services and routes in the study area are shown on Exhibit 6.

Omnitrans

The study area is currently served by Omnitrans, a public transit agency serving various jurisdictions within San Bernardino County. Omnitrans provides countywide bus service and currently has five bus routes in the City of Ontario that provide connections between rail stations, Ontario International Airport (ONT), major employment and shopping centers, and residential areas. Exhibit 6 shows the existing transit facilities, which indicates that Omnitrans Route 87 could serve the Project site. Route 87 runs along portions of Hamner Avenue and Ontario Ranch Road. The nearest bus stop is at the intersection of Hamner Avenue and Eucalyptus Avenue, approximately 1,000 feet east of the Project site. Transit service is reviewed and updated by Omnitrans periodically to address ridership, budget, and community demand needs. Changes in land use can affect these periodic adjustments which may lead to either enhanced or reduced service where appropriate. As such, it is recommended that the Applicant work in conjunction with Omnitrans to potentially provide bus service to the site.

Metrolink

Commuter train service in the City of Ontario is provided by Metrolink, which provides service throughout the Southern California region. The nearest Metrolink station is the East Ontario Metrolink station, located approximately 4 miles north of the Project site. The Riverside Line links Riverside to Union Station in downtown Los Angeles and various other destinations. This line runs weekdays during peak commute hours only.

TRANSPORTATION IMPACT ANALYSIS

This assessment addresses the following Transportation thresholds stated in *CEQA Guidelines* Appendix G:

T-1 Potential to conflict with a program, plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities.

T-2 Potential to conflict or be inconsistent with *CEQA Guidelines* Section 15064.3(b) regarding policies to reduce vehicle miles traveled (VMT).

T-3 Potential to substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment).

T-4 Potential to result in inadequate emergency access.

T-1 ASSESSMENT

The analysis presented here considers the degree to which the Project may hinder the safe and comfortable access to the Project site from other locations, with a special focus on people relying on transit services or active transportation modes such as biking or walking.

Applicable programs, plans, and policies addressing the circulation system are established under TOP 2050. Project consistency with applicable provisions of TOP 2050 is summarized at Table 5. As provided for under CEQA, the analysis presented here considers program, plan, and policy inconsistencies that could result in potentially significant environmental impacts. As a matter of law, the Project would be required to comply with City ordinances addressing the study area circulation system.

TABLE 5: TOP 2050 CONSISTENCY ANALYSIS

MOBILITY ELEMENT		
M-1 Roadway System		
Goal M1 A system of roadways that meets the mobility needs of a dynamic and prosperous Ontario.		
Policies		**Remarks**
M-1.1	**Roadway Design and Maintenance.** We require our roadways to: • Comply with federal, state and local design and safety standards. • Meet the needs of multiple transportation modes and users. • Handle the capacity envisioned in City of Ontario Master Plan of Streets and Highways. • Be maintained in accordance with best practices. • Be compatible with the streetscape and surrounding land uses.	**Consistent.** Project roadway designs and all proposed improvements would conform with the City's Master Plan of Streets and Highways, City design standards and applicable federal/state design and safety standards. City design review processes would ensure compliance with all applicable standards. Streetscape design concepts implemented pursuant to the Specific Plan establish compatible continuation of existing perimeter streetscapes. All public roadways would be maintained in accordance with City requirements to include implementation of City Best Management Practices and City Right-of-Way Management Plan.

TABLE 5: TOP 2050 CONSISTENCY ANALYSIS

MOBILITY ELEMENT		
	• Promote the efficient flow of all modes of traffic through the implementation of intelligent transportation systems and travel demand strategies.	On this basis, the Project is considered consistent with Policy M-1.1.
M-1.2	**Mitigation of Impacts.** We require development to mitigate its traffic impacts.	**Consistent.** The Project would not result in potentially significant VMT impacts. Level of Service (LOS) deficiencies are no longer CEQA considerations. Recommended improvements addressing any potential LOS deficiencies would be implemented consistent with City Conditions of Approval. On this basis, the Project is considered consistent with Policy M-1.2.
M-1.3	**Agency Coordination on Roadway Improvements.** We work with Caltrans, SBCTA and others to identify, fund and implement needed improvements to roadways when necessary. We work with neighboring jurisdictions to promote regional connectivity, access, and meet operational level of service standards at the City limits.	**Consistent.** Please refer to remarks at Policies M-1.1, M-1.2.
M-1.4	**Complete Streets.** We work to provide a complete, balanced, context-aware, multimodal transportation network that meets the needs of all users of streets, roads, and highways, including motorists, pedestrians, bicyclists, children, persons with disabilities, seniors, movers of commercial goods, and users of public transportation. We prioritize implementation of complete streets improvements in environmental justice areas to facilitate opportunities for residents to use active transportation systems.	**Consistent.** The Project would construct all circulation system improvements consistent with applicable provisions of the Specific Plan, TOP 2050 Mobility Element, and as required under City Conditions of Approval. On this basis, the Project is considered consistent with Policy M-1.4.
M-1.5	**Level of Service.** Maintain a peak hour Level of Service (LOS) E or better at all intersections. Maintain Level of Service D or better on arterial streets in the City. Develop and maintain a list of locations where LOS E or LOS F are considered acceptable and would be exempt from this level of service policy. Considerations for LOS exemption include being restricted by environmental constraints, lacking available right-of-way, deterring an	**Consistent.** The City recognizes that vehicle delay (Level of Service, LOS) deficiencies are no longer environmental impacts under CEQA. Recommended improvements addressing any LOS deficiencies would be implemented per City Conditions of Approval. On this basis, the Project is considered consistent with Policy M-1.5.

TABLE 5: TOP 2050 CONSISTENCY ANALYSIS

MOBILITY ELEMENT		
	increase in VMT, or degrading other modes of travel (such as bicycle or pedestrian infrastructure).	
M-1.6	**Reduce Vehicle Miles Traveled.** We will strive to reduce VMT through a combination of land use, transportation projects, travel demand management strategies, and other trip reduction measures in coordination with development projects and public capital improvement projects.	**Consistent.** While roadway improvements associated with the Project may facilitate vehicular travel within the City and surrounding areas, total VMT and environmental impacts of such travel would not result in any potentially significant VMT and VMT-related impacts. On this basis, the Project is considered consistent with Policy M-1.6.
M-2 Active Transportation		
Goal M-2 A system of trails and corridors that facilitate and encourage active modes of transportation.		
Policies		**Remarks**
M-2.1	**Active Transportation.** We maintain our Active Transportation Master Plan to create a comprehensive system of on- and off-street bikeways and pedestrian facilities that are safe, comfortable, and accessible and connect residential areas, businesses, schools, parks, and other key destination points.	**Consistent.** Bikeways and pedestrian facilities would be implemented consistent with provisions of the Specific Plan and as required under City Conditions of Approval. The Project does not propose or require facilities or operations that would conflict with the City's Active Transportation Master Plan. On this basis, the Project is considered consistent with Policy M-2.1.
M-2.2	**Bicycle System.** We provide off-street multipurpose trails and Class II bikeways as our preferred paths of travel and use the Class III for connectivity in constrained circumstances. When truck routes and bicycle facilities share a right-of-way, we prefer Class I or Class IV bicycle facilities. We require new development to include bicycle facilities, such as bicycle parking and secure storage areas.	**Consistent.** Bikeways and bicycle amenities would be implemented consistent with provisions of the Specific Plan and as required under City Conditions of Approval. On this basis, the Project is considered consistent with Policy M-2.2.
M-2.3	**Pedestrian Walkways.** We require streets to include sidewalks and visible crosswalks at major intersections where necessary to promote safe and comfortable mobility between residential areas, businesses, schools, parks, recreation areas, and other key destination points.	**Consistent.** Pedestrian paths would be provided within the Project site and along the Project perimeter consistent with City standards, provisions of the Specific Plan, and as required under City Conditions of Approval. On this basis, the Project is considered consistent with Policy M-2.3.

TABLE 5: TOP 2050 CONSISTENCY ANALYSIS

MOBILITY ELEMENT		
M.2-4	**Network Opportunities.** We use public rights-of-way and easements such as, utility easements, levees, drainage corridors, road rights-of-way, medians, and other potential options to maintain and expand our bicycle and pedestrian network. In urban, mixed-use, and transit-oriented Place Types, we encourage the use of underutilized public and private spaces to expand our public realm and improve pedestrian and bicycle connectivity.	**Consistent.** Bikeways and pedestrian facilities would be implemented consistent with provisions of the Specific Plan and as required under City Conditions of Approval. On this basis, the Project is considered consistent with Policy M-2.4.
M-3 Public Transit		
Goal M-3 A public transit system that is a viable alternative to automobile travel and meets basic transportation needs of the transit-dependent.		
Policies		**Remarks**
M-3.1	**Transit Partners.** We maintain a proactive working partnership with transit providers to ensure that adequate public transit service is available, cost-efficient, and convenient, particularly for residents in environmental justice areas.	**Consistent.** The Project would not interfere with or otherwise obstruct the City's cooperative partnership with transit providers. On this basis, the Project is considered consistent with Policy M-3.1.
M-3.2	**Alternative Transit Facilities at New Development.** We require new development adjacent to an existing or planned transit stop to contribute to the creation of transit facilities, such as bus shelters, transit bays and turnouts, and bicycle facilities, such as secure storage areas.	**Consistent.** The Project would support and would not conflict with City efforts to contribute to the creation of transit facilities. To these ends, the Applicant would coordinate Project development with the City and transit agencies to implement transit service and supporting amenities. On this basis, the Project is considered consistent with Policy M-3.2.
M-3.3	**Transit-Oriented Development.** We may provide additional development-related incentives to those inherent in the Land Use Plan for projects that promote transit use and reduce vehicle miles traveled.	**Consistent.** The Project would not interfere with or otherwise obstruct the City's incentive programs and policies. On this basis, the Project is considered consistent with Policy M-3.3.
M-3.4	**Bus Rapid Transit (BRT) Corridors.** We work with regional transit agencies to implement BRT service and reduce vehicle miles traveled by targeting destinations and corridors with the highest number of potential riders.	**Consistent.** The Project would not interfere with or otherwise obstruct the City's cooperative efforts with regional transit agencies. On this basis, the Project is considered consistent with Policy M-3.4.

TABLE 5: TOP 2050 CONSISTENCY ANALYSIS

MOBILITY ELEMENT		
M-3.5	**Light Rail.** We support extension of the Metro Rail Gold Line to Ontario, and will work to secure station locations at the proposed multimodal transit center.	**Consistent.** The Specific Plan area is not located near the potential Metro Rail Gold Line extension to the City; nor the proposed multimodal transit center. The Project would not impact, nor be impacted by, rail operations. On this basis, the Project is considered consistent with Policy M-3.5.
M-3.6	**Metrolink Expansion.** We advocate expansion of Metrolink service to include the Downtown and the multimodal transit center.	**Consistent.** The Project site is not located near the Metrolink rail line; nor the proposed multimodal transit center. The Project would not impact, nor be impacted by, Metrolink expansion. On this basis, the Project is considered consistent with Policy M-3.6.
M-3.7	**High Speed Rail.** We encourage the development of high-speed rail systems that would enhance regional mobility in Southern California and serve the City of Ontario.	**Consistent.** No railways exist within or near the Specific Plan area. The Project would not interfere with or otherwise obstruct the development of high-speed rail systems. On this basis, the Project is considered consistent with Policy M-3.7.
M-3.8	**Feeder Systems.** We work with regional transit agencies to secure convenient feeder service from the Metrolink station and the proposed multimodal transit center to employment centers in Ontario.	**Consistent.** The Project site is located in an area already served by public transit. The Project would implement feeder transit facilities as required by the City through its coordination with transit agencies serving the area. On this basis, the Project is considered consistent with Policy M-3.8.
M-3.9	**Ontario Airport Metro Center Circulator.** We will explore development of a convenient mobility system, including but not limited to shuttle service, people mover, and shared car system, for the Ontario Airport Metro Center.	**Consistent.** The Specific Plan area is not located in or near the Ontario Airport Metro Center. The Project would not interfere with or otherwise obstruct the City's development of a mobility system in this area. On this basis, the Project is considered consistent with Policy M-3.9.
M-3.10	**Multimodal Transportation Center.** We intend to ensure the development of a multimodal transportation center near ONT airport to serve as a transit hub with amenities for transit riders, pedestrians, and bicyclists transitioning to local buses, BRT, the Gold Line, high-speed rail, the proposed Ontario Airport Metro Center Circulator, and other future transit modes. We support locations for the multimodal	**Consistent.** The Specific Plan area is not located in/near the area intended for development of the Multimodal Transportation Center. The Project would not interfere with or otherwise obstruct the implementation of this transit hub. On this basis, the Project is considered consistent with Policy M-3.10.

TABLE 5: TOP 2050 CONSISTENCY ANALYSIS

MOBILITY ELEMENT		
	transportation center that are north of ONT airport, between Vineyard Avenue and Interstate 15.	
M-3.11	**Transit and Community Facilities.** We require the future development of community-wide serving facilities to be sited in transit-ready areas that can be served and made accessible by public transit. Conversely, we plan (and coordinate with other transit agencies to plan) future transit routes to serve existing community facilities.	**Consistent.** The Project site is located in an area already served by public transit. The Applicant would also coordinate with the City and transit agencies to implement transit service and thereby reduce vehicle miles traveled. On this basis, the Project is considered consistent with Policy M-3.11.
M-4 Goods Movement		
Goal M-4 An efficient flow of goods through the City that maximizes economic benefits and minimizes negative impacts.		
Policies		**Remarks**
M-4.1	**Truck Routes.** We designate and maintain a network of City truck routes that provide for the safe and efficient transport of goods while minimizing negative impacts on local circulation and noise-sensitive land uses, as shown on Exhibit M-04, Truck Routes. We will minimize conflicts on truck routes through the design and implementation of buffers between travel lanes and pedestrian and bicycle facilities on designated truck routes.	**Consistent.** The Project does not propose uses or activities that would generate substantial truck traffic. Any trucks accessing the Specific Plan area would utilize the City's designated truck routes, thereby minimizing negative impacts on local circulation and noise-sensitive land uses. On this basis, the Project is considered consistent with Policy M-4.1.
M-4.2	**Regional Participation.** We work with regional and subregional transportation agencies and adjacent cities to plan and implement goods movement strategies, including regional truck routes, plans and projects that improve mobility, support the efficient movement of goods, and minimize negative environmental impacts.	**Consistent.** The Project land uses take advantage of proximate available improved transportation systems acting generally to facilitate mobility, goods movement, and goods delivery on a local, sub-regional and regional basis. The Project would not interfere with or otherwise obstruct City efforts and actions to coordinate regional and sub-regional plans and strategies facilitating mobility, goods movement, and goods delivery. On this basis, the Project is considered consistent with Policy M-4.2.
M-4.3	**Railroad Grade Separations.** We eliminate at-grade rail crossings identified on Exhibit M-01, Roadway Classifications.	**Consistent.** No at-grade rail crossings are located within or adjacent to the Project site. The Project would not interfere with or otherwise obstruct the City's elimination actions in this regard.

TABLE 5: TOP 2050 CONSISTENCY ANALYSIS

MOBILITY ELEMENT		
		On this basis, the Project is considered consistent with Policy M-4.3.
M-4.4	**Environmental Considerations.** We support both local and regional efforts to reduce/eliminate the negative environmental impacts of goods movement through the planning and implementation of truck routing and the development of a plan to evaluate the future needs of clean fueling/recharging and electrified truck parking.	**Consistent.** The Specific Plan Design Guidelines and Development Regulations act globally to minimize potential environmental impacts of goods movement associated with the Project. Please refer also to remarks at Policies M-4.1, M-4.2.
M-4.5	**Air Cargo.** We support and promote a ONT airport that accommodates 1.6 million tons of cargo per year, as long as the impacts associated with that level of operations are planned for and mitigated.	**Consistent.** The Specific Plan area is not located within an identified Safety Zone of the ONT airport. The Project would not impact, nor be impacted by, ONT airport cargo operations. On this basis, the Project is considered consistent with Policy M-4.5.
M-5 Regional Transportation		
Goal M-5 A proactive leadership role in helping identify and facilitate implementation of strategies that address regional transportation challenges.		
Policies		**Remarks**
M-5.1	**Regional Leadership.** We maintain a leadership role to help identify and implement potential solutions to long-term regional transportation problems.	**Consistent.** The Project would not interfere with or otherwise obstruct the City's leadership efforts and actions. On this basis, the Project is considered consistent with Policy M-5.1.
M-5.2	**Land Use Compatibility with Regional Transportation Facilities.** We work with ONT, railroads, Caltrans, SBCTA, and other transportation agencies to minimize impacts.	**Consistent.** The Project would not interfere with or otherwise obstruct the City's cooperative efforts with regional transportation agencies. On this basis, the Project is considered consistent with Policy M-5.2.

Sources: Goal and Policy statements from TOP 2050; remarks by Urban Crossroads.

Prior to the issuance of Building Permits, the City would review the final Project designs to ensure consistency with City programs, plans, and policies as outlined above. Consistency with applicable City ordinance requirements is required as a matter of law.

Level of Significance: Less-Than-Significant. As summarized at Table 5, the Project does not propose or require uses or facilities that would conflict with applicable programs, plans, and

policies addressing the circulation system. Project impacts in these regards would therefore be **less-than-significant**.

T-2 ASSESSMENT

The Project is consistent with *CEQA Guidelines* section 15064.3, subdivision (b) regarding policies to reduce VMT. The City of Ontario has adopted the following thresholds of significance related to VMT for land use plans:

The SBTAM model should be used to forecast total daily VMT per Service Population (SP) is the required method for estimating VMT.

- A significant impact would occur if the project VMT per SP exceeds the Citywide average VMT per SP under General Plan Buildout Conditions.
- A significant impact would occur if the project caused total daily VMT per SP within the City to be higher than the no project scenario under cumulative conditions.

Based on the VMT analysis previously presented in this technical memorandum, Project-generated VMT per service population was found to be less than the City of Ontario VMT per service population under General Plan Buildout Conditions. Additionally, total daily VMT per service population within the City is forecast to remain unchanged under "With Project" for cumulative conditions. The Project therefore results in a **less-than-significant** VMT impact.

T-3 ASSESSMENT

Efficient and safe operations of the Project would be provided by on-site and localized circulation and intersection improvements to be developed as the Project individual site and building designs are finalized. The City would ensure that all on-site and localized circulation and intersection improvements would be designed and constructed consistent with applicable provisions of the Specific Plan and pursuant to City site plan and Building Permit review processes and requirements.

Traffic signing and striping would be implemented in conjunction with detailed Project construction plans. Sight distance at each Project access point would be reviewed with respect to standard Caltrans and City of Ontario sight distance standards at the time of preparation of final grading, landscape and street improvement plans.

The Project would generate passenger car trips typical of the proposed uses. As part of established site and Building Permit review processes, the City would require implementation of designated travel paths, signing, and traffic controls to ensure that traffic conflicts are minimized or avoided. Land uses proximate to the Project site are planned for, or are developed with urban uses similar to those proposed by the Project. These uses would generate urban traffic types similar to traffic generated by the Project and would not generate traffic that would be incompatible with the Project traffic types.

As supported by the preceding discussions, the potential for the Project to substantially increase hazards to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment); is considered **less-than-significant.**

T-4 ASSESSMENT

EMERGENCY ACCESS

Access to the Specific Plan area is provided by improved urban roadways. As part of the City's established design review processes, design and implementation of all Project circulation improvements, as well as final design(s) of the Project site plan(s), to include locations and design of proposed driveways, would be required to be reviewed and approved by the City Traffic Engineer. In addition, as part of the City's established design review processes, representatives of the City's Police and Fire Departments would review the Project's plans in regard to emergency access. Efficient and safe access within, and access to, the Project is provided by the Specific Plan design concepts, site access improvements, and site adjacent roadway improvements included as components of the Project. In combination, these elements act to facilitate emergency access and avoid conditions that would restrict or limit access under emergency conditions.

OTHER CONSIDERATIONS

It is also recognized that temporary and interim traffic detours and traffic disruptions could occur during Project construction. To minimize effects of Project construction on area traffic patterns, it is recommended that the following or similar Construction Area Traffic Management Plan (Plan) be implemented as a Project Condition of Approval. Typical elements and information incorporated in the Plan would include, but not be limited to:

- Name of on-site construction superintendent and contact phone number.
- Identification of Construction Contract Responsibilities - For example, for excavation and grading activities, describe the approximate depth of excavation, and quantity of soil import/export (if any).
- Identification and Description of Truck Routes - to include the number of trucks and their staging location(s) (if any).
- Identification and Description of Material Storage Locations (if any).
- Location and Description of Construction Trailer (if any).
- Identification and Description of Traffic Controls - Traffic controls shall be provided per the Manual of Uniform Traffic Control Devices (MUTCD) if the occupation or closure of any traffic lanes, parking lanes, parkways or any other public right-of-way is required. If the right-of-way occupation requires configurations or controls not identified in the MUTCD, a separate traffic control plan must be submitted to the City for review and approval. All right-of-way encroachments would require permitting through the City.
- Identification and Description of Parking - Estimate the number of workers and identify parking areas for their vehicles.
- Identification and Description of Maintenance Measures - Identify and describe measures taken to ensure that the work site and public right-of-way would be maintained (including dust control).

The Plan would be reviewed and approved by the City prior to the issuance of the first building permit. The Plan and its requirements would also be required to be provided to all contractors as one component of building plan/contract document packages.

Based on the preceding, the potential for the Project to result in inadequate emergency access would be **less-than-significant.**

If you have any questions, please contact me directly at aso@urbanxroads.com.

REFERENCES

1. **City of Ontario.** *SB 743 VMT Thresholds.* City of Ontario : s.n., June 2020.
2. —. *The Ontario Plan 2050.* City of Ontario : PlaceWorks, August 2022.
3. **City of Eastvale.** *Eastvale General Plan 2040.* City of Eastvale : PlaceWorks, March 2024. Volume I.

ATTACHMENT A
PROJECT SITE PLAN

EXHIBIT A-1: PRELIMINARY SITE PLAN

DEXTER WILSON ENGINEERING, INC.

WATER • WASTEWATER • RECYCLED WATER

CONSULTING ENGINEERS

WATER SYSTEM ANALYSIS FOR THE ESPERANZA PA 11 PROJECT IN ONTARIO RANCH IN THE CITY OF ONTARIO

April 17, 2025

2234 FARADAY AVENUE • CARLSBAD, CA • (760) 438-4422

WATER SYSTEM ANALYSIS FOR THE ESPERANZA PA 11 PROJECT IN ONTARIO RANCH IN THE CITY OF ONTARIO

April 17, 2025

4-17-2025

Prepared by:
Dexter Wilson Engineering, Inc.
2234 Faraday Avenue
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Job No. 1551-001

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April 17, 2025 1551-001

Walden & Associates
2552 White Road, Suite B
Irvine, CA 92614

Attention: Marcos Padilla, P.E., President

Subject: Water System Analysis for Esperanza PA 11 Project in the City of Ontario

Introduction

The Esperanza PA 11 project is located in the City of Ontario north of Eucalyptus Avenue between Amherst Avenue and Chatham Street. Access to the project will be from Amherst Avenue and Chatham Street. Water service for Esperanza PA 11 project will be provided by City of Ontario (City).

The proposed project is a mixed-use development consisting of 161 units on approximately 10 acres.

A Vicinity Map for the project is shown on Figure 1.

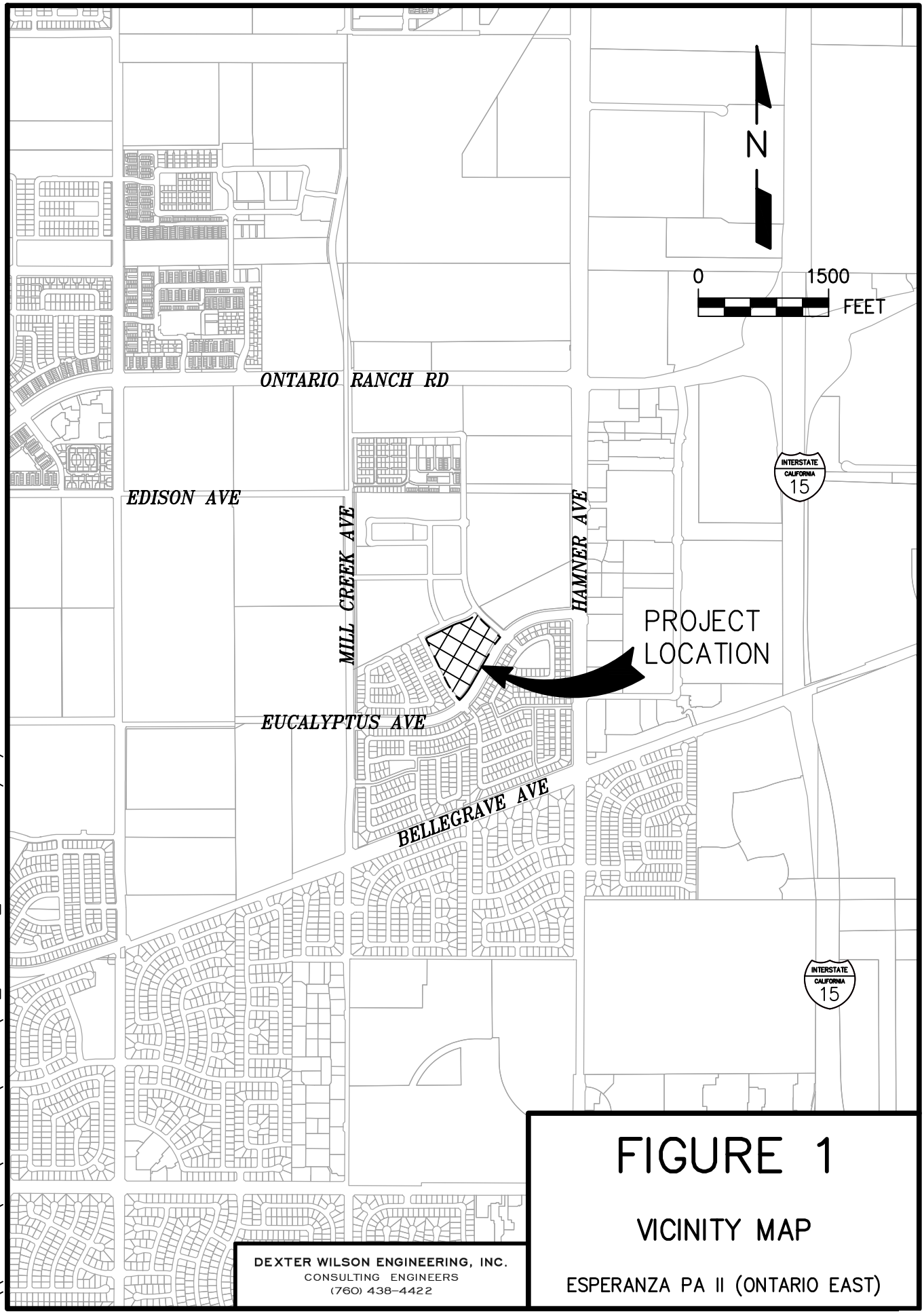

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FIGURE 1

VICINITY MAP

ESPERANZA PA II (ONTARIO EAST)

DEXTER WILSON ENGINEERING, INC.
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Purpose of Study

The purpose of this letter report is to analyze the existing and proposed water system for Esperanza PA 11 project and determine if there are any water system deficiencies created by the proposed development of this property and land use change from school site to residential. This report will address any offsite (public) water system improvements are needed for the development of the project so that the offsite water system will be in conformance with the City water system design standards.

A previous Master Plan of Water was prepared for the entire project in 2015 for the overall developer.

Study Area and Available Water System Pressure

In general, the study area for this water report is Esperanza PA 11 project boundary. The extent of the existing water system which was incorporated into the analysis of the project site was based on the existing water distribution system that serves the project area.

Figure 2 presents the existing and proposed water facilities in the project area.

Water service to the project will be from the 925 Pressure Zone of the City's public water system. Finished floor elevations on the project property range between 705 feet and 711 feet. This results in a maximum static water pressure range of 93 psi to 95 psi on the project site.

Water System Design Criteria

The design criteria used for the evaluation of the proposed water system by Esperanza PA 11 project are based on City design criteria. This water design criteria is presented in the City's most recent Master Plan for the overall project. A copy of the pertinent sections where the design criteria is located is attached as Appendix A.

Water Demand Rates. The water demand rates for the project and surrounding area are presented as Table 1 below.

TABLE 1
ESPERANZA PA 11 WATER DEMAND FACTORS

Land Use	Demand Factor
Residential – Attached Dwellings (11-25 units/acre)	323 gpd/unit

Peaking Factors. The peaking factors utilized in this study are identified in the City's Master Plan. To convert average day demand to maximum day demand a peaking factor of 1.55 was utilized and to convert average day demand to peak hour demand a peaking factor of 1.98 was utilized.

Existing and Proposed Water System

There are existing public water facilities directly adjacent to the project site. There is an existing 24-inch diameter public water line in Eucalyptus Avenue and existing 8-inch public water lines surrounding the project. The project will be connecting its onsite private water systems to two existing water lines in Amherst Avenue and Chatham Street.

Figure 2 presents the existing and proposed water system in the project vicinity.

NOTE: ALL EXISTING AND PROPOSED WATER LINES ARE IN THE 925 PRESSURE ZONE.

N

0 200 FEET

DOMESTIC METER WITH BACKUP BYPASS METER AND BACKFLOW PREVENTER

PROPOSED POINT OF CONNECTION

8" FIRE BACKFLOW PREVENTER

PROPOSED POINT OF CONNECTION

8" FIRE BACKFLOW PREVENTER

LEGEND

- PROJECT BOUNDARY
- EXISTING PUBLIC POTABLE WATER LINE
- PROPOSED PUBLIC POTABLE WATER LINE
- PROPOSED PRIVATE DOMESTIC SYSTEM
- PROPOSED PRIVATE FIRE PROTECTION SYSTEM
- EXISTING PUBLIC FIRE HYDRANT
- PROPOSED PRIVATE FIRE HYDRANT
- PROPOSED BACKFLOW PREVENTER
- PROPOSED WATER METER

CHATHAM ST

S EL REY PRIVADO

S AMHERST AVE

MILL CREEK AVE

EUCALYPTUS AVE

HAMNER AVE

EX.8" EX.12" EX.24"

FIGURE 2

EXISTING AND PROPOSED WATER FACILITIES

ESPERANZA PA 11 (ONTARIO EAST)

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Table 2 provides the summary of projected water demand for the project.

TABLE 2
ESPERANZA PA 11 PROJECTED WATER DEMAND

Description	Quantity	Unit Demand Factor	Total Avg. Demand, gpd
Medium Density Residential	161 units	323 gpd/unit	52,003

Per the City design criteria, the maximum day demand calculates to be 80,605 gpd (56 gpm) and the peak hour demand calculates to be 102,966 (72 gpm).

Private Water System

Per the City's requirement, the onsite water system for Esperanza PA 11 will be private. One connection will be made for the domestic service and two connections will be made for the fire protection service to the project site. Connections will be made at Chatham Street and Amherst Avenue.

Domestic Meter and Service. The preliminary water fixture count (WFU) for the proposed units are estimated to be 30 to 35 WFUs per unit. Based on a WFU count of between 30 and 35 fixture units per home and an extrapolation curve as shown in Appendix B, the design demand for water meter sizing is estimated to be approximately 675 gpm for the project.

Based on the meter capacities established in AWWA C700-20, the project will likely require a 4-inch or 6-inch meter. A bypass meter will be provided in the event that the primary meter is temporarily of service. The final sizing of the service laterals and meters will need to be confirmed once the fixture units and plumbing plans for each home are finalized.

Private Fire Protection Service. The private fire protection system will consist of two DCDA backflow preventers at each connection point and 8-inch diameter water lines throughout the project. The 8-inch diameter private fire protection system will sufficiently convey the projected 1,500 gpm fire flow requirement. This was confirmed by a hydraulic computer model that is presented in the next section of this water study.

Hydraulic Model Development

The KYPIPE computer software program developed by the University of Kentucky was used to analyze the proposed onsite and existing offsite public water system. KYPIPE utilizes the Hazen-Williams equation for determining head loss in pipes. The program also determines the flow and velocity in the pipes as well as the available pressure at nodes in the water system. An assumed roughness coefficient "C" value of 120 was used for all pipes.

Available Hydraulic Grade Line. **F**ire flow test data in the vicinity of the project was performed by the City and is included in Appendix C for reference. Results from the hydrant flow test show a residual pressure of approximately 58 psi at the fire flow requirement for the project at the hydrant flow test location (Eucalyptus Avenue west of the project site).

Fitting and Valve Losses. To simulate minor losses through pipe fittings and valves, minor loss coefficients or "k" values for all fittings associated with pipes were included in the hydraulic model.

Meter and Backflow Assembly Losses. The pressure loss through the proposed meters and backflow preventers was incorporated into the computer model. Appendix B presents candidate DCDA and RP backflow preventers. The manufacturer's literature includes charts which show pressure loss through the backflow preventer as a function of flow. These charts were used to incorporate the pressure losses reflected in the computer modeling.

Hydraulic Model Analysis

Hydraulic modeling of the proposed onsite and existing offsite water system for the Esperanza PA 11 project was performed to confirm the pipe sizes necessary to provide adequate domestic and fire protection service. The water system was analyzed under an onsite 1,500 gpm fire flow scenario.

Appendix C provides the results of the computer model for the analyzed water system. Exhibit A at the back of Appendix C provides the Node and Pipe Diagram of the analyzed water system.

The results of the hydraulic analyses presented in Appendix C show that the proposed water system for the project site is adequate for domestic service and fire protection. For fire protection, the results of the computer runs show that a fire flow of 1,500 gpm can be delivered to the any fire hydrant within the project site with a residual pressure at the hydrant of greater than 20 psi. The minimum residual pressures are 31 psi under a 1,500 gpm fire flow scenario. Domestic demands can be provided with residual pressures of at least 58 psi.

The results of the computer hydraulic analyses for Esperanza PA 11 project indicate that the existing public water system can provide sufficient flow and pressure for the projects' domestic and expected fire protection service needs.

Conclusions and Recommendations

The following conclusions and recommendations are summarized based on the water system analysis prepared for the proposed Esperanza PA 11 project.

1. The project will be supplied from the existing City 925 Zone water system.

2. The project is proposing to make two connections to the existing public water system. These include a connection to an existing 8-inch diameter line in Chatham Street and a connection to an existing 8-inch line in Amherst Avenue.

3. Figure 2 presents the existing and proposed water system surrounding the project.

4. The estimated WFU count and corresponding peak water demand (675 gpm approximate) is provided on page 6 of this report.

5. A maximum day demand plus fire flow of 1,500 gpm can be met at the project site with existing and the proposed piping with all residual pressures greater than 20 psi.

6. **F**ire flow test data in the vicinity of the project was performed by the City and is included in Appendix C for reference

7. This report presents the sizing and a general schematic layout of the proposed onsite water system. The design engineer for the water system should incorporate valves, fittings, and appurtenances in accordance with the design guidelines of the City of Ontario.

8. The recommended material specification for all new potable water lines is AWWA C900 DR18 PVC.

Thank you for the opportunity to assist you with the water system planning for Esperanza PA 11 project. If you have any questions regarding the information and conclusions presented in this report, please do not hesitate to call.

Dexter Wilson Engineering, Inc.

Steven Henderson, P.E.

Attachments

SH:ah

APPENDIX A

DESIGN CRITERIA

EXHIBIT C-2R

WATER DEMAND EQUIVALENTS BY LAND USE

Available Water Supply - See Exhibit C-1R for Net MDD Available

Table A - Water Demand Equivalents By Land Use

The Ontario Plan Land Use	Potable Water			Recycled Water	
	Water Demand Factor (ADD)		Water Demand Equivalents (WDE)[2]	Recycled Water Demand Factor[1] (ADD)	Recycled Water Demand Of Total Water Demand
	(gpd/du)	(gpd/ac)	(gpm/unit)	(gpd/ac)	(%)
Detached Dwellings (less than 5 units per acre)	544		0.57	900	28%
Detached or Attached Dwellings (between 5 and 11 units per acre)	464		0.48	1,000	21%
Attached Dwellings (between 11 and 25 units per acre)	323		0.34	1,500	18%
High Density Dwellings (25+ units per acre)	152		0.16	1,500	27%
Commercial Lodging	150		0.16	1,700	50%
Retail/Services Uses		2,200	2.29	2,300	51%
Office Uses		3,400	3.54	2,300	40%
Business Park Uses		2,200	2.29	2,200	50%
Industrial Uses		2,000	2.08	2,200	52%
Institutional Use		2,200	2.29	1,600	42%
Parks		1,000	1.04	1,400	58%
Schools		3,500	3.65	1,600	31%

[1]Recycled Water Demands include irrigation for right-of-way (medians and parkways), neighborhood edge, pocket parks, and common areas.

[2] The WDE is based on the Maximum Day Demand (MDD) with a peaking factor of 1.5 in the NMC for all land use categories.

Table B - Example Water Supply Calculation

Land Use	Acres[1] (gross)	Residential Units	WDE Factor (gpm)	Potable MDD (gpm)	Recycled Water ADD (gpm)
Development					
Detached Dwellings (less than 5 units per acre)	1,284	5,061	0.57	2,868	803
Detached or Attached Dwellings (between 5 and 11 units per acre)	369	2,530	0.48	1,223	256
Attached Dwellings (between 11 and 25 units per acre)	194	3,410	0.34	1,147	202
Retail/Services Uses (per acre)[2]	104		2.29	239	166
TOTAL	1,950	11,001		5,477	1,428

Three (3) Wells Are required to Support this example, assuming each well produces 2,000 gpm and connection to the Recycled Water System maximizing Recycled Water Use.

[1] Residential Acres are estimated based on the weighted average derived from the average number of units per land use category.

[2] Commercial acreage is calculated from a total square footage of 1,361,000 SF with an average Floor to Area Ratio (FAR) of 0.30 for commercial services in The Ontario Plan.

DRAFT

SECTION 4
WATER USE

4-1 Historic Water Production and Purchase

The City obtains its potable water supply from groundwater wells in Chino Basin and imported water from the Water Facilities Authority (WFA) and the Chino Basin Desalter Authority (CDA). Currently, the City operates seventeen (17) active wells.

The total annual water production and purchase from January 2007 to December 2018 is shown in Table 4-1 and on Figure 4-1. Figure 4-2 illustrates the historic water production and purchase by month. Over the last twelve years, the annual supply has averaged a total of 35,774 AFY (31.9 mgd). The average groundwater production is 23,520 AFY (21.0 mgd). Per the Chino Basin Watermaster 41st Annual Report, the City of Ontario has appropriative rights to 16,337 AFY, and its share of the initial operating safe yield is 11,374 AFY or 21 percent of the appropriative pool rights. The City has secured additional supply through transfers, purchase, and groundwater recharge. The average amount of imported water purchased is 12,253 AFY (10.9 mgd).

There has been a decrease in production over the past twelve years. This may be attributed to the expansion of the City's recycled water system, as well as a conscientious water conservation effort by the customers. Water conservation is discussed further in Section 4-9.

Table 4-1

Historic Water Production and Purchase (Annual)

	Imported Water Purchased						Groundwater Well Production					Total Production and Purchase	
Calendar Year	CDA (AFY)	WFA (AFY)	SAWCO (AFY)	Total (AFY)	Total (mgd)	% of Total	Local (AFY)	DYY Shift (AFY)	Total (AFY)	mgd	% of Total	AFY	mgd
2007	5,125	12,734	0	17,859	15.9	40%	26,946	0	26,946	24.1	60%	44,806	40.0
2008	5,498	8,740	0	14,238	12.7	33%	27,064	2,000	29,064	25.9	67%	43,302	38.7
2009	5,047	3,494	0	8,541	7.6	22%	28,996	2,000	30,996	27.7	78%	39,537	35.3
2010	5,327	7,666	0	12,993	11.6	37%	20,955	1,043	21,997	19.6	63%	34,990	31.2
2011	5,162	8,883	0	14,046	12.5	41%	20,442	0	20,442	18.3	59%	34,488	30.8
2012	4,911	10,415	0	15,326	13.7	43%	20,226	0	20,226	18.1	57%	35,552	31.7
2013	4,987	10,967	0	15,954	14.2	44%	19,967	0	19,967	17.8	56%	35,921	32.1
2014	5,288	10,135	0	15,423	13.8	43%	20,274	0	20,274	18.1	57%	35,697	31.9
2015	3,543	6,413	443	10,399	9.3	35%	19,544	0	19,544	17.5	65%	29,943	26.7
2016	3,029	2,398	107	5,534	4.9	19%	24,132	0	24,132	21.5	81%	29,666	26.5
2017	3,039	3,035	294	6,367	5.7	20%	25,797	0	25,797	23.0	80%	32,164	28.7
2018	4,413	5,589	359	10,361	9.3	31%	22,860	0	22,860	20.4	69%	33,221	29.7
Average	**4,614**	**7,539**	**100**	**12,253**	**10.9**	**34%**	**23,100**	**420**	**23,520**	**21.0**	**66%**	**35,774**	**31.9**

Figure 4-1

Historical Water Production and Purchase (Annual)

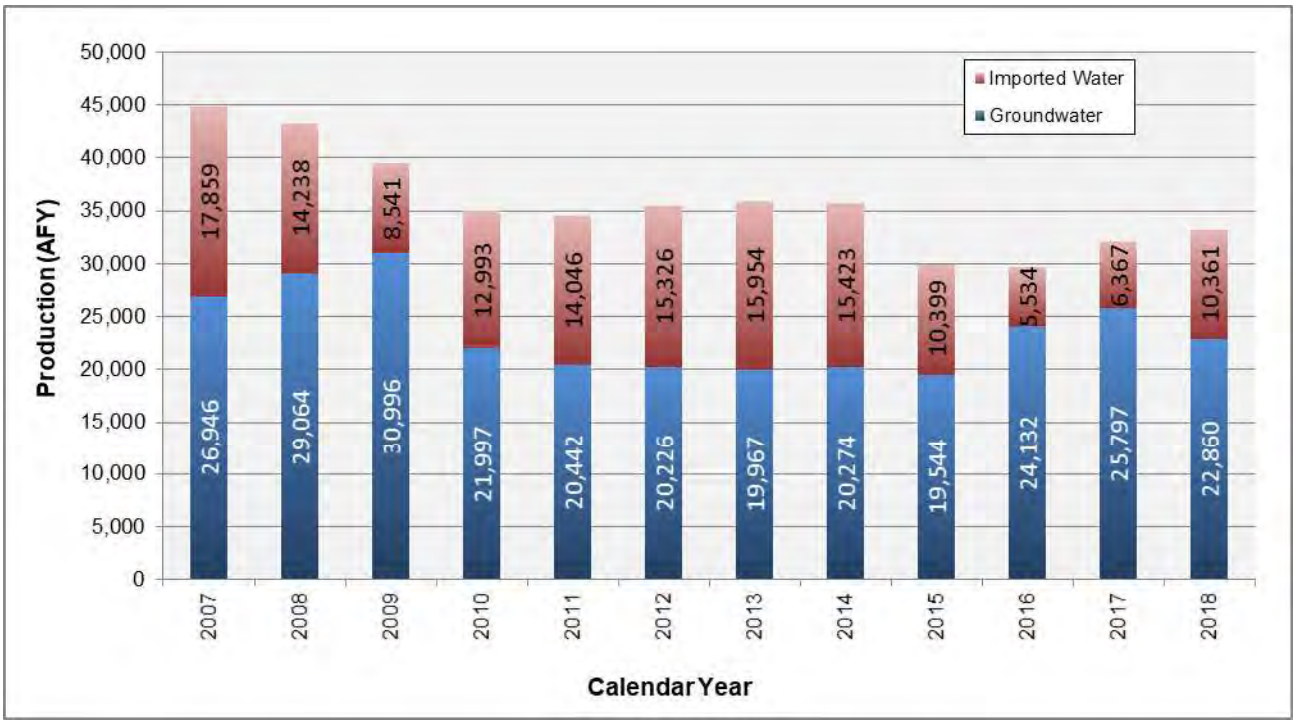
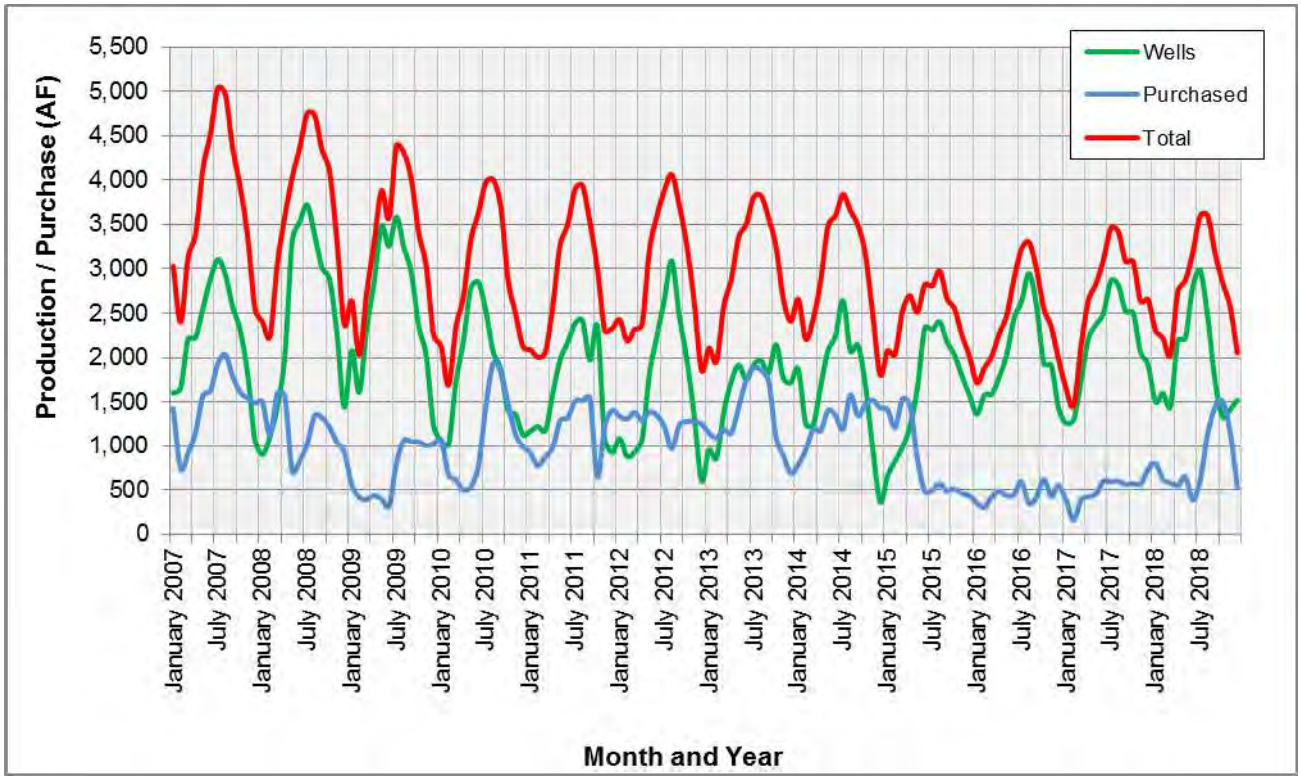


Figure 4-2

Historical Water Production and Purchase (Monthly)



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4-2 Water Consumption versus Water Production / Purchase

The City typically purchases/produces more water than the quantity measured by the customer meters. Table 4-2 summarizes the difference between the measured consumption and production from 2007 to 2018. Figure 4-3 graphically shows the City's water consumption versus production/purchase.

Table 4-2

Water Consumption versus Water Production/Purchase

Calendar Year	Water Consumption[1] (AFY)	Water Production/ Purchase[2] (AFY)	Non-Revenue Water (%)	Population[3]	Per Capita Production/ Purchase (gpcd)	Per Capita Consumption (gpcd)
2007	44,286	44,806	1.2%	158,405	253	250
2008	42,072	43,302	2.8%	158,181	244	237
2009	37,708	39,537	4.6%	157,539	224	214
2010	35,403	34,990	-1.2%	158,154	198	200
2011	37,735	34,488	-9.4%	160,723	192	210
2012	37,652	35,552	-5.9%	160,827	197	209
2013	34,212	35,921	4.8%	161,812	198	189
2014	35,160	35,697	1.5%	162,778	196	193
2015[4]	29,346	29,943	2.0%	164,389	163	159
2016[4]	29,056	29,666	2.1%	165,966	160	156
2017[4]	30,817	32,164	4.2%	169,387	170	162
2018[4]	33,026	33,221	0.6%	171,819	173	172
Average	**35,539**	**35,774**	**2.6%**	**162,498**	**197**	**196**

[1] Consumption from annual Department of Water Resources Public Water System Statistics Report.

[2] Water Production/Purchase data extracted from City's Anuual System Operations Data

[3] Population data from California Department of Finance, E-5 Population and Housing Estimates for Cities 2000-2018, excluding estimate of population for areas in Ontario served by CVWD.

[4] Water consumption estimates are from monthly water billing data.

Per the historical records, the consumption between 2010 and 2012 was more than the amount of water produced and/or purchased, which could not have actually happened. Possible explanations for the discrepancy in data include the following:

- During this time, the City was expanding its recycled water system. Some customers were converted from potable water use to recycled water use. Some of the consumption data might have actually been a combination of the potable and recycled water use.
- City staff has been updating and reclassifying meter types in its billing database. Some of the data provided in the historical DWR reports might have been misclassified at the time the report was created.
- Meters are not always perfectly calibrated. The margin of error in few large meters that measure production and purchase amounts or the thousands of small meters measuring consumption could contribute to the discrepancy in data.

The water consumption data before the 2015 Calendar Year is based on Department of Water Resources Public Water System Statistics Reports. After the 2015 Calendar Year, the consumption data is based on the monthly water billing data. Non-revenue water makes up between 0.6% and 4.8% of the total production and purchase supply, respectively. The City strives to keep the percentage as low as possible. The City's non-revenue water is 2.6%, on average.

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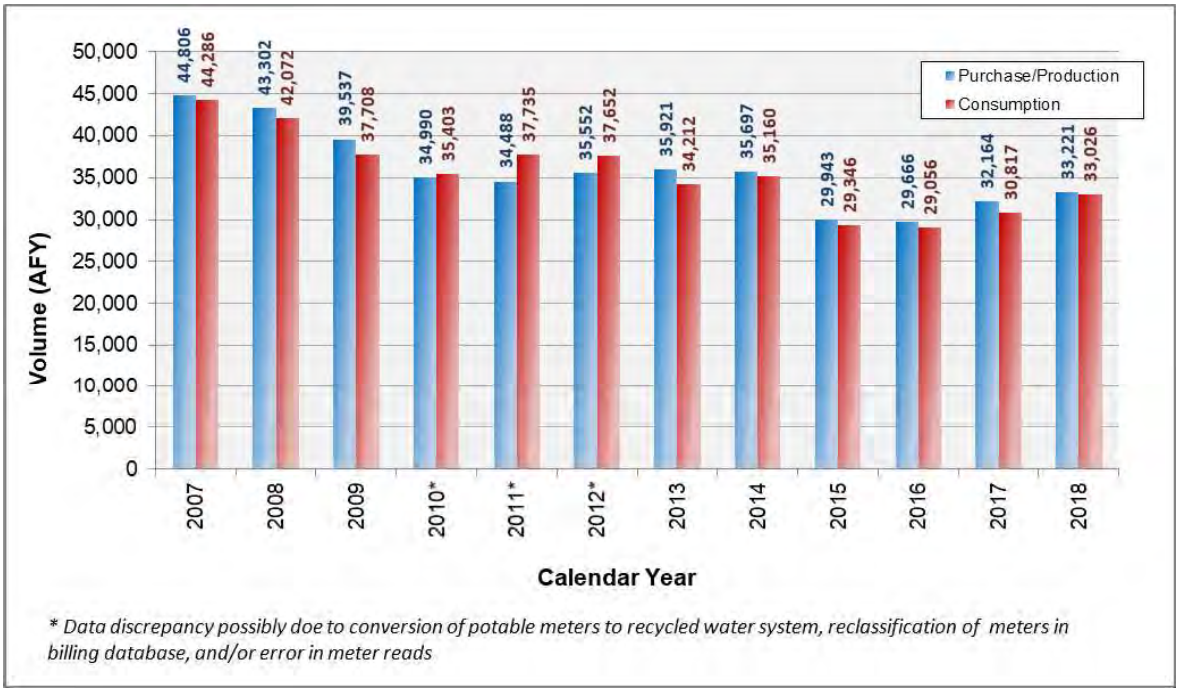
Non-revenue water occurs in all water systems. There will be differences in the accuracies of the few large meters which measure purchases and production, and the thousands of small customer meters which measure sales. Non-revenue water can also be due to unmeasured uses such as water main flushing and other maintenance related tasks. The remainder may be due to leaks from the system. The City's average non-revenue water rate of 2.6%.

Figure 4-3

Water Consumption versus Water Production/Purchase



4-3 Water Demand Variations

Demand variations through a year are influenced by seasonal effects such as temperature, humidity, and precipitation. System demand variations throughout a day are influenced by the customer base and the daily lifestyles of the customers. In primarily residential areas, the peak demands within a day typically occur in the morning hours between 6:00 am and 9:00 am, when customers wake to begin their daily routine. In largely commercial and industrial areas, the peaks may occur mid-day or the demand may even remain relatively constant throughout the work day. For this study, the variations are expressed as a ratio to the average demand, with the average demand being equal to one.

For the purpose of this master plan, the average day demand was based on the most recent twelve consecutive months of production and purchase data that was available at the time the hydraulic model was created. The average day demand is summarized in Table 4-3.

Table 4-3
Average Day Demand for the Hydraulic Water Model

	AF	MGD	gpm
September 2018	3,179	34.53	23,980
October 2018	2,850	29.95	20,800
November 2018	2,583	28.06	19,483
December 2018	2,053	21.58	14,988
January 2019	1,915	20.13	13,980
February 2019	1,503	17.49	12,147
March 2019	1,831	19.25	13,366
April 2019	2,708	29.41	20,425
May 2019	2,682	28.19	19,574
June 2019	2,966	32.22	22,373
July 2019	3,404	35.78	24,847
August 2019	3,479	36.57	25,397
Total	**31,153**	**27.76**	**19,280**

4-4 Monthly Demand Variations

Typical of most Southern California communities, the City's water consumption exhibits a distinct seasonal pattern. Peak and low monthly consumption occur during the dry summer months and wet winter months, respectively. Monthly demand

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totals and factors for 2007 to 2018 are shown in Table 4-4. Peak demands typically occur in July and August. Low demands typically occur in February. The highest and lowest monthly demand factor for the 2018 Calendar year is 1.46 and 0.82, respectively.

The maximum month factor is estimated to be 1.46 times the ADD, which is representative of the OMC demands, since there is very little existing usage in the OR area. The OR maximum day peaking factor was estimated to be 1.36, which was developed by excluding a portion of the water use that is expected to be served through the recycled water system.

Table 4-4

Monthly Water Demand Totals and Factors

Month	2007		2008		2009		2010		2011		2012		2013	
	AF	Factor	AF	Factor	AF	Factor	AF	Factor	AF	Factor	AF	Factor	AF	Factor
January	3,031	0.81	2,402	0.67	2,639	0.80	2,134	0.73	2,090	0.73	2,427	0.82	2,108	0.70
February	2,402	0.64	2,238	0.62	2,033	0.62	1,690	0.58	2,004	0.70	2,190	0.74	1,958	0.65
March	3,127	0.84	3,055	0.85	2,726	0.83	2,345	0.80	2,060	0.72	2,317	0.78	2,583	0.86
April	3,387	0.91	3,588	0.99	3,297	1.00	2,683	0.92	2,574	0.90	2,369	0.80	2,883	0.96
May	4,132	1.11	4,032	1.12	3,880	1.18	3,325	1.14	3,267	1.14	3,212	1.08	3,362	1.12
June	4,511	1.21	4,363	1.21	3,574	1.08	3,621	1.24	3,493	1.22	3,597	1.21	3,500	1.17
July	5,039	1.35	4,750	1.32	4,385	1.33	3,970	1.36	3,895	1.36	3,881	1.31	3,808	1.27
August	4,974	1.33	4,733	1.31	4,307	1.31	4,005	1.37	3,939	1.37	4,061	1.37	3,824	1.28
September	4,359	1.17	4,338	1.20	4,008	1.22	3,714	1.27	3,524	1.23	3,722	1.26	3,574	1.19
October	3,925	1.05	4,105	1.14	3,403	1.03	2,878	0.99	3,004	1.05	3,276	1.11	3,251	1.09
November	3,369	0.90	3,323	0.92	3,028	0.92	2,500	0.86	2,307	0.80	2,641	0.89	2,657	0.89
December	2,549	0.68	2,374	0.66	2,257	0.69	2,125	0.73	2,331	0.81	1,860	0.63	2,411	0.81
Average	**3,734**		**3,609**		**3,295**		**2,916**		**2,874**		**2,963**		**2,993**	

Month	2014		2015		2016		2017		2018		Average	
	AF	Factor	AF	Factor	AF	Factor	AF	Factor	AF	Factor	AF	Factor
January	2,657	0.89	2,080	0.83	1,717	0.69	1,647	0.66	2,309	0.93	2,270	0.77
February	2,210	0.74	2,039	0.82	1,884	0.76	1,465	0.59	2,223	0.90	2,028	0.69
March	2,434	0.82	2,523	1.01	2,020	0.82	2,133	0.85	2,034	0.82	2,446	0.83
April	2,859	0.96	2,698	1.08	2,271	0.92	2,650	1.06	2,744	1.11	2,834	0.94
May	3,487	1.17	2,513	1.01	2,476	1.00	2,830	1.13	2,867	1.16	3,282	1.11
June	3,596	1.21	2,822	1.13	2,890	1.17	3,104	1.24	3,181	1.29	3,521	1.19
July	3,838	1.29	2,809	1.13	3,226	1.30	3,458	1.39	3,596	1.45	3,888	1.30
August	3,657	1.23	2,977	1.19	3,301	1.34	3,421	1.37	3,601	1.46	3,900	1.31
September	3,494	1.17	2,664	1.07	3,008	1.22	3,085	1.24	3,179	1.29	3,556	1.20
October	3,168	1.07	2,550	1.02	2,554	1.03	3,083	1.24	2,850	1.15	3,171	1.06
November	2,488	0.84	2,252	0.90	2,347	0.95	2,634	1.06	2,583	1.04	2,677	0.89
December	1,809	0.61	2,016	0.81	1,973	0.80	2,654	1.06	2,053	0.83	2,201	0.72
Average	**2,975**		**2,495**		**2,472**		**2,680**		**2,768**		**2,981**	

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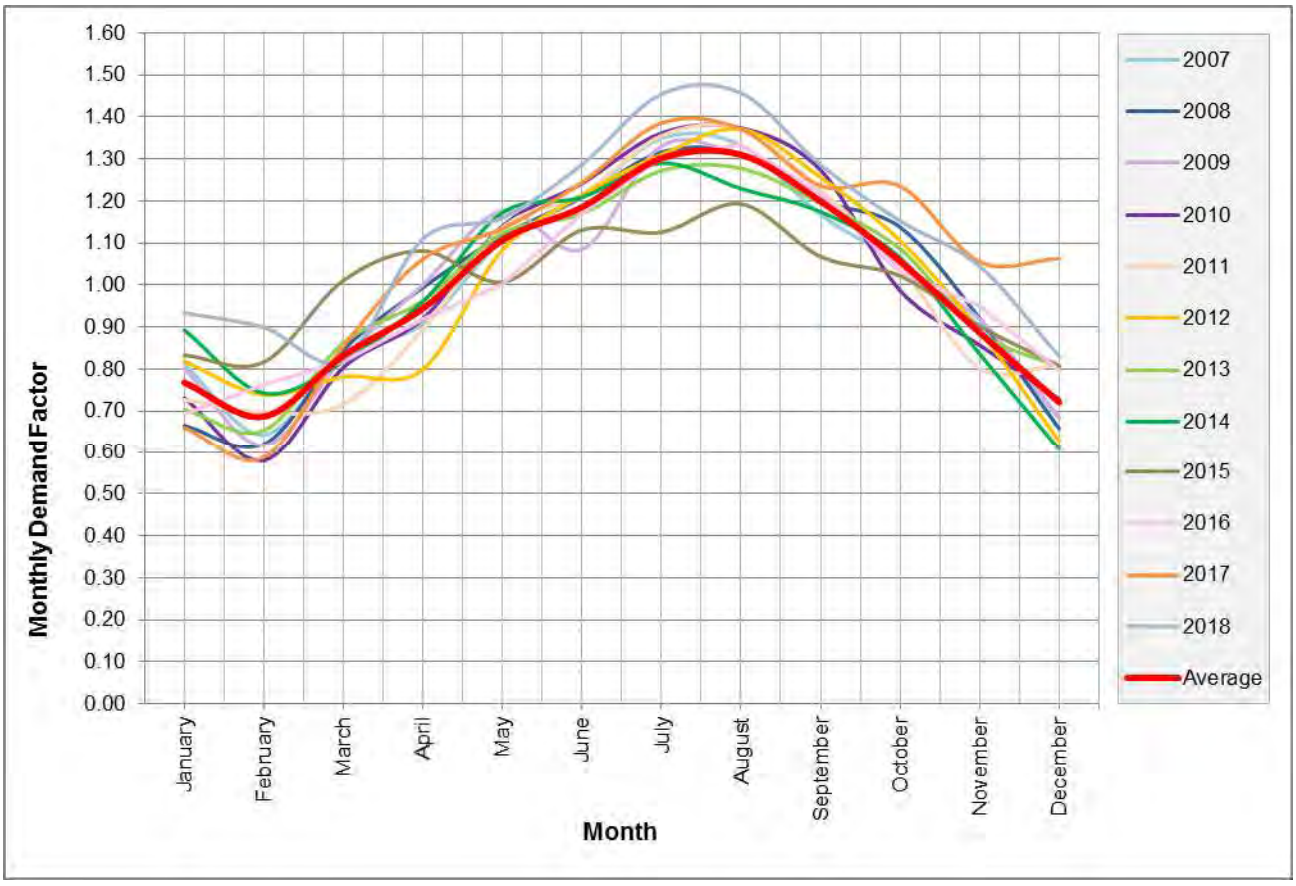
Figure 4-4

Monthly Demand Factors



4-5 Daily Demand Variations

In the predominately developed OMC service area, the MDD is estimated to be 1.60 times the ADD. The OR maximum day peaking factor was estimated to be 1.50, which was developed by excluding a portion of the water use that is expected to be served through the recycled water system. The MDD estimate is summarized in Table 4-5.

In the hydraulic model, demands and patterns for high water users were allocated based on field data that was captured during the calibration period. For modeling purposes, the calibration diurnal pattern and demands were used for the ADD and MDD scenarios.

Table 4-5

Maximum Day Demand Summary

	ADD (gpm)			MDD/ADD Peaking Factor	MDD (gpm)		
	Non-HWU	HWU[1]	Total		Non-HWU	HWU[1]	Total
Original Model Colony (OMC)	17,196	1,691	18,887	1.6	27,512	1,691	29,202
Ontario Ranch (OR)	391	2	393	1.5	586	2	588
Total	17,587	1,693	19,280		28,097	1,693	29,790

[1] *High water user demand and diurnal patterns are based on the calibration period*

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4-6 Hourly Demand Variations

Knowledge of accurate demand variations over a 24-hour period is essential for proper analysis of water systems. For this study, diurnal use patterns were developed for each hydraulic zone. Customer specific diurnal patterns were developed for high water users. The development of diurnal use patterns are described in detail in Section 5 (Diurnal Patterns) of this report.

4-7 System Demands and Peaking Factors

It is important to evaluate a water system during various incremental peak demands. Typically, a water system is designed to meet the maximum demands placed on it. The system components must be designed to cope with these demands as they occur. Maximum month and maximum day demands are important factors in sizing a system's supply capability. Maximum day demands usually dictate the design criteria for both system transmission and storage needs. Peak hour criterion is a measure of the system's overall adequacy with respect to its transmission and distribution elements, as well as its operational storage capacity.

The peaking factors for Ontario Ranch (OR) was further refined to account for the fact that it is planned to be largely residential in nature and there were a dual recycled water system constructed in all major streets. The City anticipates a target of 12 percent of the total water use in low density residential areas to be provided by the recycled water system. It is expected that this percentage will increase as the residential density increases. With more recycled water and less irrigation use on the domestic water system, the peaking factors in OR are reduced as detailed in Table 4-6. These factors are utilized for future demand estimates in Ontario Ranch. The relationships between the peaking factors developed for this study with respect to the average day demand estimate are displayed graphically on Figure 4-5.

Table 4-6

Existing Water System Demands and Peaking Factors

Demand Description	OMC Demand (gpm)	OR Demand (gpm)	HWU Demand[1] (gpm)	Total System Demand (gpm)	Total System Demand (mgd)	Total System Demand (AFY)	(OMC) Peaking Factor	(OR) Peaking Factor	Total System Peaking Factor
Average Day	17,196	391	1,693	19,280	27.76	31,098	1.00	1.00	1.00
Max Month	25,107	531	1,693	27,331	39.36	44,085	1.46	1.36	1.42
Max Day	27,512	586	1,693	29,790	42.90	48,051	1.60	1.50	1.55
Peak Hour[2]	N.A.	N.A.	N.A.	36,934	53.19	59,575	N.A.	N.A.	1.98

[1] *High water user demand and diurnal patterns are based on the calibration period*

[2] *System Wide Peak Hour Factor was developed with multiple diurnal patterns that differ by zone, meter type, and for high water users.*

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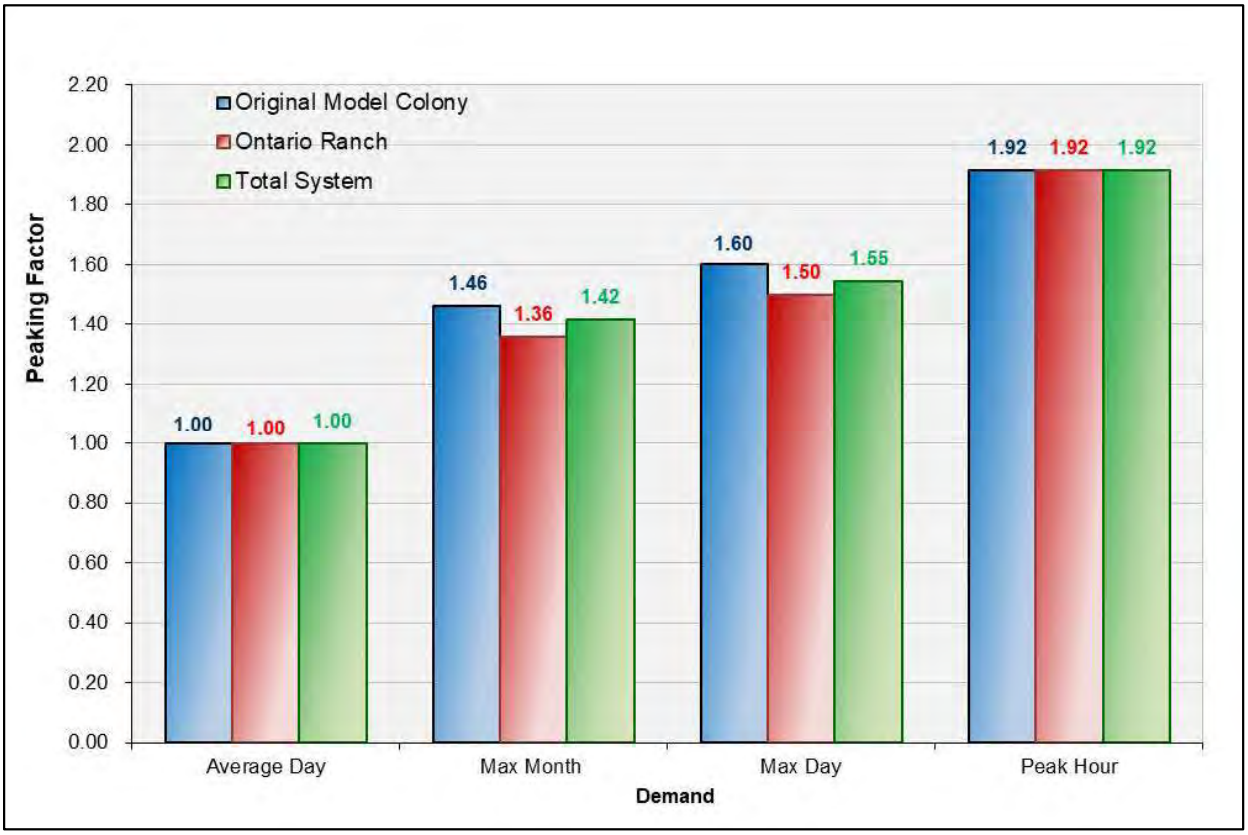
Figure 4-5

Water Demand Peaking Factors



4-7.1 Existing Demands

- **Average Day -** As detailed in Table 4-2, the average day demand is based on the City of Ontario's average daily production and purchase data between September 2018 and August 2019. As shown in Table 4-5, the average day demand is 31,153 AFY (19,280 gpm).
- **Maximum Month -** As detailed in Table 4-6, the maximum month peaking factor for OMC and OR are 1.46 and 1.36, respectively. The maximum month demand is estimated as 45,341 AFY (28,109 gpm).
- **Maximum Day -** As detailed in Table 4-6, the maximum day peaking factor for OMC and OR are 1.6 and 1.5, respectively. The maximum day demand is estimated as 48,051 AFY (29,790 gpm).
- **Peak Hour Demands -** Modeled peak hour demands were based upon the diurnal patterns that were developed for the hydraulic model, as detailed in Section 5. The overall peak hour system demand is estimated to be 1.98 times the average day demand or 61,656 AFY (38,224 gpm). This factor varies by zone depending on the diurnal patterns developed by zone, meter type, and for high water users.
- **Existing Water Demands by Zone -** Existing water demands by zone are shown in Table 4-5. These estimates are based upon the demand distribution generated from water billing historical data linked to the City's meter geodatabase. The average day demands (ADD) were distributed in the model using the 12-month consumption data from the City's billing department, adjusted to the most-recent production and purchase data (31,094 AFY; 27.8 mgd; 19,280 gpm) which takes into consideration non-revenue water.

  Generally, the ADD were increased with the factors included in Table 4-6 to develop the Maximum Day Demands (MDD), which are summarized by zone in Table 4-7. It should be noted that the MDD model demands for the high water users are based on actual field data collected during the calibration period, and they are not estimated with the MDD peaking factor included in Table 4-6. The MDD total 48,051 AFY (42.9 mgd; 29,790 gpm).

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Table 4-7

Existing Water Demands by Zone

Zone	Average Day Demand				Maximum Day Demand[1]			
	gpm	mgd	AFY	% of Total	gpm	mgd	AFY	% of Total
1348	2,059	2.96	3,321	10.7%	3,273	4.71	5,280	11.0%
1212	8,947	12.88	14,432	46.4%	13,718	19.75	22,127	46.0%
1074	3,839	5.53	6,192	19.9%	5,939	8.55	9,579	19.9%
1010	4,153	5.98	6,698	21.5%	6,439	9.27	10,386	21.6%
925	282	0.41	455	1.5%	422	0.61	680	1.4%
Total	**19,280**	**27.76**	**31,098**	**100.0%**	**29,790**	**42.90**	**48,051**	**100.0%**

[1] *MDD for high water users model demands are based on actual field data collected, not MDD peaking factors included in Table 4-6*

4-7.2 Water Unit Demand Factors

Existing consumption data was used in this study to represent the water use of existing customers. For future developments, water unit demand factors were used to estimate future water use. Potable water unit demand factors are generally based on the factors that were developed as a part of a study completed in May 2016 entitled "*Ultimate Citywide Water Demand Estimate*".

The revised potable water unit demand factors are shown in Table 4-8.

The residential unit demand factors were first developed in terms of gpd/person. Then the maximum densities (people/du and du/ac) were applied to determine the factors in other units. The resulting unit factors in terms of gpd/du and gpd/ac represent the maximum expected demand factors.

The 2016 study included maximum residential densities in the Ontario Ranch area, which were based on historical development projections that were provided by the City's planning department. Some of the recent actual projections are higher than those included in the Ontario Plan, which needed to be updated to appropriately develop the demand factors and the future demand estimate.

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Table 4-8

Potable Water Unit Demand Factors

Landuse		Max Density (du/ac)[1]	Density (people/ du)[2]	Domestic Water Unit Demand Factors[3]			
				gpd	unit	gpd/ac	gpd/du
Residential							
Rural Residential	RR	2	3.997	172	gpd/person	1,375	687
Low Density Residential (w/o RW)	LDR	4	3.997	123	gpd/person	1,970	492
Low Density Residential (w/ RW)	LDR	5	3.997	95	gpd/person	1,900	380
Low Medium Density Residential (w/o RW)	LMDR	8.5	3.997	105	gpd/person	3,570	420
Low Medium Density Residential (w/ RW)	LMDR	11	3.997	90	gpd/person	3,960	360
Medium Density Residential (w/o RW)	MDR	18	3.347	90	gpd/person	5,420	301
Medium Density Residential (w/ RW)	MDR	25	3.347	80	gpd/person	6,690	268
High Density Residential (w/o RW)	HDR	35	3.347	70	gpd/person	8,200	234
High Density Residential (w/ RW)	HDR	40	3.347	60	gpd/person	8,030	201
Commercial							
Business Park (w/o RW)	BP			103	gpd/job	3,140	
Business Park (w/ RW)	BP	-	-	59	gpd/job	1,800	-
General Commercial (w/o RW)	GC			258	gpd/job	3,140	
General Commercial (w/ RW)	GC	-	-	148	gpd/job	1,800	-
Hospitality[4] (w/o RW)	HOS			155	gpd/room	5,980	
Hospitality[4] (w/ RW)	HOS	-	-	130	gpd/room	5,000	-
Neighborhood Commercial (w/o RW)	NC			99	gpd/job	3,140	
Neighborhood Commercial (w/ RW)	NC	-	-	57	gpd/job	1,800	-
Office Commercial (w/o RW)	OC			53	gpd/job	3,840	
Office Commercial (w/ RW)	OC	-	-	35	gpd/job	2,500	-
Industrial							
Industrial (w/o RW)	IND	-	-	110	gpd/job	2,290	-
Industrial (w/ RW)	IND	-	-	67	gpd/job	1,400	-
Mixed Use[5]							
High Density Residential (w/o RW)	MU-HDR	35	2.000	70	gpd/person	4,900	140
High Density Residential (w/ RW)	MU-HDR	40	2.000	60	gpd/person	4,800	120
Office (w/o RW)	MU-O			53	gpd/job	3,840	
Office (w/ RW)	MU-O	-	-	35	gpd/job	2,500	-
Non-Office (w/o RW)	MU-NO			179	gpd/job	2,690	
Non-Office (w/ RW)	MU-NO	-	-	102	gpd/job	1,800	-
Open Space							
Open Space Non-Recreational (w/o RW)	OS-NR					2,340	
Open Space Non-Recreational (w/ RW)	OS-NR	-	-		-	1,000	-
Open Space Recreational (w/o RW)	OS-R					2,340	
Open Space Recreational (w/ RW)	OS-R	-	-		-	1,000	-

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Table 4-8 (Continued)

Potable Water Unit Demand Factors

Landuse		Max Density (du/ac)[1]	Density (people/ du)[2]	Domestic Water Unit Demand Factors[3]			
				gpd	unit	gpd/ac	gpd/du
Public							
Public Facility (w/o RW)	PF					3,040	
Public Facility (w/ RW)	PF	-	-		-	1,700	-
Public Middle or High School (w/o RW)	PS	-	-	50	gpd/student	3,500	-
Public Middle or High School (w/RW)	PS	-	-	10	gpd/student	1,800	-
Public Elementary School (w/o RW)	PS	-	-	30	gpd/student	3,500	-
Public Elementary School (w/RW)	PS	-	-	10	gpd/student	1,800	-

[1] Max Density per the City's 2010 General Plan (The Ontario Plan) for OMC without recycled water. Density for LDR, LMDR, MDR, and HDR with recycled water (Ontario Ranch) were increased per the City Planning Department recommendation (March 2016).

[2] Density per the City's 2010 General Plan (The Ontario Plan)

[3] Unit Flow Factor Abbreviations:

ac = acre *du = dwelling unit* *gpd = gallons per day*

room = hotel/motel room *stu = student* *tsf = thousand square feet*

[4] If possible it is recommended to use 130 - 155 gpd/room on a case by case basis. It is difficult to estimate the number of rooms or square footage per acre.

[5] Mixed Use demands should be based on the types of landuse that make up the specific area and the unit demand factors provided above. The City's 2010 General Plan (The Ontario Plan) provides detailed information on the landuses that make up each mixed use area.

4-7.3 Future Demands

The City of Ontario's Future water system demands utilized in this study are detailed in Table 4-9 by zone. Generally, the ADD were increased with the factors included in Table 4-6 to develop the Maximum Day Demands (MDD), which are summarized by zone in Table 4-7. It should be noted that the MDD model demands for the high water users are based on actual field data collected during the calibration period, and they are not estimated with the MDD peaking factor included in Table 4-6. The MDD total 48,051 AFY (42.9 mgd; 29,790 gpm).

Table 4-9

Future Water demands by Zone

Zone	Average Day Demand				Maximum Day Demand[1]			
	gpm	mgd	AFY	% of Total	gpm	mgd	AFY	% of Total
1348	2,137	3.08	3,446	6.0%	3,398	4.89	5,481	6.2%
1212	11,298	16.27	18,224	31.6%	17,481	25.17	28,196	31.9%
1074	4,103	5.91	6,618	11.5%	6,361	9.16	10,261	11.6%
1010	6,292	9.06	10,149	17.6%	9,706	13.98	15,657	17.7%
925	11,886	17.12	19,172	33.3%	17,831	25.68	28,762	32.6%
Total	**35,716**	**51.43**	**57,610**	**100.0%**	**54,778**	**78.88**	**88,357**	**100.0%**

[1] MDD for high water users model demands are based on actual field data collected, not MDD peaking factors included in Table 4-6

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The increase in future water demand is due to development of Ontario Ranch, anticipated densification in land use and population per the City's 2010 General Plan, and the assumption that the area within the service area will be fully occupied (vacant land will be built upon and occupied).

The total water maximum day demand for the future system is estimated 54,778 gpm (78.88 mgd; 88,357 AFY). This Subsection describes the process of developing the future system demands for the areas that are going to be developed or redeveloped and distributing the demands in the hydraulic model. The existing demands remained the same unless an area was going to be redeveloped.

In summary, the following steps were used to estimate the future demands:

1. Existing meter data was used for existing uses.
2. Used Water Demand Factors included in Table 4-7 to estimate demand for the vacant and future densification areas. In areas of redevelopment the existing demands were updated with the estimated flows for the future development.
3. The "City Buildout Table" approved in April 2015 (*Appendix 4-1*) provided the population and job estimates for all future mixed use areas as defined by the Ontario Plan (General Plan). The unit flow factors provided in Table 4-7 were used to estimate the total average day water demand for mixed use areas. Any existing water demands were deducted from the total future average water demand estimate. If the existing demands were greater than the calculated future demands, the existing water demand was maintained in the hydraulic model. The difference was then applied to the hydraulic model in the specific mixed use area.
4. In the Original Model Colony, future average water demands were calculated for currently vacant parcels, assuming that they will be developed in the future per the land use designated in the General Plan. The parcel acreage and the water demand factors provided in Table 4-7 were utilized to estimate the total water demand.
5. All available specific plans and other more current planning information were utilized for Ontario Ranch. The specific plan areas are shown on Figure 4-6. The City compiled the information and provided table specifying the proposed land uses (*Appendix 4-1: Ontario Ranch Proposed Land Uses per Specific Plans*). The detailed land use information and the water demand factors provided in Table 4-7 were utilized for calculating the future water demands. Demands were applied to the nearest model junction. If less than 50 percent of a specific plan area was constructed at the time of this study, all existing water demand was removed and replaced with the projected future water demand. If a specific plan area was mostly constructed, the difference in existing and future water demand was added to the model in that particular area.
6. On the west side of Ontario Ranch, where no specific plans yet exist, the future water demands were calculated utilizing the General Plan land uses, parcel acreages, and the water demand factors provided in Table 4-7. Demands were applied to the nearest model junction.

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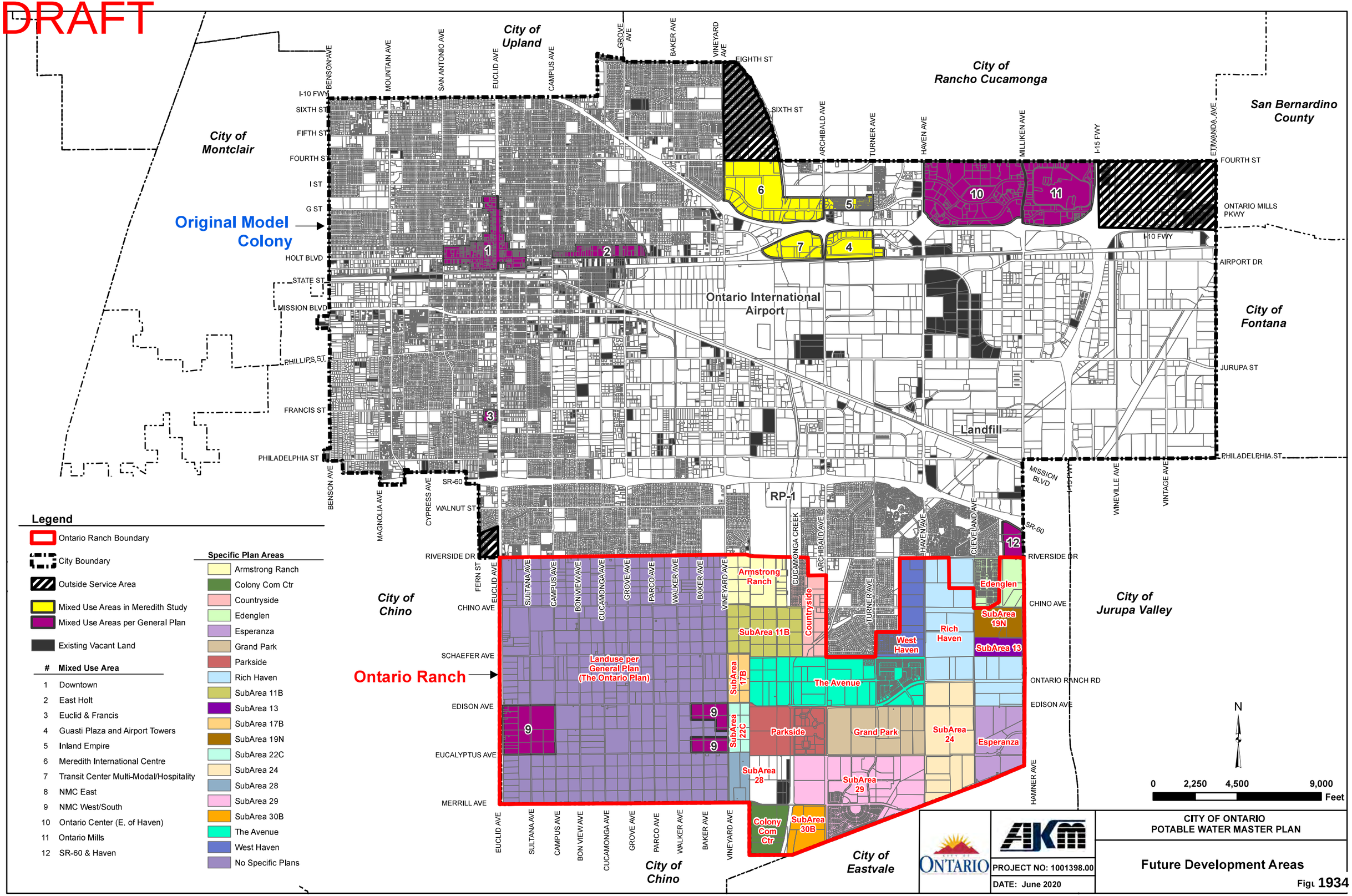

Legend

- Ontario Ranch Boundary
- City Boundary
- Outside Service Area
- Mixed Use Areas in Meredith Study
- Mixed Use Areas per General Plan
- Existing Vacant Land

#	Mixed Use Area
1	Downtown
2	East Holt
3	Euclid & Francis
4	Guasti Plaza and Airport Towers
5	Inland Empire
6	Meredith International Centre
7	Transit Center Multi-Modal/Hospitality
8	NMC East
9	NMC West/South
10	Ontario Center (E. of Haven)
11	Ontario Mills
12	SR-60 & Haven

Specific Plan Areas

- Armstrong Ranch
- Colony Com Ctr
- Countryside
- Edenglen
- Esperanza
- Grand Park
- Parkside
- Rich Haven
- SubArea 11B
- SubArea 13
- SubArea 17B
- SubArea 19N
- SubArea 22C
- SubArea 24
- SubArea 28
- SubArea 29
- SubArea 30B
- The Avenue
- West Haven
- No Specific Plans

CITY OF ONTARIO
POTABLE WATER MASTER PLAN

Future Development Areas

PROJECT NO: 1001398.00
DATE: June 2020

Figu 1934

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4-8 Recycled Water

The City's recycled water use was 9,653 AFY (3,042 gpm) in Fiscal Year 2018. The recycled water is supplied by Inland Empire Utilities Agency (IEUA). Recycled water from IEUA's treatment plants are conveyed through IEUA's pipe conveyance system to the City's recycled distribution system. According to the City's billing data, there are approximately 370 recycled customer meters in the City.

The City's Recycled Water Master Plan was last updated in April 2006. It is being updated concurrent to this master plan. Potable water customers that are anticipated to be converted to the recycled water system in the future will be identified as part of the recycled water master plan update.

4-9 Water Conservation

Title 6, Chapter 8A, The Emergency Water Conservation Plan of the City's Municipal Code addresses water conservation issues. The reference for this Chapter is Ordinance 2907, which became effective June 16, 2009.

Voluntary conservation is encouraged to limit the amount of water used to the amount absolutely necessary for health, business, and irrigation. The following elements of conservation apply at all times on a voluntary basis:

- Avoid hose washing of sidewalks, walkways, driveways, parking areas or other paved surfaces, except as required for sanitary purposes.
- Wash motor vehicles, trailers, boats and other types of mobile equipment using a hand held bucket or a hose equipped with a positive shutoff nozzle for quick rinses, or at the immediate premises of a commercial car wash or with recycled wastewater for approved uses.
- Avoid using water to clean, fill or maintain levels in decorative fountains, ponds, lakes or other similar aesthetic structures unless such water is part of a recycling system.
- Encourage restaurants, hotels, cafés, cafeterias or other public places where food is sold, served or offered for sale, to serve drinking water only to those customers expressly requesting water.
- Promptly repair all leaks from indoor and outdoor plumbing fixtures.
- Avoid watering lawn, landscape or other turf area more often than every other day and during the hours between 6:00 a.m. and 6:00 p.m.
- Avoid causing or allowing the water to run off landscape areas into adjoining streets, sidewalks or other paved areas due to incorrectly directed or maintained sprinklers or excessive watering.

The City maintains water conservation information on their website for viewing by the public. Information includes water use efficiency and conservation tips, links to other websites pertaining to water conservation, and links to IEUA's website where indoor and outdoor rebates are offered for residents of the IEUA service area. Indoor and outdoor rebates are also offered to commercial businesses

4-9.1 California Water Conservation

A variety of executive orders have been issued since 2009 regarding water conservation in the state of California. The following is a brief summary:

1. **November 2009 – Senate Bill SBx7-7 (i.e. The Water Conservation Act of 2009) enacted**
   - Requires State of California Department of Water Resources (DWR) in consultation with other state agencies, to develop a single standardized water use reporting form that can be used by both urban and agricultural water agencies.
   - For urban water conservation, the legislation sets an overall goal of reducing per capita urban water use by 20 percent by December 31, 2020.
2. **April 2014 Proclamation**
   - Governor declares a drought State of Emergency to exist in California due to severe drought conditions.

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- Calls on Californians to reduce their water usage by 20 percent.
- Suspends California Environmental Quality Act to allow the emergency regulation and other actions to take place as quickly as possible

3. **December 2014 - Executive Order B-28-14**
   - Extends the California Environmental Quality Act suspension through May 2016
4. **April 2015 - Executive Order B-29-15**
   - Imposes restrictions on urban water suppliers to achieve a statewide 25 percent reduction in potable urban usage through February 2016
   - Requires commercial, industrial, and institutional users to implement water efficiency measures
   - Prohibits irrigation with potable water of ornamental turf in public street medians
   - Prohibits irrigation with potable water outside newly constructed homes and buildings that is not delivered by drip or microspray systems
   - Directs urban suppliers to develop rate structures and other pricing mechanisms to promote water conservation
   - Requires urban suppliers to increase enforcement against water waste
5. **November 2015 – Executive Order B-26-15**
   - Directs State agencies to prioritize and accelerate approvals for projects that enhance the ability of a local or state agency to capture high precipitation events
   - Extends drought restrictions through October 2016
6. **May 2016 - Executive Order B-37-16**
   - Aims to bolster California's climate and drought resilience by instructing State agencies to help Californians adopt permanent changes to use water more wisely.
   - Directs the State Water Resources Control Board to develop new mandatory water conservation regulations
   - Directs the Department of Water Resources to update new water use targets for urban water agencies. These new targets will build upon the existing requirement to achieve 20% reduction in usage by 2020. The executive order states that new targets would be developed no later than 2020, with the goal of reaching full compliance by 2025.
   - Directs the State Water Resources Control Board to eliminate water waste by
     - **i.** permanently prohibits practices that waste potable water
     - **ii.** directing actions to minimize water system leaks
     - **iii.** directing urban and agricultural water suppliers to accelerate data collection, improve water system management and prioritize capital projects to reduce water waste
   - Directs the Department of Water Resources to strengthen local drought resilience by updating requirements for Water Shortage Contingency Plans
   - Directs the Department of Water Resources to improve agricultural water use efficiency and drought planning
7. **April 2017 – Executive Order B-40-17 was issued**
   - Terminates the January 17, 2014 Drought State of Emergency
   - Rescinds Executive Orders B-26-14, B-28-14, B-29-15, and B-36-15

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- Most of Executive Order B-37-16 (Making Water Conservation a California Way of Life) remains in full force. The Department of Water Resources and State Water Resources Control Board continues to:

  i. develop permanent prohibitions on wasteful water use and requirements for reporting water use by urban water agencies. Permanent restrictions include:

  - ✓ Hosing off sidewalks, driveways and other hardscapes
  - ✓ Washing automobiles with hoses not equipped with shut-off nozzle
  - ✓ Using non-recirculated water in a fountain or other decorative water feature
  - ✓ Watering lawns in a manner that causes runoff, or within 48 hours after measurable precipitation
  - ✓ Irrigating ornamental turf on public street medians

  ii. develop standards that urban water suppliers will use to set new urban water use efficiency targets

  iii. direct actions to minimize water system leaks that waste large amounts of water.

  iv. direct urban and agricultural water suppliers to accelerate their data collection, improve water system management, and prioritize capital projects to reduce water waste

  v. work with agencies and suppliers to identify mechanisms that would encourage and facilitate the adoption of rate structures and other pricing mechanisms that promote water conservation

8. Assembly Bill No. 606 – May 31, 2018

- authorizes State Water Resources Control Board (SWRCB), along with the Department of Water Resources (DWR) to issue regulation requiring wholesale water suppliers, urban retail water suppliers, or distributors of public water supply to submit information relating to water production, water use, or water conservation.
- require urban water suppliers to submit a urban water usage objective report by November 1, 2023
- updates the requirements of the urban water management plans

9. Assembly Bill No. 1668 – May 31, 2018

- authorizes State Water Board, along with the Department of Water Resources (DWR) to issue regulation requiring wholesale water suppliers, urban retail water suppliers, or distributors of public water supply to submit information relating to water production, water use, or water conservation.
- establishes 55 gallons per capita daily as the standard for indoor residential water use beginning January 1, 2025 and 50 gallons per capita daily beginning January 1, 2030
- require DWR and SWRCB to adopt standards to monitor the performance of commercial, industrial, and institutional water use.
- Includes penalties of $1,000 to $10,000 per day to the water supplier for violations to this order

APPENDIX B

PRIVATE WATER REFERENCE

APPENDIX A

RECOMMENDED RULES FOR SIZING THE WATER SUPPLY SYSTEM

The provisions contained in this appendix are not mandatory unless specifically adopted by a state agency, or referenced in the adopting ordinance.

A 101.0 General.

A 101.1 Applicability. This appendix provides a general procedure for sizing a water supply system. Because of the variable conditions encountered, it is impractical to lay down definite detailed rules of procedure for determining the sizes of water supply pipes in an appendix, which shall necessarily be limited in length. For an adequate understanding of the problems involved, refer to Water-Distributing Systems for Buildings, Report BMS 79 of the National Bureau of Standards; and Plumbing Manual, Report BMS 66, also published by the National Bureau of Standards.

A 102.0 Preliminary Information.

A 102.1 Daily Service Pressure. Obtain the necessary information regarding the minimum daily service pressure in the area where the building is to be located.

A 102.2 Water Meter. Where the building supply is to be metered, obtain information regarding friction loss relative to the rate of flow of meters in the range of sizes likely to be used. Friction-loss data is capable of being obtained from most manufacturers of water meters. Friction losses for disk-type meters shall be permitted to be obtained from Chart A 102.2.

A 102.3 Local Information. Obtain available local information regarding the use of different kinds of pipe with respect both to durability and to decrease in capacity with the length of service in the particular water supply.

A 103.0 Demand Load.

A 103.1 Supply Demand. Estimate the supply demand for the building main, the principal branches and risers of the system by totaling the fixture units on each, Table A 103.1, and then by reading the corresponding ordinate from Chart A 103.1(1) or Chart A 103.1(2), whichever is applicable.

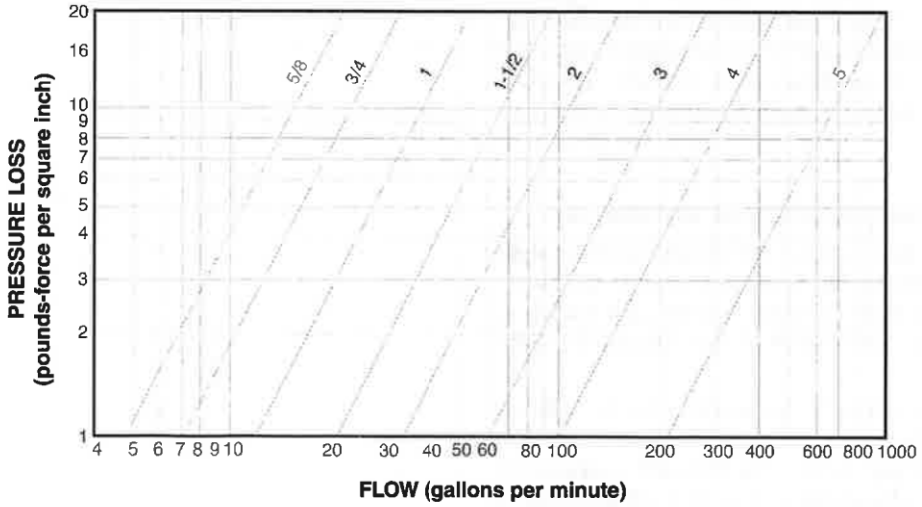
A 103.2 Continuous Supply Demand. Estimate continuous supply demands in gallons per minute (gpm) (L/s) for lawn sprinklers, air conditioners, etc., and add the sum to the total demand for fixtures. The result is the estimated supply demand of the building supply.

A 104.0 Permissible Friction Loss.

A 104.1 Residual Pressure. Decide what is the desirable minimum residual pressure that shall be maintained at the highest fixture in the supply system. Where the highest group of fixtures contains flushometer valves, the residual pressure for the group shall be not less than 15 pounds-force per square inch (psi) (103 kPa). For flush tank supplies, the available residual pressure shall be not less than 8 psi (55 kPa).

A 104.2 Elevation. Determine the elevation of the highest fixture or group of fixtures above the water (street) main. Multiply this difference in elevation by 0.43. The result is the loss of static pressure in psi (kPa).

CHART A 102.2
FRICTION LOSSES FOR DISK-TYPE WATER METERS



For SI units: 1 inch = 25 mm, 1 pound-force per square inch = 6.8947 kPa, 1 gallon per minute = 0.06 L/s

A 104.3 Available Pressure. Subtract the sum of loss in static pressure and the residual pressure to be maintained at the highest fixture from the average minimum daily service pressure. The result will be the pressure available for friction loss in the supply pipes, where no water meter is used. Where a meter is to be installed, the friction loss in the meter for the estimated maximum demand should also be subtracted from the service pressure to determine the pressure loss available for friction loss in the supply pipes.

A 104.4 Developed Length. Determine the developed length of pipe from the water (street) main to the highest fixture. Where close estimates are desired, compute with the aid of Table A 104.4(1), Table A 104.4(2), or Table A 104.4(3), whichever is applicable, the equivalent length of pipe for fittings in the line from the water (street) main to the highest fixture and add the sum to the developed length. The pressure available for friction loss in psi (kPa), divided by the developed lengths of pipe from the water (street) main to the highest fixture, times 100, will be the average permissible friction loss per 100 feet (30 480 mm) length of pipe.

A 105.0 Size of Building Supply.

A 105.1 Diameter. Knowing the permissible friction loss per 100 feet (30 480 mm) of pipe and the total demand, the diameter of the building supply pipe shall be permitted to be obtained from Chart A 105.1(1), Chart A 105.1(2), Chart A 105.1(3), Chart A 105.1(4) Chart A 105.1(5), Chart A 105.1(6), or Chart A 105.1(7), whichever is applicable. The diameter of pipe on or next above the coordinate point corresponding to the estimated total demand and the permissible friction loss will be the size needed up to the first branch from the building supply pipe.

A 105.2 Copper and Copper Alloy Piping. Where copper tubing or copper alloy pipe is to be used for the supply piping and where the character of the water is such that slight changes in the hydraulic characteristics are expected, Chart A 105.1(1) shall be permitted to be used.

A 105.3 Hard Water. Chart A 105.1(2) shall be used for ferrous pipe with the most favorable water supply in regards to corrosion and caking. Where the water is hard or corrosive, Chart A 105.1(3) or Chart A 105.1(4) will be applicable. For extremely hard water, it will be advisable to make additional allowances for the reduction of the capacity of hot-water lines in service.

A 106.0 Size of Principal Branches and Risers.

A 106.1 Size. The required size of branches and risers shall be permitted to be obtained in the same manner as the building supply, by obtaining the demand load on each branch or riser and using the permissible friction loss computed in Section A 104.0.

A 106.2 Branches. Where fixture branches to the building supply are sized for the same permissible friction loss per 100 feet (30 480 mm) of pipe as the branches and risers to the highest level in the building and lead to the inadequate water supply to the upper floor of a building, one of the following shall be provided:

(1) Selecting the sizes of pipe for the different branches so that the total friction loss in each lower branch is approximately equal to the total loss in the riser, including both friction loss and loss in static pressure.

(2) Throttling each such branch using a valve until the preceding balance is obtained.

(3) Increasing the size of the building supply and risers above the minimum required to meet the maximum permissible friction loss.

A 106.3 Water Closets. The size of branches and mains serving flushometer tanks shall be consistent with sizing procedures for flush tank water closets.

A 107.0 General.

A 107.1 Velocities. Velocities shall not exceed 10 feet per second (ft/s) (3 m/s), except as otherwise approved by the Authority Having Jurisdiction.

A 107.2 Pressure-Reducing Valves. Where a pressure-reducing valve is used in the building supply, the developed length of supply piping and the permissible friction loss shall be computed from the building side of the valve.

A 107.3 Fittings. The allowances in Table A 104.4(1) for fittings are based on non-recessed threaded fittings. For recessed threaded fittings and streamlined soldered fittings, one-half of the allowances given in the table will be ample.

TABLE A 103.1
WATER SUPPLY FIXTURE UNITS (WSFU) AND MINIMUM FIXTURE BRANCH PIPE SIZES[3]

APPLIANCES, APPURTENANCES, OR FIXTURES[2]	MINIMUM FIXTURE BRANCH PIPE SIZE[1,4] (inches)	PRIVATE	PUBLIC	ASSEMBLY[6]
Bathtub or Combination Bath/Shower (fill)	½	4.0	4.0	–
¾ inch Bathtub Fill Valve	¾	10.0	10.0	–
Bidet	½	1.0	–	–
Clothes Washer	½	4.0	4.0	–
Dental Unit, cuspidor	½	–	1.0	–
Dishwasher, domestic	½	1.5	1.5	–
Drinking Fountain or Water Cooler	½	0.5	0.5	0.75
Hose Bibb	½	2.5	2.5	–
Hose Bibb, each additional[7]	½	1.0	1.0	–
Lavatory	½	1.0	1.0	1.0
Lawn Sprinkler, each head[5]	–	1.0	1.0	–
Mobile Home, each (minimum)	–	12.0	–	–
Sinks	–	–	–	–
Bar	½	1.0	2.0	–
Clinical Faucet	½	–	3.0	–
Clinical Flushometer Valve with or without faucet	1	–	8.0	–
Kitchen, domestic	½	1.5	1.5	–
Laundry	½	1.5	1.5	–
Service or Mop Basin	½	1.5	3.0	–
Washup, each set of faucets	½	–	2.0	–
Shower per head	½	2.0	2.0	–
Urinal, 1.0 GPF Flushometer Valve	¾	3.0	4.0	5.0
Urinal, greater than 1.0 GPF Flushometer Valve	¾	4.0	5.0	6.0
Urinal, flush tank	½	2.0	2.0	3.0
Wash Fountain, circular spray	¾	–	4.0	–
Water Closet, 1.6 GPF Gravity Tank	½	2.5	2.5	3.5
Water Closet, 1.6 GPF Flushometer Tank	½	2.5	2.5	3.5
Water Closet, 1.6 GPF Flushometer Valve	1	5.0	5.0	8.0
Water Closet, greater than 1.6 GPF Gravity Tank	½	3.0	5.5	7.0
Water Closet, greater than 1.6 GPF Flushometer Valve	1	7.0	8.0	10.0

For SI units: 1 inch = 25 mm

Notes:

1 Size of the cold branch pipe, or both the hot and cold branch pipes.

2 Appliances, appurtenances, or fixtures not included in this table shall be permitted to be sized by reference to fixtures having a similar flow rate and frequency of use.

3 The listed fixture unit values represent their total load on the cold water building supply. The separate cold water and hot water fixture unit value for fixtures having both cold and hot water connections shall be permitted to be three-quarters of the listed total value of the fixture.

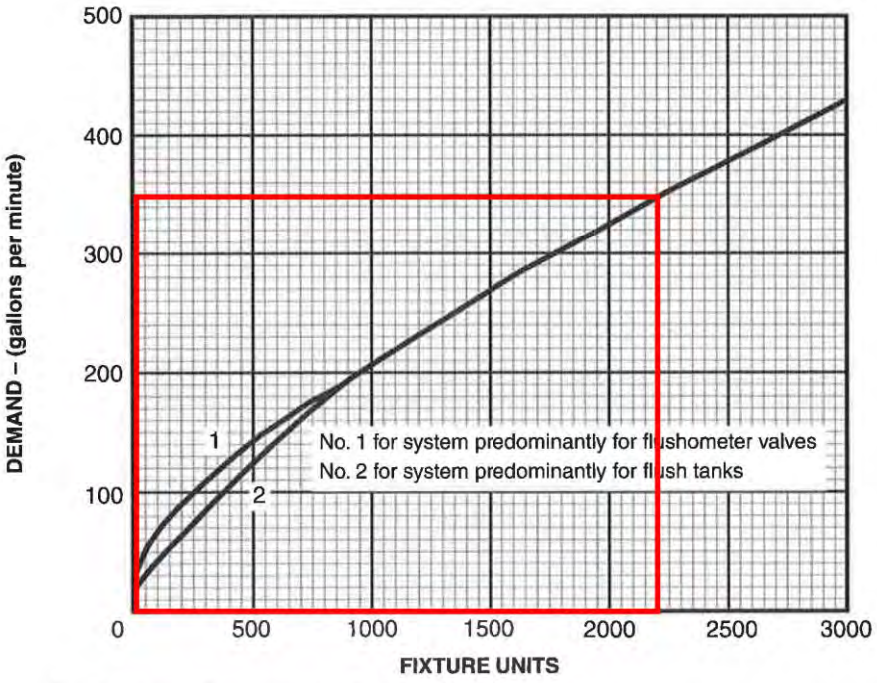
4 The listed minimum supply branch pipe sizes for individual fixtures are the nominal (I.D.) pipe size.

5 For fixtures or supply connections likely to impose continuous flow demands, determine the required flow in gallons per minute (gpm) (L/s) and add it separately to the demand in gpm (L/s) for the distribution system or portions thereof.

6 Assembly [Public Use (see Table 422.1)].

7 Reduced fixture unit loading for additional hose bibbs is to be used where sizing total building demand and for pipe sizing where more than one hose bibb is supplied by a segment of water distribution pipe. The fixture branch to each hose bibb shall be sized by 2.5 fixture units.

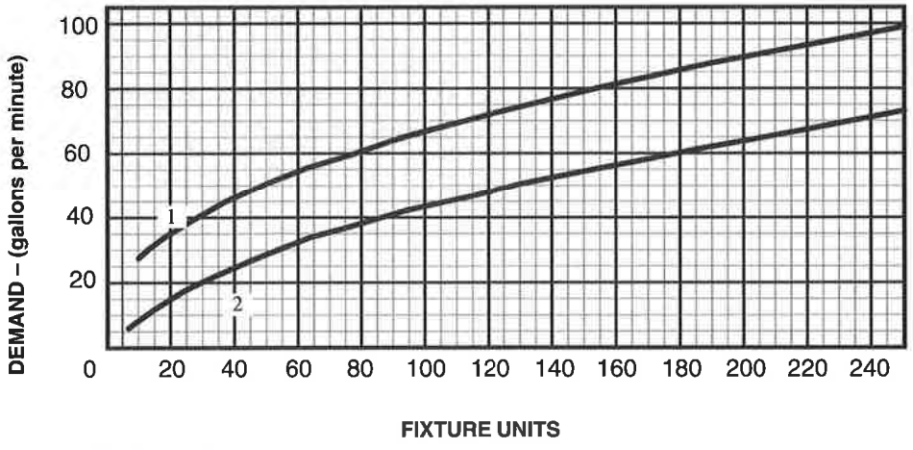
CHART A 103.1(1)
ESTIMATE CURVES FOR DEMAND LOAD



For SI units: 1 gallon per minute = 0.06 L/s

350 gpm

CHART A 103.1(2)
ENLARGED SCALE DEMAND LOAD



For SI units: 1 gallon per minute = 0.06 L/s

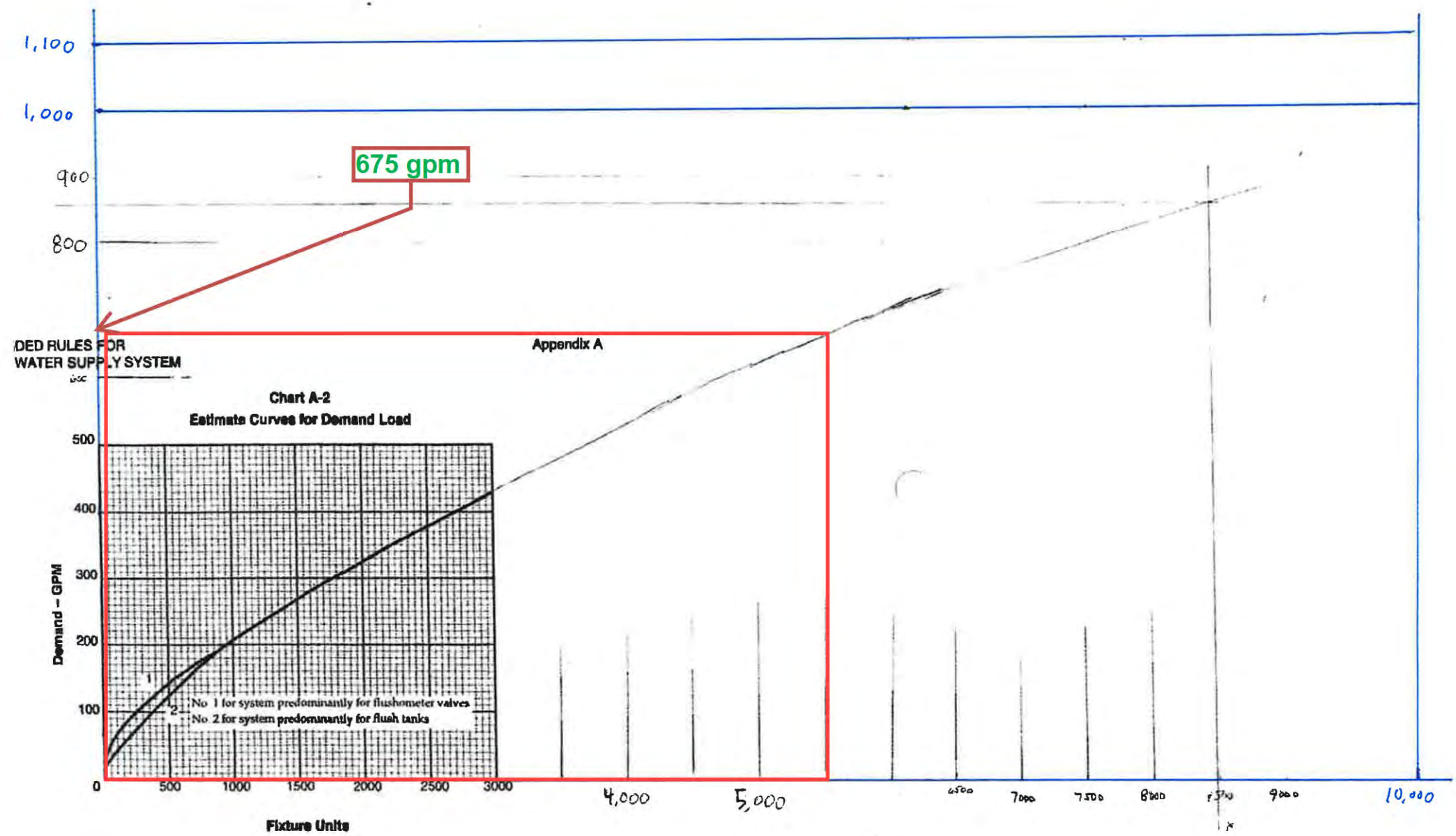

1,100
1,000
900
800
675 gpm
DED RULES FOR
WATER SUPPLY SYSTEM
Appendix A
Chart A-2
Estimate Curves for Demand Load
500
400
300
200
100
0
Demand – GPM
No. 1 for system predominantly for flushometer valves
No. 2 for system predominantly for flush tanks
500
1000
1500
2000
2500
3000
Fixture Units
4,000
5,000
7000
7500
8000
9000
10,000

Table 1 Operating Characteristics

Nominal Meter Size *in.*	Safe Maximum Operating Capacity *gpm*	Maximum Rate for Continuous Duty *gpm*	Maximum Loss of Head at Safe Maximum Operating Capacity* *psi*	Normal Test-Flow Limits *gpm*
Class I—Vertical-Shaft and Low-Velocity Horizontal Type				
1 1/2	100	50	15	12–80
2	160	80	15	16–120
3	350	175	15	24–250
4	600	300	15	40–400
6	1250	625	15	80–1000
8	1800	900	15	140–1600
10	2900	1450	15	225–2500
12	4300	2150	15	400–4000
Class II—In-Line (High-Velocity) Type				
2	160	100	7	4–160
3	350	240	7	8–350
4	630	420	7	15–630
6	1400	920	7	30–1400
8	2400	1600	7	50–2400
10	3800	2500	7	75–3800
12	5000	3300	7	120–5000

*Does not include strainer, which may be required in some applications.

Sec. 3.2 Capacity

The nominal capacity ratings and the related pressure-loss limits shall be the same as those shown in Table 1 for the safe maximum operating capacities.

Sec. 3.3 Length, Width, and Height

Maximum overall meter length, face to face of spuds or flanges, shall not be greater than shown in Table 2. A filler piece may be used to increase the length of a shorter meter to meet this requirement. Meter width and height shall not be greater than shown in Table 2. The distance from the centerline of the meter outlet to the lowest point on the meter bottom shall not be greater than shown in Table 2.

Sec. 3.4 Test Plugs

The test plug is optional for the manufacturer.

Sec. 3.5 Pressure Requirement

Meters supplied under this standard shall operate without leakage or damage to any part when operated continuously at a working pressure of 150 psi (1050 kPa).

Sec. 3.6 Accessibility

Meters shall be designed for easy removal of all interior parts without disturbing the connections to the pipeline. Straightening vanes need not be removable while the meter case is still connected in line.

For Non-Health Hazard Applications

Job Name _____ Contractor _____

Job Location _____ Approval _____

Engineer _____ Contractor's P.O. No. _____

Approval _____ Representative _____

Series 774DCDA

Double Check Detector Assemblies

Sizes 2½" – 12" (65 – 300mm)

Series 774DCDA Double Check Detector Assemblies are designed for use in accordance with water utility non-health hazard containment requirements. It is mandatory to prevent the reverse flow of fire protection system substances, i.e., glycerin wetting agents, stagnant water and water of non-potable quality from being pumped or siphoned into the potable water supply.

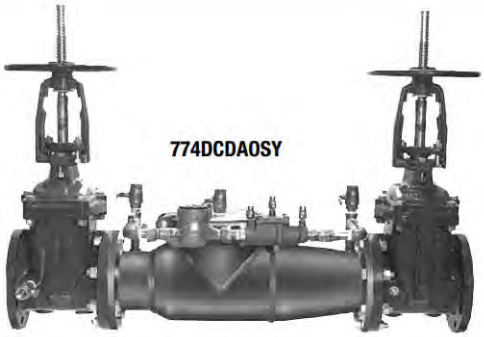
Features

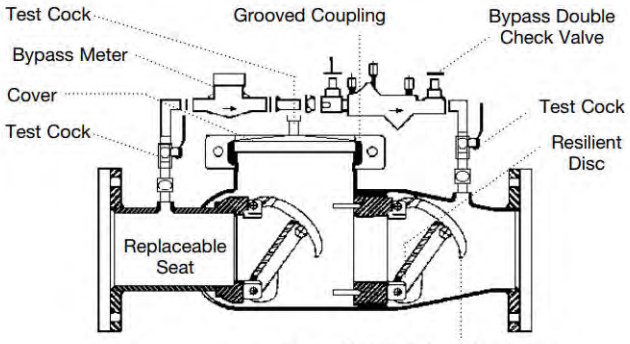
- Torsion spring check valve provides low head loss
- Short lay length is ideally suited for retrofit installations
- Stainless steel body is half the weight of competitive designs reducing installation and shipping cost
- Stainless steel construction provides long term corrosion protection and maximum strength
- Single top access cover with two-bolt grooved style coupling for ease of maintenance
- Thermoplastic and stainless steel check valves for trouble-free operation
- No special tools required for servicing
- Compact construction allows for smaller vaults and enclosures
- Furnished with ⅝" x ¾" (16x19mm) bronze meter (gpm or cfm)
- Detects underground leaks and unauthorized water use
- May be installed horizontal or vertical "flow up" position

Specifications

A Double Check Detector Assembly shall be installed on fire protection systems when connected to a potable water supply. Degree of hazard present is determined by the local authority having jurisdiction. The assembly shall consist of two positive seating check valves located between two resilient seated shutoffs with a hydraulically balanced bypass line and four test cocks. The main valve body shall be manufactured from 300 Series stainless steel to provide corrosion resistance. The check valves shall be of thermoplastic construction with stainless steel hinge pins, cam arm and cam bearing. The check valves shall utilize a single torsion spring design to minimize pressure drop through the assembly. The check valves shall be modular and shall seal to the main valve body by the use of an O-ring. There shall be no brass or bronze parts used within the check valve assembly. The check valve seats shall be of molded thermoplastic construction. The use of seat screws as a retention method is prohibited. All internal parts shall be accessible through a single cover on the valve assembly. The valve cover shall be held in place through the use of a single grooved style two-bolt coupling. The bypass line shall be hydraulically sized to accurately measure low flow. The bypass line shall consist of a meter, a small diameter double check assembly with test cocks and isolation valves. The bypass line double check valve shall have two independently operating modular poppet check valves, and top mounted test cocks. The assembly shall be a Watts Series 774DCDA.

FIRE PROTECTION





Laser Cut Polished Cam Arm

Available Models

Suffix:

LF –	without shutoff valves
OSY –	UL/FM outside stem and yoke resilient seated gate valves
*OSY FxG –	flanged inlet gate connection and grooved outlet gate connection
*OSY GxF –	grooved inlet gate connection and flanged outlet gate connection
*OSY GxG –	grooved inlet gate connection and grooved outlet gate connection
CFM –	cubic feet per minute meter
GPM –	gallons per minute meter

Available with grooved NRS gate valves - consult factory*
Post indicator plate and operating nut available - consult factory*
*Consult factory for dimensions

Now Available
WattsBox Insulated Enclosures.
For more information, send for literature ES-WB.

NOTICE

Inquire with governing authorities for local installation requirements

Watts product specifications in U.S. customary units and metric are approximate and are provided for reference only. For precise measurements, please contact Watts Technical Service. Watts reserves the right to change or modify product design, construction, specifications, or materials without prior notice and without incurring any obligation to make such changes and modifications on Watts products previously or subsequently sold.

WATTS®

Materials

All internal metal parts: 300 Series stainless steel, Main valve body: 300 Series stainless steel, Check assembly: Noryl® Flange dimensions in accordance with AWWA Class D.

Pressure - Temperature

Temperature Range: 33°F – 110°F (0.5°C – 43°C) continuous
Pressure Range: 175psi (12.1 bar)

Standards

AWWA C510, CSA B64.5

Approvals

(2½" - 10" only)
(65 - 250mm)

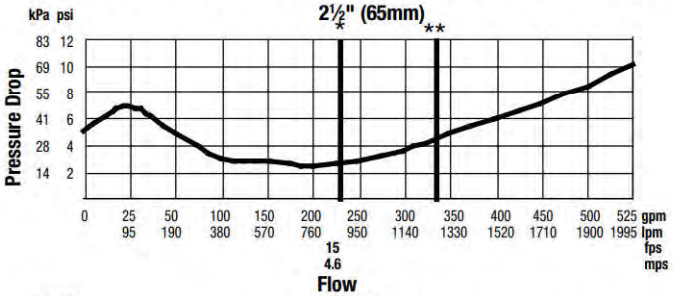
ASSE 1048

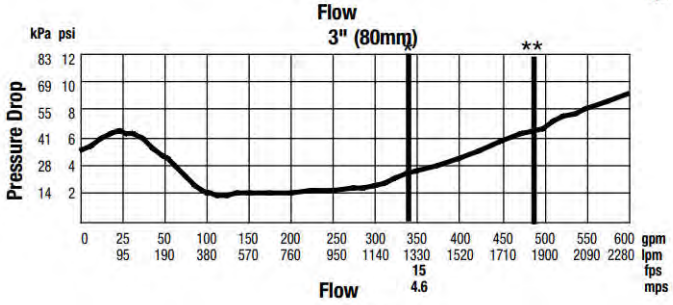
CLASSIFIED c UL us (OSY only)

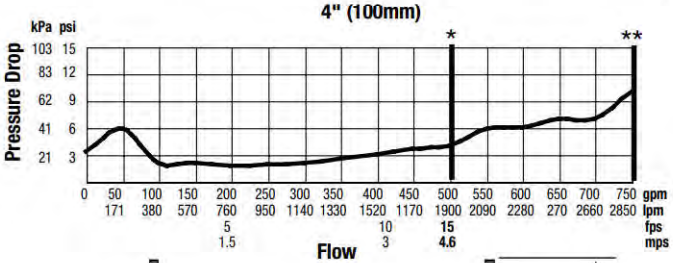
FM Approved

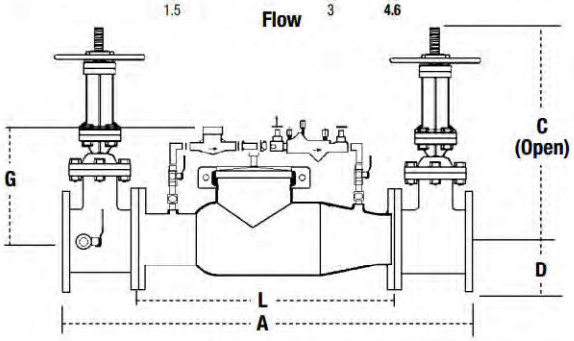
Capacity

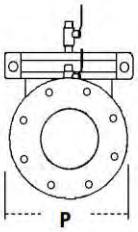
Flow curves as tested by Underwriters Laboratory per UL 1469, 1996 * Rated flow **UL Tested

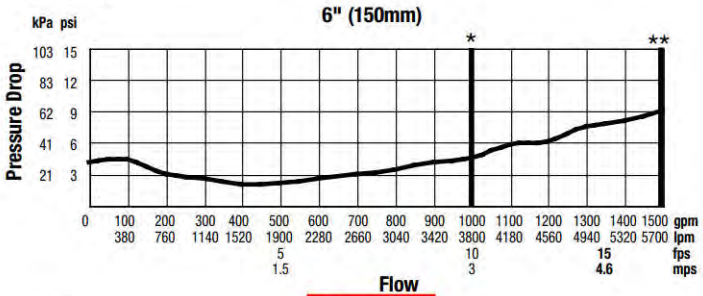


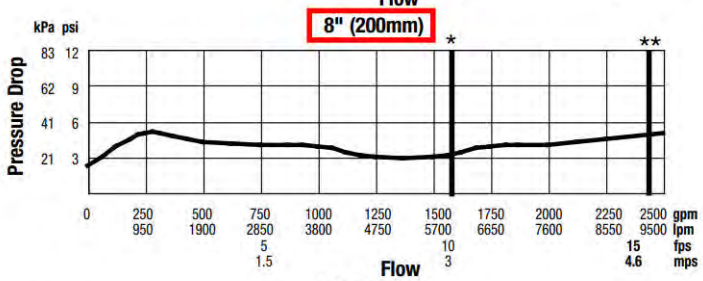


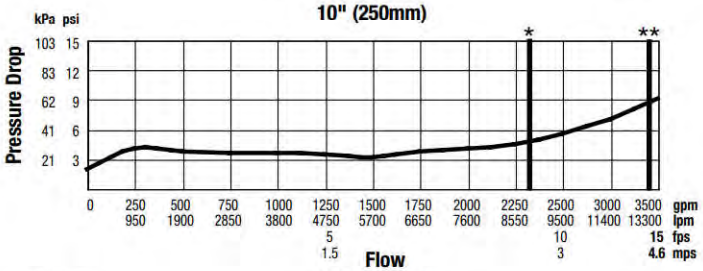


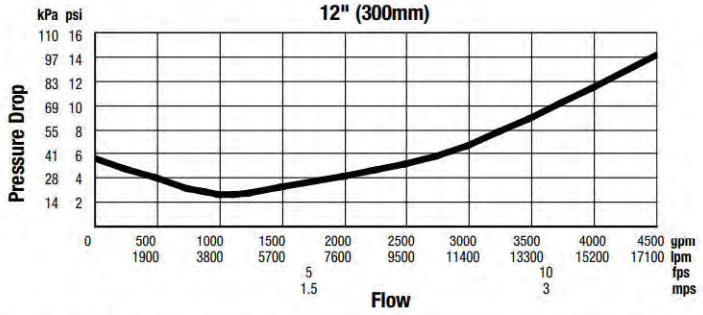












SIZE (DN)		DIMENSIONS												WEIGHT			
		A		C (OSY)		D		G		L		P		w/Gates		w/o Gates	
in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	lbs.	kgs.	lbs.	kgs.
2½	65	37	940	16⅜	416	3½	89	10	250	22	559	12½	318	155	70	68	31
3	80	38	965	18⅞	479	3¾	95	10	250	22	559	13	330	230	104	70	32
4	100	40	1016	22¾	578	4½	114	10	250	22	559	14½	368	240	109	73	33
6	150	48½	1232	30⅛	765	5½	140	15	381	27½	699	15½	394	390	177	120	54
8	200	52½	1334	37¾	959	6¾	171	15	381	29½	749	18¼	464	572	259	180	82
10	250	55½	1410	45¾	1162	8	200	15	381	29½	749	19½	495	774	351	190	86
12	300	57½	1461	53⅛	1349	9½	241	15	381	29½	749	21	533	1044	474	220	100

Noryl® is a registered trademark of SABIC Innovative Plastics™.

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SPECIFICATION SHEET

FEBCO®

MASTER series®

LEAD FREE*

MasterSeries® LF860

Reduced Pressure Zone Backflow Prevention Assemblies

Size: 2½" - 10" (65mm - 250mm)

The FEBCO MasterSeries LF860 Reduced Pressure Zone Assembly is specifically designed to protect against possible backpressure and backsiphonage conditions for high hazard [i.e., toxic] application in accordance with Local Governing Water Utility Code. This Backflow Prevention Assembly is primarily used on potable drinking water systems where Local Governing Code mandates protection from non-potable water being pumped or siphoned back into the potable water system.

The LF860 features Lead Free* construction to comply with low lead installation requirements. The Lead Free* Reduced Pressure Zone Assemblies shall comply with state codes and standards, where applicable, requiring reduced lead content.

Series LF860 Reduced Pressure Zone Assembly

Features

- Inline Serviceable Assembly
- No Special Tools Required for Servicing
- Captured Modular Spring Assembly
- Reversible & Replaceable Discs
- Field Replaceable Seats
- Ductile Iron Valve Body Design
- Stainless Steel Check Components
- Modular Pressure Differential Relief Valve
- Repairable Pressure Differential Relief Valve
- Clapper Check Assembly
- Captured O-ring Design

DOMESTIC

Specifications

The FEBCO MasterSeries LF860 Reduced Pressure Zone Assembly shall be installed on the potable water supply and at each point of cross-connection to protect against possible backpressure and backsiphonage conditions for high hazard [i.e., toxic] applications. The assembly shall consist of a main line valve body composed of a pressure differential relief valve located in a zone between two (2) independently acting approved clapper style check modules with replaceable seats and disc rubbers. Servicing of the pressure differential relief valve and both check modules does not require any special tools; both check modules are accessed through independently top entry covers. This assembly shall be fitted with AWWA Compliant inlet/outlet resilient seated shutoff valves; when used on a Fire-Sprinkler application, the assembly shall be fitted with approved UL/FM inlet/outlet resilient seated shutoff valves and contain four (4) properly located resilient seated test cocks as specified by AWWA Standard C511. Flow and pressure loss performance parameters shall meet the requirements of AWWA Standard C511.

NOTICE

This information is not intended to replace the product installation and safety information available or the experience of a trained product installer. Please refer to the product installation and safety instructions for further information.

***The wetted surface of this product contacted by consumable water contains less than 0.25% of lead by weight.**

Job Name _____ Contractor _____

Job Location _____ Approval _____

Engineer _____ Contractor's P.O. No. _____

Approval _____ Representative _____

FEBCO product specifications in U.S. customary units and metric are approximate and are provided for reference only. For precise measurements, please contact FEBCO. FEBCO reserves the right to change or modify product design, construction, specifications, or materials without prior notice and without incurring any obligation to make such changes and modifications on FEBCO products previously or subsequently sold.

Options - Suffix

OSY: UL/FM Approved OS&Y Gate Valves (ANSI/AWWA C515 Compliant)

NRS: Non-Rising Stem Gate Valves (ANSI/AWWA C509 Compliant)

LG: Less Shut-off valves; This is NOT an APPROVED ASSEMBLY

Example Ordering Descriptions:

4" LF860-OSY - Valve Assembly fitted with OS&Y Shutoff Valves

4" LF860-NRS - Valve Assembly fitted with NRS Shutoff Valves

Assembly Flow Orientation:

- Horizontal (2½" – 10") - Approved by FCCCHR-USC, ASSE, cULus, FM, IAPMO and CSA

Approvals - Standards

- Approved by the Foundation for Cross-Connection Control and Hydraulic Research at The University of Southern California (FCCCHR-USC)
- ASSE 1013 Listed
- **UL Classified (US & Canada)
- **FM Approved
- IAPMO
- AWWA Standard C511 Compliant
- End Connections: Compliant to ASME B16.1 Class 125 & AWWA Class D Flange

**Assembly configured with UL/FM Approved OS&Y RW Gate Valves. Less gate valve assemblies are not UL/FM approved configurations.

1048 B64.4

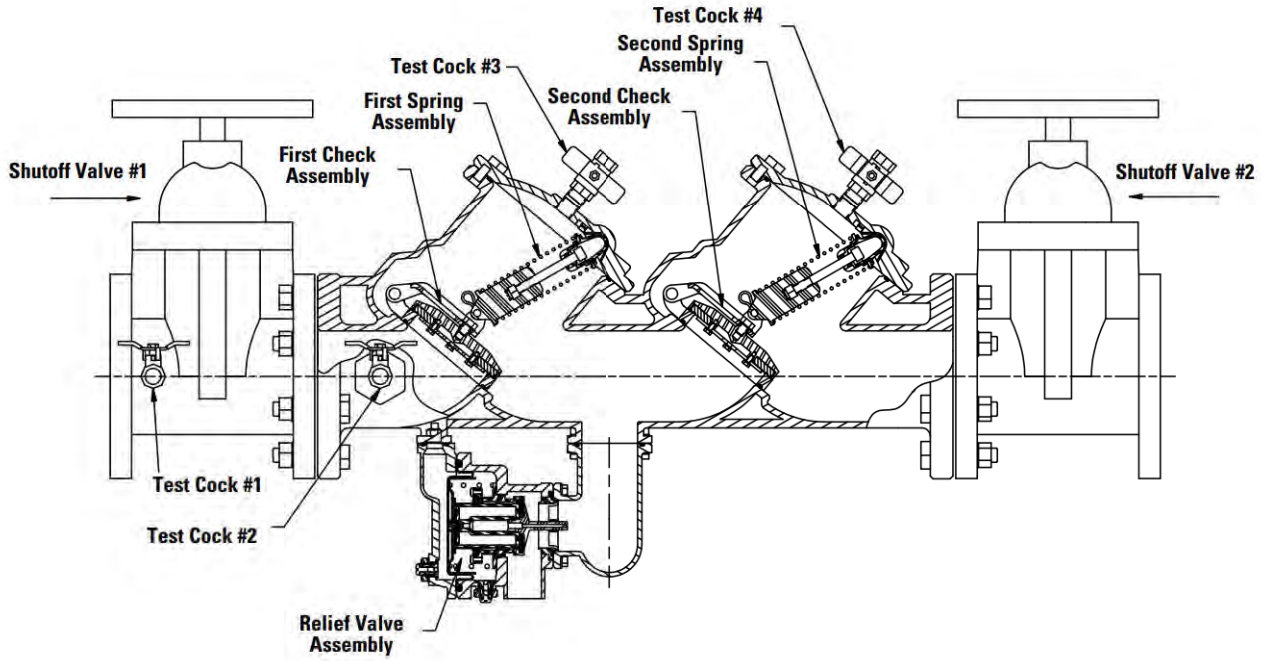
Materials

Below is a general materials list of the Series LF860. All assemblies size 2-1/2" through 10" is similar in materials and construction. Please contact your local FEBCO Representative if you require further information.

Main Valve Body:	Ductile iron Grade 65-45-12
Relief Valve Body:	Ductile iron Grade 65-45-12
Coating:	Fusion epoxy coated internal and external AWWA C550
Shutoff Valves:	NRS resilient wedge gate valve AWWA C509 (Standard) OSY resilient wedge gate valve AWWA C515 (UL/FM)
Check Seats:	Stainless Steel
Disc Holder:	Stainless Steel
Elastomer Disc:	Silicone
Spring:	Stainless Steel
Clamp:	AWWA C606 (10" Only)

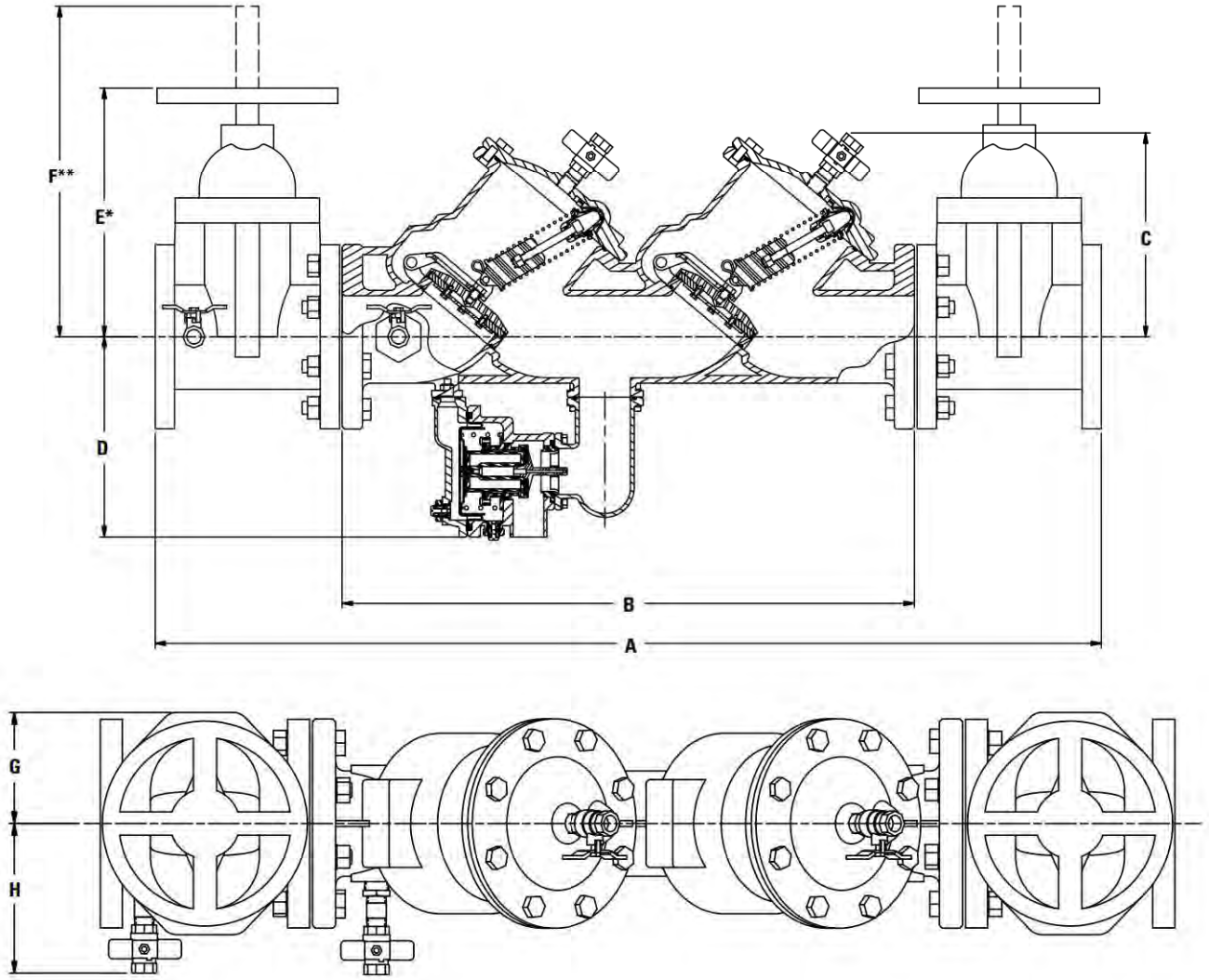
Pressure - Temperature

Max. Working Pressure:	175 psi (12.1 bar)
Min. Working Pressure:	20 psi (1.4 bar)
Hydrostatic Test Pressure:	350 psi (24.1 bar)
Hydrostatic Safety Pressure:	700 psi (48.3 bar)
Temperature Range:	33°F - 140°F (0.5°C - 60°C) Continuous



Dimensions & Weights

Below are the nominal dimensions and physical weights for the Series LF860 size 2-1/2" through 10". Allowances must be made for normal manufacturing tolerances. Please visit our website to download a copy of this product's installation instructions, or contact your local FEBCO Representative for more information.



LF860

SIZE (DN)		DIMENSIONS																WEIGHT***			
		A		B		C		D		E*		F**		G		H		NRS		OSY	
in.	*mm*	*in.*	*mm*	*in.*	*mm*	*in.*	*mm*	*in.*	*mm*	*in.*	*mm*	*in.*	*mm*	*in.*	*mm*	*in.*	*mm*	*lbs.*	*kg.*	*lbs.*	*kg.*
2½	65	40¾	1035	25½	648	10	254	10	254	12⅝	321	16⅜	416	4½	114	7⅛	181	250	113	254	115
3	80	41⅞	1064	25⅝	651	10	254	10	254	12⅞	327	22¼	565	4½	114	7⅜	187	276	125	280	127
4	100	46¼	1175	28	711	10⅛	257	10⅛	257	14⅜	365	23¼	591	5½	140	8⅛	206	335	152	347	157
6	150	56	1422	34¾	883	12¾	324	11⅛	283	18⅞	479	30⅛	765	6½	165	9⅞	251	503	228	523	237
8	200	65	1651	41¾	1061	15⅝	397	12¼	311	23½	597	37¾	959	7	178	11⅛	283	807	366	835	379
10	250	72⅝	1845	46⅜	1178	15⅝	397	12⅜	314	27½	699	48	1219	9	229	12⅜	314	1205	547	1243	564

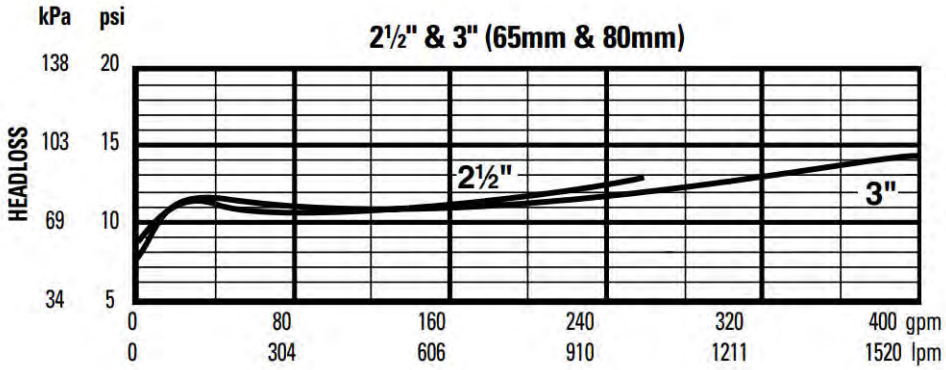
* Indicates nominal dimensions with NRS Gate Valves
** Indicates nominal dimensions with OSY Gate Valves (Full Open Position)
*** Indicates weight of complete Backflow Assemblies with specified Gate Valves

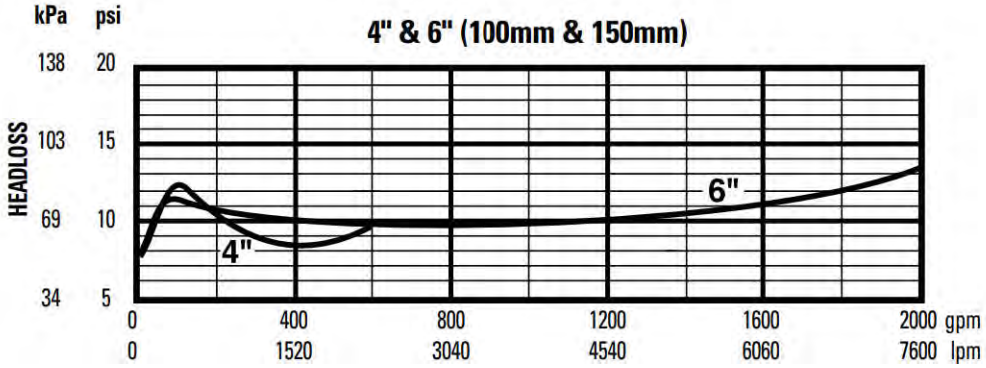
The gap drain is not designed to catch the maximum discharge possible from the relief valve. The installation of the FEBCO air gap with the drain line terminating above a floor drain will handle any normal discharge or nuisance spitting through the relief valve. However, floor drain size may need to be designed to prevent water damage caused by a catastrophic failure condition. Do not reduce the size of the drain line from the air gap fitting.

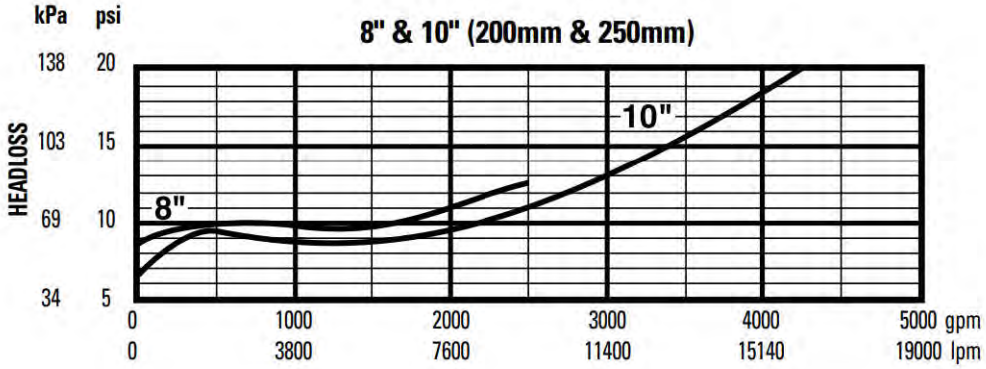
Performance

Flow capacity chart identifies valve performance based upon rated water Velocity up to 20fps

- Maximum service flow rate is determined by maximum rated Velocity of 7.5fps.
- AWWA Manual M-22 (Appendix C) recommends that the maximum water Velocity in the services be not more than 10fps.
- UL flow rate is determined by typically rated Velocity of 15 feet/sec.







FEBCO®

A Watts Water Technologies Company

MASTER series®

ISO 9001-2008 CERTIFIED

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APPENDIX C

COMPUTER MODELING OUTPUT

The following conditions were modeled:

0. Average Day Demand
1. Peak Hour Demand
2. Maximum Day Demand plus 1,500 gpm Fire Flow at Node 123
3. Maximum Day Demand plus 1,500 gpm Fire Flow at Node 125
4. Peak Domestic Demand – WFU Based

- Node and Pipe Diagram – Exhibit A

```
* * * * * * * * * * * * K Y P I P E * * * * * * * * * * * *
*                                                           *
*  Pipe Network Modeling Software                           *
*                                                           *
*  CopyRighted by KYPIPE LLC (www.kypipe.com)               *
*  Version: 12.009b  03-25-2024                             *
*  Company:  DEXWIL        Serial #:  580753                *
*  Interface:  Classic                                      *
*   Licensed for Pipe2018                                   *
*                                                           *
* * * * * * * * * * * * * * * * * * * * * * * * * * * * * *

 Date & Time:  Thu Apr 17 14:59:08 2025

 Master File : k:\1551001\esperanza pa 11 ky pipe jan 2025.KYP\esperanza pa 11 ky pipe jan
2025.P2K

              ********************************************
               S U M M A R Y   O F   O R I G I N A L   D A T A
              ********************************************


 U N I T S   S P E C I F I E D

    FLOWRATE ............ = gallons/minute
    HEAD (HGL) .......... = feet
    PRESSURE ............ = psig
```

P I P E L I N E D A T A

STATUS CODE: XX -CLOSED PIPE CV -CHECK VALVE

P I P E N A M E	NODE NAMES #1	#2	LENGTH (ft)	DIAMETER (in)	ROUGHNESS COEFF.	MINOR LOSS COEFF.
P-1	J-1	J-7	950.00	24.00	120.0000	0.00
P-2	J-1	FF Test	5000.00	24.00	120.0000	0.00
P-3	J-3	J-1	350.00	12.00	120.0000	0.00
P-4	J-4	J-3	620.00	8.00	120.0000	0.00
P-5	J-5	J-4	290.00	8.00	120.0000	0.00
P-6	J-6	J-5	410.00	8.00	120.0000	0.00
P-7	J-7	J-6	470.00	8.00	120.0000	0.00
P-8	J-3	I-BF-1	20.00	8.00	120.0000	1.50
P-9	J-9	J-8	260.00	4.00	120.0000	1.40
P-10	J-9	J-10	120.00	6.00	120.0000	1.40
P-11	J-5	I-Meter 1	20.00	6.00	120.0000	2.50
P-12	J-10	J-11	240.00	6.00	120.0000	1.75
P-13	J-11	J-13	90.00	6.00	120.0000	0.75
P-14	J-13	J-14	120.00	6.00	120.0000	0.75
P-15	J-14	J-12	160.00	6.00	120.0000	1.15
P-16	J-12	J-15	190.00	4.00	120.0000	1.40
P-17	J-12	J-16	300.00	6.00	120.0000	1.00
P-18	J-16	J-17	170.00	4.00	120.0000	1.00
P-19	J-16	J-18	410.00	6.00	120.0000	1.40
P-20	J-18	J-19	170.00	4.00	120.0000	1.00
P-21	J-9	J-18	370.00	6.00	120.0000	0.40
P-23	O-BF-1	J-121	200.00	8.00	120.0000	1.50
P-24	O-Meter 1	J-10	200.00	6.00	120.0000	1.50
P-25	J-5	I-BF-2	20.00	8.00	120.0000	0.00
P-26	O-BF-2	J-122	250.00	8.00	120.0000	0.00
P-127	J-122	J-121	340.00	8.00	120.0000	1.40
P-128	J-121	J-123	500.00	8.00	120.0000	3.00
P-131	J-125	J-122	350.00	8.00	120.0000	4.50

P U M P/L O S S E L E M E N T D A T A

THERE IS A DEVICE AT NODE Meter 1 DESCRIBED BY THE FOLLOWING DATA: (ID= 2)

HEAD (ft)	FLOWRATE (gpm)	EFFICIENCY (%)
-18.46	0.00	75.00 (Default)
-19.62	200.00	75.00 (Default)
-20.77	400.00	75.00 (Default)
-21.92	600.00	75.00 (Default)
-23.08	800.00	75.00 (Default)

THERE IS A DEVICE AT NODE BF-1 DESCRIBED BY THE FOLLOWING DATA: (ID= 1)

HEAD (ft)	FLOWRATE (gpm)	EFFICIENCY (%)
-16.15	0.00	75.00 (Default)
-18.46	500.00	75.00 (Default)
-20.77	1000.00	75.00 (Default)
-23.08	1500.00	75.00 (Default)
-25.38	2000.00	75.00 (Default)

THERE IS A DEVICE AT NODE BF-2 .....> (ID= 1)

N O D E D A T A

NODE NAME	NODE TITLE	EXTERNAL DEMAND (gpm)	JUNCTION ELEVATION (ft)	EXTERNAL GRADE (ft)
FF Test		----	0.00	886.00
O-Meter 1		0.00	712.00	
O-BF-1		0.00	707.00	
O-BF-2		0.00	712.00	
J-1		0.00	705.00	
J-3		0.00	707.00	
J-4		0.00	711.00	
J-5		0.00	712.00	
J-6		0.00	715.00	
J-7		0.00	715.00	
J-8		3.00	709.00	
J-9		3.00	708.00	
J-10		3.00	710.00	
J-11		3.00	710.00	
J-12		3.00	709.00	
J-13		3.00	711.00	
J-14		3.00	711.00	
J-15		3.00	709.00	
J-16		3.00	708.00	
J-17		3.00	708.00	
J-18		3.00	706.00	
J-19		3.00	706.00	
J-121		0.00	708.00	
J-122		0.00	710.00	
J-123		0.00	710.00	
J-125		0.00	711.00	
I-Meter 1		0.00	712.00	
I-BF-1		0.00	707.00	
I-BF-2		0.00	712.00	

O U T P U T O P T I O N D A T A

OUTPUT SELECTION: ALL RESULTS ARE INCLUDED IN THE TABULATED OUTPUT
MAXIMUM AND MINIMUM PRESSURES = 3
MAXIMUM AND MINIMUM VELOCITIES = 3

S Y S T E M C O N F I G U R A T I O N

NUMBER OF PIPES .....(P) = 28
NUMBER OF END NODES .....(J) = 25
NUMBER OF PRIMARY LOOPS .....(L) = 3
NUMBER OF SUPPLY NODES .....(F) = 1
NUMBER OF SUPPLY ZONES .....(Z) = 1

==========

Case: 0

RESULTS OBTAINED AFTER 200 TRIALS: ACCURACY = 0.13216E+01

AVERAGE DAY DEMAND

S I M U L A T I O N D E S C R I P T I O N (L A B E L)

P I P E L I N E R E S U L T S

STATUS CODE: XX -CLOSED PIPE CV -CHECK VALVE

PIPE NAME	NODE NUMBERS #1	#2	FLOWRATE gpm	HEAD LOSS ft	MINOR LOSS ft	LINE VELO. ft/s	HL+ML/ 1000 ft/f	HL/ 1000 ft/f
P-1	J-1	J-7	45.45	0.00	0.00	0.03	0.00	0.00
P-2	J-1	FF Test	-36.00	0.00	0.00	0.03	0.00	0.00
P-3	J-3	J-1	9.45	0.00	0.00	0.03	0.00	0.00
P-4	J-4	J-3	124.30	0.28	0.00	0.79	0.45	0.45
P-5	J-5	J-4	124.30	0.13	0.00	0.79	0.45	0.45
P-6	J-6	J-5	45.45	0.03	0.00	0.29	0.07	0.07
P-7	J-7	J-6	45.45	0.03	0.00	0.29	0.07	0.07
P-8	J-3	I-BF-1	114.85	0.01	0.01	0.73	1.01	0.38
P-9	J-9	J-8	3.00	0.00	0.00	0.08	0.01	0.01
P-10	J-9	J-10	-17.25	0.01	0.00	0.20	0.05	0.05
P-11	J-5	I-Meter 1	36.00	0.00	0.01	0.41	0.51	0.18
P-12	J-10	J-11	15.75	0.01	0.00	0.18	0.04	0.04
P-13	J-11	J-13	12.75	0.00	0.00	0.14	0.03	0.03
P-14	J-13	J-14	9.75	0.00	0.00	0.11	0.02	0.02
P-15	J-14	J-12	6.75	0.00	0.00	0.08	0.01	0.01
P-16	J-12	J-15	3.00	0.00	0.00	0.08	0.01	0.01
P-17	J-12	J-16	0.75	0.00	0.00	0.01	0.00	0.00
P-18	J-16	J-17	3.00	0.00	0.00	0.08	0.01	0.01
P-19	J-16	J-18	-5.25	0.00	0.00	0.06	0.01	0.01
P-20	J-18	J-19	3.00	0.00	0.00	0.08	0.01	0.01
P-21	J-9	J-18	11.25	0.01	0.00	0.13	0.02	0.02
P-23	O-BF-1	J-121	114.85	0.08	0.01	0.73	0.45	0.38
P-24	O-Meter 1	J-10	36.00	0.04	0.00	0.41	0.20	0.18
P-25	J-5	I-BF-2	-114.85	0.01	0.00	0.73	0.38	0.38
P-26	O-BF-2	J-122	-114.85	0.10	0.00	0.73	0.38	0.38
P-127	J-122	J-121	-114.85	0.13	0.01	0.73	0.42	0.38
P-128	J-121	J-123	0.00	0.00	0.00	0.00	0.00	0.00
P-131	J-125	J-122	0.00	0.00	0.00	0.00	0.00	0.00

P U M P/L O S S E L E M E N T R E S U L T S

NAME	FLOWRATE gpm	INLET HEAD ft	OUTLET HEAD ft	PUMP HEAD ft	EFFIC-ENCY %	USEFUL POWER Hp	INCREMTL COST $	TOTAL COST $	#PUMPS PARALLEL	#PUMPS SERIES	NPSH Avail. ft	Case
Meter 1	36.00	173.93	155.26	-18.7	75.00	0.	0.0	0.0	**	**	207.1	0.0000
BF-1	114.85	178.98	162.30	-16.7	75.00	0.	0.0	0.0	**	**	212.2	0.0000
Warning P2K107:Device BF-2 is operating out of range.												
BF-2	-114.85	173.95	158.32	-15.6	75.00	0.	0.0	0.0	**	**	207.1	0.0000

N O D E R E S U L T S

NODE NAME	NODE TITLE	EXTERNAL DEMAND gpm	HYDRAULIC GRADE ft	NODE ELEVATION ft	PRESSURE HEAD ft	NODE PRESSURE psi
FF Test		----	886.00			
O-Meter 1		0.00	867.26	712.00	155.26	67.28
O-BF-1		0.00	869.30	707.00	162.30	70.33
O-BF-2		0.00	870.32	712.00	158.32	68.61
J-1		0.00	886.00	705.00	181.00	78.43
J-3		0.00	886.00	707.00	179.00	77.57
J-4		0.00	886.28	711.00	175.28	75.95
J-5		0.00	885.94	712.00	173.94	75.37
J-6		0.00	885.97	715.00	170.97	74.09
J-7		0.00	886.00	715.00	171.00	74.10
J-8		3.00	867.21	709.00	158.21	68.56
J-9		3.00	867.21	708.00	159.21	68.99
J-10		3.00	867.22	710.00	157.22	68.13
J-11		3.00	867.21	710.00	157.21	68.12
J-12		3.00	867.20	709.00	158.20	68.55
J-13		3.00	867.21	711.00	156.21	67.69
J-14		3.00	867.20	711.00	156.20	67.69
J-15		3.00	867.20	709.00	158.20	68.55
J-16		3.00	867.20	708.00	159.20	68.99
J-17		3.00	867.20	708.00	159.20	68.99
J-18		3.00	867.20	706.00	161.20	69.85
J-19		3.00	867.20	706.00	161.20	69.85
J-121		0.00	869.21	708.00	161.21	69.86
J-122		0.00	869.06	710.00	159.06	68.93
J-123		0.00	869.21	710.00	159.21	68.99
J-125		0.00	869.06	711.00	158.06	68.49
I-Meter 1		0.00	885.93	712.00	173.93	75.37
I-BF-1		0.00	885.98	707.00	178.98	77.56
I-BF-2		0.00	885.95	712.00	173.95	75.38

M A X I M U M A N D M I N I M U M V A L U E S

P R E S S U R E S

JUNCTION NUMBER	MAXIMUM PRESSURES psi	JUNCTION NUMBER	MINIMUM PRESSURES psi
J-1	78.43	O-Meter 1	67.28
J-3	77.57	J-14	67.69
I-BF-1	77.56	J-13	67.69

V E L O C I T I E S

PIPE NUMBER	MAXIMUM VELOCITY (ft/s)	PIPE NUMBER	MINIMUM VELOCITY (ft/s)
P-4	0.79	P-17	0.01
P-5	0.79	P-2	0.03
P-8	0.73	P-3	0.03

S U M M A R Y O F I N F L O W S A N D O U T F L O W S

(+) INFLOWS INTO THE SYSTEM FROM SUPPLY NODES
(-) OUTFLOWS FROM THE SYSTEM INTO SUPPLY NODES

NODE NAME	FLOWRATE gpm	NODE TITLE
FF Test	36.00	

NET SYSTEM INFLOW = 36.00
NET SYSTEM OUTFLOW = 0.00
NET SYSTEM DEMAND = 36.00

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Case: 1

C H A N G E S F O R N E X T S I M U L A T I O N (Change Number = 1)

Peak Hour Demand

JUNCTION DEMANDS CHANGED - PLEASE SEE RESULTS TABLE

RESULTS OBTAINED AFTER 200 TRIALS: ACCURACY = 0.12917E+01

P I P E L I N E R E S U L T S

STATUS CODE: XX -CLOSED PIPE CV -CHECK VALVE

PIPE NAME	NODE NUMBERS #1	#2	FLOWRATE gpm	HEAD LOSS ft	MINOR LOSS ft	LINE VELO. ft/s	HL+ML/ 1000 ft/f	HL/ 1000 ft/f
P-1	J-1	J-7	30.48	0.00	0.00	0.02	0.00	0.00
P-2	J-1	FF Test	-72.00	0.00	0.00	0.05	0.00	0.00
P-3	J-3	J-1	-41.52	0.00	0.00	0.12	0.01	0.01
P-4	J-4	J-3	57.65	0.07	0.00	0.37	0.11	0.11
P-5	J-5	J-4	57.65	0.03	0.00	0.37	0.11	0.11
P-6	J-6	J-5	30.48	0.01	0.00	0.19	0.03	0.03
P-7	J-7	J-6	30.48	0.02	0.00	0.19	0.03	0.03
P-8	J-3	I-BF-1	99.17	0.01	0.01	0.63	0.76	0.29
P-9	J-9	J-8	6.00	0.01	0.00	0.15	0.05	0.05
P-10	J-9	J-10	-34.51	0.02	0.00	0.39	0.20	0.17
P-11	J-5	I-Meter 1	72.00	0.01	0.03	0.82	1.95	0.66
P-12	J-10	J-11	31.49	0.03	0.00	0.36	0.16	0.14
P-13	J-11	J-13	25.49	0.01	0.00	0.29	0.11	0.10

P-14	J-13	J-14	19.49	0.01	0.00	0.22	0.06	0.06
P-15	J-14	J-12	13.49	0.00	0.00	0.15	0.03	0.03
P-16	J-12	J-15	6.00	0.01	0.00	0.15	0.05	0.05
P-17	J-12	J-16	1.49	0.00	0.00	0.02	0.00	0.00
P-18	J-16	J-17	6.00	0.01	0.00	0.15	0.05	0.05
P-19	J-16	J-18	-10.51	0.01	0.00	0.12	0.02	0.02
P-20	J-18	J-19	6.00	0.01	0.00	0.15	0.05	0.05
P-21	J-9	J-18	22.51	0.03	0.00	0.26	0.08	0.08
P-23	O-BF-1	J-121	99.17	0.06	0.01	0.63	0.34	0.29
P-24	O-Meter 1	J-10	72.00	0.13	0.02	0.82	0.74	0.66
P-25	J-5	I-BF-2	-99.17	0.01	0.00	0.63	0.29	0.29
P-26	O-BF-2	J-122	-99.17	0.07	0.00	0.63	0.29	0.29
P-127	J-122	J-121	-99.17	0.10	0.01	0.63	0.32	0.29
P-128	J-121	J-123	0.00	0.00	0.00	0.00	0.00	0.00
P-131	J-125	J-122	0.00	0.00	0.00	0.00	0.00	0.00

P U M P/L O S S E L E M E N T R E S U L T S

NAME	FLOWRATE gpm	INLET HEAD ft	OUTLET HEAD ft	PUMP HEAD ft	EFFIC-ENCY %	USEFUL POWER Hp	INCREMTL COST $	TOTAL COST $	#PUMPS PARALLEL	#PUMPS SERIES	NPSH Avail. ft	Case
Meter 1	72.00	173.93	155.05	-18.9	75.00	0.	0.0	0.0	**	**	207.1	1.0000
BF-1	99.17	178.98	162.37	-16.6	75.00	0.	0.0	0.0	**	**	212.2	1.0000
Warning P2K107:Device BF-2 is operating out of range.												
BF-2	-99.17	173.97	158.28	-15.7	75.00	0.	0.0	0.0	**	**	207.2	1.0000

N O D E R E S U L T S

NODE NAME	NODE TITLE	EXTERNAL DEMAND gpm	HYDRAULIC GRADE ft	NODE ELEVATION ft	PRESSURE HEAD ft	NODE PRESSURE psi
FF Test		----	886.00			
O-Meter 1		0.00	867.05	712.00	155.05	67.19
O-BF-1		0.00	869.37	707.00	162.37	70.36
O-BF-2		0.00	870.28	712.00	158.28	68.59
J-1		0.00	886.00	705.00	181.00	78.43
J-3		0.00	885.99	707.00	178.99	77.56
J-4		0.00	886.06	711.00	175.06	75.86
J-5		0.00	885.97	712.00	173.97	75.39
J-6		0.00	885.98	715.00	170.98	74.09
J-7		0.00	886.00	715.00	171.00	74.10
J-8		6.00(2.00)	866.87	709.00	157.87	68.41
J-9		6.00(2.00)	866.88	708.00	158.88	68.85
J-10		6.00(2.00)	866.90	710.00	156.90	67.99
J-11		6.00(2.00)	866.87	710.00	156.87	67.98
J-12		6.00(2.00)	866.84	709.00	157.84	68.40
J-13		6.00(2.00)	866.86	711.00	155.86	67.54
J-14		6.00(2.00)	866.85	711.00	155.85	67.53
J-15		6.00(2.00)	866.83	709.00	157.83	68.39
J-16		6.00(2.00)	866.84	708.00	158.84	68.83
J-17		6.00(2.00)	866.84	708.00	158.84	68.83
J-18		6.00(2.00)	866.85	706.00	160.85	69.70
J-19		6.00(2.00)	866.84	706.00	160.84	69.70
J-121		0.00	869.30	708.00	161.30	69.90
J-122		0.00	869.19	710.00	159.19	68.98
J-123		0.00	869.30	710.00	159.30	69.03
J-125		0.00	869.19	711.00	158.19	68.55
I-Meter 1		0.00	885.93	712.00	173.93	75.37
I-BF-1		0.00	885.98	707.00	178.98	77.56
I-BF-2		0.00	885.97	712.00	173.97	75.39

M A X I M U M A N D M I N I M U M V A L U E S

P R E S S U R E S

JUNCTION NUMBER	MAXIMUM PRESSURES psi	JUNCTION NUMBER	MINIMUM PRESSURES psi
J-1	78.43	O-Meter 1	67.19
J-3	77.56	J-14	67.53
I-BF-1	77.56	J-13	67.54

V E L O C I T I E S

PIPE NUMBER	MAXIMUM VELOCITY (ft/s)	PIPE NUMBER	MINIMUM VELOCITY (ft/s)
P-11	0.82	P-17	0.02
P-24	0.82	P-1	0.02
P-8	0.63	P-2	0.05

S U M M A R Y O F I N F L O W S A N D O U T F L O W S

(+) INFLOWS INTO THE SYSTEM FROM SUPPLY NODES
(-) OUTFLOWS FROM THE SYSTEM INTO SUPPLY NODES

NODE NAME	FLOWRATE gpm	NODE TITLE
FF Test	72.00	

NET SYSTEM INFLOW = 72.00
NET SYSTEM OUTFLOW = 0.00
NET SYSTEM DEMAND = 72.00

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Case: 2

C H A N G E S F O R N E X T S I M U L A T I O N (Change Number = 2)

Maximum Day Demand plus 1,500 gpm Fire Flow at Node 123

JUNCTION DEMANDS CHANGED - PLEASE SEE RESULTS TABLE

TANK at node FF Test has a new HGL of 837.000

RESULTS OBTAINED AFTER 5 TRIALS: ACCURACY = 0.25646E-05

P I P E L I N E R E S U L T S

STATUS CODE: XX -CLOSED PIPE CV -CHECK VALVE

PIPE NAME	NODE NUMBERS #1	#2	FLOWRATE gpm	HEAD LOSS ft	MINOR LOSS ft	LINE VELO. ft/s	HL+ML/ 1000 ft/f	HL/ 1000 ft/f
P-1	J-1	J-7	379.07	0.02	0.00	0.27	0.02	0.02
P-2	J-1	FF Test	-1557.60	1.14	0.00	1.10	0.23	0.23
P-3	J-3	J-1	-1178.53	1.40	0.00	3.34	3.99	3.99

P-4	J-4	J-3	-270.60	1.17	0.00	1.73	1.88	1.88
P-5	J-5	J-4	-270.60	0.55	0.00	1.73	1.88	1.88
P-6	J-6	J-5	379.07	1.44	0.00	2.42	3.51	3.51
P-7	J-7	J-6	379.07	1.65	0.00	2.42	3.51	3.51
P-8	J-3	I-BF-1	907.93	0.35	0.78	5.79	56.82	17.72
P-9	J-9	J-8	4.80	0.01	0.00	0.12	0.03	0.03
P-10	J-9	J-10	-27.60	0.01	0.00	0.31	0.13	0.11
P-11	J-5	I-Meter 1	57.60	0.01	0.02	0.65	1.26	0.44
P-12	J-10	J-11	25.20	0.02	0.00	0.29	0.10	0.09
P-13	J-11	J-13	20.40	0.01	0.00	0.23	0.07	0.06
P-14	J-13	J-14	15.60	0.00	0.00	0.18	0.04	0.04
P-15	J-14	J-12	10.80	0.00	0.00	0.12	0.02	0.02
P-16	J-12	J-15	4.80	0.01	0.00	0.12	0.03	0.03
P-17	J-12	J-16	1.20	0.00	0.00	0.01	0.00	0.00
P-18	J-16	J-17	4.80	0.01	0.00	0.12	0.03	0.03
P-19	J-16	J-18	-8.40	0.01	0.00	0.10	0.01	0.01
P-20	J-18	J-19	4.80	0.01	0.00	0.12	0.03	0.03
P-21	J-9	J-18	18.00	0.02	0.00	0.20	0.05	0.05
P-23	O-BF-1	J-121	907.93	3.54	0.78	5.79	21.63	17.72
P-24	O-Meter 1	J-10	57.60	0.09	0.01	0.65	0.49	0.44
P-25	J-5	I-BF-2	592.07	0.16	0.00	3.78	8.03	8.03
P-26	O-BF-2	J-122	592.07	2.01	0.00	3.78	8.03	8.03
P-127	J-122	J-121	592.07	2.73	0.31	3.78	8.94	8.03
P-128	J-121	J-123	1500.00	22.45	4.27	9.57	53.43	44.89
P-131	J-125	J-122	0.00	0.00	0.00	0.00	0.00	0.00

P U M P/L O S S E L E M E N T R E S U L T S

NAME	FLOWRATE gpm	INLET HEAD ft	OUTLET HEAD ft	PUMP HEAD ft	EFFIC-ENCY %	USEFUL POWER Hp	INCREMTL COST $	TOTAL COST $	#PUMPS PARALLEL	#PUMPS SERIES	NPSH Avail. ft	Case
Meter 1	57.60	120.72	101.93	-18.8	75.00	0.	0.0	0.0	**	**	153.9	2.0000
BF-1	907.93	126.33	105.98	-20.3	75.00	-5.	0.0	-0.1	**	**	159.0	2.0000
BF-2	592.07	120.59	101.70	-18.9	75.00	-3.	0.0	0.1	**	**	153.6	2.0000

N O D E R E S U L T S

NODE NAME	NODE TITLE	EXTERNAL DEMAND gpm	HYDRAULIC GRADE ft	NODE ELEVATION ft	PRESSURE HEAD ft	NODE PRESSURE psi
FF Test		----	837.00			
O-Meter 1		0.00	813.93	712.00	101.93	44.17
O-BF-1		0.00	812.98	707.00	105.98	45.93
O-BF-2		0.00	813.70	712.00	101.70	44.07
J-1		0.00	835.86	705.00	130.86	56.70
J-3		0.00	834.46	707.00	127.46	55.23
J-4		0.00	833.29	711.00	122.29	52.99
J-5		0.00	832.75	712.00	120.75	52.32
J-6		0.00	834.19	715.00	119.19	51.65
J-7		0.00	835.84	715.00	120.84	52.36
J-8		4.80(1.60)	813.81	709.00	104.81	45.42
J-9		4.80(1.60)	813.82	708.00	105.82	45.85
J-10		4.80(1.60)	813.83	710.00	103.83	44.99
J-11		4.80(1.60)	813.81	710.00	103.81	44.98
J-12		4.80(1.60)	813.79	709.00	104.79	45.41
J-13		4.80(1.60)	813.80	711.00	102.80	44.55
J-14		4.80(1.60)	813.80	711.00	102.80	44.55
J-15		4.80(1.60)	813.79	709.00	104.79	45.41
J-16		4.80(1.60)	813.79	708.00	105.79	45.84

J-17	4.80(1.60)	813.79	708.00	105.79	45.84
J-18	4.80(1.60)	813.80	706.00	107.80	46.71
J-19	4.80(1.60)	813.79	706.00	107.79	46.71
J-121	0.00	808.66	708.00	100.66	43.62
J-122	0.00	811.70	710.00	101.70	44.07
J-123	1500.00	781.94	710.00	71.94	31.17
J-125	0.00	811.70	711.00	100.70	43.63
I-Meter 1	0.00	832.72	712.00	120.72	52.31
I-BF-1	0.00	833.33	707.00	126.33	54.74
I-BF-2	0.00	832.59	712.00	120.59	52.25

M A X I M U M A N D M I N I M U M V A L U E S

P R E S S U R E S

JUNCTION NUMBER	MAXIMUM PRESSURES psi	JUNCTION NUMBER	MINIMUM PRESSURES psi
J-1	56.70	J-123	31.17
J-3	55.23	J-121	43.62
I-BF-1	54.74	J-125	43.63

V E L O C I T I E S

PIPE NUMBER	MAXIMUM VELOCITY (ft/s)	PIPE NUMBER	MINIMUM VELOCITY (ft/s)
P-128	9.57	P-17	0.01
P-8	5.79	P-19	0.10
P-23	5.79	P-15	0.12

S U M M A R Y O F I N F L O W S A N D O U T F L O W S

(+) INFLOWS INTO THE SYSTEM FROM SUPPLY NODES
(-) OUTFLOWS FROM THE SYSTEM INTO SUPPLY NODES

NODE NAME	FLOWRATE gpm	NODE TITLE
FF Test	1557.60	

NET SYSTEM INFLOW = 1557.60
NET SYSTEM OUTFLOW = 0.00
NET SYSTEM DEMAND = 1557.60

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Case: 3

C H A N G E S F O R N E X T S I M U L A T I O N (Change Number = 3)

Maximum Day Demand plus 1,500 gpm Fire Flow at Node 125

JUNCTION DEMANDS CHANGED - PLEASE SEE RESULTS TABLE

TANK at node FF Test has a new HGL of 837.000

RESULTS OBTAINED AFTER 4 TRIALS: ACCURACY = 0.12494E-05

P I P E L I N E R E S U L T S

STATUS CODE: XX -CLOSED PIPE CV -CHECK VALVE

PIPE NAME	NODE NUMBERS #1	#2	FLOWRATE gpm	HEAD LOSS ft	MINOR LOSS ft	LINE VELO. ft/s	HL+ML/ 1000 ft/f	HL/ 1000 ft/f
P-1	J-1	J-7	466.21	0.02	0.00	0.33	0.02	0.02
P-2	J-1	FF Test	-1557.60	1.14	0.00	1.10	0.23	0.23
P-3	J-3	J-1	-1091.39	1.21	0.00	3.10	3.46	3.46
P-4	J-4	J-3	-388.68	2.28	0.00	2.48	3.68	3.68
P-5	J-5	J-4	-388.68	1.07	0.00	2.48	3.68	3.68
P-6	J-6	J-5	466.21	2.11	0.00	2.98	5.16	5.16
P-7	J-7	J-6	466.21	2.42	0.00	2.98	5.16	5.16
P-8	J-3	I-BF-1	702.70	0.22	0.47	4.48	34.45	11.02
P-9	J-9	J-8	4.80	0.01	0.00	0.12	0.03	0.03
P-10	J-9	J-10	-27.60	0.01	0.00	0.31	0.13	0.11
P-11	J-5	I-Meter 1	57.60	0.01	0.02	0.65	1.26	0.44
P-12	J-10	J-11	25.20	0.02	0.00	0.29	0.10	0.09
P-13	J-11	J-13	20.40	0.01	0.00	0.23	0.07	0.06
P-14	J-13	J-14	15.60	0.00	0.00	0.18	0.04	0.04
P-15	J-14	J-12	10.80	0.00	0.00	0.12	0.02	0.02
P-16	J-12	J-15	4.80	0.01	0.00	0.12	0.03	0.03
P-17	J-12	J-16	1.20	0.00	0.00	0.01	0.00	0.00
P-18	J-16	J-17	4.80	0.01	0.00	0.12	0.03	0.03
P-19	J-16	J-18	-8.40	0.01	0.00	0.10	0.01	0.01
P-20	J-18	J-19	4.80	0.01	0.00	0.12	0.03	0.03
P-21	J-9	J-18	18.00	0.02	0.00	0.20	0.05	0.05
P-23	O-BF-1	J-121	702.70	2.20	0.47	4.48	13.37	11.02
P-24	O-Meter 1	J-10	57.60	0.09	0.01	0.65	0.49	0.44
P-25	J-5	I-BF-2	797.30	0.28	0.00	5.09	13.93	13.93
P-26	O-BF-2	J-122	797.30	3.48	0.00	5.09	13.93	13.93
P-127	J-122	J-121	-702.70	3.75	0.44	4.48	12.31	11.02
P-128	J-121	J-123	0.00	0.00	0.00	0.00	0.00	0.00
P-131	J-125	J-122	-1500.00	15.71	6.40	9.57	63.19	44.89

P U M P/L O S S E L E M E N T R E S U L T S

NAME	FLOWRATE gpm	INLET HEAD ft	OUTLET HEAD ft	PUMP HEAD ft	EFFIC-ENCY %	USEFUL POWER Hp	INCREMTL COST $	TOTAL COST $	#PUMPS PARALLEL	#PUMPS SERIES	NPSH Avail. ft	Case
Meter 1	57.60	119.27	100.48	-18.8	75.00	0.	0.0	0.0	**	**	152.5	3.0000
BF-1	702.70	126.96	107.56	-19.4	75.00	-3.	-0.2	-0.3	**	**	159.8	3.0000
BF-2	797.30	119.02	99.18	-19.8	75.00	-4.	-0.1	-0.1	**	**	151.8	3.0000

N O D E R E S U L T S

NODE NAME	NODE TITLE	EXTERNAL DEMAND gpm	HYDRAULIC GRADE ft	NODE ELEVATION ft	PRESSURE HEAD ft	NODE PRESSURE psi
FF Test		----	837.00			
O-Meter 1		0.00	812.48	712.00	100.48	43.54
O-BF-1		0.00	814.56	707.00	107.56	46.61
O-BF-2		0.00	811.18	712.00	99.18	42.98
J-1		0.00	835.86	705.00	130.86	56.70
J-3		0.00	834.65	707.00	127.65	55.31
J-4		0.00	832.36	711.00	121.36	52.59
J-5		0.00	831.30	712.00	119.30	51.70
J-6		0.00	833.41	715.00	118.41	51.31
J-7		0.00	835.83	715.00	120.83	52.36
J-8		4.80(1.60)	812.36	709.00	103.36	44.79
J-9		4.80(1.60)	812.37	708.00	104.37	45.23
J-10		4.80(1.60)	812.38	710.00	102.38	44.37
J-11		4.80(1.60)	812.36	710.00	102.36	44.35
J-12		4.80(1.60)	812.34	709.00	103.34	44.78
J-13		4.80(1.60)	812.35	711.00	101.35	43.92
J-14		4.80(1.60)	812.34	711.00	101.34	43.92
J-15		4.80(1.60)	812.34	709.00	103.34	44.78
J-16		4.80(1.60)	812.34	708.00	104.34	45.21
J-17		4.80(1.60)	812.34	708.00	104.34	45.21
J-18		4.80(1.60)	812.35	706.00	106.35	46.08
J-19		4.80(1.60)	812.34	706.00	106.34	46.08
J-121		0.00	811.89	708.00	103.89	45.02
J-122		0.00	807.70	710.00	97.70	42.34
J-123		0.00	811.89	710.00	101.89	44.15
J-125		1500.00	785.59	711.00	74.59	32.32
I-Meter 1		0.00	831.27	712.00	119.27	51.68
I-BF-1		0.00	833.96	707.00	126.96	55.02
I-BF-2		0.00	831.02	712.00	119.02	51.57

M A X I M U M A N D M I N I M U M V A L U E S

P R E S S U R E S

JUNCTION NUMBER	MAXIMUM PRESSURES psi	JUNCTION NUMBER	MINIMUM PRESSURES psi
J-1	56.70	J-125	32.32
J-3	55.31	J-122	42.34
I-BF-1	55.02	O-BF-2	42.98

V E L O C I T I E S

PIPE NUMBER	MAXIMUM VELOCITY (ft/s)	PIPE NUMBER	MINIMUM VELOCITY (ft/s)
P-131	9.57	P-17	0.01
P-25	5.09	P-19	0.10
P-26	5.09	P-15	0.12

S U M M A R Y O F I N F L O W S A N D O U T F L O W S

(+) INFLOWS INTO THE SYSTEM FROM SUPPLY NODES
(-) OUTFLOWS FROM THE SYSTEM INTO SUPPLY NODES

NODE NAME	FLOWRATE gpm	NODE TITLE
FF Test	1557.60	

NET SYSTEM INFLOW = 1557.60
NET SYSTEM OUTFLOW = 0.00
NET SYSTEM DEMAND = 1557.60

==========

Case: 4

C H A N G E S F O R N E X T S I M U L A T I O N (Change Number = 4)

Peak Domestic Demand - WFU Based

JUNCTION DEMANDS CHANGED - PLEASE SEE RESULTS TABLE

TANK at node FF Test has a new HGL of 886.000

RESULTS OBTAINED AFTER 14 TRIALS: ACCURACY = 0.97120E-04

P I P E L I N E R E S U L T S

STATUS CODE: XX -CLOSED PIPE CV -CHECK VALVE

PIPE NAME	NODE NUMBERS #1	#2	FLOWRATE gpm	HEAD LOSS ft	MINOR LOSS ft	LINE VELO. ft/s	HL+ML/ 1000 ft/f	HL/ 1000 ft/f
P-1	J-1	J-7	282.34	0.01	0.00	0.20	0.01	0.01
P-2	J-1	FF Test	-673.20	0.24	0.00	0.48	0.05	0.05
P-3	J-3	J-1	-390.86	0.18	0.00	1.11	0.52	0.52
P-4	J-4	J-3	-262.62	1.10	0.00	1.68	1.78	1.78
P-5	J-5	J-4	-262.62	0.52	0.00	1.68	1.78	1.78
P-6	J-6	J-5	282.34	0.84	0.00	1.80	2.04	2.04
P-7	J-7	J-6	282.34	0.96	0.00	1.80	2.04	2.04
P-8	J-3	I-BF-1	128.24	0.01	0.02	0.82	1.25	0.47
P-9	J-9	J-8	56.10	0.78	0.04	1.43	3.16	2.99
P-10	J-9	J-10	-323.14	1.27	0.29	3.67	13.05	10.62
P-11	J-5	I-Meter 1	673.20	0.83	2.26	7.64	154.56	41.33
P-12	J-10	J-11	293.96	2.14	0.30	3.34	10.17	8.91
P-13	J-11	J-13	237.86	0.54	0.08	2.70	6.96	6.02

P-14	J-13	J-14	181.76	0.44	0.05	2.06	4.07	3.66
P-15	J-14	J-12	125.66	0.30	0.04	1.43	2.07	1.85
P-16	J-12	J-15	56.10	0.57	0.04	1.43	3.22	2.99
P-17	J-12	J-16	13.46	0.01	0.00	0.15	0.03	0.03
P-18	J-16	J-17	56.10	0.51	0.03	1.43	3.17	2.99
P-19	J-16	J-18	-98.74	0.48	0.03	1.12	1.25	1.18
P-20	J-18	J-19	56.10	0.51	0.03	1.43	3.17	2.99
P-21	J-9	J-18	210.94	1.78	0.04	2.39	4.91	4.82
P-23	O-BF-1	J-121	128.24	0.09	0.02	0.82	0.55	0.47
P-24	O-Meter 1	J-10	673.20	8.27	1.36	7.64	48.12	41.33
P-25	J-5	I-BF-2	-128.24	0.01	0.00	0.82	0.47	0.47
P-26	O-BF-2	J-122	-128.24	0.12	0.00	0.82	0.47	0.47
P-127	J-122	J-121	-128.24	0.16	0.01	0.82	0.52	0.47
P-128	J-121	J-123	0.00	0.00	0.00	0.00	0.00	0.00
P-131	J-125	J-122	0.00	0.00	0.00	0.00	0.00	0.00

P U M P/L O S S E L E M E N T R E S U L T S

NAME	FLOWRATE gpm	INLET HEAD ft	OUTLET HEAD ft	PUMP HEAD ft	EFFIC-ENCY %	USEFUL POWER Hp	INCREMTL COST $	TOTAL COST $	#PUMPS PARALLEL	#PUMPS SERIES	NPSH Avail. ft	Case
Meter 1	673.20	168.87	146.52	-22.3	75.00	-4.	0.0	-0.1	**	**	201.2	4.0000
BF-1	128.24	178.55	161.81	-16.7	75.00	-1.	-0.2	-0.5	**	**	211.7	4.0000
Warning P2K107:Device BF-2 is operating out of range.												
BF-2	-128.24	171.97	156.40	-15.6	75.00	1.	-0.2	-0.3	**	**	205.2	4.0000

N O D E R E S U L T S

NODE NAME	NODE TITLE	EXTERNAL DEMAND gpm	HYDRAULIC GRADE ft	NODE ELEVATION ft	PRESSURE HEAD ft	NODE PRESSURE psi
FF Test		----	886.00			
O-Meter 1		0.00	858.52	712.00	146.52	63.49
O-BF-1		0.00	868.81	707.00	161.81	70.12
O-BF-2		0.00	868.40	712.00	156.40	67.78
J-1		0.00	885.76	705.00	180.76	78.33
J-3		0.00	885.58	707.00	178.58	77.38
J-4		0.00	884.47	711.00	173.47	75.17
J-5		0.00	883.96	712.00	171.96	74.51
J-6		0.00	884.79	715.00	169.79	73.58
J-7		0.00	885.75	715.00	170.75	73.99
J-8		56.10(**)	846.51	709.00	137.51	59.59
J-9		56.10(**)	847.33	708.00	139.33	60.38
J-10		56.10(**)	848.90	710.00	138.90	60.19
J-11		56.10(**)	846.46	710.00	136.46	59.13
J-12		56.10(**)	845.01	709.00	136.01	58.94
J-13		56.10(**)	845.83	711.00	134.83	58.43
J-14		56.10(**)	845.34	711.00	134.34	58.21
J-15		56.10(**)	844.40	709.00	135.40	58.67
J-16		56.10(**)	845.00	708.00	137.00	59.37
J-17		56.10(**)	844.46	708.00	136.46	59.13
J-18		56.10(**)	845.51	706.00	139.51	60.46
J-19		56.10(**)	844.97	706.00	138.97	60.22
J-121		0.00	868.70	708.00	160.70	69.64
J-122		0.00	868.52	710.00	158.52	68.69
J-123		0.00	868.70	710.00	158.70	68.77
J-125		0.00	868.52	711.00	157.52	68.26
I-Meter 1		0.00	880.87	712.00	168.87	73.18
I-BF-1		0.00	885.55	707.00	178.55	77.37
I-BF-2		0.00	883.97	712.00	171.97	74.52

M A X I M U M A N D M I N I M U M V A L U E S

P R E S S U R E S

JUNCTION NUMBER	MAXIMUM PRESSURES psi	JUNCTION NUMBER	MINIMUM PRESSURES psi
J-1	78.33	J-14	58.21
J-3	77.38	J-13	58.43
I-BF-1	77.37	J-15	58.67

V E L O C I T I E S

PIPE NUMBER	MAXIMUM VELOCITY (ft/s)	PIPE NUMBER	MINIMUM VELOCITY (ft/s)
P-11	7.64	P-17	0.15
P-24	7.64	P-1	0.20
P-10	3.67	P-2	0.48

S U M M A R Y O F I N F L O W S A N D O U T F L O W S

(+) INFLOWS INTO THE SYSTEM FROM SUPPLY NODES
(-) OUTFLOWS FROM THE SYSTEM INTO SUPPLY NODES

NODE NAME	FLOWRATE gpm	NODE TITLE
FF Test	673.20	

NET SYSTEM INFLOW = 673.20
NET SYSTEM OUTFLOW = 0.00
NET SYSTEM DEMAND = 673.20

***** HYDRAULIC ANALYSIS COMPLETED *****

NOTE: ALL EXISTING AND PROPOSED WATER LINES ARE IN THE 925 PRESSURE ZONE.

N

0 200 FEET

LEGEND

- PROJECT BOUNDARY
- EXISTING PUBLIC POTABLE WATER LINE
- PROPOSED PUBLIC POTABLE WATER LINE
- PROPOSED PRIVATE DOMESTIC SYSTEM
- PROPOSED PRIVATE FIRE PROTECTION SYSTEM
- EXISTING PUBLIC FIRE HYDRANT
- PROPOSED PRIVATE FIRE HYDRANT
- PROPOSED BACKFLOW PREVENTER
- PROPOSED WATER METER
- (0) COMPUTER MODEL NODE NUMBER
- [1] COMPUTER MODEL PIPE NUMBER

METER+1, BF-1, BF-2, F.F. TEST

CHATHAM ST, S AMHERST AVE, S EL REY PRIVADO, EUCALYPTUS AVE, MILL CREEK AVE, HAMNER AVE

EX.12", EX.24", EX.8", 4", 6", 8"

EXHIBIT A

NODE AND PIPE DIAGRAM

ESPERANZA PA 11 (ONTARIO EAST)

DEXTER WILSON ENGINEERING, INC.
CONSULTING ENGINEERS
(760) 438-4422

\\MERIDIAN\DWG\1551001\REPORT\EH_WTR_EXHIBIT-A_NP-DIAGRAM.DWG 4/17/2025 3:52:30 PM LAYOUT:11x17 USER:James

CITY OF ONTARIO
ONTARIO MUNICIPAL UTILITIES COMPANY
UTILITIES ENGINEERING DIVISION
1425 S. Bon View Avenue, Ontario, CA 91761
Phone: (909) 395-2600 FAX: (909) 395-2608

RECORD OF FIRE FLOW TEST # FM-25-0041 HAVEN AV BETWEEN MERRILL & EUCALYPTUS

Date:	3/24/2025
Model Operator:	J. Yang
Reviewed By:	E. Woosley
Approved By:	E. Woosley
Remarks:	

Project Information

Request Number:	**FM-25-0041**
Project Name (if applicable):	
Project Number(if applicable):	
Location:	**HAVEN AV BETWEEN MERRILL & EUCALYPTUS**

Pressure Zone (Max Reservoir HGL): 925 PZ Land Use (GP, TOP): MDR

Allowable Design Criteria
Expected Potable Water System Performance

Fire Hydrant #1 Flow Results	
Fire Hydrant Asset #:	J121
Fire Hydrant Model Node #:	J121
Hydrant elevation:	697 feet
Static Pressure:	82 psi
Flow Test Residual Pressure:	61 psi
Flow Test Observed Flow:	2,000 gpm
Expected Flow at 20 psi	**3,819 gpm**
Potential Peak High Water Pressure*:	99 psi

Main Direct Connection Flow Results	
Main Size	8-inch
Main Model Node #:	J115
In "G" Dr	
Static Pressure:	82 psi
Flow Test Residual Pressure:	66 psi
Flow Test Observed Flow:	2,000 gpm
Expected System Flow at 20 psi	**4,565 gpm**
Maximum Flow Pumped from Main**:	**1,567 gpm**

*Potential Peak High Water Pressure is based on Pressure Zone HGL and Hydrant Elevation.
**Maximum allowable Flow to be safely pumped from the main by a Pump System.

Notes

These results were modeled with a 8-inch main being installed and looped on "A" Street, "B" Street, "C" Street,"E" Street, "D" Street, "F" Dr., "G" Dr., and "H" Dr. from Eucalyptus Ave to Parkview St. If said improvements are not installed, these results are null and void.

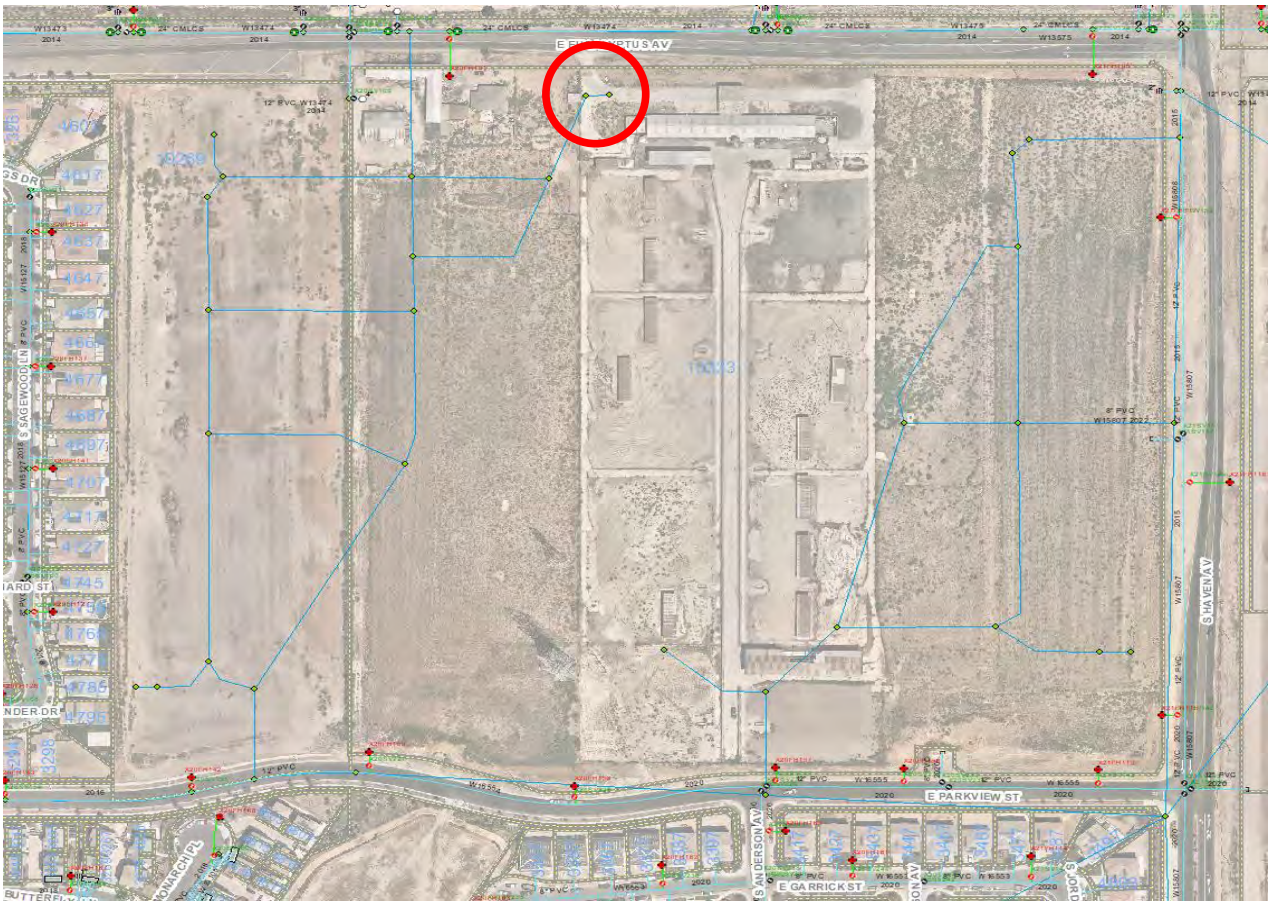
For Information on using Fire Flow Results contact the Fire Prevention Bureau at 909-395-2029.
For Details on how the Fire Flow Results were prepared, contact: UtilityFireFlows@ontarioca.gov

Disclaimer

The allowable design criteria shown above represents projected future maximum day water system conditions at the location of the test as determined by the City of Ontario's hydraulic water system computer model. This allowable design criteria does not constitute a guarantee by the City of the present or future conditions and availability, pursuant to City Resolution 85-85.

Actual water pressure will, in instances, exceed or fall below allowable design criteria due to seasonal and daily pressure variation within the City's water system. The designer is encouraged to provide an allowance in the fire protection system design to maintain adequate protection during such variations in system pressure.

The results are valid for a period of 12 months from the date of the test release unless extended in writing by the Ontario Fire Department.
These Fire Flow Results cannot be used to create Boundary Controls for use in Hydraulic Modeling.


E PARKVIEW ST
E GARRICK ST
S SAGEWOOD DR
S SHAVEN AV
S ANDERSON AV

DEXTER WILSON ENGINEERING, INC.

WATER • WASTEWATER • RECYCLED WATER

CONSULTING ENGINEERS

SEWER SYSTEM ANALYSIS FOR THE ESPERANZA PA 11 PROJECT IN ONTARIO RANCH IN THE CITY OF ONTARIO

April 17, 2025

2234 FARADAY AVENUE • CARLSBAD, CA • (760) 438-4422

SEWER SYSTEM ANALYSIS FOR THE ESPERANZA PA 11 PROJECT IN ONTARIO RANCH IN THE CITY OF ONTARIO

April 17, 2025

4-17-2025

Prepared by:
Dexter Wilson Engineering, Inc.
2234 Faraday Avenue
Carlsbad, CA 92008
(760) 438-4422

Job No. 1551-001

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Conclusions and Recommendations 9

APPENDICES

APPENDIX A DESIGN CRITERIA

APPENDIX B ESPERANZA PA 11 REFERENCE AND RED LINED PERTINENT SECTIONS OF THE 2022 L.D. KING MASTER SEWER STUDY

APPENDIX C SEWER ANALYSIS RESULTS

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TABLE 3 ESPERANZA PA 11 EXISTING DOWNSTREAM SEWER IMPACTS....9

DEXTER WILSON ENGINEERING, INC.

DEXTER S. WILSON, P.E.
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KATHLEEN H. NOEL, P.E.
WILLIAM W. TODD, P.E.

April 17, 2025 1551-001

Walden & Associates
2552 White Road, Suite B
Irvine, CA 92614

Attention: Marcos Padilla, P.E., President

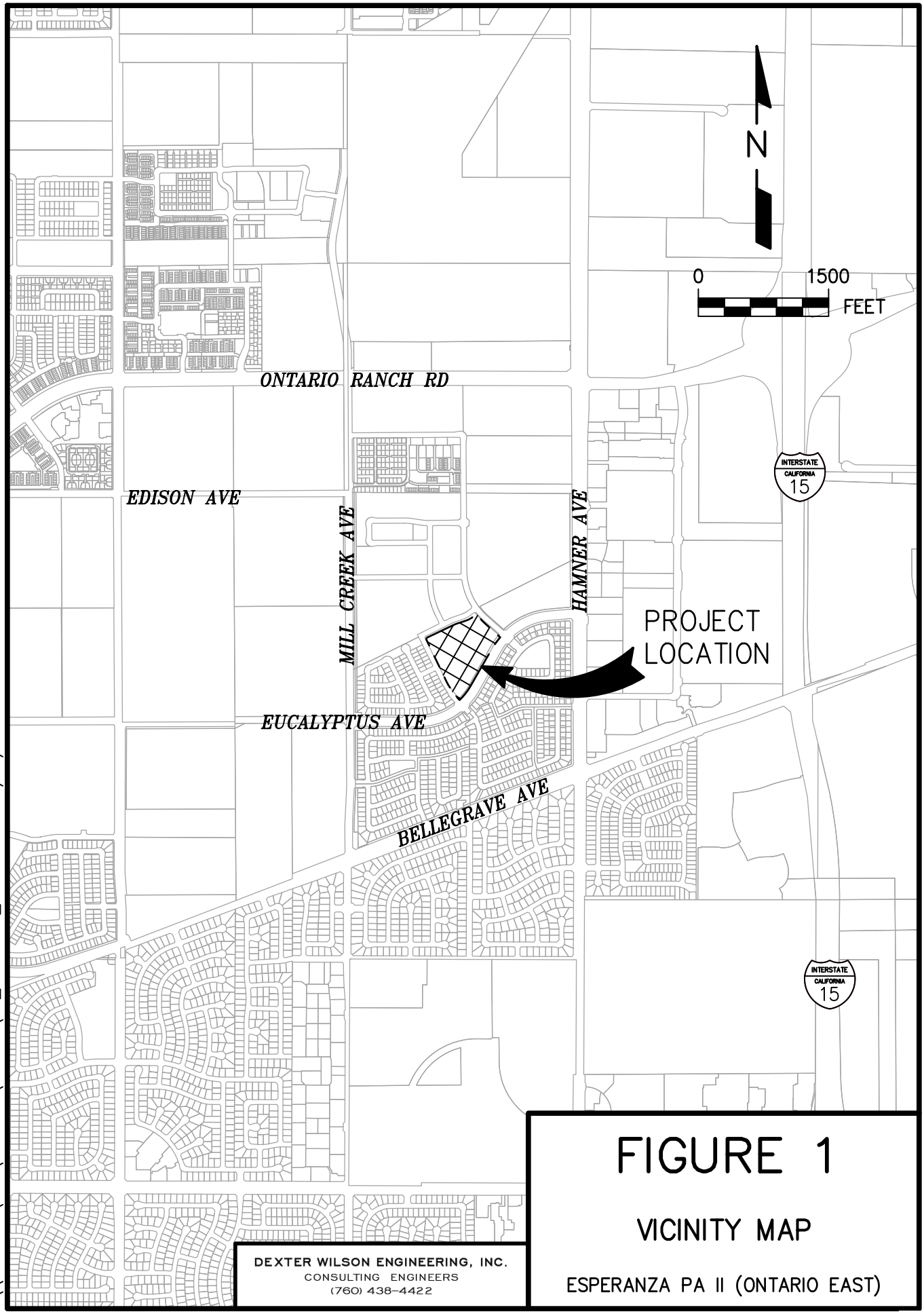
Subject: Sewer System Analysis for Esperanza PA 11 Project in the City of Ontario

Introduction

The Esperanza PA 11 project is located in the City of Ontario north of Eucalyptus Avenue between Amherst Avenue and Chatham Street. Access to the project will be from Amherst Avenue and Chatham Street. Sewer service for Esperanza PA 11 project will be provided by City of Ontario (City).

The proposed project is a mixed-use development consisting of 161 medium density residential units on approximately 10 acres.

A Vicinity Map for the project is shown on Figure 1.



\\MERIDIAN\DWG\1551001\REPORT\EH_FIGURE-1_VICMAP.DWG 7/12/2024 1:38:24 PM LAYOUT:8x11 USER:Karam

FIGURE 1

VICINITY MAP

ESPERANZA PA II (ONTARIO EAST)

DEXTER WILSON ENGINEERING, INC.
CONSULTING ENGINEERS
(760) 438-4422

Purpose of Study

The purpose of this letter report is to analyze the existing public sewer system downstream of the Esperanza PA 11 project and determine if there are any sewer system deficiencies created by the proposed development of this property and land use change from school site to medium density residential. This report will address any offsite (public) sewer system deficiencies that are created as a result of the development of the residential project.

A previous Ontario Ranch East Master Plan Sewer Study was prepared by L.D. King, Inc. for the overall master plan area in 2022 for the overall developer. This study will utilize that 2022 master plan where appropriate and will serve as an amendment to that 2022 master plan. Red lines of pertinent sections of the L.D. King, Inc. study are included in Appendix B.

Study Area

In general, the study area for this sewer report is the sewer sub-basin comprising of the tributary area surrounding the Esperanza PA 11 project up to the Eastern Trunk Sewer in Archibald Avenue. This sub-basin system collects the wastewater flow from Esperanza PA 11 and adjacent development. The gravity sewer in adjacent Amherst Avenue is an 8-inch sewer line that conveys wastewater to the connection with the 15-inch diameter sewer line running westerly in Eucalyptus Avenue. The 15-inch diameter sewer line in Eucalyptus Avenue turns south at Mill Creek Avenue and increases to 21-inch diameter before increasing to 27-inch diameter at Bellegrave Avenue and Merrill Avenue.

These existing public sewer facilities can be seen on Figure 2 and Exhibit A.

Sewer System Design Criteria

The design criteria used for the evaluation of the offsite sewerage system impacts by Esperanza PA 11 project are based on City design criteria. The City's Master Plan itself was referenced to confirm the pertinent design criteria as well. A copy of the pertinent sections in the City's Master Plan where the design criteria is located is attached as Appendix A.

\\MERIDIAN\DWG\1551001\REPORT\EH_SWR_FIGURE-2_EXPROSWR.DWG 4/17/2025 2:23:48 PM LAYOUT:11x17 USER:James

LEGEND

PROJECT BOUNDARY

EXISTING PUBLIC GRAVITY SEWER

PROPOSED PRIVATE GRAVITY SEWER

N

0 200 FEET

CHATHAM ST

S EL REY PRIVADO

S AMHERST AVE

HAMNER AVE

EUCALYPTUS AVE

MILL CREEK AVE

PROPOSED POINT OF CONNECTION

EX.8"

EX.15"

EX.21"

EUCALYPTUS AVE

EX.15"

EX.21"

DEXTER WILSON ENGINEERING, INC.
CONSULTING ENGINEERS
(760) 438-4422

FIGURE 2

EXISTING AND PROPOSED SEWER FACILITIES

ESPERANZA PA 11 (ONTARIO EAST)

Sewer Generation Rates. The sewer generation rates for the project is presented as Table 1 below.

TABLE 1
ESPERANZA PA 11 SEWER GENERATION RATES

Land Use	Generation Rate
Medium Density Residential	174 gpd/unit

Peaking Factors

The peaking factor utilized in this study is identified in City's design criteria. To convert average dry weather flows to peak wet weather flows, the following equation was used:

$Q_{peak\ dry\ weather\ flow} = 1.77 \times Q_{avg}^{\ 0.893}$, where Q_{peak} equals peak flow in MGD (million gallons per day) and Q_{avg} equals average flow in MGD.

$Q_{peak\ wet\ weather\ flow} = 1.34 \times Q_{peak\ dry\ weather\ flow}$

Manning's "n"

The gravity sewer analyses are made using a computer spreadsheet calculation which uses the Manning Equation for all of its calculations. The Manning's "n" used by the computer spreadsheet calculation is held as a constant for all depths in a circular conduit. The value of Manning's "n" used for this study is 0.013 per the City criteria.

Depth and Velocity of Flow in Gravity Sewers

Gravity sewer lines are designed to convey peak flow. For pipes up to 12 inches in diameter, flow depths are maintained at or below a d/D ratio of 0.50 under peak dry weather flows. Pipes that are larger than 12-inches in diameter are designed for a maximum d/D ratio of 0.64 under peak dry weather flows. For either group, the depth of flow to d/D shall not exceed 0.82 with peak wet weather flows.

Gravity sewer lines are designed to maintain a minimum velocity of 2.0 feet per second at peak flow to prevent the deposition of solids.

Existing Sewer System

There are existing gravity sewer lines that are adjacent to the project site. The sewer line that will be utilized by the project is an 8-inch diameter gravity sewer line in Amherst Avenue on the western boundary of the project. This existing sewer line conveys flow southerly and westerly and ultimately connects to the existing Eastern Trunk Sewer line in Archibald Avenue. Appendix B provides reference information of the existing sewer lines utilized by the project.

Existing Sewer Flows. The sewer system analysis for Esperanza PA 11 project will need to consider sewage flows from existing development that is upstream and downstream of the project. Esperanza PA 11 project will be the most upstream development along this particular stretch of gravity sewer. Appendix B summarizes the projected sewage flows from existing downstream development.

Proposed Sewer Facilities

The projected sewer flow from Esperanza PA 11 project is based on the 161 residential unit site plan. Table 2 provides the summary of projected sewage flows for the project.

TABLE 2
ESPERANZA PA 11 PROJECTED SEWAGE FLOWS

Description	Quantity	Unit Flow Factor	Total Avg. Flow
Residential	161 units	174 gpd/unit	28,014

Per the City design criteria, the peak dry weather flow to average flow ratio is approximately 2.59 based on the formula presented earlier this study, resulting in an estimated peak dry weather flow of 72,691 gpd (50 gpm). The peak wet weather flow is calculated to be 97,406 gpd (68 gpm).

The project will construct an onsite gravity sewer collection system within the project's overall street distribution. The onsite sewer system within Esperanza PA 11 project is proposed to consist of 8-inch diameter gravity sewer lines. The existing and proposed sewer facilities for Esperanza PA 11 project are presented on Figure 2 and Exhibit A.

Sewer System Analysis

To analyze the impact of Esperanza PA 11 project on the existing sewer system, a hydraulic analysis was conducted. Appendix C provides the hydraulic analysis output and Exhibit A provides the corresponding Manhole Diagram. To perform this analysis, we obtained As-Built and design drawings information of the existing sewer system so that the pipe sizes and slopes could be inputted to the spreadsheet. A key component of the hydraulic analysis is to estimate existing flows within the sewer lines that will be utilized to serve the Esperanza PA 11 project. Appendix B provided the summary of existing flows from existing offsite upstream and downstream development.

The existing downstream 8-inch, 15-inch, 21-inch, 24-inch, and 27-inch gravity sewer lines were analyzed to the point where it connects to the Eastern Trunk Sewer in Archibald Avenue.

Sewer System Analysis Results

Appendix C presents the results of the hydraulic analysis for Esperanza PA 11 project. The results indicate that the existing system has adequate capacity to serve the project. With the additional sewer flow from Esperanza PA 11 residential project, all sections of downstream sewer lines will flow less than depth criteria during peak flow conditions.

The analysis results in Appendix C also indicate where changes due to the land use occur in the downstream sewer system. These changes are indicated via red lines and comments.

A summary of the impacts of the existing downstream gravity sewer to the proposed project is shown below in Table 3.

TABLE 3
ESPERANZA PA 11 EXISTING DOWNSTREAM SEWER IMPACTS

Existing Downstream Sewer Section	Maximum d/D Ratio		Minimum Velocity, fps	
	PDWF	PWWF	PDWF	PWWF
8-inch Diameter	0.14	0.28	1.7	1.9
15-inch Diameter	0.26	0.32	2.5	2.7
21-inch Diameter	0.35	0.41	4.3	4.7
24-inch Diameter	0.58	0.72	2.3	2.5
27-inch Diameter	0.59	0.73	2.3	2.5

Conclusions and Recommendations

The following conclusions have been made related to providing sewer service to Esperanza PA 11 project.

1. Esperanza PA 11 project can receive sewer service by connecting to an existing public 8-inch diameter gravity sewer line in Amherst Avenue and connecting to its proposed in-tract gravity sewer collection system. The project will construct an 8-inch diameter gravity sewer collection system onsite.

2. The development of the project is projected to result in an average sewage flow of 28,014 gpd.

3. Figure 2 provides the project layout including the location of existing and proposed sewer facilities.

4. A sewer system analysis was conducted (see Appendix C) and indicates that all existing and proposed sewer lines have adequate capacity to convey peak flows from existing development plus Esperanza PA 11 project while maintaining depth-to-diameter ratios of less than City criteria.

5. The sewer system analysis conducted indicates that the existing 8-inch, 15-inch, 21-inch, 24-inch, and 27-inch diameter public gravity sewer lines downstream of the project site up to the Eastern Trunk Sewer in Archibald Avenue can accommodate both existing sewer flow and the sewer flows of the proposed project.

6. A previous Ontario Ranch East Master Plan Sewer Study was prepared by L.D. King, Inc. for the overall master plan area in 2022 for the overall developer. This study will utilize that 2022 master plan where appropriate and will serve as an amendment to that 2022 master plan. Red lines of pertinent sections of the L.D. King, Inc. study are included in Appendix B.

Thank you for the opportunity to assist you with the sewer system planning for Esperanza PA 11 project. If you have any questions regarding the information and conclusions presented in this report, please do not hesitate to call.

Dexter Wilson Engineering, Inc.

Steven Henderson, P.E.

Attachments

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APPENDIX A

DESIGN CRITERIA

Table 3-2
Sewer Unit Flow Factors

Landuse		Sewer Unit Flow Factors							
		Max Density (du/ac)[1]	Density (people/ du)[2]	FAR	gpd	unit	gpd/ac	gpd/tsf	gpd/du
Residential									
Rural Residential (OMC)	RR	2	3.997	-	52	gpd/person	420	-	208
Low Density Residential (OMC)	LDR	4	3.997	-	52	gpd/person	840	-	208
Low Density Residential (OR)	LDR	5	3.997	-	52	gpd/person	1,040	-	208
Low Medium Density Residential (OMC)	LMDR	8.5	3.997	-	52	gpd/person	1,785	-	208
Low Medium Density Residential (OR)	LMDR	11	3.997	-	52	gpd/person	2,300	-	208
Medium Density Residential (OMC)	MDR	18	3.347	-	52	gpd/person	3,150	-	174
Medium Density Residential (OR)	MDR	25	3.347	-	52	gpd/person	4,350	-	174
High Density Residential (OMC)	HDR	35	3.347	-	52	gpd/person	6,125	-	174
High Density Residential (OR)	HDR	40	3.347	-	52	gpd/person	6,960	-	174
Commercial									
Business Park	BP	-	-	0.40	53	gpd/job	1,610	90	-
General Commercial	GC	-	-	0.30	132	gpd/job	1,610	120	-
Hospitality[3]	HOS	-	-	1.00	116	gpd/room	-	100	-
Neighborhood Commercial	NC	-	-	0.30	51	gpd/job	1,610	120	-
Office Commercial	OC	-	-	0.75	31	gpd/job	2,250	70	-
Industrial									
Industrial	IND	-	-	0.55	51	gpd/job	1,060	45	-
Mixed Use[4]									
High Density Residential	MU-HDR	35	2.000	-	52	gpd/person	4,200	-	104
Office	MU-O	-	-	-	31	gpd/job	2,250	70	-
Non-Office	MU-NO	-	-	-	91	gpd/job	1,610	120	-
Open Space									
Open Space Non-Recreational	OS-NR	-	-	-	-	-	-	-	-
Open Space Recreational	OS-R	-	-	-	-	-	200	-	-
Public									
Public Facility	PF	-	-	-	-	-	1,450	-	-
Public Middle or High School	PS	-	-	-	8	gpd/student	-	-	
Public Elementary School	PS	-	-	-	8	gpd/student	-	-	-

[1] Max Density per the City's Buildout Table (April 2015) for Original Model Colony. Density for LDR, LMDR, MDR, and HDR in Ontario Ranch were increased per the City Planning Department recommendation (March 2016).

[2] Density per the City's Buildout Table (April 2015)

[3] The sewage generation for a hotel is best estimated by the number of rooms.

[4] Mixed Use demands should be based on the types of landuse that make up the specific area and the unit demand factors provided above. The City's Buildout Table (April 2015) provides detailed information on the landuses that make up each mixed use area.

Definitions: ac = acre; du = dwelling unit; gpd = gallons per day; OMC = Original Model Colony; OR = Ontario Ranch; tsf = thousand sqare feet

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3-3.1 Residential Sewer Unit Flow Factors

As shown on Figure 3-1, the flow monitoring sites were primarily chosen in the Original Model Colony (OMC) areas, which are generally built out. The residential developments in this area is predominately low density residential (LDR) and high density residential (HDR), which were used to develop the sewage generation estimates in gallons per day per person.

The sewer unit flow factor for LDR and HDR were calculated to be 52 and 51 gpd/person, respectively, when applying annual sewer return ratios to the potable water unit flow factors. This calculation shows that the sewage generation per person is very similar, regardless of the residential land use categorization. For planning purposes, the sewage unit flow factor of 52 gpd per person was applied to all residential land use types, as shown in Table 3-2.

The majority of the new development is composed of low density residential (LDR) and low-medium density residential (LMDR) land use types, each with an estimated population density of 3.997 persons per dwelling unit. The sewer unit flow factor for both LDR and LMDR is 208 gpd/DU, when applying the sewage generation factor of 52 gpd per person.

The City's planning department estimates that the medium density residential (MDR) and high density residential (HDR) land use types have population densities of 3.347 persons per dwelling unit. With the sewage generation factor of 52 gpd per person, the unit flow factor for MDR and HDR are 174 gpd per dwelling unit.

3-3.2 Non-Residential Sewer Unit Flow Factors

Commercial Land Uses

The City's water meter billing data accounts for commercial indoor use, outdoor irrigation water use, as well as recycled water use. Excluding irrigation and recycled water use for commercial customers (business park, general commercial, office commercial, neighborhood commercial, and hospitality), a sewer return ratio of 89% of the annual average water use was developed. This return ratio was applied to the developed water demand factors to establish the sewer unit flow factors for commercial uses.

Hospitality Land Uses

The City's 2010 General Plan defines an area along Vineyard Avenue, south of the I-10 Freeway and north of the Ontario International Airport, as the hospitality area. It consists of numerous hotels and restaurants that provide service for patrons of the airport. A sewer return ratio of 89% of the annual average water use was applied to the hospitality land use to establish the sewer unit flow factors.

Industrial Land Uses

Industrial land use types include a wide variety of businesses and manufacturing processes that causes sewage generation to vary significantly from one customer to another. This is evident in the wide range water use for different businesses with these land use categorizations. For example, warehouses typically use a low amount of water and generate low amounts of sewage. On the other hand, some manufacturing businesses can use large of amounts of water and contribute large amounts of sewage to the City's sewer system.

The average sewer return ratio was estimated to be 75% of the annual average water use. For planning purposes and when no other specific planning information is available, the sewage generation will be based on

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the sewer unit flow factor of 1,060 gpd/ac. This factor was based on the number of future estimated jobs and the 51 gpd/job divided by the number of future industrial acres. It is considered quite conservative in comparison to the currently estimated factor of 244 gpd/ac per flow monitoring in a primarily industrial area. The reason the existing factor is so low is because many of the industrial areas consist of warehouse uses that don't use a lot of water. In the future, these warehouses can be converted to manufacturing uses. Therefore, for planning purposes, the calculated unit flow factor of 1,060 gpd/ac is deemed appropriate.

It is recommended that the City evaluate future potential high water users on a case by case basis, as details regarding the proposed development or redevelopment area becomes available. The sewer hydraulic model should be utilized to make sure that the system is capable of handling the proposed sewage generation.

Public Facility and School Land Uses

Sewer return ratios of 85% and 80%, respectively were implemented for public facilities and schools. The sewer unit flow factor for public facilities is 1,450 gpd per acre. For schools, the sewer unit flow factor is 8 gpd per student.

3-4 Peaking Factors

3-4.1 Peak Dry Weather

The wastewater unit flow factors discussed in Section 3-3 are used to generate average dry weather flows (ADWF) entering the collection system. However, the adequacy of a sewage collection system is based upon its ability to convey the peak flows. At any individual point in the system, peak dry weather flow (PDWF) is estimated by converting the total average flow upstream of the point in question to peak dry weather flow by an empirical peak-to-average relationship.

The peaking formula commonly used in sewerage studies is of the following form:

$$PDWF = a \times ADWF^{b}$$

where PDWF = Peak Dry Weather Flow
ADWF = Average Dry Weather Flow
a, b = Peaking Formula Coefficients

In order to develop the peaking formula and establish coefficient "a" and "b", the maximum versus average flow measured was plotted for each flow monitoring site as shown in Figure 3-3.

Based on the best fit line through the data points shown in Figure 3-3, the following peaking relationship was selected for this study:

$$PDWF\ (mgd) = 1.77 \times ADWF\ (mgd)^{0.893}$$

The coefficient "b" factor accounts for smaller tributary areas with smaller ADWF, which generally experience greater PDWF. The change in usage of one customer in a very small tributary area will have a greater effect on its corresponding PDWF than a change in usage of one customer is a very large tributary area.

Note that the units of the selected peaking formula are in million gallons per day (mgd). These peaks are generally observed between the hours of 6:00 a.m. and 9:00 a.m. and 7:00 p.m. and 9:00 p.m. during weekdays and somewhat later in the morning hours during weekends in the predominantly residential areas.

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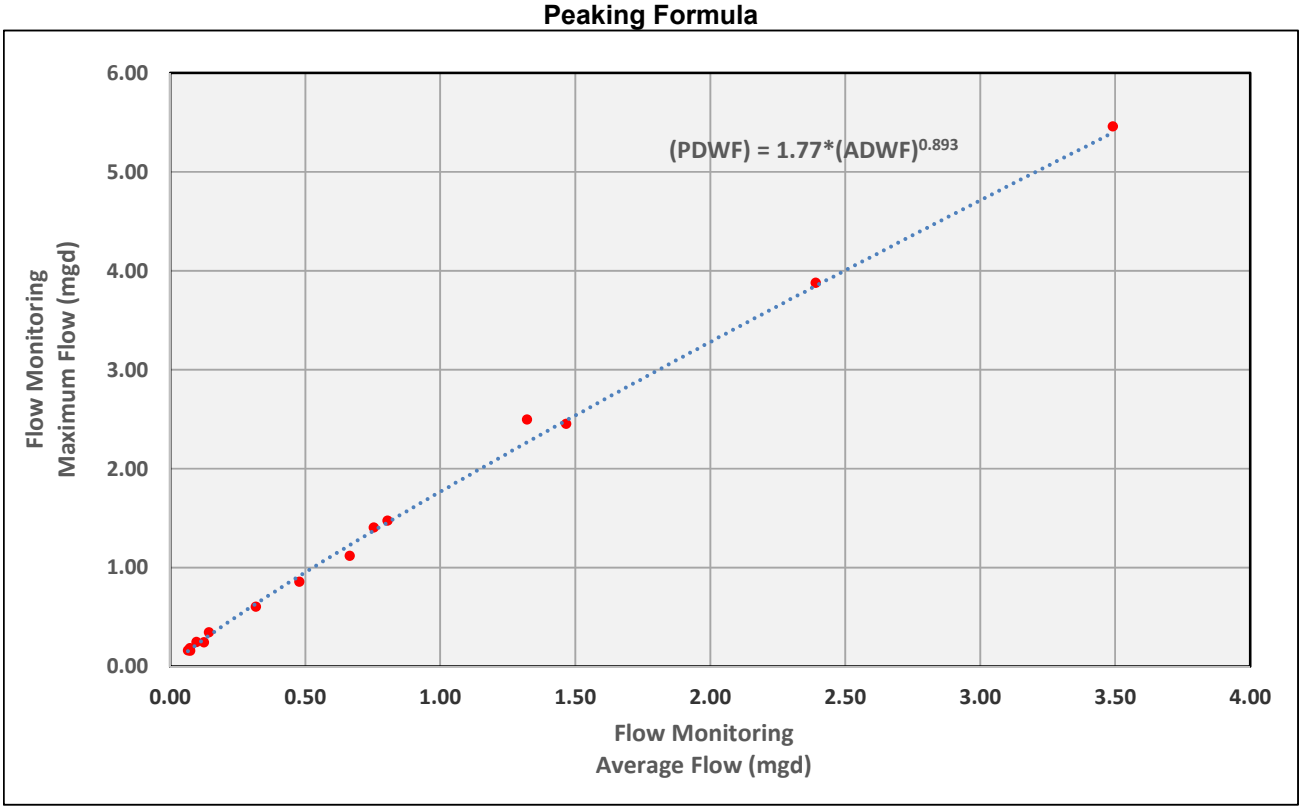
Figure 3-3
Peaking Formula



3-4.2 Peak Wet Weather

The peak wet weather flow (PWWF) has two components: peak dry weather flow (PDWF) and rainfall dependent inflow/infiltration (I/I) as expressed by the following equation:

$$PWWF = PDWF + I/I$$

Inflow and infiltration is discussed further in Section 3-5.

The flow monitoring effort for this study did not cover a wet weather period. Until wet weather flow data can be collected, it is recommended that the peak wet weather flow be estimated as the following:

Peak Wet Weather Flow (PWWF) = 1.34 x Peak Dry Weather Flow (PDWF)

Although the PWWF/PDWF factor of 1.34 may not cover all situations, it is not reasonable or feasible to design the sewer system to carry the flows that would result from the use of a larger ratio. Instead, it is recommended that the City concentrate on projects such as replacing manhole covers, installing plugs in manhole covers, and replacing or relining cracked pipes to reduce inflow and infiltration.

3-5 Inflow and Infiltration

Inflow is the surface water that typically gains entry to the sewer system through perforated or unsealed manhole covers during rainfall events. Infiltration is defined as water entering the collection system from the ground through defective pipes, pipe joint connections, or manhole walls. The sewer system design capacity

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must include allowances for these extraneous flow components, which inevitably become a part of the total flow. The amount of inflow and infiltration (I/I) that enters the system typically depends upon the availability, adequacy, and location of the storm water drainage facilities; age and condition of structures; materials and methods of construction; the location of the groundwater table; and the characteristics of the soil. In the absence of flow monitoring data, many regulating agencies utilize commonly accepted practices for estimating I/I. For example, I/I is often estimated based on the diameter and length of pipeline (100 to 400 gpd/ in. dia/ mile) or as a percentage of the peak flow or pipeline capacity.

AKM's experience from other master planning studies and review of limited flow monitoring information available during severe rainfall events indicate that the peak wet weather flow can vary from 10 percent of average dry weather flows in steeper areas with adequate drainage facilities, to over 400 percent of average dry weather flows in flat areas that lack significant drainage facilities.

For this study, extraneous flow due to inflow and infiltration is included in the peak wet weather flow formula described above. If better data becomes available subsequently for specific areas, the analysis shall be updated based upon that information.

3-6 Sewer System Performance Evaluation Criteria

Sewer system performance evaluation criteria are established to ensure that the wastewater collection system can operate effectively under all flow conditions. Each pipe segment must be capable of carrying peak wet weather flows in the hydraulically stable zone of the pipe. Low flows must be conveyed at a velocity that will prevent solids from settling and blocking the system.

The design capacity of a gravity pipeline is the calculated capacity of the pipeline based on the Manning formula:

$$Q = 1.486 * A * R^{\frac{2}{3}} \frac{S^{\frac{1}{2}}}{n}$$

where, **Q** = flow in cubic feet per second
R = hydraulic radius in feet = A / P
A = cross-sectional area of the pipe in square feet
P = wetted perimeter in feet
S = slope of pipe in feet of rise per foot of length
n = Manning's friction factor

Sewer system capacity is established using a Manning's friction factor of 0.013 for vitrified clay pipe.

The design and analysis of sewer pipes is typically based upon the depth to diameter ratio (d/D). In this study, **existing** pipes are considered capacity deficient if the d/D is above 0.64 at peak dry weather flows. This d/D ratio was arrived at by taking 75% of a pipe's maximum stable flow capacity, which is at a d/D of 0.82. The area above a d/D of 0.82 is considered hydraulically unstable. The 25% pipe capacity above the d/D ratio of 0.64 is reserved for inflow and infiltration.

By setting the maximum allowable PWWF equal to the maximum capacity of the pipe (d/D ratio = 0.82) and setting the maximum allowable PDWF equal to 75% of the maximum pipe capacity (d/D ratio = 0.64), the PWWF/PDWF ratio is 1.34 (100% pipe capacity/75% pipe capacity) as stated in Section 3-4.2.

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The extra pipeline capacity also allows for the possibility that actual wastewater flows may be slightly higher than anticipated PDWF. Additionally, the area above the water surface helps to keep the sewage aerated, reducing the possibility of septic conditions and odors.

For **new construction**, the design and analysis of gravity sewer pipes shall be based on the following depth to diameter ratios:

- Pipes **12-inches and smaller** in diameter shall be designed to flow at a maximum **d/D of 0.50** under peak dry weather flows
- Pipes **15-inches and greater** in diameter shall be designed to flow at a maximum **d/D of 0.64** under peak dry weather flows
- For either group, the depth of flow to diameter ratio shall not exceed **0.82 with peak wet weather flows**

Although this Sewer Master Plan study defined existing pipes as deficient when the d/D ratio exceeded 0.64 under peak dry weather flows, for all practical purposes the aforementioned design criteria must be adhered to. For instance, if the sewer pipe is 12-inches and smaller and was designed to flow at a maximum PDWF d/D of 0.50 and is now constructed. The maximum PDWF d/D must be maintained at 0.50. Additional future development flow should not be allowed to contribute to this sewer pipe if the maximum PDWF d/D ratio is going to exceed 0.50.

At a minimum, all pipes shall be 8 inches or larger in diameter and the velocity of flow in the pipe shall be greater than 2 feet per second at average dry weather flow (ADWF). This velocity will prevent deposition of solids in the sewer and help to re-suspend any materials that may have already settled in the pipe. The minimum corresponding slopes for various pipe sizes are shown in Table 3-3.

It is important to note that the slopes listed in Table 3-3 assume the depth of flow in the pipe is 50 or 64 percent full depending on the size. If there is insufficient flow to create this condition, greater slopes than those shown may be required.

The peak flow velocity shall be less than 10 feet per second in vitrified clay pipe.

The City recognizes that minimum slopes and velocities are sometimes not achievable under certain circumstances. On a case by case basis, the City may approve sewer designs that do not meet these criteria.

Table 3-3
Example Sewer Slopes

Sewer Size	2 ft/s Velocity Slope
8"	0.0057
10"	0.0042
12"	0.0033
15"	0.0019
18"	0.0014
21"	0.0011
24"	0.0008
27"	0.0008
30"	0.0007
33"	0.0006
36" & larger	0.0005

**Pipes 12" and smaller assume depth of flow is 50 percent*

**Pipes 15" and greater assume depth of flow is 64 percent*

3-7 Sewer Pump Station Performance Evaluation Criteria

It is desirable to develop a sewer collection system with as few pump stations as possible due to the associated cost and maintenance required. The City's policy does not allow new pump stations. If a pump station is absolutely necessary, the following criteria shall be minimum standards.

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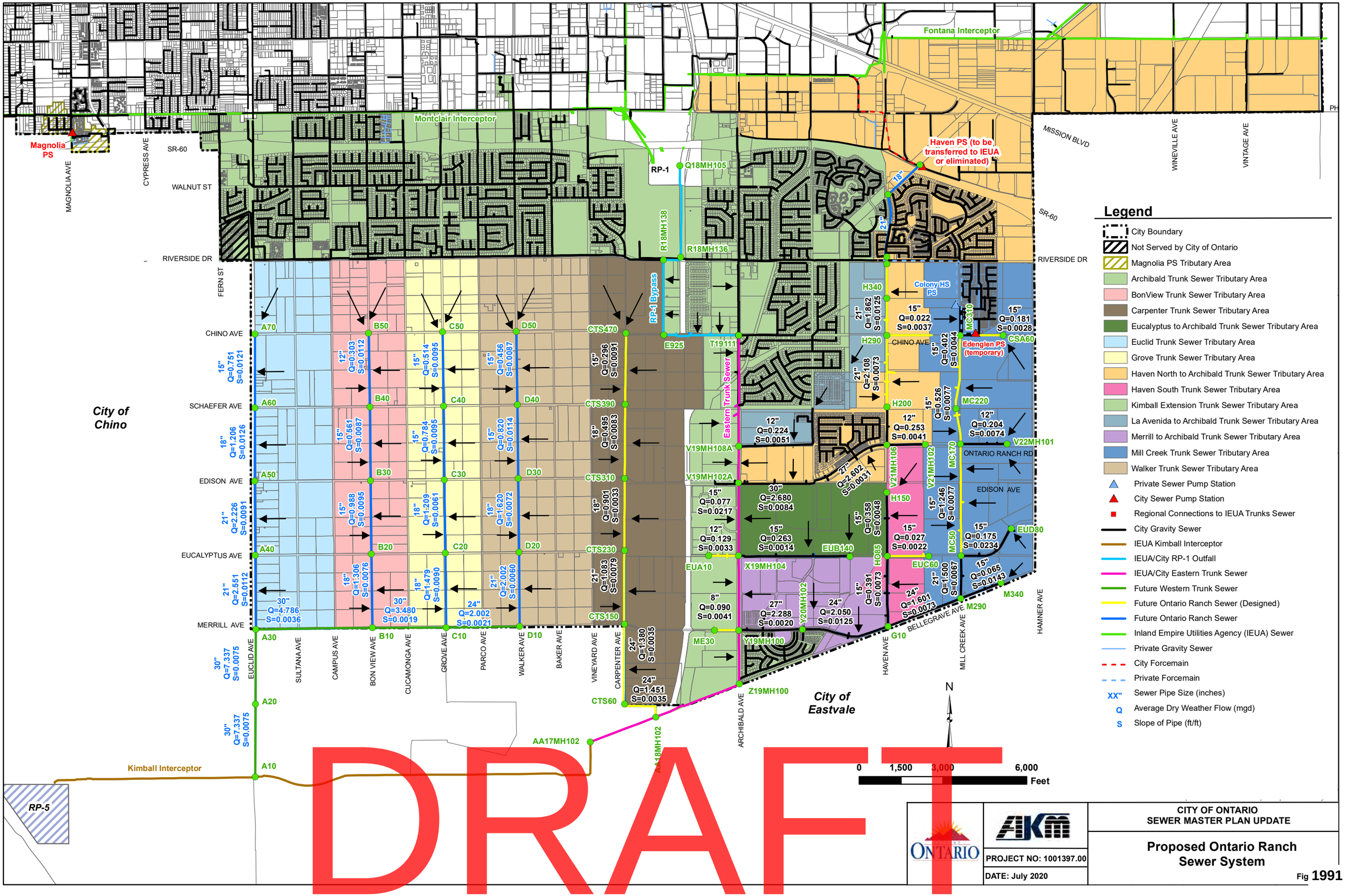

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CITY OF ONTARIO
SEWER MASTER PLAN UPDATE

Proposed Ontario Ranch Sewer System

PROJECT NO: 1001397.00

DATE: July 2020

Fig 1991

APPENDIX B

ESPERANZA PA 11 REFERENCE AND
RED LINED PERTINENT SECTIONS OF THE 2022 L.D. KING MASTER SEWER STUDY

Ontario Ranch East

Master Plan Line

Sewer Analysis Results

ESPERANZA PA-11 SCHOOL SITE - RESIDENTIAL CONVERSION UPDATE

- Applicable project file numbers (PGPA24-003, PSPA24-004, PMTT24-008 (TM-20730), PDEV24-017).

Prepared For:

Lewis Management Corp.
And Richland

Prepared By:

L.D. King, Inc.
975 N. Haven Avenue, Suite 200
Ontario, California 91764

April 2022
Updated August 2022
Updated October 2022
Updated November 2022

proposed and/or existing sewer lines within the study and the calculated velocities and depth to diameter ratios.

- A **Tributary Area Map** is included for each study.

Sewer Analysis Comments:

Merrill Tributary: Merrill, Bellegrave, Mill Creek

Analysis 1: Using the 2050 TOP Land Uses and high end densities and Existing Uses and SPA for Subarea 29 propoerties

- There is an 80-acre property located on the northeast corner of Mill Creek Avenue and Schaefer Avenue owned by Southern California Edison, (SCE). In Analysis 1, the Land Use for this 80-acre property is Business Park per the 2050 TOP.

- There is a section of an existing and future 8-inch sewer line within the Esperanza Specific Plan where the depth of flow ratio, d/D exceeds the maximum criteria of 0.50. The range of the d/D's in this section is 0.56 to 0.81. The location of the deficient lines are shown in the attached **Master Plan Sewer Location Map.**

Analysis 2: A second analysis of the system was modeled using the following revisions;

- ❖ The Land Use for the existing 80-acre SCE property, which currently contains a Substation, was changed to its existing land use resulting in no sewer flows tributary to the Mill Creek Sewer.

- ❖ The Land Use and densities for the Esperanza Specific Plan Area were taken from the Specific Plan, (SP) in lieu of the 2050 TOP.

- There is still a section within the Esperanza Specific Plan where the 8-inch sewer lines depth of flow ratio, d/D, exceeds the maximum criteria of 0.50 However the d/D is reduced to a range of 0.56 to 0.62.

- The Esperanza PA 11 School Siet has been converted to a 161 unit medium density residential site.

West Haven

Using the TOP 2050 Land Uses and high end densities

MERRILL TRIBUTARY: Merrill Ave to Bellegrave Ave to Mill Creek Ave Including Southern Portion of Haven Ave

Land Use and DU's per 2050 TOP With the Exception of SCE Prop where the Existing Use was used, Esperanza propertes where the SP was used and Subarea 29 properties where the 2022 Amended Subarea 29 Specific Plans was used.

Specific Plan and Planning Area	Acres	Residential Land Use	# Residential Units	DU/ac	Employment Land Use	Employment Square Footage (Bldg SF)	School # Students	Unit Flow Factors: Residential UFF (gpd/du)	Other UFF	Unit	ADWF gpd	Total ADWF	Flow Sum (mgd)	Input MH
TRIBUTARY TO EUCALYPTUS AVENUE														
Rich Haven PA 8B	20		500	25	MDR			174			87,000			
Esperanza PA3	11.4		156	14	MDR			174			27,144	114,144	0.114144	ESP10MH
Esperanza North Por. PA4	12.87		202	16	MDR			174			35,148	35,148	0.035148	ESP21MH
Esperanza South Por. PA4	6.43		101	16	MDR			174			17,574	17,574	0.017574	ESP30MH
Esperanza PA 11	10		161	16.1	MDR		1000	174	3	gpd/st	3,000	3,000	0.020800	EUD5L100
Esperanza PA 10 TM			100					208			20,800	20,800	0.020800	EUD3L10
Esperanza PA 9	17.75		82	11	LMDR			208			17,056	17,056	0.017056	MCL10
TRIBUTARY TO BELLEGRAVE AVENUE														
Esperanza PA 5	23.78		157	11	LMDR			208			32,656			
Esperanza PA 6	13.64		78	11	LMDR			208			16,224	48,880	0.048880	M10L10
Esperanza PA 7	14.36		76	11	LMDR			208			15,808			
Esperanza PA 8	23.72		107	11	LMDR			208			22,256	38,064	0.038064	M300
Subarea 29														
PA 33	47.6		644	13.5	LMDR			174			112,056	112,056	0.112056	M6L10
TRIBUTARY TO HAVEN AVENUE														
Rich Haven 9A and Portion of 9b	62.5				MU				2690	gpd/ac	168,125	168,125	0.168125	H160
The Lakes 24A PA1	25		625	25	MDR			174			108,750	108,750	0.108750	H150
The Lakes 24A PA3	6				NC				1610	gpd/ac	9,660	9,660		
	14		630	45	HDR				174	gpd/acre	109,620	119,280		
	13		143	11	LMDR			208			29,744	149,024	0.149024	EUC5L10
Subarea 29 PA 31	16.1		172	11	LMDR			208			35,776	35,776	0.035776	H4L10
Subarea 29 PA 32	42.5		671	15.8	LMDR			174			116,754	152,530	0.152530	H3L10
School	19						1200		8	gpd/st	9,600	9,600	0.009600	H00
TRIBUTARY TO MERRILL														
Subarea 29 Pa 28 and 29	44.4		222	5	LDR			208			46,176	46176	0.046176	M4L10
TRIBUTARY TO PARKVIEW STREET														
Subarea 29 PA 15	3.15				PF				1450	gpd/acre	4,568			
Subarea 29 PA 16	6.07		41	6.8	LMDR			208			8,528			
Subarea 29 PA 17	8.38		56	6.7	LMDR			208			11,648			
Subarea 29 PA 19	8.95		61	6.8	LMDR			208			12,688			
Subarea 29 PA 20	13.29		67	5.0	LDR			208			13,936	51,368	0.051368	Y19MH161
Subarea 29 PA 4	17.81		88	4.9	LDR			208			18,304			
Subarea 29 PA 5	13.67		68	5.0	LDR			208			14,144	32,448	0.032448	Y19MH158
Subarea 29 PA 9a			7		LMDR			208			1,456	1,456	0.001456	Y19MH127
Subarea 29 PA 11	6.23				OS-R				200	gpd/acre	1,246			
Subarea 29 PA 14	7.64				OS-R				200	gpd/acre	1,528	2,774	0.002774	Y19MH151
Subarea 29 PA 18	11.19				PS-E		750		8	gpd/stu	6,000			
Subarea 29 PA 21	11.48		48	4.2	LDR			208			9,984			
Subarea 29 PA 22	21.34		79	3.7	LDR			208			16,432			
Subarea 29 PA 23	14.41		82	5.7	LMDR			208			17,056			
Subarea 29 PA 24	13.71		73	5.3	LMDR			208			15,184			
Subarea 29 PA 25	18.45		102	5.5	LMDR			208			21,216			
Subarea 29 PA 26	12.03		101	8.4	LMDR			208			21,008			
Subarea 29 PA 30	21.8		180	11	LMDR			208			37,440	144,320	0.144320	Y20MH101
Subarea 29 PA 27	9.58		50	5.2	LMDR			208			10,400	10,400	0.010400	M3AL10
TRIBUTARY TO ARCHIBALD AVE NORTH OF MERRILL AVE														
Subarea 29 PA 1	83.1		432	5.2	LMDR			208			89,856	89,856		
Subarea 29 PA 2	12.1				COM				1610	gpd/ac	19,481	109,337		
Subarea 29 PA 3	34.5		186	5.4	LMDR			208			38,688	148,025	0.148025	
TRIBUTARY TO ARCHIBALD AVE SOUTH OF MERRILL AVE														
Subarea 29 PA 6	13		67	5.2	LMDR			208			13,936	13,936		
Subarea 29 PA 7	15.3		65	4.2	LDR			208			13,520	27,456		
Subarea 29 PA 8	9.1		46	5.1	LMDR			208			9,568	37,024		
Subarea 29 POR. PA 9			62	7	LMDR			208			12,896	49,920		
Subarea 29 PA 10	6.6		57	8.7	LMDR			208			11,856	61,776		
Subarea 29 PA 12	9.5		53	5.6	LMDR			208			11,024	72,800		
Subarea 29 PA 13	7.8		75	9.6	LMDR			208			15,600	88,400	0.088400	

0.028014

28,014

Merrill_Bellgrave_Mill Creek Hydraulic Analysis Results (Table 1 of 2)										
Per TOP with exception of SCE Prop as Existing Use and Esperanza SP area per SP										
General Pipe Information						Ultimate Baseline Scenario				
Pipe ID	U/S MH ID	D/S MH ID	Diameter (in)	Length (ft)	Slope	PDWF (mgd)	ADWF (mgd)	PDWF Velocity (ft/s)	PDWF d/D	PDWF Water Depth (ft)
MC340P	MC340	MC330	12	306	0.0093	0.1474	0.0618	2.48	0.17	0.17
MC350P	MC350	MC340	12	65	0.0089	0.0476	0.0174	1.75	0.10	0.10
MC320P	MC320	MC310	15	312	0.0105	0.1474	0.0618	2.52	0.13	0.16
MC330P	MC330	MC320	12	312	0.0093	0.1474	0.0618	2.48	0.17	0.17
MC310P	MC310	MC300	15	337	0.0072	0.6268	0.3127	3.37	0.28	0.36
CSA10P	CSA10	MC310	15	79	0.0023	0.5148	0.2509	2.11	0.35	0.43
CSA20P	CSA20	CSA10	15	297	0.0027	0.5148	0.2509	2.23	0.33	0.42
CSA30P	CSA30	CSA20	15	295	0.0026	0.5148	0.2509	2.23	0.33	0.42
CSA40P	CSA40	CSA30	15	333	0.0028	0.2993	0.1367	1.94	0.25	0.31
MB120P	MC280	MB120	15	330	0.0043	0.6890	0.3477	2.89	0.34	0.43
MC270P	MC270	MC260	15	343	0.0109	0.6890	0.3477	4.02	0.27	0.34
MC290P	MC295	MC280	15	330	0.0044	0.6890	0.3477	2.90	0.34	0.42
MC300P	MC300	MC295	15	133	0.0079	0.6890	0.3477	3.58	0.29	0.36
CSA50P	CSA50	CSA40	15	332	0.0028	0.2993	0.1367	1.94	0.25	0.31
CSA60P	CSA60	CSA50	15	206	0.0031	0.2993	0.1367	2.02	0.24	0.30
51	MB120	MC270	15	188	0.0106	0.6890	0.3477	3.98	0.27	0.34
MC180P	MC180	MC170	15	257	0.0076	0.8173	0.4209	3.70	0.32	0.40
MC190P	MC190	MC180	15	256	0.0076	0.8173	0.4209	3.71	0.32	0.40
MC200P	MC200	MC190	15	256	0.0073	0.8173	0.4209	3.66	0.32	0.41
MC210P	MC210	MC200	15	271	0.0074	0.8173	0.4209	3.68	0.32	0.40
MC4L10P	MC4L10	MC210	8	95	0.0047	0.0683	0.0261	1.63	0.24	0.16
MC220P	MC220	MC210	15	237	0.0099	0.7719	0.3948	4.01	0.29	0.36
MC230P	MC230	MC220	15	314	0.0102	0.7719	0.3948	4.06	0.29	0.36
MC240P	MC240	MC230	15	216	0.0107	0.7719	0.3948	4.13	0.29	0.36
MC250P	MC250	MC240	15	210	0.0105	0.7719	0.3948	4.10	0.29	0.36
MC260P	MC260	MC250	15	242	0.0107	0.7719	0.3948	4.13	0.29	0.36
MC110P	MC110	MC100	15	340	0.0073	1.4681	0.8111	4.30	0.45	0.56
MC3L10P	MC3L10	MC110	8	84	0.0048	0.0621	0.0235	1.59	0.23	0.15
MC120PP	MC120	MC110	15	345	0.0073	1.4301	0.7876	4.25	0.44	0.55
MC130P	MC130	MC120	15	346	0.0074	1.0929	0.5828	3.98	0.38	0.47
MC130PP	MC140	MC130	15	336	0.0074	1.0929	0.5828	3.99	0.38	0.47
MC150P	MC150	MC140	15	365	0.0073	1.0929	0.5828	3.97	0.38	0.47
MC160P	MC160	MC150	15	325	0.0074	1.0929	0.5828	3.97	0.38	0.47
MC170P	MC170	MC160	15	373	0.0069	0.8173	0.4209	3.57	0.33	0.41
ESP3P	ESP21MH	ESP25MH	8	389	0.0057	0.3239	0.1493	2.68	0.53	0.35
ESP1P	ESP10MH	ESP21MH	8	632	0.0060	0.2548	0.1141	2.57	0.45	0.30
MC40P	MC40	MC30	21	361	0.0062	2.8419	1.1736	4.82	0.34	0.60
MC50P	MC50	MC40	21	362	0.0074	2.8419	1.1736	4.61	0.33	0.57
EUD10P	EUD10	MC50	15	83	0.0226	0.4124	0.1957	4.48	0.17	0.22
MC60P	MC60	MC50	15	307	0.0075	1.7350	0.9779	4.52	0.49	0.61
MC70P	MC70	MC60	15	305	0.0076	1.7350	0.9779	4.54	0.49	0.61
MC80P	MC80	MC70	15	297	0.0074	1.7350	0.9779	4.51	0.49	0.61
MC2L10P	MC2L10	MC80	10	92	0.0047	0.3576	0.1668	2.54	0.42	0.35
MC90P	MC90	MC80	15	336	0.0071	1.4681	0.8111	4.25	0.45	0.56
MC100PP	MC100	MC90	15	336	0.0074	1.4681	0.8111	4.30	0.44	0.56
EUD20P	EUD20	EUD10	15	293	0.0229	0.4124	0.1957	4.58	0.17	0.22
EUD30P	EUD30	EUD20	15	275	0.0045	0.4124	0.1957	2.53	0.26	0.33
EUD3L10P	EUD3L10	EUD30	8	77	0.0075	0.0557	0.0208	1.82	0.19	0.13
EUD50P	EUD50	EUD40	15	282	0.0047	0.3738	0.1749	2.56	0.24	0.30
EUD40P	EUD40	EUD30	15	400	0.0043	0.3738	0.1749	2.42	0.25	0.31
EUD60P	EUD60	EUD50	15	348	0.0028	0.3577	0.1669	2.05	0.27	0.34
EUD5L10P	EUD5L100	EUD50	8	105	0.0053	0.0227	0.0080	1.25	0.14	0.09
EUD70P	EUD70	EUD60	15	319	0.0028	0.3577	0.1669	2.04	0.27	0.34
EUD80P	EUD80	EUD70	15	276	0.0023	0.3577	0.1669	1.91	0.29	0.36
EUD8L10P	EUD8L10	EUD80	8	92	0.0052	0.3577	0.1669	2.65	0.58	0.38
ESP6P	ESP30MH	EUD8L10	8	411	0.0057	0.3577	0.1669	2.75	0.56	0.37
ESP4P	ESP25MH	ESP30MH	8	312	0.0057	0.3239	0.1493	2.68	0.53	0.35
M29	M290	M280	24	314	0.0011	2.2028	1.2776	2.35	0.47	0.94
M30	M300	M290	15	348	0.0143	0.1999	0.0869	3.07	0.14	0.17
M31	M310	M300	15	300	0.0043	0.1195	0.0489	1.73	0.14	0.18
M32	M320	M310	15	286	0.0043	0.1195	0.0489	1.73	0.14	0.18
M33	M330	M320	15	255	0.0043	0.1195	0.0489	1.73	0.14	0.18
M34	M340	M330	15	324	0.0058	0.1195	0.0489	1.92	0.13	0.17
MC100P	MC10	M290	21	314	0.0065	2.8684	1.1936	4.44	0.34	0.60
MC120P	MC20	MC10	21	236	0.0061	2.8684	1.1936	4.34	0.35	0.61
MC30P	MC30	MC20	21	253	2.3821	2.8684	1.1936	35.48	0.08	0.14
MCL10P	MCL10	MC30	8	39	0.0744	0.0467	0.0171	3.85	0.10	0.07
M10L10P	M10L10	M340	8	25	0.0060	0.1195	0.0489	2.09	0.30	0.20
M24	M240	M230	24	297	0.0011	2.3745	1.5036	2.36	0.50	0.99

2.0731, 1.1936, 4.35, 0.35, 0.61

2.0731, 1.1936, 4.63, 0.33, 0.58

0.4499, 0.2157, 4.59, 0.18, 0.23

0.4499, 0.2157, 4.61, 0.18, 0.23

0.4499, 0.2157, 2.59, 0.27, 0.34

0.4110, 0.1949, 2.56, 0.26, 0.32

0.4110, 0.1949, 2.56, 0.26, 0.33

0.0727, 0.0281, 1.73, 0.24, 0.16

2.1613, 1.2506, 2.32, 0.47, 0.94

2.1304, 1.2306, 4.45, 0.35, 0.61

2.0994, 1.2106, 4.34, 0.35, 0.61

2.0994, 1.2106, 7.06, 0.25, 0.43

2.4355, 1.4296, 2.39, 0.50, 1.00

Assuming this slope is a typo?

Merrill_Bellgrave_Mill Creek Hydraulic Analysis Results (Table 2 of 2)											
Per TOP with exception of SCE Prop as Existing Use and Esperanza SP area per SP											
General Pipe Information						Ultimate Baseline Scenario					
Pipe ID	U/S MH ID	D/S MH ID	Diameter (in)	Length (ft)	Slope	PDWF (mgd)	ADWF (mgd)	PDWF Velocity (ft/s)	PDWF d/D	PDWF Water Depth (ft)	
M25	M250	M240	24	300	0.0011	2.3745	1.3696	2.38	0.49	0.99	2.4050, 1.4096, 2.38, 0.50, 0.99
M26	M260	M250	24	344	0.0011	2.2828	1.2776	2.34	0.47	0.94	2.2336, 1.2976, 2.34, 0.48, 0.95
M27	M270	M260	24	321	0.0011	2.2828	1.2776	2.33	0.47	0.95	2.2336, 1.2976, 2.34, 0.48, 0.95
M28	M280	M270	24	274	0.0011	2.2828	1.2776	2.33	0.47	0.95	2.2336, 1.2976, 2.34, 0.48, 0.95
H10P	H010	H00	15	300	0.0068	1.1249	0.6019	3.88	0.39	0.49	
H20P	H020	H010	15	206	0.0091	1.1249	0.6019	4.32	0.36	0.45	
H30P	H030	H020	15	210	0.0090	1.1249	0.6019	4.31	0.36	0.46	
H40P	H040	H030	15	192	0.0090	1.1249	0.6019	4.30	0.36	0.46	
H50P	H050	H040	15	195	0.0089	1.1249	0.6019	4.30	0.36	0.46	
H3L10	H3L10	H050	8	60	0.0182	0.3063	0.1402	4.06	0.37	0.25	
H60P	H060	H050	15	334	0.0091	0.8876	0.4617	4.04	0.32	0.40	
H70P	H070	H060	15	280	0.0091	0.8876	0.4617	4.04	0.32	0.40	
H4L10P	H4L10	H070	8	92	0.0070	0.0904	0.0358	2.03	0.25	0.17	
H80P	H080	H070	15	312	0.0091	0.8259	0.4259	3.96	0.31	0.39	
H082P	H082	H080	15	310	0.0091	0.8259	0.4259	3.97	0.31	0.39	
M6L10P	M6L10	M250	8	68	0.0089	0.2507	0.1121	2.96	0.40	0.27	
M19	M190	M180	24	321	0.0013	3.2880	2.0011	2.75	0.57	1.14	3.3179, 2.0211, 2.74, 0.58, 1.15
M20	G10	M190	24	315	0.0013	3.2880	2.0011	2.75	0.57	1.14	3.3179, 2.0211, 2.74, 0.58, 1.15
M21	M210	G10	24	296	0.0073	2.3745	1.3696	4.74	0.30	0.59	2.4355, 1.4296, 4.77, 0.30, 0.60
M22	M220	M210	24	297	0.0011	2.3745	1.3696	2.39	0.48	0.98	2.4355, 1.4296, 2.39, 0.50, 1.00
M23	M230	M220	24	297	0.0011	2.3745	1.3696	2.39	0.48	0.98	2.4355, 1.4296, 2.39, 0.50, 1.00
H00P	H00	G10	15	94	0.0063	1.1409	0.6115	3.79	0.40	0.51	
H85P	H085	H082	15	91	0.0079	0.8259	0.4259	3.77	0.32	0.40	
H87P	H087	H085	15	93	0.0045	0.5623	0.2769	2.77	0.30	0.38	
H90P	H090	H087	15	211	0.0061	0.5623	0.2769	3.08	0.28	0.35	
H100P	H100	H090	15	352	0.0056	0.5623	0.2769	2.99	0.29	0.36	
H110P	H110	H100	15	350	0.0056	0.5623	0.2769	3.00	0.29	0.36	
H120P	H120	H110	15	350	0.0056	0.5623	0.2769	2.99	0.29	0.36	
H130P	H130	H120	15	230	0.00566	0.5623	0.2769	3.00	0.29	0.36	
H140P	H140	H130	15	345	0.00514	0.5623	0.27688	2.90	0.29	0.37	
EUC20P	EUC20	H085	15	361	0.00224	0.3234	0.14902	1.84	0.27	0.34	
EUC30	EUC30	EUC20	15	371	0.00216	0.3234	0.14902	1.82	0.28	0.34	
EUC40P	EUC40	EUC30	15	371	0.00219	0.3234	0.14902	1.82	0.27	0.34	
EUC50P	EUC50	EUC40	15	185	0.00211	0.3234	0.14902	1.80	0.28	0.35	
EUC5L10P	EUC5L10	EUC50	12	80	0.0033	0.3234	0.1490	2.15	0.34	0.34	
H150P	H150	H140	15	349	0.0099	0.5623	0.2769	3.66	0.25	0.31	
H160P	H160	H150	15	505	0.0100	0.3601	0.1681	3.23	0.20	0.25	
M13	M140	Y20MH120	24	126	0.0014	3.3715	2.0577	2.80	0.57	1.15	3.4008, 2.0777, 2.84, 0.57, 1.14
M15	M150	M140	24	302	0.0013	3.3715	2.0577	2.75	0.58	1.16	3.4008, 2.0777, 2.76, 0.58, 1.17
M16	M160	M150	24	363	0.0013	3.2880	2.0011	2.74	0.57	1.14	3.3179, 2.0211, 2.74, 0.58, 1.15
M17	M170	M160	24	147	0.0014	3.2880	2.0011	2.75	0.56	1.15	3.3179, 2.0211, 2.74, 0.58, 1.15
M18	M180	M170	24	322	0.0013	3.2880	2.0011	2.72	0.57	1.15	3.3179, 2.0211, 2.74, 0.58, 1.15
M3AL10P	M3AL10	M150	8	86	0.0110	0.0300	0.0104	1.73	0.13	0.09	
M4L10P	M4L10	M150	8	95	0.0121	0.1136	0.0462	2.65	0.25	0.16	
Y20CL1017	Y20MH120	Y20MH121	24	321	0.0013	3.3715	2.0577	2.77	0.58	1.16	3.4008, 2.0777, 2.76, 0.58, 1.17
Y20CL1001	Y20MH101	Y20MH102	10	95	0.0042	0.3142	0.1443	2.37	0.40	0.34	
Y20CL1018	Y20MH121	Y20MH122	24	324	0.0013	3.3715	2.0577	2.76	0.58	1.16	3.4008, 2.0777, 2.76, 0.58, 1.17
Y20CL1000	Y20MH100	Y20MH102	24	282	0.0128	3.3715	2.0577	6.41	0.31	0.61	3.4008, 2.0777, 6.41, 0.31, 0.62
Y20CL1019	Y20MH122	Y20MH100	24	280	0.0013	3.3715	2.0577	2.75	0.58	1.16	3.4008, 2.0777, 2.76, 0.58, 1.17
Y20CL1002	Y20MH104	Y20MH102	8	95	0.0099	0.0052	0.0015	0.98	0.06	0.04	
Y20CL1003	Y20MH102	Y20MH103	27	194	0.0008	3.5840	2.2035	2.36	0.57	1.28	3.6131, 2.2235, 2.34, 0.58, 1.31
Y19CL1067	Y20MH103	Y19MH151	27	326	0.0008	3.5840	2.2035	2.33	0.58	1.30	3.6131, 2.2235, 2.34, 0.58, 1.31
Y20CL1004	Y20MH105	Y20MH104	8	146	0.02445	0.0052	0.0015	1.34	0.05	0.03	
Y20CL1005	Y20MH106	Y20MH105	8	137	0.0100	0.0052	0.0015	0.98	0.06	0.04	
Y19CL1066	Y19MH151	Y19MH152	27	330	0.0008	3.5681	2.2063	2.32	0.58	1.30	3.6172, 2.2263, 2.34, 0.58, 1.31
Y19CL1068	Y19MH152	Y19MH153	27	330	0.0008	3.5681	2.2063	2.36	0.57	1.29	3.6172, 2.2263, 2.34, 0.58, 1.31
Y19CL1070	Y19MH153	Y19MH154	27	216	0.0008	3.5947	2.2408	2.32	0.58	1.31	3.6237, 2.2308, 2.34, 0.58, 1.31
Y19CL1071	Y19MH154	Y19MH156	27	264	0.0008	3.6892	2.2822	2.34	0.59	1.32	3.6983, 2.2822, 2.35, 0.59, 1.33
Y19CL1073	Y19MH155	Y19MH154	8	92	0.0261	0.1249	0.0514	3.57	0.21	0.14	
Y19CL1077	Y19MH161	Y19MH162	8	244	0.0057	0.1249	0.0514	2.08	0.31	0.21	
Y19CL1078	Y19MH162	Y19MH155	8	96	0.0056	0.1249	0.0514	2.07	0.31	0.21	
Y19CL1069	Y19MH156	Y19MH157	27	296	0.0008	3.6892	2.2822	2.36	0.56	1.31	3.6983, 2.2822, 2.35, 0.59, 1.33
Y19CL1072	Y19MH157	Y19MH159	27	203	0.0008	3.7461	2.2946	2.36	0.58	1.33	3.7450, 2.3146, 2.35, 0.59, 1.34
Y19CL1074	Y19MH158	Y19MH157	8	61	0.0419	0.0829	0.0324	3.74	0.15	0.10	
Y19CL1075	Y19MH159	Y19MH100	27	90	0.0020	3.7461	2.2946	3.33	0.45	1.01	3.7450, 2.3146, 3.33, 0.45, 1.02

MERRILL TRIBUTARY

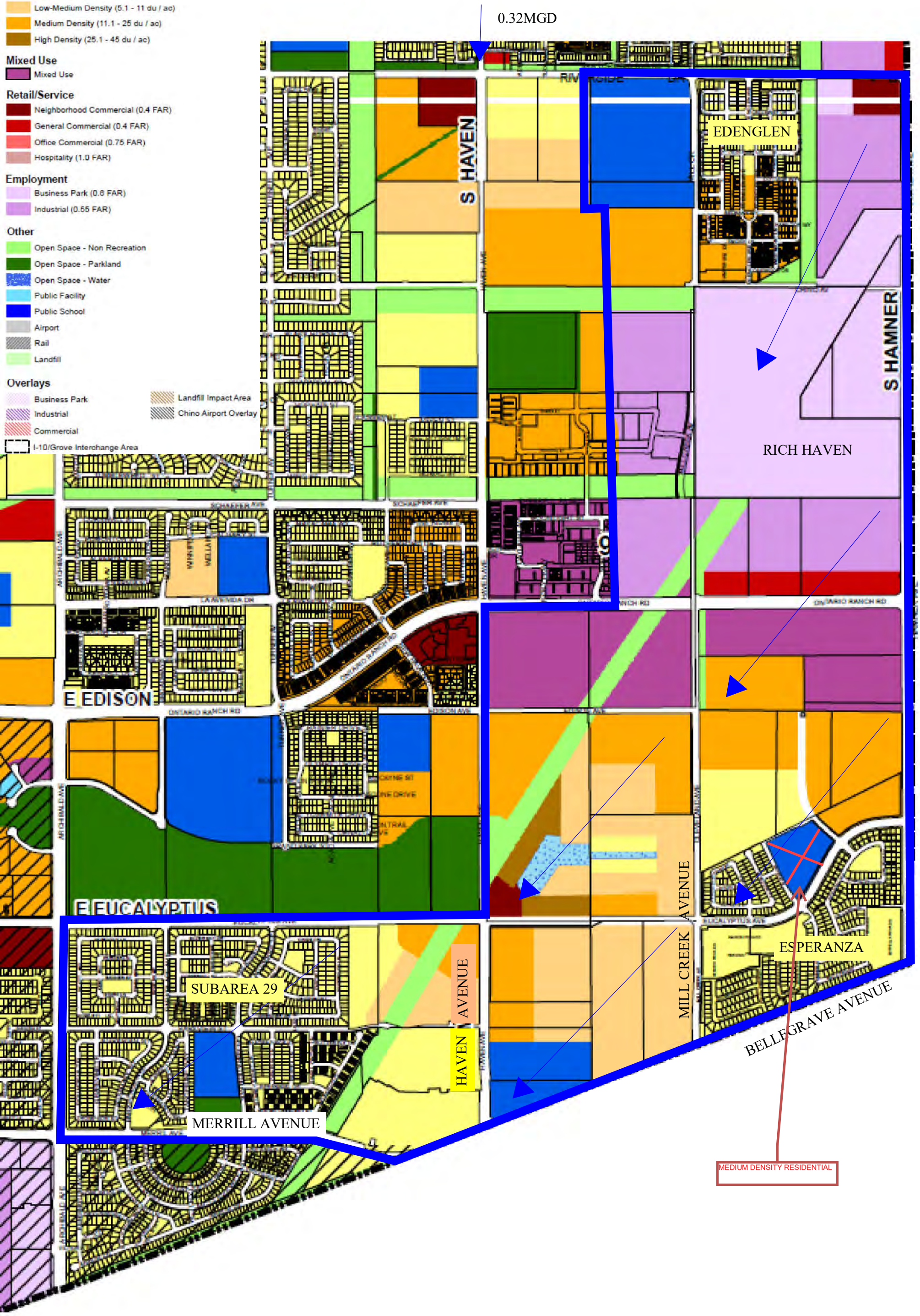

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Exhibit 8
Land Use Plan

LAND USE	UNITS	GROSS ACRES	UNITS/ GROSS ACRES	NET ACRES	UNITS/ NET ACRES
Residential Uses					
PA-1 (RD-7/ Row Townhomes, RD-8/ Motorcourt Townhomes)	319 DU	29.35 AC	10.87 DU/AC	28.97 AC	11.01 DU/AC
PA-2 (RD-4/ SFD Cottages, RD-6/ 6-Pack Courtyard)	113 DU	22.84 AC	4.95 DU/AC	17.36 AC	6.51 DU/AC
PA-3 (RD-7 & RD-8/ Row Townhomes)	156 DU	11.40 AC	13.68 DU/AC	11.10 AC	14.05 DU/AC
PA-4 (RD-6/ 6-Pack Courtyard, 8-Pack Courtyard, Row Townhomes)	303 DU	27.41 AC	11.05 DU/AC	19.30 AC	15.70 DU/AC
PA-5 (RD-5/ 4-Pack Courtyard)	157 DU	23.78 AC	6.60 DU/AC	17.64 AC	8.90 DU/AC
PA-6 (RD-4/ SFD Cottages)	78 DU	13.64 AC	5.72 DU/AC	10.00 AC	7.80 DU/AC
PA-7 (RD-1/ SFD 50' wide lots)	76 DU	14.36 AC	5.29 DU/AC	12.56 AC	6.05 DU/AC
PA-8 (RD-2/ SFD 55' wide lots)	107 DU	23.72 AC	4.51 DU/AC	19.26 AC	5.56 DU/AC
PA-9 (RD-1/ SFD 50' x 80')	82 DU	17.75 AC	4.62 DU/AC	13.27 AC	6.18 DU/AC
PA-10 (RD-3/ SFD 2-Pack)	100 DU	19.92 AC	5.02 DU/AC	14.62 AC	6.84 DU/AC
Park 1		5.75*AC			
Residential land Use Total	**1491 DU**	**209.90 AC**	**7.10 DU/AC**	**164.08 AC**	**9.09 DU/AC**
Parks				9.89 AC	
Neighborhood Edge Buffers				6.62 AC	
Roadways				28.25 AC	
SCE Easements and Well Sites				4.14 AC	
Community Facilities Use					
PA-11 ~~(School)~~ Med. Density. Res.	161 DU	13.10 AC		10.02 AC	16.1 DU/AC
PROJECT TOTAL	~~1491~~ **DU** 1652	**223.00 AC**		**223.00 AC**	

NOTES:

1. *Gross residential acres do not include the 13.10 gross acres for a school site.*
2. *Net residential acres are gross acres less parks, neighborhood edge buffers, roadways, easements and net area for school site.*

** PA-2 includes 3.45 AC of Park 1*

Table 2
Land Use Summary

APPENDIX C

SEWER ANALYSIS RESULTS

The following conditions were modeled for Esperanza PA 11 Project:

1. Existing Flows (Peak Dry Weather Flow)
2. Existing Flows (Peak Wet Weather Flow)
3. Existing Plus Project Flows (Peak Dry Weather Flow)
4. Existing Plus Project Flows (Peak Wet Weather Flow)

- Reference Exhibit A for Manhole Diagram

SEWER STUDY SUMMARY

DATE: 1/24/2025 Esperanza PA 11 (Ontario Ranch East) Sewer Capacity Analysis - Existing Flow Only - Peak Dry Weather Flow

JOB NUMBER: 1551-001

General Pipe Information						Ultimate Baseline Scenario				
PIPE ID	U/S MH ID	D/S MH ID	Diameter (in)	Length (ft)	Slope	PDWF (mgd)	ADWF (mgd)	PDWF Velocity (ft/s)	PDWF d/D	PDWF Water Depth (ft)
EUD5L10P	EUD5L100	EUD50	8	105	0.0053	0.0237	0.0080	1.24	0.14	0.09
EUD50P	EUD50	EDU40	15	282	0.0047	0.3731	0.1749	2.49	0.24	0.30
EUD40P	EDU40	EUD30	15	400	0.0043	0.3731	0.1749	2.41	0.25	0.31
EUD40P	EUD30	EUD20	15	275	0.0045	0.4124	0.1957	2.53	0.26	0.32
EUD20P	EUD20	EUD10	15	293	0.0229	0.4124	0.1957	4.49	0.17	0.22
EUD10P	EUD10	MC50	15	83	0.0226	0.4124	0.1957	4.47	0.17	0.22
MC50P	MC50	MC40	21	362	0.0074	2.0420	1.1736	4.61	0.33	0.57
MC40P	MC40	MC30	21	361	0.0062	2.0420	1.1736	4.33	0.34	0.60
MC30P	MC30	MC20	21	253	0.0238	2.0684	1.1906	7.03	0.24	0.43
MC120P	MC20	MC10	21	236	0.0061	2.0684	1.1906	4.32	0.35	0.61
MC100P	MC10	M290	21	348	0.0065	2.0684	1.1906	4.42	0.34	0.60
M29	M290	M280	24	314	0.0011	2.0684	1.1906	2.29	0.46	0.91
M28	M280	M270	24	274	0.0011	2.2028	1.2776	2.33	0.47	0.95
M27	M270	M260	24	321	0.0011	2.2028	1.2776	2.33	0.47	0.95
M26	M260	M250	24	344	0.0011	2.2028	1.2776	2.33	0.47	0.95
M25	M250	M240	24	300	0.0011	2.3745	1.3896	2.38	0.49	0.99
M24	M240	M230	24	297	0.0011	2.3745	1.3896	2.38	0.49	0.99
M23	M230	M220	24	297	0.0011	2.3745	1.3896	2.38	0.49	0.99
M22	M220	M210	24	297	0.0011	2.3745	1.3896	2.38	0.49	0.99
M21	M210	G10	24	296	0.0073	2.3745	1.3896	4.74	0.30	0.59
M20	G10	M190	24	315	0.0013	3.2886	2.0011	2.74	0.57	1.14
M19	M190	M180	24	321	0.0013	3.2886	2.0011	2.74	0.57	1.14
M18	M180	M170	24	322	0.0013	3.2886	2.0011	2.74	0.57	1.14
M17	M170	M160	24	147	0.0013	3.2886	2.0011	2.74	0.57	1.14
M16	M160	M150	24	363	0.0013	3.2886	2.0011	2.74	0.57	1.14
M15	M150	M140	24	302	0.0013	3.3715	2.0577	2.75	0.58	1.16
M13	M140	Y20MH120	24	126	0.0014	3.3715	2.0577	2.83	0.57	1.14
Y20CL1017	Y20MH120	Y20MH121	24	321	0.0013	3.3715	2.0577	2.75	0.58	1.16
Y20CL1018	Y20MH121	Y20MH122	24	324	0.0013	3.3715	2.0577	2.75	0.58	1.16
Y20CL1019	Y20MH122	Y20MH100	24	280	0.0013	3.3715	2.0577	2.75	0.58	1.16
Y20CL1000	Y20MH100	Y20MH102	24	282	0.0128	3.3715	2.0577	6.39	0.31	0.61
Y20CL1003	Y20MH102	Y20MH103	27	194	0.0008	3.5840	2.2035	2.33	0.58	1.30
Y19CL1067	Y20MH103	Y19MH151	27	326	0.0008	3.5840	2.2035	2.33	0.58	1.30
Y19CL1066	Y19MH151	Y19MH152	27	330	0.0008	3.5881	2.2063	2.33	0.58	1.30
Y19CL1068	Y19MH152	Y19MH153	27	330	0.0008	3.5881	2.2063	2.33	0.58	1.30
Y19CL1070	Y19MH153	Y19MH154	27	216	0.0008	3.5946	2.2108	2.33	0.58	1.30
Y19CL1071	Y19MH154	Y19MH156	27	264	0.0008	3.6692	2.2622	2.34	0.59	1.32
Y19CL1069	Y19MH156	Y19MH157	27	296	0.0008	3.6692	2.2622	2.34	0.59	1.32
Y19CL1072	Y19MH157	Y19MH159	27	203	0.0008	3.7161	2.2946	2.35	0.59	1.33
Y19CL1075	Y19MH159	Archibald/ ETS	27	90	0.002	3.7161	2.2946	3.32	0.45	1.01

[1] K' based on n = 0.013

[2] dn/D using K' in Brater King Table 7-14

[3] From Brater King Table 7-4 based on dn/D

SEWER STUDY SUMMARY

DATE: 1/24/2025 Esperanza PA 11 (Ontario Ranch East) Sewer Capacity Analysis - Existing Flow Only - Peak Wet Weather Flow

JOB NUMBER: 1551-001

General Pipe Information						Ultimate Baseline Scenario				
PIPE ID	U/S MH ID	D/S MH ID	Diameter (in)	Length (ft)	Slope	PWWF (mgd)	ADWF (mgd)	PWWF Velocity (ft/s)	PWWF d/D	PWWF Water Depth (ft)
EUD5L10P	EUD5L100	EUD50	8	105	0.0053	0.0318	0.0080	1.36	0.16	0.11
EUD50P	EUD50	EDU40	15	282	0.0047	0.4999	0.1749	2.71	0.28	0.35
EUD40P	EDU40	EUD30	15	400	0.0043	0.4999	0.1749	2.63	0.29	0.36
EUD40P	EUD30	EUD20	15	275	0.0045	0.5527	0.1957	2.75	0.30	0.38
EUD20P	EUD20	EUD10	15	293	0.0229	0.5527	0.1957	4.90	0.20	0.25
EUD10P	EUD10	MC50	15	83	0.0226	0.5527	0.1957	4.88	0.20	0.25
MC50P	MC50	MC40	21	362	0.0074	2.7363	1.1736	5.00	0.38	0.67
MC40P	MC40	MC30	21	361	0.0062	2.7363	1.1736	4.69	0.40	0.70
MC30P	MC30	MC20	21	253	0.0238	2.7716	1.1906	7.65	0.28	0.50
MC120P	MC20	MC10	21	236	0.0061	2.7716	1.1906	4.68	0.41	0.71
MC100P	MC10	M290	21	348	0.0065	2.7716	1.1906	4.79	0.40	0.70
M29	M290	M280	24	314	0.0011	2.7716	1.1906	2.46	0.54	1.08
M28	M280	M270	24	274	0.0011	2.9518	1.2776	2.50	0.56	1.13
M27	M270	M260	24	321	0.0011	2.9518	1.2776	2.50	0.56	1.13
M26	M260	M250	24	344	0.0011	2.9518	1.2776	2.50	0.56	1.13
M25	M250	M240	24	300	0.0011	3.1818	1.3896	2.55	0.59	1.18
M24	M240	M230	24	297	0.0011	3.1818	1.3896	2.55	0.59	1.18
M23	M230	M220	24	297	0.0011	3.1818	1.3896	2.55	0.59	1.18
M22	M220	M210	24	297	0.0011	3.1818	1.3896	2.55	0.59	1.18
M21	M210	G10	24	296	0.0073	3.1818	1.3896	5.14	0.34	0.69
M20	G10	M190	24	315	0.0013	4.4067	2.0011	2.91	0.70	1.40
M19	M190	M180	24	321	0.0013	4.4067	2.0011	2.91	0.70	1.40
M18	M180	M170	24	322	0.0013	4.4067	2.0011	2.91	0.70	1.40
M17	M170	M160	24	147	0.0013	4.4067	2.0011	2.91	0.70	1.40
M16	M160	M150	24	363	0.0013	4.4067	2.0011	2.91	0.70	1.40
M15	M150	M140	24	302	0.0013	4.5178	2.0577	2.92	0.71	1.43
M13	M140	Y20MH120	24	126	0.0014	4.5178	2.0577	3.01	0.69	1.39
Y20CL1017	Y20MH120	Y20MH121	24	321	0.0013	4.5178	2.0577	2.92	0.71	1.43
Y20CL1018	Y20MH121	Y20MH122	24	324	0.0013	4.5178	2.0577	2.92	0.71	1.43
Y20CL1019	Y20MH122	Y20MH100	24	280	0.0013	4.5178	2.0577	2.92	0.71	1.43
Y20CL1000	Y20MH100	Y20MH102	24	282	0.0128	4.5178	2.0577	6.94	0.36	0.71
Y20CL1003	Y20MH102	Y20MH103	27	194	0.0008	4.8026	2.2035	2.47	0.71	1.59
Y19CL1067	Y20MH103	Y19MH151	27	326	0.0008	4.8026	2.2035	2.47	0.71	1.59
Y19CL1066	Y19MH151	Y19MH152	27	330	0.0008	4.8081	2.2063	2.47	0.71	1.59
Y19CL1068	Y19MH152	Y19MH153	27	330	0.0008	4.8081	2.2063	2.47	0.71	1.59
Y19CL1070	Y19MH153	Y19MH154	27	216	0.0008	4.8168	2.2108	2.48	0.71	1.59
Y19CL1071	Y19MH154	Y19MH156	27	264	0.0008	4.9167	2.2622	2.48	0.72	1.62
Y19CL1069	Y19MH156	Y19MH157	27	296	0.0008	4.9167	2.2622	2.48	0.72	1.62
Y19CL1072	Y19MH157	Y19MH159	27	203	0.0008	4.9795	2.2946	2.49	0.73	1.64
Y19CL1075	Y19MH159	Archibald/ ETS	27	90	0.002	4.9795	2.2946	3.57	0.53	1.20

[1] K' based on n = 0.013

[2] dn/D using K' in Brater King Table 7-14

[3] From Brater King Table 7-4 based on dn/D

SEWER STUDY SUMMARY

DATE: 1/24/2025 Esperanza PA 11 (Ontario Ranch East) Sewer Capacity Analysis - Existing plus Project Flows - Peak Dry Weather Flow

JOB NUMBER: 1551-001

General Pipe Information						Ultimate Baseline Scenario				
PIPE ID	U/S MH ID	D/S MH ID	Diameter (in)	Length (ft)	Slope	PDWF (mgd)	ADWF (mgd)	PDWF Velocity (ft/s)	PDWF d/D	PDWF Water Depth (ft)
EUD5L10P	EUD5L100	EUD50	8	105	0.0053	0.0727	0.0280	1.73	0.24	0.16
EUD50P	EUD50	EDU40	15	282	0.0047	0.4110	0.1949	2.56	0.26	0.32
EUD40P	EDU40	EUD30	15	400	0.0043	0.4110	0.1949	2.48	0.26	0.33
EUD40P	EUD30	EUD20	15	275	0.0045	0.4499	0.2157	2.59	0.27	0.34
EUD20P	EUD20	EUD10	15	293	0.0229	0.4499	0.2157	4.61	0.18	0.23
EUD10P	EUD10	MC50	15	83	0.0226	0.4499	0.2157	4.59	0.18	0.23
MC50P	MC50	MC40	21	362	0.0074	2.0731	1.1936	4.63	0.33	0.58
MC40P	MC40	MC30	21	361	0.0062	2.0731	1.1936	4.35	0.35	0.61
MC30P	MC30	MC20	21	253	0.0238	2.0994	1.2106	7.06	0.25	0.43
MC120P	MC20	MC10	21	236	0.0061	2.0994	1.2106	4.34	0.35	0.61
MC100P	MC10	M290	21	348	0.0065	2.1304	1.2306	4.45	0.35	0.61
M29	M290	M280	24	314	0.0011	2.1613	1.2506	2.32	0.47	0.94
M28	M280	M270	24	274	0.0011	2.2336	1.2976	2.34	0.48	0.95
M27	M270	M260	24	321	0.0011	2.2336	1.2976	2.34	0.48	0.95
M26	M260	M250	24	344	0.0011	2.2336	1.2976	2.34	0.48	0.95
M25	M250	M240	24	300	0.0011	2.4050	1.4096	2.38	0.50	0.99
M24	M240	M230	24	297	0.0011	2.4355	1.4296	2.39	0.50	1.00
M23	M230	M220	24	297	0.0011	2.4050	1.4096	2.38	0.50	0.99
M22	M220	M210	24	297	0.0011	2.4050	1.4096	2.38	0.50	0.99
M21	M210	G10	24	296	0.0073	2.4355	1.4296	4.77	0.30	0.60
M20	G10	M190	24	315	0.0013	3.3179	2.0211	2.74	0.58	1.15
M19	M190	M180	24	321	0.0013	3.3179	2.0211	2.74	0.58	1.15
M18	M180	M170	24	322	0.0013	3.3179	2.0211	2.74	0.58	1.15
M17	M170	M160	24	147	0.0013	3.3179	2.0211	2.74	0.58	1.15
M16	M160	M150	24	363	0.0013	3.3179	2.0211	2.74	0.58	1.15
M15	M150	M140	24	302	0.0013	3.4008	2.0777	2.76	0.58	1.17
M13	M140	Y20MH120	24	126	0.0014	3.4008	2.0777	2.84	0.57	1.14
Y20CL1017	Y20MH120	Y20MH121	24	321	0.0013	3.4008	2.0777	2.76	0.58	1.17
Y20CL1018	Y20MH121	Y20MH122	24	324	0.0013	3.4008	2.0777	2.76	0.58	1.17
Y20CL1019	Y20MH122	Y20MH100	24	280	0.0013	3.4008	2.0777	2.76	0.58	1.17
Y20CL1000	Y20MH100	Y20MH102	24	282	0.0128	3.4008	2.0777	6.41	0.31	0.62
Y20CL1003	Y20MH102	Y20MH103	27	194	0.0008	3.6131	2.2235	2.34	0.58	1.31
Y19CL1067	Y20MH103	Y19MH151	27	326	0.0008	3.6131	2.2235	2.34	0.58	1.31
Y19CL1066	Y19MH151	Y19MH152	27	330	0.0008	3.6172	2.2263	2.34	0.58	1.31
Y19CL1068	Y19MH152	Y19MH153	27	330	0.0008	3.6172	2.2263	2.34	0.58	1.31
Y19CL1070	Y19MH153	Y19MH154	27	216	0.0008	3.6237	2.2308	2.34	0.58	1.31
Y19CL1071	Y19MH154	Y19MH156	27	264	0.0008	3.6982	2.2822	2.35	0.59	1.33
Y19CL1069	Y19MH156	Y19MH157	27	296	0.0008	3.6982	2.2822	2.35	0.59	1.33
Y19CL1072	Y19MH157	Y19MH159	27	203	0.0008	3.7450	2.3146	2.35	0.59	1.34
Y19CL1075	Y19MH159	Archibald/ ETS	27	90	0.002	3.7450	2.3146	3.33	0.45	1.02

[1] K' based on n = 0.013

[2] dn/D using K' in Brater King Table 7-14

[3] From Brater King Table 7-4 based on dn/D

SEWER STUDY SUMMARY

DATE: 1/24/2025 Esperanza PA 11 (Ontario Ranch East) Sewer Capacity Analysis - Existing plus Project Flows - Peak Wet Weather Flow

JOB NUMBER: 1551-001

General Pipe Information						Ultimate Baseline Scenario				
PIPE ID	U/S MH ID	D/S MH ID	Diameter (in)	Length (ft)	Slope	PWWF (mgd)	ADWF (mgd)	PWWF Velocity (ft/s)	PWWF d/D	PWWF Water Depth (ft)
EUD5L10P	EUD5L100	EUD50	8	105	0.0053	0.0974	0.0280	1.88	0.28	0.19
EUD50P	EUD50	EDU40	15	282	0.0047	0.5507	0.1949	2.79	0.30	0.37
EUD40P	EDU40	EUD30	15	400	0.0043	0.5507	0.1949	2.70	0.30	0.38
EUD40P	EUD30	EUD20	15	275	0.0045	0.6029	0.2157	2.81	0.32	0.39
EUD20P	EUD20	EUD10	15	293	0.0229	0.6029	0.2157	5.03	0.21	0.26
EUD10P	EUD10	MC50	15	83	0.0226	0.6029	0.2157	5.00	0.21	0.26
MC50P	MC50	MC40	21	362	0.0074	2.7779	1.1936	5.02	0.39	0.68
MC40P	MC40	MC30	21	361	0.0062	2.7779	1.1936	4.71	0.40	0.71
MC30P	MC30	MC20	21	253	0.0238	2.8132	1.2106	7.68	0.29	0.50
MC120P	MC20	MC10	21	236	0.0061	2.8132	1.2106	4.70	0.41	0.72
MC100P	MC10	M290	21	348	0.0065	2.8547	1.2306	4.83	0.41	0.71
M29	M290	M280	24	314	0.0011	2.8961	1.2506	2.49	0.56	1.11
M28	M280	M270	24	274	0.0011	2.9931	1.2976	2.51	0.57	1.14
M27	M270	M260	24	321	0.0011	2.9931	1.2976	2.51	0.57	1.14
M26	M260	M250	24	344	0.0011	2.9931	1.2976	2.51	0.57	1.14
M25	M250	M240	24	300	0.0011	3.2227	1.4096	2.55	0.60	1.19
M24	M240	M230	24	297	0.0011	3.2636	1.4296	2.56	0.60	1.20
M23	M230	M220	24	297	0.0011	3.2227	1.4096	2.55	0.60	1.19
M22	M220	M210	24	297	0.0011	3.2227	1.4096	2.55	0.60	1.19
M21	M210	G10	24	296	0.0073	3.2636	1.4296	5.18	0.35	0.70
M20	G10	M190	24	315	0.0013	4.4460	2.0211	2.91	0.70	1.41
M19	M190	M180	24	321	0.0013	4.4460	2.0211	2.91	0.70	1.41
M18	M180	M170	24	322	0.0013	4.4460	2.0211	2.91	0.70	1.41
M17	M170	M160	24	147	0.0013	4.4460	2.0211	2.91	0.70	1.41
M16	M160	M150	24	363	0.0013	4.4460	2.0211	2.91	0.70	1.41
M15	M150	M140	24	302	0.0013	4.5570	2.0777	2.92	0.72	1.44
M13	M140	Y20MH120	24	126	0.0014	4.5570	2.0777	3.02	0.70	1.39
Y20CL1017	Y20MH120	Y20MH121	24	321	0.0013	4.5570	2.0777	2.92	0.72	1.44
Y20CL1018	Y20MH121	Y20MH122	24	324	0.0013	4.5570	2.0777	2.92	0.72	1.44
Y20CL1019	Y20MH122	Y20MH100	24	280	0.0013	4.5570	2.0777	2.92	0.72	1.44
Y20CL1000	Y20MH100	Y20MH102	24	282	0.0128	4.5570	2.0777	6.96	0.36	0.72
Y20CL1003	Y20MH102	Y20MH103	27	194	0.0008	4.8416	2.2235	2.48	0.71	1.60
Y19CL1067	Y20MH103	Y19MH151	27	326	0.0008	4.8416	2.2235	2.48	0.71	1.60
Y19CL1066	Y19MH151	Y19MH152	27	330	0.0008	4.8470	2.2263	2.48	0.71	1.60
Y19CL1068	Y19MH152	Y19MH153	27	330	0.0008	4.8470	2.2263	2.48	0.71	1.60
Y19CL1070	Y19MH153	Y19MH154	27	216	0.0008	4.8557	2.2308	2.48	0.71	1.60
Y19CL1071	Y19MH154	Y19MH156	27	264	0.0008	4.9555	2.2822	2.49	0.72	1.63
Y19CL1069	Y19MH156	Y19MH157	27	296	0.0008	4.9555	2.2822	2.49	0.72	1.63
Y19CL1072	Y19MH157	Y19MH159	27	203	0.0008	5.0183	2.3146	2.49	0.73	1.65
Y19CL1075	Y19MH159	Archibald/ ETS	27	90	0.002	5.0183	2.3146	3.58	0.54	1.21

[1] K' based on n = 0.013

[2] dn/D using K' in Brater King Table 7-14

[3] From Brater King Table 7-4 based on dn/D

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N

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LEGEND

PROJECT BOUNDARY

EXISTING GRAVITY SEWER

0 MANHOLE NUMBER

S ARCHIBALD AVE

EASTERN TRUNK SEWER

MERRILL AVE

SUMNER AVE

EUCALYPTUS AVE

MILL CREEK AVE

HAMNER AVE

BELLEGRAVE AVE

Y20MH156 Y20MH157 Y20MH152 Y20MH151 Y20MH102 Y20MH120 Y20MH154 Y20MH153 Y20MH103 Y20MH100 Y20MH121 Y20MH122 Y20MH159

M140 M150 M160 M170 M180 M190 G10 M210 M220 M230 M240 M260 M250 M270 M280 M290

MC50 EUD10 EUD20 EUD5L100 EUD50 EUD40 EUD30 MC30 MC40 MC20 MC10

DEXTER WILSON ENGINEERING, INC.
CONSULTING ENGINEERS
(760) 438-4422

EXHIBIT A

MANHOLE DIAGRAM

ESPERANZA PA II (ONTARIO EAST)

RESOLUTION NO. PC25-048

A RESOLUTION OF THE PLANNING COMMISSION OF THE CITY OF ONTARIO, CALIFORNIA, RECOMMENDING THE CITY COUNCIL APPROVE FILE NO. PGPA24-003, AN AMENDMENT TO THE LAND USE ELEMENT OF THE POLICY PLAN (GENERAL PLAN), REVISING EXHIBIT LU-01 (OFFICIAL LAND USE PLAN) AND EXHIBIT LU-03 (FUTURE BUILDOUT), AFFECTING PROPERTY, LOCATED SOUTH OF CHATHAM STREET, WEST OF CLIFTON AVENUE, EAST OF AMHERST AVENUE, AND NORTH OF EUCALYPTUS AVENUE, FROM PUBLIC SCHOOL TO MEDIUM DENSITY RESIDENTIAL. AND MAKING FINDINGS IN SUPPORT THEREOF—APN: 1073-101-050. (SEE ATTACHMENTS 1 AND 2) (PART OF CYCLE 1 FOR THE 2025 CALENDAR YEAR)

WHEREAS, GDC Investments13, LP, has filed an Application for the approval of a General Plan Amendment, File No. PGPA24-003, as described in the title of this Resolution (hereinafter referred to as Application or Project); and

WHEREAS, the City of Ontario adopted the Policy Plan (General Plan) as part of the component framework for The Ontario Plan on January 27, 2010, and issued Resolution No. 2010-004; and

WHEREAS, the City of Ontario adopted a Supplemental Environmental Impact Report (SEIR) for the General Plan Amendment for The Ontario Plan 2050 Technical Update (TOP 2050) on August 16, 2022 and issued Resolution No. 2022-129. Since the adoption of TOP 2050, the City has evaluated Exhibits LU-01: Official Land Use Plan and LU-03: Future Buildout further and is proposing modifications; and

WHEREAS, the proposed changes to Exhibit LU-01 Official Land Use Plan include changes to land use designations of certain properties shown on Exhibit A to make the land use designations of these properties consistent with existing adjacent properties; and

WHEREAS, Policy Plan Exhibit LU-03 (Future Buildout) specifies the expected buildout for the City of Ontario, incorporating the adopted land use designations. The proposed changes to Exhibit LU-01 (Official Land Use Plan) will require that Exhibit LU-03 (Future Buildout) is modified to be consistent with Exhibit LU-01 (Official Land Use Plan), as depicted on Exhibit B, attached; and

WHEREAS, the Project proposes to amend TOP Policy Plan Land Use Map and associated buildout tables to change the land use designation of approximately 10.02 acres, located south of Chatham Street, west of Clifton Avenue, east of Amherst Avenue,

and north of Eucalyptus Avenue, from Public School to Medium Density Residential (see Exhibit B), establishing a buildout capacity of 221 units; and

WHEREAS, this capacity offsets the loss of 130 units resulting from File No. PGPA23-003 and ensures compliance with SB 330 by maintaining the City's overall housing capacity; and

WHEREAS, City of Ontario Development Code Division 2.03 (Public Hearings) prescribes the manner in which public notification shall be provided and hearing procedures to be followed, and all such notifications and procedures have been completed; and

WHEREAS, the Project is located within the Airport Influence Area of Ontario International Airport, which encompasses lands within parts of San Bernardino, Riverside, and Los Angeles Counties, and is subject to, and must be consistent with, the policies and criteria set forth in the Ontario International Airport Land Use Compatibility Plan (ALUCP), which applies only to jurisdictions within San Bernardino County, and addresses the noise, safety, airspace protection, and overflight impacts of current and future airport activity; and

WHEREAS, the Application is a project pursuant to the California Environmental Quality Act (Public Resources Code Section 21000, et seq.) (CEQA); and

WHEREAS, as the first action on the Project, on September 23, 2025, the Planning Commission recommended approval of a Resolution recommending City Council adopt an addendum to TOP 2050 Supplemental Environmental Impact Report (SEIR; State Clearinghouse No. 2021070364) adopted by City Council on August 16, 2022, for File No. PGPA20-002. The addendum finds that the proposed Project introduces no new significant environmental impacts, and all previously adopted mitigation measures are incorporated into the Project by reference; and

WHEREAS, on September 23, 2025, the Planning Commission of the City of Ontario conducted a hearing to consider the Project, and concluded said hearing on that date; and

WHEREAS, all legal prerequisites to the adoption of this Resolution have occurred.

NOW, THEREFORE, IT IS HEREBY FOUND, DETERMINED, AND RESOLVED by the Planning Commission of the City of Ontario, as follows:

SECTION 1: ***Environmental Determination and Findings.*** As the recommending body for the Project, the Planning Commission has reviewed and considered the information contained in the administrative record for the Project. Based

upon the facts and information contained in the administrative record, including all written and oral evidence presented to the Planning Commission, the Planning Commission finds as follows:

(1) The environmental impacts of this Project were reviewed in conjunction with an TOP 2050 Supplemental Environmental Impact Report — State Clearinghouse No. 2021070364 (Certified SEIR), which was certified by the Ontario City Council on August 16, 2022, in conjunction with File No. PGPA20-002; and

(2) The Addendum and administrative record have been completed in compliance with CEQA, the State CEQA Guidelines, and the City of Ontario Local CEQA Guidelines; and

(3) The City's "Local Guidelines for Implementing the California Environmental Quality Act (CEQA)" provide for the use of a single environmental assessment in situations where the impacts of subsequent projects are adequately analyzed. This Application introduces no new significant environmental impacts; and

(4) All previously adopted mitigation measures shall be a condition of Project approval, as they are applicable to the Project, and are incorporated herein by this reference; and

(5) The Addendum contains a complete and accurate reporting of the environmental impacts associated with the Project, and reflects the independent judgment of the Planning Commission; and

(6) There is no substantial evidence in the administrative record supporting a fair argument that the Project may result in significant environmental impacts.

SECTION 2: ***Additional Environmental Review Not Required.*** Based on the Addendum, all related information presented to the Planning Commission, and the specific findings set forth in Section 1, above, the Planning Commission finds that the preparation of a subsequent or supplemental environmental impact report is not required for the Project, as the Project:

(1) Does not constitute substantial changes to the certified SEIR that will require major revisions to the Certified SEIR due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified significant effects; and

(2) Does not constitute substantial changes with respect to the circumstances under which the Certified SEIR was prepared, that will require major revisions to the

Certified SEIR due to the involvement of new significant environmental effects or a substantial increase in the severity of the previously identified significant effects; and

(3) Does not contain new information of substantial importance that was not known and could not have been known with the exercise of reasonable diligence at the time the Certified SEIR was certified/adopted, that shows any of the following:

(a) The Project will have one or more significant effects not discussed in the Certified SEIR; or

(b) Significant effects previously examined will be substantially more severe than shown in the Certified SEIR; or

(c) Mitigation measures or alternatives previously found not to be feasible would in fact be feasible and would substantially reduce one or more significant effects of the Project, but the City declined to adopt such measures; or

(d) Mitigation measures or alternatives considerably different from those analyzed in the Certified SEIR would substantially reduce one or more significant effects on the environment, but which the City declined to adopt.

SECTION 3: ***Housing Element Compliance.*** Pursuant to the requirements of California Government Code Chapter 3, Article 10.6, commencing with Section 65580, as the recommending body for the Project, the Planning Commission finds that based upon the facts and information contained in the Application and supporting documentation, at the time of Project implementation, the Project is consistent with the Housing Element of the Policy Plan (General Plan) component of TOP 2050, as the Project site is not one of the properties in the Housing Element Sites Inventory contained in Tables B-1 and B-2 of the Housing Element Technical Report.

SECTION 4: ***Airport Land Use Compatibility Plan (ALUCP) Compliance.*** The California State Aeronautics Act (Public Utilities Code Section 21670, et seq.) requires that an Airport Land Use Compatibility Plan be prepared for all public use airports in the State; and requires that local land use plans and individual development proposals must be consistent with the policies set forth in the adopted Airport Land Use Compatibility Plan.

(1) On April 19, 2011, the City Council of the City of Ontario approved and adopted the Ontario International Airport Land use Compatibility Plan, establishing the Airport Influence Area for Ontario International Airport, which encompasses lands within parts of San Bernardino, Riverside, and Los Angeles Counties, and limits future land uses and development within the Airport Influence Area, as they relate to noise, safety, airspace protection, and overflight impacts of current and future airport activity. As the

recommending body for the Project, the Planning Commission has reviewed and considered the facts and information contained in the Application and supporting documentation against the ONT ALUCP compatibility factors, including [1] Safety Criteria (ONT ALUCP Table 2-2) and Safety Zones (ONT ALUCP Map 2-2), [2] Noise Criteria (ONT ALUCP Table 2-3) and Noise Impact Zones (ONT ALUCP Map 2-3), [3] Airspace protection Zones (ONT ALUCP Map 2-4), and [4] Overflight Notification Zones (ONT ALUCP Map 2-5). As a result, the Planning Commission finds and determines that the Project, when implemented in conjunction with the conditions of approval, will be consistent with the policies and criteria set forth within the ONT ALUCP; and

SECTION 5: ***Concluding Facts and Reasons.*** Based upon the substantial evidence presented to the Planning Commission during the above-referenced hearing, and upon the specific findings set forth in the Sections above, the Planning Commission hereby concludes as follows:

(1) The proposed General Plan Amendment is consistent with the goals and policies of TOP 2050 as follows:

Policy Plan (General Plan)

Land Use Element:

- LU-1.1 Strategic Growth. We concentrate growth in strategic locations that help create place and identity, maximize available and planned infrastructure, foster the development of transit, and support the expansion of the active and multimodal transportation networks throughout the City.

- LU-1.6 Complete Community. We incorporate a variety of land uses and building types in our land use planning efforts that result in a complete community where residents at all stages of life, employers, workers, and visitors have a wide spectrum of choices of where they can live, work, shop and recreate within Ontario.

- Goal LU-2 Compatibility: Compatibility between a wide range of uses and a resultant urban patterns and forms.

Community Economics Element:

- Goal CE-1 Complete Community: A complete community that provides for all incomes and stages of life.

- Goal CE-2 Placemaking: A City of distinctive neighborhoods, districts, corridors, and centers where people choose to be; and

(2) The proposed General Plan Amendment would not be detrimental to the public interest, health, safety, convenience, or general welfare of the City; and

(3) The Land Use Element is a mandatory element allowed four general plan amendments per calendar year and this general plan amendment is the first amendment to the Land Use Element of the 2025 calendar year consistent with Government Code Section 65358; and

(4) The proposed General Plan Amendment action modifying land use designations for 10.2 acres from Public School to Medium-Density Residential, located south of Chatham Street, west of Clifton Avenue, east of Amherst Avenue, and north of Eucalyptus Avenue is consistent with the Housing Element of the Policy Plan (general plan) component of TOP 2050, as the Project site is not one of the properties in the Housing Element Sites contained in Tables B-1 and B-2 (Housing Element Sites Inventory) of the Housing Element Technical Report.; and

(5) The proposed General Plan Amendment would not be detrimental to the public interest, health, safety, convenience, or general welfare of the City; and

(6) The Land Use Element is a mandatory element allowed four general plan amendments per calendar year and this general plan amendment is the first amendment to the Land Use Element of the 2025 calendar year consistent with Government Code Section 65358; and

(7) During the amendment of the general plan, opportunities for the involvement of citizens, California Native American Indian tribes (Government Code Section 65352.3.), public agencies, public utility companies, and civic, education, and other community groups, through public hearings or other means were implemented consistent with Government Code Section 65351.

SECTION 6: ***Planning Commission Action.*** Based upon the findings and conclusions set forth in the Sections above, the Planning Commission hereby RECOMMENDS THE CITY COUNCIL APPROVES the proposed General Plan Amendment, as depicted in Attachment 1 (Policy Plan Land Use Plan (Exhibit LU-01) Revision) and Attachment 2 (Future Buildout Table (Exhibit LU-03) Revision) of this Resolution.

SECTION 7: ***Indemnification.*** The Applicant shall agree to defend, indemnify and hold harmless, the City of Ontario or its agents, officers, and employees from any claim, action or proceeding against the City of Ontario or its agents, officers or employees to attack, set aside, void, or annul this approval. The City of Ontario shall promptly notify the Applicant of any such claim, action, or proceeding, and the City of Ontario shall cooperate fully in the defense.

SECTION 8: ***Custodian of Records.*** The documents and materials that constitute the record of proceedings on which these findings have been based are located at the City of Ontario City Hall, 303 East B Street, Ontario, California 91764. The custodian for these records is the City Clerk of the City of Ontario.

SECTION 9: ***Certification to Adoption.*** The Secretary shall certify to the adoption of the Resolution.

- - - - - - - - - - - - - -

The Secretary Pro Tempore for the Planning Commission of the City of Ontario shall certify as to the adoption of this Resolution.

I hereby certify that the foregoing Resolution was duly and regularly introduced, passed and adopted by the Planning Commission of the City of Ontario at a regular meeting thereof held on the 23rd day of September 2025, and the foregoing is a full, true and correct copy of said Resolution, and has not been amended or repealed.

Nicola Ricci
Planning Commission Chairman

ATTEST:

Henry K. Noh
Planning Director and
Secretary to the Planning Commission

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

I, Gwen Berendsen, Secretary Pro Tempore of the Planning Commission of the City of Ontario, DO HEREBY CERTIFY that foregoing Resolution No. PC25-048, was duly passed and adopted by the Planning Commission of the City of Ontario at their regular meeting held on September 23, 2025, by the following roll call vote, to wit:

AYES: Anderson, DeDiemar, Lampkin, Marks, Ricci

NOES: Gage

ABSENT: None

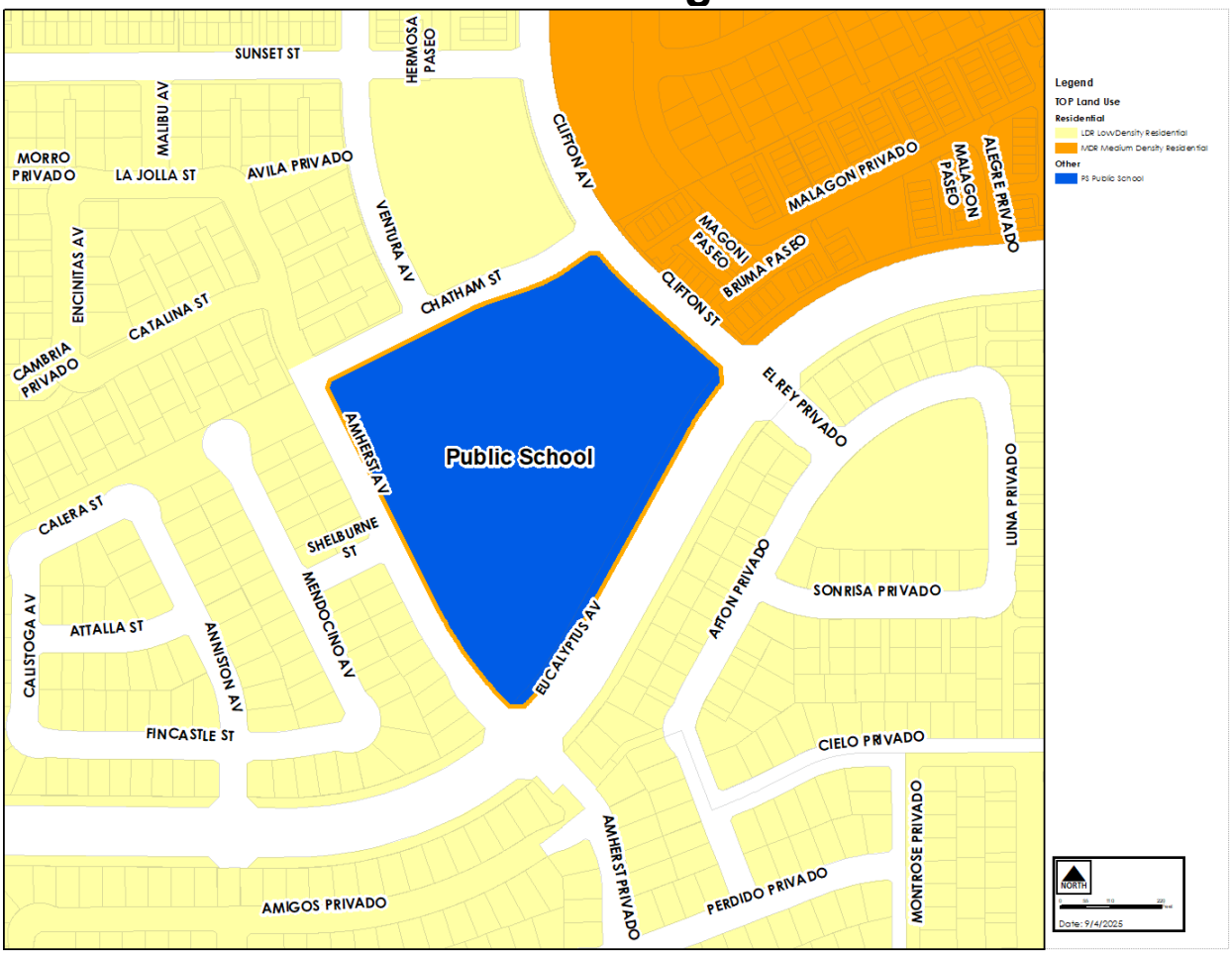
ABSTAIN: None

Gwen Berendsen
Secretary Pro Tempore

ATTACHMENT 1:

Policy Plan Land Use Plan (Exhibit LU-01) Revision

Existing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LA JOLLA ST
AVILA PRIVADO
CLIFTON AV
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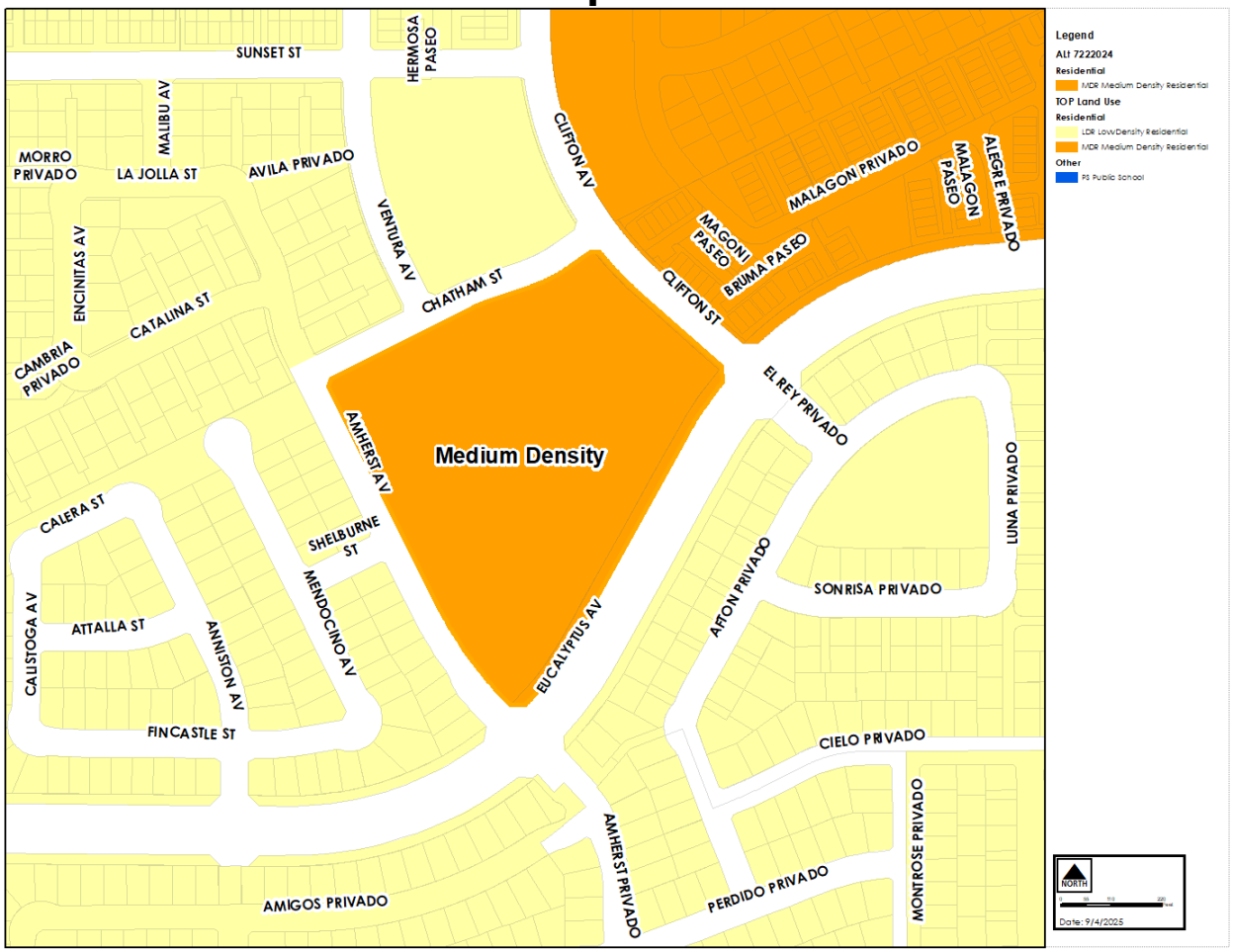
MALAGON PASEO
ALEGRE PRIVADO
MAGONI PASEO
BRUMA PASEO
ENCINITAS AV
CATALINA ST
CHATHAM ST
CLIFTON ST
CAMBRIA PRIVADO
EL REY PRIVADO
AMHERST AV
Public School
CALERA ST
SHELBURNE ST
LUNA PRIVADO
AFTON PRIVADO
SONRISA PRIVADO
CALISTOGA AV
ATTALLA ST
ANNISTON AV
MENDOCINO AV
EUCALYPTUS AV
FINCASTLE ST
CIELO PRIVADO
MONTROSE PRIVADO
AMHERST PRIVADO
PERDIDO PRIVADO
AMIGOS PRIVADO
Legend
TOP Land Use
Residential
LDR Low Density Residential
MDR Medium Density Residential
Other
PS Public School
NORTH
Date: 9/4/2025

Proposed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AMHERST AV
Medium Density
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SONRISA PRIVADO
CALISTOGA AV
ATTALLA ST
ANNISTON AV
MENDOCINO AV
EUCALYPTUS AV
FINCASTLE ST
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AMHERST PRIVADO
MONTROSE PRIVADO
AMIGOS PRIVADO
PERDIDO PRIVADO
Legend
Alt 7222024
Residential
MDR Medium Density Residential
TOP Land Use
Residential
LDR LowDensity Residential
MDR Medium Density Residential
Other
PS Public School
NORTH
Date: 9/4/2025

ATTACHMENT 2:

Future Buildout Table (Exhibit LU-03) Revision

LU-03 Future Buildout Table

Land Use	Acres[2]	Assumed Density/Intensity[3]	Units	Pop[4]	Non-Residential Square Feet	Jobs[5]
Residential						
Rural	529	2.0 du/ac	1,057	3,863	-	-
Low Density[6,7]	6,274	5.9 du/ac (north of Riverside Dr) 4.5 du/ac (south of Riverside Dr)[7]	34,842	127,304	-	-
Low-Medium Density[6]	889	8.5 du/ac	7,197	26,363	-	-
Medium Density[7]	2,301 ~~2,291~~	18.0 du/ac (north of Riverside Dr) 22.0 du/ac (south of Riverside Dr)[8]	~~46,926~~ 47,150	~~152,030~~ 152,757	-	-
High Density	198	25.0 du/ac (north of Riverside Dr) 35.0 du/ac (south of Riverside Dr)	5,089	13,038	-	-
Subtotal	~~101,180~~ 101,190		~~95,433~~ 95,657	~~322,710~~ 323,437	-	-
Mixed Use						
• Downtown	132	• 60% of the area at 35 du/ac • 40% of the area at 0.80 FAR for office and retail	2,758	7,068	1,830,863	4,092
• East Holt Boulevard[8]	75	• 75% of the area at 30 du/ac • 25% of area at 0.80 FAR retail	1,693	4,336	655,222	546
• West Holt Boulevard[8]	1	• 75% of the area at 30 du/ac • 25% of area at 0.80 FAR retail	33	84	12,678	11
• Meredith	91	• 50% of the area at 40 du/ac • 50% at 0.35 FAR for retail uses	1,815	4,651	691,939	577
• Multimodal Transit Center	73	• 15% of the area at 60 du/ac • 60% of the area at 1.0 FAR office and retail • 25% of the area at 0.70 FAR Lodging	653	1,673	2,449,557	5,993
• Inland Empire Corridor	37	• 82% of the area at 10 du/ac • 18% of area t 0.35 FAR retail	300	769	100,455	84
• Guasti	86	• 30% of the area at 30 du/ac • 15% of area at 1.0 FAR retail • 30% of area at 0.70 FAR office • 25% of area at 0.70 FAR Lodging	777	1,991	2,012,077	3,848
• Ontario Center[8] *(South of Concours, East of Haven Avenue, West of Milliken, North of Interstate 10 Fwy)*	186	• 50% of area at 40 du/ac • 20% of area at 1.0 FAR office • 30% of area at 0.70 FAR retail	3,729	9,553	3,329,507	7,327

LU-03 Future Buildout Table

Land Use	Acres[2]	Assumed Density/Intensity[3]	Units	Pop[4]	Non-Residential Square Feet	Jobs[5]
• Ontario Center Arena[8] *((North of Concours, West of Milliken, East of Center Avenue, South of 4th Street*	169	• 75% of area at 40 du/ac • 10% of area at 1.00 FAR office • 15% of area at 0.80 FAR retail	5,076	13,006	1,621,435	3,417
• Ontario Mills	249	• 40% of area at 40 du/ac • 5% of area at 0.75 FAR office • 55% of area at 0.50 FAR retail	3,990	10,223	3,394,666	3,971
• Rich-Haven[2]	154	• 86% of area at 18 du/ac • 2% of area at 0.35 FAR office • 12% of area at 0.30 FAR retail	2,389	6,122	289,088	373
• Parkside	3	• 50% of the area at 35 du/ac • 50% of area at 0.80 FAR retail	52	132	51,440	129
• Eucalyptus/ Chino Airport[2]	105	• 40% of the area at 35 du/ac • 10% of area at 0.80 FAR retail • 20% of area at 1.00 FAR office • 30% of area at 0.60 FAR business park (industrial)	1,471	3,769	2,059,760	4,008
• Grove[2]	36	• 65% of the area at 35 du/ac • 25% of area at 0.80 FAR retail • 10% of area at 0.70 FAR Office	821	2,104	385,285	630
• Great Park[2]	~~305~~ 300	• 70% of area at 35 du/ac • 10% of area at 0.70 FAR for office • 20% of area at 0.30 FAR for retail uses	~~7,470~~ 7,340	~~19,141~~ 18,808	~~2,789,181~~ 2,740,699	~~4,930~~ 4,845
• Neighborhood Activity Hub[8] *(Mountain Village)*	8	• 50% of the area at 35 du/ac • 50% of area at 0.80 FAR retail	137	350	136,070	340
• Neighborhood Activity Hub[8] *(Mountain & Fourth)*	7	• 70% of the area at 50 du/ac • 30% of area at 0.80 FAR retail	251	643	75,008	188
• Neighborhood Activity Hub[8] *(Euclid & Francis)*	13	• 50% of the area at 30 du/ac • 50% of area at 0.80 FAR retail	190	487	220,912	552
• Neighborhood Activity Hub[8] *(Euclid & Walnut)*	16	• 75% of the area at 30 du/ac • 25% of area at 0.80 FAR retail	369	945	142,840	357
• Neighborhood Activity Hub[2,8] *(Euclid & Riverside)*	15	• 75% of the area at 35 du/ac • 25% of area at 0.80 FAR retail	394	1,009	130,662	327
Subtotal	~~1,762~~ 1,756	-	~~34,367~~ 34,238	~~88,058~~ 87,725	~~22,478,644~~ 22,330,162	~~41,698~~ 41,612

LU-03 Future Buildout Table

Land Use	Acres[2]	Assumed Density/Intensity[3]	Units	Pop[4]	Non-Residential Square Feet	Jobs[5]
Retail/Service						
Neighborhood Commercial[6]	248	0.30 FAR	-	-	3,238,367	8,832
General Commercial	385	0.30 FAR	-	-	5,033,395	5,605
Office/ Commercial	310	0.75 FAR	-	-	10,101,733	28,239
Hospitality	194	1.00 FAR	-	-	8,458,978	11,412
Subtotal	**1,136**		**-**	**-**	**26,832,472**	**54,088**
Employment						
Business Park	~~1,139~~ 1,145	0.50 FAR	-	-	~~24,816,271~~ 24,931,704	~~42,835~~ 42,987
Industrial	7,664	0.55 FAR	-	-	183,596,786	148,483
Subtotal	~~**8,802**~~ **8,808**		-	-	~~**208,413,056**~~ **208,528,490**	~~**191,318**~~ **191,470**
Other						
Open Space–Non-Recreation	1,200	Not applicable	-	-	-	-
Open Space–Parkland[6]	1,047	Not applicable	-	-	-	-
Open Space-Water	17	Not applicable	-	-	-	-
Public Facility	90	Not applicable	-	-	-	-
Public School	~~614~~ 604	Not applicable	-	-	-	-
Ontario International Airport	1,423	Not applicable	-	-	-	-
Landfill	137	Not applicable	-	-	-	-
Railroad	250	Not applicable	-	-	-	-
Roadways	5,364	Not applicable	-	-	-	-
Subtotal	~~***10,142***~~ ***10,131***	-	-	-	-	-
Total	***32,022***	-	~~***129,800***~~ ***129,895***	~~***410,768***~~ ***411,162***	~~***264,057,928***~~ ***261,709,056***	~~***299, 324***~~ ***296,028***

RESOLUTION NO. PC25-049

A RESOLUTION OF THE PLANNING COMMISSION OF THE CITY OF ONTARIO, CALIFORNIA, RECOMMENDING THAT THE CITY COUNCIL APPROVE FILE NO. PSPA24-004, AN AMENDMENT TO THE ESPERANZA SPECIFIC PLAN TO REVISE THE SPECIFIC PLAN FOR CONSISTENCY WITH THE ONTARIO PLAN POLICY PLAN (GENERAL PLAN) LAND USE MAP. THE AMENDMENT INCLUDES [I] REVISING THE ALLOWED USES WITHIN PLANNING AREA 11 FROM SCHOOL TO RD-7/ROW TOWNHOMES; AND [II] MODIFYING THE SPECIFIC PLAN LAND USE MAP, DEVELOPMENT STANDARDS, EXHIBITS, AND TEXT TO REFLECT THE PROPOSED LAND USE CHANGES, AND MAKING FINDINGS IN SUPPORT THEREOF—APN: 1073-101-050

WHEREAS, GDC Investments 13, LP (hereinafter referred to as Applicant) has filed an Application for the approval of a Specific Plan Amendment, File No. PSPA24-004, as described in the title of this Resolution (hereinafter referred to as Application or Project); and

WHEREAS, the Application applies to approximately 10.02 acres of land generally located south of Chatham Street, west of Clifton Avenue, east of Amherst Avenue, and north of Eucalyptus Avenue, within Planning Area 11 (RD-7 / Row Townhomes) of the Esperanza Specific Plan, identified as Assessor's Parcel Number 1073-101-050, and presently vacant; and

WHEREAS, the property to the north of the Project site is within the Esperanza Specific Plan, designated Park, and developed with residential uses; the property to the east is within the Esperanza Specific Plan, designated PA-4 (RD-6 / 6-Pack Courtyard), and developed with residential uses; the property to the south is within the Esperanza Specific Plan, designated PA-7 (RD-1 / SFD 50' wide lots), and developed with residential uses; and the property to the west is within the Esperanza Specific Plan, designated PA-10 (RD-3 / SFD 2-Pack), and developed with residential uses; and

WHEREAS, on February 6, 2007, the City Council adopted Ordinance No. 2852, approving the Esperanza Specific Plan (File No. PSP05-002), establishing a master plan for the development of 223 acres of land, inclusive of the Project site; and

WHEREAS, the Application was submitted to amend the land use designation and development standards of Planning Area 11 of the Esperanza Specific Plan; and

WHEREAS, the Application was submitted to increase the number of units allowed within Planning Area 11 from 0 dwelling units to 161 dwelling units; and

WHEREAS, The Ontario Plan (TOP) 2050 Supplemental Environmental Impact Report (State Clearinghouse No. 2021070364), certified by the Ontario City Council on August 16, 2022, in conjunction with File No. PGPA20-002 (hereinafter referred to as Certified SEIR), in which development and use of the Project site was discussed; and

WHEREAS, the Planning Director of the City of Ontario prepared and approved for attachment to the certified Environmental Impact Report, an Addendum to the Certified EIR (hereinafter referred to as SEIR Addendum) in accordance with the requirements of the California Environmental Quality Act of 1970, together with State and local guidelines implementing said Act, all as amended to date (collectively referred to as CEQA); and

WHEREAS, the environmental impacts of this Project were thoroughly analyzed in the SEIR Addendum, which concluded that implementation of the Project could result in a number of significant effects on the environment that were previously analyzed in the Certified SEIR, and that the Certified SEIR identified mitigation measures that would reduce each of those significant effects to a less-than-significant level; and

WHEREAS, the City's "Local Guidelines for Implementing the California Environmental Quality Act (CEQA)" provide for the use of a single environmental assessment in situations where the impacts of subsequent projects are adequately analyzed; and

WHEREAS, the Application is a project pursuant to the California Environmental Quality Act — Public Resources Code Section 21000, et seq. — (hereinafter referred to as CEQA) and an SEIR Addendum has been prepared to determine possible environmental impacts; and

WHEREAS, Ontario Development Code Table 2.02-1 (Review Matrix) grants the Planning Commission the responsibility and authority to review and make a recommendation to the City Council on the subject Application; and

WHEREAS, the Project has been reviewed for consistency with the Housing Element of the Policy Plan component of TOP 2050, as State Housing Element law (as prescribed in Government Code Sections 65580 through 65589.8) requires that development projects must be consistent with the Housing Element, if upon consideration of all its aspects, it is found to further the purposes, principals, goals, and policies of the Housing Element; and

WHEREAS, the Project is located within the Airport Influence Area of Ontario International Airport, which encompasses lands within parts of San Bernardino, Riverside, and Los Angeles Counties, and is subject to, and must be consistent with, the policies and criteria set forth in the Ontario International Airport Land Use Compatibility Plan (hereinafter referred to as ALUCP), which applies only to jurisdictions within San

Bernardino County, and addresses the noise, safety, airspace protection, and overflight impacts of current and future airport activity; and

WHEREAS, City of Ontario Development Code Division 2.03 (Public Hearings) prescribes the manner in which public notification shall be provided and hearing procedures to be followed, and all such notifications and procedures have been completed; and

WHEREAS, as the first action on the Project, on September 23, 2025, the Planning Commission issued a Resolution recommending the City Council adopt the SEIR Addendum, finding that the proposed Project introduces no new significant environmental impacts and applying all previously adopted mitigation measures to the Project, which were incorporated by reference; and

WHEREAS, on September 23, 2025, the Planning Commission of the City of Ontario conducted a hearing to consider the Project, and concluded said hearing on that date; and

WHEREAS, all legal prerequisites to the adoption of this Resolution have occurred.

NOW, THEREFORE, IT IS HEREBY FOUND, DETERMINED, AND RESOLVED by the Planning Commission of the City of Ontario, as follows:

SECTION 1: ***Environmental Determination and Findings.*** As the recommending body for the Project, the Planning Commission has reviewed and considered the information contained in the Addendum, the initial study, and the administrative record for the Project, including all written and oral evidence provided during the comment period. Based upon the facts and information contained in the Addendum, the initial study, and the administrative record, including all written and oral evidence presented to the Planning Commission, the Planning Commission finds as follows:

(1) The environmental impacts of the Project were reviewed in conjunction with an Addendum to TOP 2050 Supplemental Environmental Impact Report (SEIR)(State Clearinghouse No. 2021070364), certified by the Ontario City Council on August 16, 2022, in conjunction with File No. PGPA20-002; and

(2) The SEIR Addendum and administrative record have been completed in compliance with CEQA, the State CEQA Guidelines, and the City of Ontario Local CEQA Guidelines; and

(3) The City's "Local Guidelines for Implementing the California Environmental Quality Act (CEQA)" provide for the use of a single environmental assessment in

situations where the impacts of subsequent projects are adequately analyzed. This Application introduces no new significant environmental impacts; and

(4) All previously adopted mitigation measures shall be a condition of Project approval, as they are applicable to the Project, and are incorporated herein by this reference; and

(5) The SEIR Addendum contains complete and accurate reporting of the environmental impacts associated with the Project, and reflects the independent judgment of the Planning Commission; and

(6) There is no substantial evidence in the administrative record supporting a fair argument that the Project may result in significant environmental impacts.

SECTION 2: ***Subsequent or Supplemental Environmental Review Not Required.*** Based on the SEIR Addendum, all related information presented to the Planning Commission, and the specific findings set forth in Section 1, above, the Planning Commission finds that the preparation of a subsequent or supplemental Certified SEIR is not required for the Project, as the Project:

(1) Does not constitute substantial changes to the Certified SEIR that will require major revisions to the Certified SEIR due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified significant effects; and

(2) Does not constitute substantial changes with respect to the circumstances under which the Certified SEIR was prepared, that will require major revisions to the Certified SEIR due to the involvement of new significant environmental effects or a substantial increase in the severity of the previously identified significant effects; and

(3) Does not contain new information of substantial importance that was not known and could not have been known with the exercise of reasonable diligence at the time the Certified SEIR was certified/adopted, that shows any of the following:

(a) The Project will have one or more significant effects not discussed in the Certified SEIR; or

(b) Significant effects previously examined will be substantially more severe than shown in the Certified SEIR; or

(c) Mitigation measures or alternatives previously found not to be feasible would in fact be feasible and would substantially reduce one or more significant effects of the Project, but the City declined to adopt such measures; or

(d) Mitigation measures or alternatives are considerably different from those analyzed in the Certified SEIR would substantially reduce one or more significant effects on the environment, but which the City declined to adopt.

SECTION 3: ***Housing Element Compliance.*** Pursuant to the requirements of California Government Code Chapter 3, Article 10.6, commencing with Section 65580, as the recommending body for the Project, the Planning Commission finds that based upon the facts and information contained in the Application and supporting documentation, at the time of Project implementation, the Project is consistent with the Housing Element of the Policy Plan (General Plan) component of TOP 2050, as the Project site is not one of the properties in the Housing Element Sites Inventory contained in Tables B-1 and B-2 of the Housing Element Technical Report.

SECTION 4: ***Airport Land Use Compatibility Plan (ALUCP) Compliance.*** The California State Aeronautics Act (Public Utilities Code Section 21670, et seq.) requires that an Airport Land Use Compatibility Plan be prepared for all public use airports in the State; and requires that local land use plans and individual development proposals must be consistent with the policies set forth in the adopted Airport Land Use Compatibility Plan.

(1) On April 19, 2011, the City Council of the City of Ontario approved and adopted the Ontario International Airport Land use Compatibility Plan, establishing the Airport Influence Area for Ontario International Airport, which encompasses lands within parts of San Bernardino, Riverside, and Los Angeles Counties, and limits future land uses and development within the Airport Influence Area, as they relate to noise, safety, airspace protection, and overflight impacts of current and future airport activity. As the recommending body for the Project, the Planning Commission has reviewed and considered the facts and information contained in the Application and supporting documentation against the ONT ALUCP compatibility factors, including [1] Safety Criteria (ONT ALUCP Table 2-2) and Safety Zones (ONT ALUCP Map 2-2), [2] Noise Criteria (ONT ALUCP Table 2-3) and Noise Impact Zones (ONT ALUCP Map 2-3), [3] Airspace protection Zones (ONT ALUCP Map 2-4), and [4] Overflight Notification Zones (ONT ALUCP Map 2-5). As a result, the Planning Commission finds and determines that the Project, when implemented in conjunction with the conditions of approval, will be consistent with the policies and criteria set forth within the ONT ALUCP; and

SECTION 5: ***Concluding Facts and Reasons.*** Based upon the substantial evidence presented to the Planning Commission during the above-referenced hearing, and upon the specific findings set forth in the Sections above, the Planning Commission hereby concludes as follows:

(1) ***The proposed Specific Plan, or amendment thereto, is consistent with the goals, policies, plans and exhibits of the Vision, Policy Plan (General Plan), and***

City Council Priorities components of The Ontario Plan 2050. The proposed Specific Plan Amendment is consistent with the Vision, Policy Plan (General Plan), and City Council Priorities components of TOP 2050, in that the Specific Plan Amendment contributes towards the legislative framework for the implementation of TOP components, guiding growth and development within the Project area to achieve optimum results from the City's physical, economic, environmental, and human resources.

(2) ***The proposed Specific Plan, or amendment thereto, would not be detrimental to the public interest, health, safety, convenience, or general welfare of the City.*** The development standards and guidelines established by the proposed Specific Plan Amendment have been created with the intent to safeguard and further the public interest, health, safety, convenience, and/or general welfare, and to ensure that the purposes of TOP 2050 and the proposed Specific Plan Amendment are maintained.

(3) ***In the case of an application affecting specific property(ies), the proposed Specific Plan, or amendment thereto, will not adversely affect the harmonious relationship with adjacent properties and land uses.*** The location of the proposed Specific Plan Amendment, and the proposed conditions under which future developments will be constructed and maintained, is consistent with the Policy Plan component of TOP 2050 and the City's Development Plan, and, therefore, will not adversely affect the harmonious relationship with adjacent properties and land uses.

(4) ***In the case of an application affecting specific property(ies), the subject site is physically suitable, including, but not limited to, parcel size, shape, access, and availability of utilities, for the request and anticipated development.*** The proposed Specific Plan Amendment has been reviewed by all City departments, which have established that the project site is physically suitable for the anticipated development in terms of parcel size, shape, and availability of utilities.

SECTION 6: ***Planning Commission Action.*** Based upon the findings and conclusions set forth in the Sections above, the Planning Commission hereby RECOMMENDS THE CITY COUNCIL APPROVES the herein described Application, subject to each and every condition set forth in the Department reports attached hereto as "Attachment A," and incorporated herein by this reference.

SECTION 7: ***Indemnification.*** The Applicant shall agree to defend, indemnify and hold harmless, the City of Ontario or its agents, officers, and employees from any claim, action or proceeding against the City of Ontario or its agents, officers or employees to attack, set aside, void, or annul this approval. The City of Ontario shall promptly notify the Applicant of any such claim, action, or proceeding, and the City of Ontario shall cooperate fully in the defense.

SECTION 8: ***Custodian of Records.*** The documents and materials that constitute the record of proceedings on which these findings have been based are located at the City of Ontario City Hall, 303 East B Street, Ontario, California 91764. The custodian for these records is the City Clerk of the City of Ontario.

SECTION 9: ***Certification to Adoption.*** The Secretary shall certify to the adoption of the Resolution.

- - - - - - - - - - - - -

The Secretary Pro Tempore for the Planning Commission of the City of Ontario shall certify as to the adoption of this Resolution.

I hereby certify that the foregoing Resolution was duly and regularly introduced, passed and adopted by the Planning Commission of the City of Ontario at a regular meeting thereof held on the 23rd day of September 2025, and the foregoing is a full, true and correct copy of said Resolution, and has not been amended or repealed.

Nicola Ricci
Planning Commission Chairman

ATTEST:

Henry K. Noh
Planning Director and
Secretary to the Planning Commission

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

I, Gwen Berendsen, Secretary Pro Tempore of the Planning Commission of the City of Ontario, DO HEREBY CERTIFY that foregoing Resolution No. PC25-049, was duly passed and adopted by the Planning Commission of the City of Ontario at their regular meeting held on September 23, 2025, by the following roll call vote, to wit:

AYES: Anderson, DeDiemar, Lampkin, Marks, Ricci

NOES: Gage

ABSENT: None

ABSTAIN: None

Gwen Berendsen
Secretary Pro Tempore

ATTACHMENT A:

File No. PSPA24-004
Esperanza Specific Plan Amendment

(Specific Plan Amendment document to follow this page)

ONTARIO ESPERANZA SPECIFIC PLAN

City of Ontario
303 East 'B' Street
Ontario, California 91764

Armada LLC
430 Thirty Second Street
Suite 200
Newport Beach, California 92663

February 6, 2007

ADOPTION

ESPERANZA
FILE NUMBER: PSP05-002
City Council Ordinance Number: 2852 *Adopted February 6, 2007*

AMENDMENTS

FILE NUMBER: PSPA14-001 *Adopted June 16, 2014*
Zoning Administrator Decision Number: ZA 14-001

FILE NUMBER: PSPA18-007 *Adopted April 22, 2019*
Zoning Administrator Decision Number: ZA 19-008

FILE NUMBER: PSPA19-003 *Adopted October 20, 2020*
City Council Resolution Number: R2020-176

FILE NUMBER: PSPA19-005 *Adopted August 12, 2022*
Zoning Administrator Decision Number ZA22-014

ONTARIO ESPERANZA SPECIFIC PLAN

Consultant Team

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Ontario CA 91764

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Newport Beach CA 92660

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Section 1. Executive Summary

The Esperanza Specific Plan is a proposal for the development of approximately 223 acres located within the City of Ontario ~~New Model Colony (NMC)~~ Ontario Ranch. The master plan for Esperanza will provide for development of a distinctive residential planned community offering a variety of housing types within walking distance to parks and private recreational amenities. The regional context and local setting of the Esperanza Specific Plan are illustrated in Exhibit 1, "Regional Location Map" and Exhibit 2, "Vicinity Map."

The Esperanza Specific Plan comprises all of Planning Subarea 25 as depicted on the City of Ontario ~~New Model Colony (NMC)~~ Ontario Ranch General Plan Land Use Map. The Esperanza Specific Plan reflects the current Land Use Plan in The Ontario Plan (General Plan). It encompasses the eastern edge of The Ontario Ranch Master Planned Community. The Specific Plan is bounded by Bellegrave Avenue to the south, ~~Milliken~~ Hamner Avenue to the east, and Mill Creek Avenue to the west. Old Edison Road abuts the Specific Plan area on the north. Approximately 174.10 net acres of Esperanza are proposed for residential uses along with 9.89 net acres of park uses.

The Esperanza Specific Plan establishes the regulations and guidelines which will govern development of the master planned community within the Ontario Ranch General Plan. The development plan as illustrated in Exhibit 3 "Land Use Plan," is consistent with the goals and policies of the ~~NMC~~ Ontario Ranch General Plan combining livable residential neighborhoods served by public and recreational facilities as well as active open space offering opportunities for social interaction among residents.

Pedestrian accessibility is provided throughout Esperanza, through a system of sidewalks separated from the street by landscaped parkways and landscaped buffer areas. Bicycle mobility is provided within the community through a system of on-street bicycle trails.

~~The NMC~~ The Ontario Ranch General Plan, adopted by the City of Ontario, designates The Esperanza Specific Plan for development of up to 1,456 residential dwelling units, however, ~~46~~ 161 residential dwelling units will be developed within the Specific Plan area originally anticipated to be a 10.02 acre school site within Esperanza. On ~~XX-XX-2020~~ 10-20-2020, a request to increase PA4 to 14DU/AC was approved in order to accommodate a more efficient, economical sized design, and more appropriate product type. The increase allows for the development of up to ~~1,640~~ 1,652 units.

Governing Documents

Development of Esperanza will be governed by the following:

- The City of Ontario ~~NMC~~ Ontario Ranch General Plan, as amended, which establishes policies governing land use, circulation, housing, conservation and open space, noise, safety, and public facilities within the Esperanza Specific Plan area.
- The Esperanza Specific Plan which includes a Land Use Plan, Infrastructure Plan, Design Guidelines, and Development Regulations. Where the Esperanza Specific Plan is silent, the City of Ontario Development Code shall govern.
- The City of Ontario Subdivision Ordinance regulating the subdivision of land within the Esperanza Specific Plan area.
- A development agreement to include methods for financing, acquisition, and construction of infrastructure, acquisition and development of parks and schools, as well as the provision for housing opportunities consistent with the regional housing needs assessment.
- Covenants, Conditions, and Restrictions (CC&R's) to be established by the developers of Esperanza as a means of ensuring and enforcing quality design and development of the master planned community.

Specific Plan Components

The Esperanza Specific Plan is organized into the following sections in addition to Section 1, Executive Summary.

Section 2
Introduction

The Introduction serves to acquaint the reader with:

- Community vision and objectives,
- The project setting,
- A general description of the project proposal,
- The goals and policies of the Esperanza Specific Plan,
- The entitlements to accompany the Esperanza Specific Plan; and
- The relationship of the Esperanza Specific Plan to the City of Ontario ~~NMC~~ Ontario Ranch General Plan, and the City of Ontario Development Code.

Section 3
Existing Conditions

The physical setting for Esperanza is described in this section outlining the existing physical conditions on and around the Specific Plan area.

Section 4
Land Use

The Land Use Section describes residential planning areas and residential types, allocations of residential dwelling units per planning area as well as the system of parks and public facilities planned within the community.

Section 5
Infrastructure and Services

This section provides information on circulation improvements, planned backbone water, sewer, and storm drain systems, the grading concept for the development of the project, and a discussion of public utilities and services to serve the Specific Plan.

Section 6
Development Regulations

Development Regulations established in this section will govern the permitted uses and the standards regulating the development of various residential types within the Esperanza Specific Plan area. The relationship of the Esperanza Specific Plan development regulations to the City of Ontario Development Code is also provided. The policies and procedures for the City's review and approval of specific development proposals within Esperanza are presented in this section as well as the methods and procedures for interpreting and amending the Esperanza Specific Plan as necessary.

Section 7
Implementation

The policies and procedures for the City's review and approval of specific development proposals, within Esperanza, are presented in this section. This section provides the methods and procedures for interpreting and amending the Esperanza Specific Plan as necessary. A summary of project financing and project maintenance responsibilities for new development within the Specific Plan area is provided in this section.

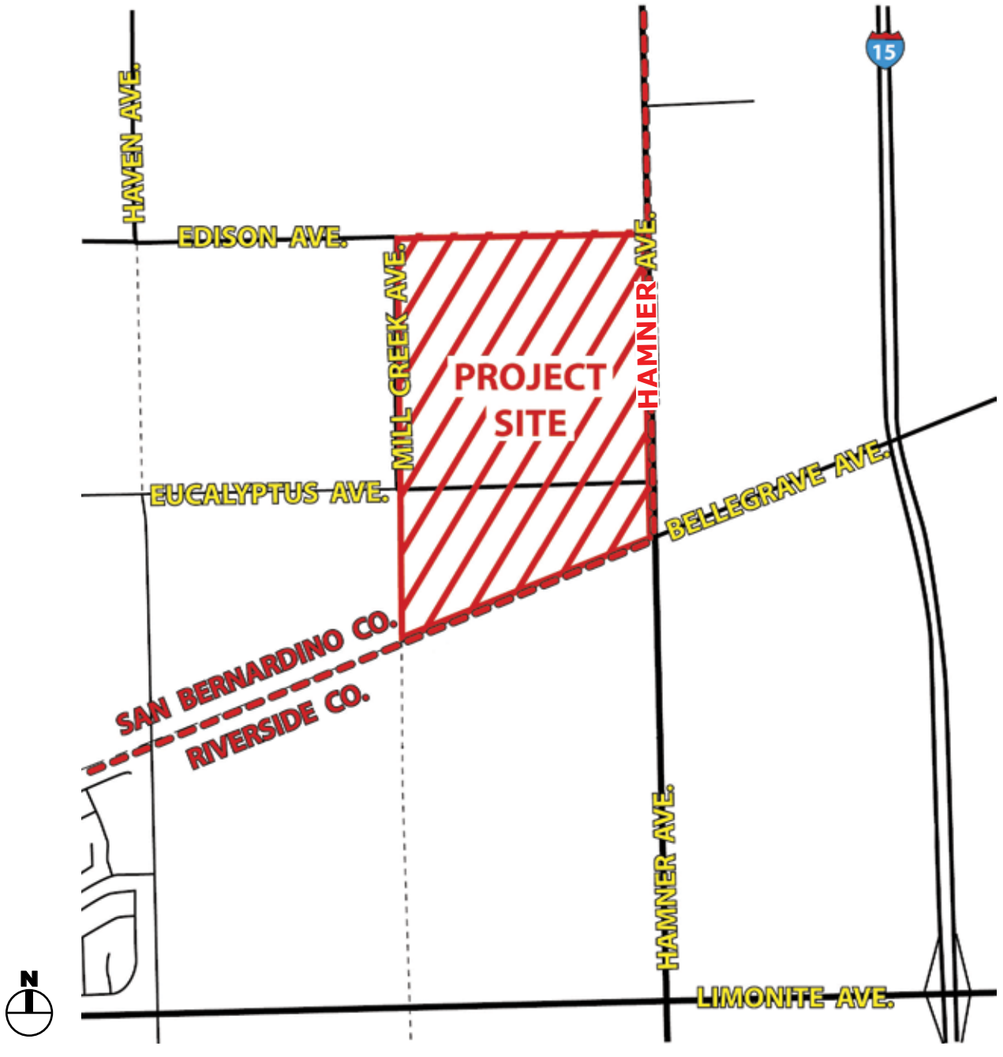
Section 8
Design Guidelines

The Esperanza Design Guidelines are intended to direct the site planning, landscaping, and architectural quality of the development. Streetscapes, entries, edge treatments, walls and fencing, lighting, signage, and architectural design are some of the features to be addressed in the Design Guidelines.

Exhibit 1
Regional Location Map

Section 9
General Plan Consistency

This section includes the City of Ontario General Plan consistency matrix describing the relationship of the Esperanza Specific Plan to each policy of the ~~NMC~~ Ontario Ranch General Plan.



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Vicinity Map

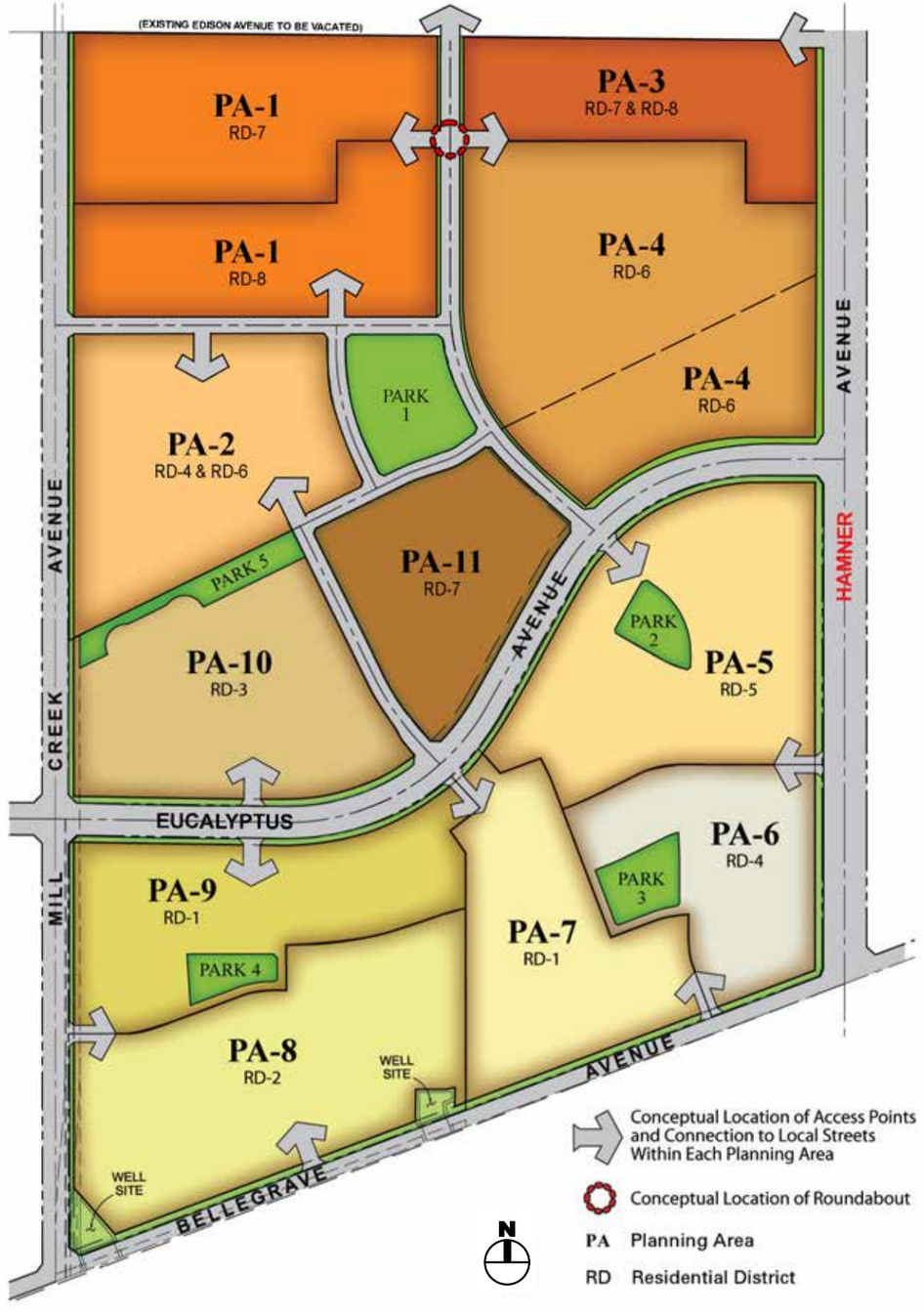


Exhibit 3
Land Use Plan

LAND USE	UNITS	GROSS ACRES	UNITS/ GROSS ACRES	NET ACRES	UNITS/ NET ACRES
Residential Uses					
PA-1 (RD-7/ Row Townhomes, RD-8/ Motorcourt Townhomes)	319 DU	29.35 AC	10.87 DU/AC	28.97 AC	11.01 DU/AC
PA-2 (RD-4/ SFD Cottages, RD-6/ 6-Pack Courtyard)	113 DU	22.84 AC	4.95 DU/AC	17.36 AC	6.51 DU/AC
PA-3 (RD-7 & RD-8/ Row Townhomes)	156 DU	11.40 AC	13.68 DU/AC	11.10 AC	14.05 DU/AC
PA-4 (RD-6/ 6-Pack Courtyard, 8-Pack Courtyard, Row Townhomes)	303 DU	27.41 AC	11.05 DU/AC	19.30 AC	15.70 DU/AC
PA-5 (RD-5/ 4-Pack Courtyard)	157 DU	23.78 AC	6.60 DU/AC	17.64 AC	8.90 DU/AC
PA-6 (RD-4/ SFD Cottages)	78 DU	13.64 AC	5.72 DU/AC	10.00 AC	7.80 DU/AC
PA-7 (RD-1/ SFD 50' wide lots)	76 DU	14.36 AC	5.29 DU/AC	12.56 AC	6.05 DU/AC
PA-8 (RD-2/ SFD 55' wide lots)	107 DU	23.72 AC	4.51 DU/AC	19.26 AC	5.56 DU/AC
PA-9 (RD-1/ SFD 50' x 80')	82 DU	17.75 AC	4.62 DU/AC	13.27 AC	6.18 DU/AC
PA-10 (RD-3/ SFD 2-Pack)	100 DU	19.92 AC	5.02 DU/AC	14.62 AC	6.84 DU/AC
PA-11 (RD-7/ Row Townhomes)	161 DU	13.10 AC	12.29 DU/AC	10.02 AC	16.07 DU/AC
Park 1		5.75*AC			
Residential land Use Total	**1,652 DU**	**223.00 AC**	**7.41 DU/AC**	**174.10 AC**	**9.49 DU/AC**
Parks				9.89 AC	
Neighborhood Edge Buffers				6.62 AC	
Roadways				28.25 AC	
SCE Easements and Well Sites				4.14 AC	
PROJECT TOTAL	**1,652 DU**	**223.00 AC**		**223.00 AC**	

NOTES:

1. *Gross residential acres do not include the 13.10 gross acres for a school site.*
2. *Net residential acres are gross acres less parks, neighborhood edge buffers, roadways, and easements and net area for school site.*

** PA-2 includes 3.45 AC of Park 1*

Exhibit 3 (cont.)
Land Use Table

Section 2. Introduction

The Esperanza Specific Plan (Specific Plan) includes 223 acres of land designated for residential uses as part of the Ontario Ranch area within the City of Ontario. Esperanza, at build out will be a residential master planned community within the City of Ontario with a traditional neighborhood design similar to that found in older established communities.

2.1 Community Vision and Objectives

The community vision for the Esperanza Specific Plan is implemented through the application of key design objectives guiding the development of the Specific Plan as discussed below.

Objective: Create a Livable Environment

The Esperanza Specific Plan combines residential, recreation and public facilities designed to create a livable community and includes features such as:

- A design which allows for alternative modes of travel such as biking and walking.
- Opportunities for informal neighborhood interaction.
- Diverse architectural design of a high quality.
- Connectivity among neighborhoods.
- Diversity and choice of housing types and opportunities to address a variety of lifestyles and economic segments of the marketplace.
- Residential neighborhoods developed at a human scale oriented to pedestrian activities with connectivity among residential neighborhoods, parks, and schools.
- A simple and well-designed street system providing street separated sidewalks and active and passive recreational opportunities allowing residents to experience increased outdoor living opportunities.
- A variety of housing types incorporated into the land use plan addressing lifestyle considerations of singles, families, and empty nesters.
- Residential neighborhoods designed around a network of centrally located parks, promoting outdoor activity and casual social interaction among neighbors.

Objective: Plan for a Circulation System Serving Motorists, Bicyclists and Pedestrians

The circulation plan for the Esperanza Specific Plan provides a comprehensive system of arterial, collector, and local streets accommodating bicycle and pedestrian travel as well as the safe and efficient movement of automobiles within the Specific Plan area:

- Street design includes landscaped buffer areas and pedestrian walkways, separated from the street, to create an intimate environment promoting social interaction.
- Internal project streets are designed to slow vehicular traffic through the use of traffic calming devices such as a roundabout at "A" Street adjacent to the neighborhood park, landscaped areas adjacent to local streets, and narrowed intersections to influence a driver's peripheral vision and encourage drivers to proceed more slowly.
- A system of bikeways is integrated into the design of the community to encourage bicycle travel as an alternative to the automobile.

Objective: Provide for Adequate Public Community Facilities

The Esperanza Specific Plan provides for the development of needed public facilities to serve the community as follows:

- New water, sewer, and storm drain facilities to serve the Specific Plan area.
- New planned bike paths connecting to the City of Ontario bikeway master plan bike paths.

Objective: Provision of New Parks and Open Space

New public park and open space amenities are provided to enhance outdoor recreational opportunities to residents of Esperanza and the surrounding community.

- Provision of approximately 9.89 acres of public parks, distributed throughout the community, will offer active and passive recreational opportunities within walking distance of all residential areas.
- Approximately 4.4 acres adjacent to Mill Creek Avenue, including a Southern California Edison Easement, will be landscaped for use as linear open space.
- Approximately 6.62 acres of landscaped open space to include pedestrian trails adjacent to public arterial and collector streets will be provided.
- A bicycle/pedestrian trail system will be developed within the street system of the Specific Plan area connecting the residential areas of the Specific Plan to parks and points surrounding the community providing accessibility to bicyclists and pedestrians throughout the community.

Objective: Promote Exceptional Architecture and Site Planning

Diverse and varied architecture combined with comprehensive site planning within the Esperanza Specific Plan will produce neighborhoods that have aesthetic and functional harmony, preserve residents privacy, and encourage neighborhood interaction.

- Streets will be linked together in a manner, which is pedestrian friendly, but also auto-accessible connecting homes with other neighborhoods, open space, public facilities, and recreational areas for residents to either walk, bike, or drive to.
- A variety of housing types, including attached and detached single family homes, will be provided within the Specific Plan area, all of which are located close to parks and open space.
- Residential planning areas include a variety of housing types oriented toward the street adding interest and encouraging neighborhood interaction along the street.
- Residential neighborhoods are designed with houses addressing the street by:
  - Designing homes to a more human level with porches, stoops, and walkways creating opportunities for neighborly interaction.
  - Homes fronting the street with garages accessed from rear alleys.
  - Minimizing views of garage doors through setback requirements, location, design elements, and landscaping.
  - Incorporating varied architectural styles and elements within each neighborhood.

2.2 SPECIFIC PLAN PURPOSE

The City of Ontario will adopt the Esperanza Specific Plan by ordinance thereby establishing the land use plan, development standards, infrastructure requirements, and implementation requirements for the Specific Plan area. The Esperanza Specific Plan establishes the type and distribution of residential land uses, defines the development regulations and design guidelines for residential land use, establishes appropriate locations for development of public parks, and describes the infrastructure requirements and the level of improvements necessary to support development of the Specific Plan area. The Esperanza Specific Plan establishes the procedures and requirements to approve new development within the Specific Plan area and identifies, where applicable, City of Ontario Development Code requirements.

2.3 SPECIFIC PLAN PROPOSAL

2.3.1 Project Summary

The Esperanza Land Use Plan is described below and in the Specific Plan "Statistical Summary," Table 1.

2.3.1.1 Residential Uses

Esperanza will provide for development of a variety of residential housing types oriented toward open space amenities and designed to promote walkability and interaction among residents. Residential development within the approximately 223 acre Specific Plan area will contain up to ~~1,594~~ 1,652 residential dwelling units, providing a mix of single family detached and single family attached housing types as described below. In the event Planning Area 11, reserved as for a 10.02 acre school site, is not purchased by the Mountain View School District Planning Area 11 may revert to a residential zoning district for development of up to ~~46~~ 161 additional dwelling units subject to approval by the City of a Specific Plan Amendment.

2.3.1.2.2 Residential Detached

Esperanza offers six different types of single family detached residential products for development within the Specific Plan area.

- SFD Conventional – Conventional single family detached residential units are proposed on lots ranging from 3,900 square feet to 4,900 square feet in size. Vehicular access is provided from interior streets and garages are set back from the front of the residence emphasizing the architectural elements forming the streetscene. These residential types will be developed at density levels between 5.56 to 6.18 dwelling units per net acre.
- SFD Cottage – Alley served single family detached residential dwelling units will be developed in two planning areas designed with an architectural orientation to the street by locating garages to the rear of residential units. Alley loaded residential areas will be developed at an average density of 7.89 dwelling units per net acre with a minimum lot size of 2,400 square feet.
- SFD 2 Pack – Residential single family detached development on minimum lots of 3,400 square feet in size will be developed in a 2 Pack configuration. Residential 2 Pack housing will be developed at a density of 6.84 dwelling units per net acre. Garages within this housing type are alternately placed to the rear of the lot or placed a significant distance from the street maintaining an architecture forward streetscene.

- SFD Courtyard – Two types of single family detached courtyard housing types are planned for Esperanza. Courtyard single family residential consisting of four units per courtyard will be developed at approximately 8.9 dwelling units per net acre. This type of housing will be developed around a 1 acre public park and will be served by public streets with private drive aisles accessing residential units developed around a common motorcourt. Courtyard single family residential courts of six units per courtyard will be developed at approximately 7.48 dwelling units per net acre. This type of courtyard housing will be developed around private streets and parks with private drive aisles serving residential units developed around a common motorcourt. The courtyard design planned for both housing types places garages in alternating side on and street facing conditions either minimizing or eliminating visibility of garages from the street.

2.3.1.3 Residential Attached

Two types of single family attached residential development products are planned within Esperanza. Alley loaded row townhomes designed around a private common green will be developed at approximately 14.05 dwelling units per net acre within PA 3 and at approximately 16.07 dwelling units per net acre in PA 11. Single family attached motorcourt townhomes will be developed at approximately 13.76 dwelling units per net acre. The motorcourt townhome residential housing type will be served by private streets with drive aisles providing access to a motorcourt serving 10 to 12 residential dwelling units. Both the alley loaded row townhome and the motorcourt townhome residential housing types are designed with garages located to the rear or turned to side on to the street preserving an architecturally interesting streetscene.

2.3.1.4 Parks, Trails, and Open Space

A centrally located 5.36 acre neighborhood park is planned to serve the Specific Plan area providing opportunities for informal active recreation such as soccer and baseball. Four additional parks ranging in size from .84 to 1.39 acres are provided offering opportunities for active and passive recreation and informal gathering among neighbors. Approximately 6.62 acres of the Specific Plan area will be developed as enhanced landscaped parkways along major streets serving the community. These enhanced parkways will include pedestrian walkways providing connectivity to and from the Specific Plan area and to the pedestrian network to be developed within the community, connecting all residential neighborhoods to parks. Within the townhome residential areas, private open space as well as private active recreation centers, including swimming pools and spas, will be provided.

2.4 AUTHORITY AND REQUIREMENTS

2.4.1 Authority

State of California Government Code, Title 7, Division 1, Chapter 3, Article 8, Section 65450-57 grants authority to cities to adopt Specific Plans for purposes of implementing the goals and policies of their General Plans. The Government Code specifies that Specific Plans may be adopted either by resolution or by ordinance and that the Specific Plan is required to be consistent with the General Plan. The City of Ontario will adopt the Esperanza Specific Plan by ordinance thereby establishing the zoning regulations for development of the Specific Plan area. The requirements of the Esperanza Specific Plan shall take precedence over the City of Ontario Development Code. In instances where the Esperanza Specific Plan is silent, the City of Ontario Development Code shall prevail.

LAND USE	ACRES
Residential Detached	**Residential Acres are Net [1]**
• RD 1 - 50 foot wide lots/PA-7 and PA-9	25.83 AC
• RD 2 – Typical 55 foot wide lots/ PA-8	19.26 AC
• RD 3 – 2 Pack lots/PA-10	14.62 AC
• RD 4 – Cottages 2,640 sf lots/PA-2 and PA-6	27.36 AC
• RD 5 – 4 Pack Courtyard/ PA-5	17.64 AC
• RD 6 – 6 Pack Courtyard & Rowtown/ PA-2 and PA-4	19.30 AC
Residential Attached	
• RD 7 – Row Townhomes/ PA-1, PA-3 and PA-11	30.67 AC
• RD 8 – Motorcourt Townhomes / PA-1 and PA-3	19.42 AC
Subtotal Residential:	**174.10 AC**
Other	
Neighborhood Park	5.36 AC
Pocket Parks	4.53 AC
Neighborhood Edge Buffers	6.62 AC
Roadways [2]	28.25 AC
SCE Easements and Well Sites	4.14 AC
Subtotal Other:	**48.90 AC**
PROJECT TOTAL	**223.00 AC**

NOTES:

1. *Net acres excludes all streets and uses listed as "Other Uses" but includes interior local streets and drive aisles.*
2. *Includes all Master Plan Streets, Street 'A' and Local Streets serving the Neighborhood Park and School Site.*

TABLE 1

Specific Plan Statistical Summary

2.4.2 Requirements of the Specific Plan

California Government Code Section 65451 sets forth the minimum requirements and review procedures for Specific Plans as follows.

A Specific Plan shall include a text and a diagram or diagrams, which specify all of the following in detail:

1. The distribution, location, and extent of the uses of land, including open space, within the area covered by the plan;
2. The proposed distribution, location, and extent and intensity of major components of public and private transportation, sewage, water, drainage, solid waste disposal, energy, and other essential facilities proposed to be located within the area covered by the plan and needed to support the land uses described in the plan;
3. Standards and criteria by which improvements will proceed, and standards for the conservation, development, and utilization of natural resources, where applicable;
4. A program of implementation measures including regulations, programs, public works projects and the financing measures necessary to carry out paragraphs 1, 2, and 3 above.
5. A statement of the relationship of the Specific Plan to the General Plan.

The Esperanza Specific Plan meets the requirements of the State of California Government Code.

2.5 DEVELOPMENT APPROVAL COMPONENTS

The components of the development approval process for Esperanza are discussed below.

2.5.1 Specific Plan

The Esperanza Specific Plan, when adopted, provides the zoning for the Specific Plan area. It serves as a "blueprint" for development by establishing the distribution of land use and criteria for development as set forth herein. The Esperanza Specific Plan also serves as the legal document to implement the City's General Plan.

2.5.2 Development Agreement

Unless done in a coordinated manner and with adequate fiscal planning, development projects within the ~~NMC~~ Ontario Ranch are likely to present a challenge in their implementation because of the lack of existing public facilities including street, sewerage, transportation, drinking water, school and utility facilities. California law has established a mechanism for ensuring the adequate provision of such facilities while at the same time providing assurances to applicants that, upon approval of the project, the applicants can proceed with their projects. Approval of this Specific Plan without a development agreement may result in a waste of resources, escalate the cost of housing to the consumer, and discourage investment in and commitment to comprehensive planning as envisioned by the City, which seeks to make maximum efficient utilization of resources at the least economic cost to the public.

Therefore, a statutory development agreement, authorized pursuant to California Government Code sections 65864 et seq., shall be required as part of the approval of this Specific Plan. For the above-mentioned reasons, the development agreement for this Specific Plan shall include, among other things, methods for financing acquisition and construction of infrastructure, acquisition and development of adequate levels of parkland, and schools, as well as the provision of adequate housing opportunities for various segments of the community consistent with the regional housing needs assessment. Such development agreement shall have been fully approved before the issuance of the first building permit for this project.

2.5.3 Subdivision Maps

A tentative tract map(s) will be approved by the City of Ontario for the Specific Plan area indicating the approximate location of lot lines, streets, and proposed grading. Following approval by the City of the tentative tract map(s), a final map(s) will be prepared. The final map(s) becomes a legal document that is recorded and defines legal parcels and lots that can be sold for development.

2.5.4 Development Plan Review

All development proposals for individual Planning Areas within the Specific Plan will be subject to the Development Plan Review process pursuant to Article 8 of the City's Development Code.

2.6 CEQA COMPLIANCE

A Project Environmental Impact Report (EIR) prepared by the City of Ontario for the Esperanza Specific Plan, in accordance with the California Environmental Quality Act (CEQA), addresses impacts associated with the Specific Plan and subdivision map(s). The EIR recommends mitigation measures to reduce impacts of the project to a less than significant level. The EIR has been prepared as a basis for the environmental review for all subsequent discretionary and ministerial actions.

2.7 RELATIONSHIP TO GENERAL PLAN AND ZONING

The City of Ontario ~~NMC~~ Ontario Ranch General Plan designates the Specific Plan area for development of the following land uses:

Land Use Designation	Approximate Acres (Gross)
Residential – Low Density (4.6 d.u. per gross acre)	95.1 AC
Residential – Medium Density (12.0 d.u. per gross acre)	114.8 AC
Residential – High Density (18.0 d.u. per gross acre)	13.1 AC
Total	**223 AC**

The General Plan establishes a target development capacity of ~~1,456~~ 1,652 residential dwelling units as further described below:

Single Family	878 dwelling units
Multi-Family	774 dwelling units
Total	**1,652 dwelling units**

The table below provides a summary of how the Esperanza Specific Plan land use plan implements the General Plan target development capacity.

GENERAL PLAN TARGET DEVELOPMENT CAPACITY			
Land Use	**Target DUs**	**Gross Acres**	**Gross Density**
Residential Medium Density	1,535 DU	127.9 AC	12.0 DU/AC
Residential Low Density	285 DU	95.1 AC	3.0 DU/AC
Total	**1,820 DU**	**223.0 AC**	8.2 **DU/AC**
ESPERANZA SPECIFIC PLAN LAND USE DISTRIBUTION			
Land Use	**Target DUs**	**Gross Acres**	**Gross Density**
Residential Medium Density	1,209 DU	127.9 AC	9.5 DU/AC
Residential Low Density	443 DU	95.1 AC	4.7 DU/AC
Total	**1,652 DU**	**223.0 AC**	7.4 **DU/AC**

The General Plan allows for development of multi-family residential units as small lot, single family detached units with a variety of parcel sizes and product types on property designated for multi-family uses, including "Residential-Medium" and "Residential-High" density housing.

The City of Ontario has pre-zoned the Specific Plan area as SP/AG (Specific Plan AG preserve). The zoning designation of "SP" requires the Specific Plan area to implement the objectives of the ~~NMC~~ Ontario Ranch General Plan land uses.

The Esperanza Specific Plan is designed to meet the requirements of the State of California Government Code and the City of Ontario ~~NMC~~ Ontario Ranch General Plan. The City of Ontario will adopt the Esperanza Specific Plan by ordinance, thereby establishing the zoning regulations for the development of the Specific Plan area. The requirements of the Specific Plan shall take precedence over the City of Ontario Development Code. In instances where the Specific Plan is silent, the City of Ontario Development Code shall prevail.

Section 3. Existing Conditions

This section describes the existing physical conditions within and surrounding the Esperanza Specific Plan area.

3.1 Property Ownerships

The Specific Plan area is comprised of approximately 223 gross acres. Richland Communities owns approximately 85 gross acres and RCCD Development owns the remaining 138 acres of the Specific Plan Area. Exhibit 4, "Existing Property Ownerships and Williamson Act Contract Status" illustrates the property ownerships within the Esperanza Specific Plan boundary.

3.2 Williamson Act Contracts

Exhibit 4, "Existing Property Ownerships and Williamson Act Contract Status" illustrates the status of Williamson Act Contracts within the Esperanza Specific Plan boundary.

3.3 Existing Improvements

The Specific Plan area historically has been used for agricultural purposes, primarily dairy and crop farming, and is currently in development as illustrated on Exhibit 5, "Existing and Surrounding Land Uses." Existing improvements within northern and eastern portions of the Specific Plan area controlled by RCCD Development, are currently in development. All dairy related structures in this area have been demolished and removed. Existing agricultural related facilities such as modular structures and feedlots located within the properties owned by Richland Communities have also been demolished and removed in preparation for development.

3.4 Surrounding Land Use Characteristics

Land uses adjacent to the Specific Plan area include:

North	Future Planned Residential Community and Mixed Use Development
West	Rural Residential and Dairy Operations
South	Planned Residential Communities
East	Commercial, Industreial, and Vacant Land

The City of Ontario ~~NMC~~ Ontario Ranch General Plan designates the undeveloped areas located directly to the west of the Specific Plan area as "LMDR - Low Medium Density Residential" and "MDR - Medium Density Residential". The undeveloped areas located to the north of the Specific Plan are designated as "MDR - Medium Density Residential" and "MU - Mixed Use". Land adjacent to the Specific Plan area to the east is located within Riverside County and is developed as a mixed use/retail center. Land south of the Specific Plan area is also located in Riverside County and developed with single family and low density residential land uses. Exhibit 6, "Land Use Designations" illustrates the proposed land uses adjacent to the Specific Plan area within the ~~NMC~~ Ontario Ranch and the County of Riverside.

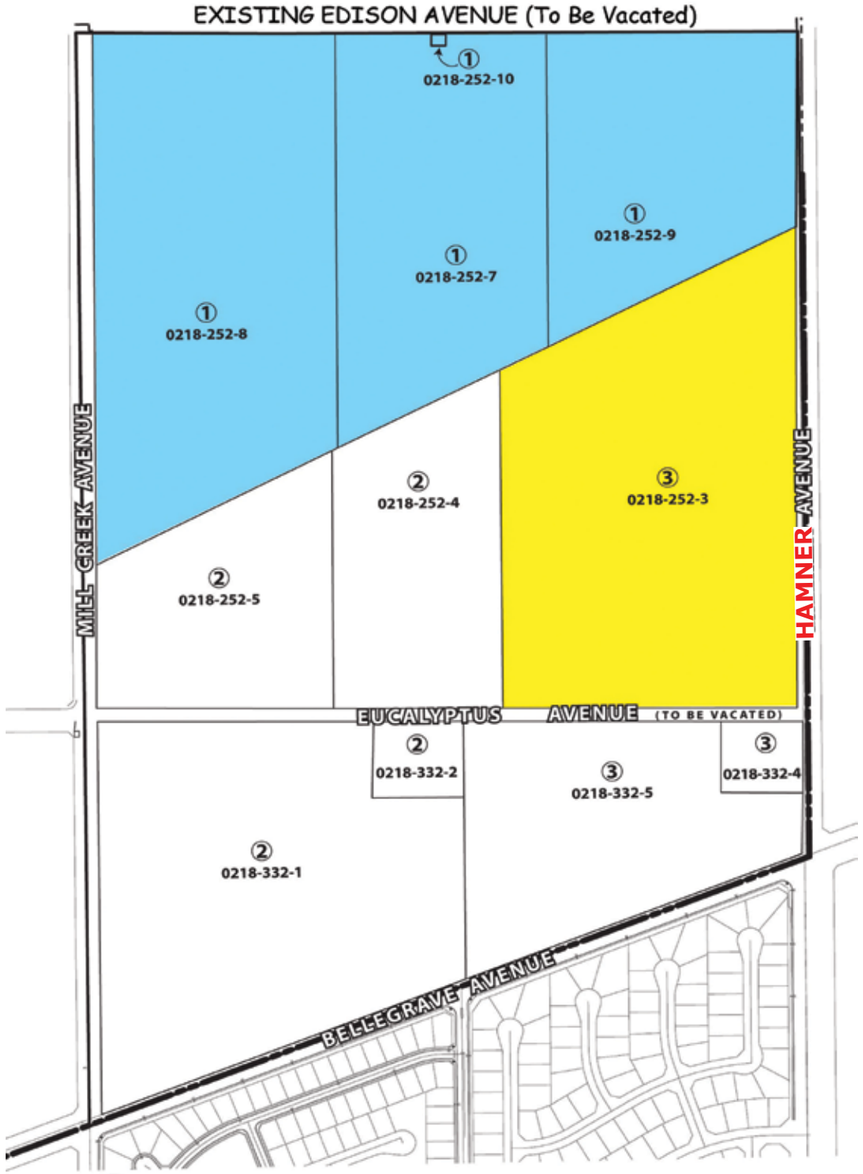


EXHIBIT 4
Existing Property Ownerships and Williamson Act Contract Status

EXHIBIT 5
Existing and Surrounding Land Uses

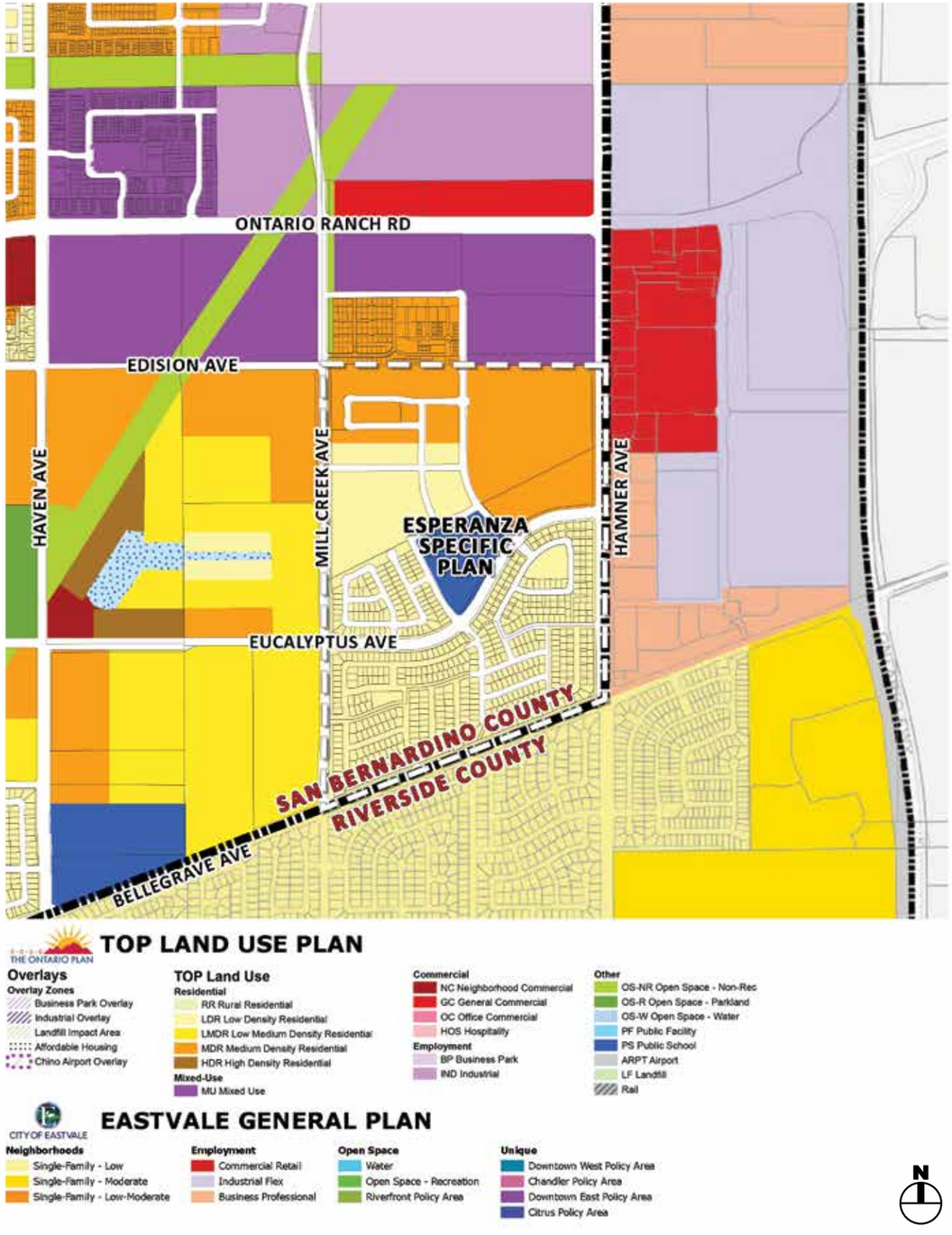


Exhibit 6
Land Use Designations

3.5 Topography

The Specific Plan area is relatively flat and generally slopes from the northeast to southwest as illustrated on Exhibit 7, "Existing Site Topography and Well Locations." The site falls at an average slope of approximately two percent (2%). There is an existing earthen drainage interceptor ditch paralleling the southerly boundary of the site and an existing drainage basin located in the southwest corner of the Specific Plan area.

3.6 Existing Circulation and Access

Interstate 15 (I-15) is located one-half mile east of the Specific Plan area. Access to I-15 is located approximately 1.5 miles southeast of the Specific Plan area, via Hamner and Limonite Avenues. The Specific Plan area is approximately 1.8 miles south of State Route 60.

Bellegrave Avenue, designated as a "Standard Arterial" in the City of Ontario's ~~NMC~~ Ontario Ranch General Plan, borders the Specific Plan on the south. The south half of Bellegrave Avenue within Riverside County has been improved with 55 feet of paving and a 21-foot parkway as part of the residential development to the south. ~~Milliken~~ Hamner Avenue, designated as a "Divided Arterial Parkway 1-1" borders the Specific Plan area on the east. ~~Milliken~~ Hamner Avenue is partially improved with two lanes for traffic and 38 feet of paving. Mill Creek Avenue, designated as a "Collector" street, borders the Specific Plan area to the west. Mill Creek Avenue is partially improved, north of Eucalyptus Avenue with two lanes for traffic and 20 feet of paving. Existing Edison Avenue borders the Specific Plan to the north and is partially improved with two lanes for traffic and 20 feet of paving. Existing Eucalyptus Avenue bisects the Specific Plan area and is partially improved with two lanes for traffic and 20 feet of paving.

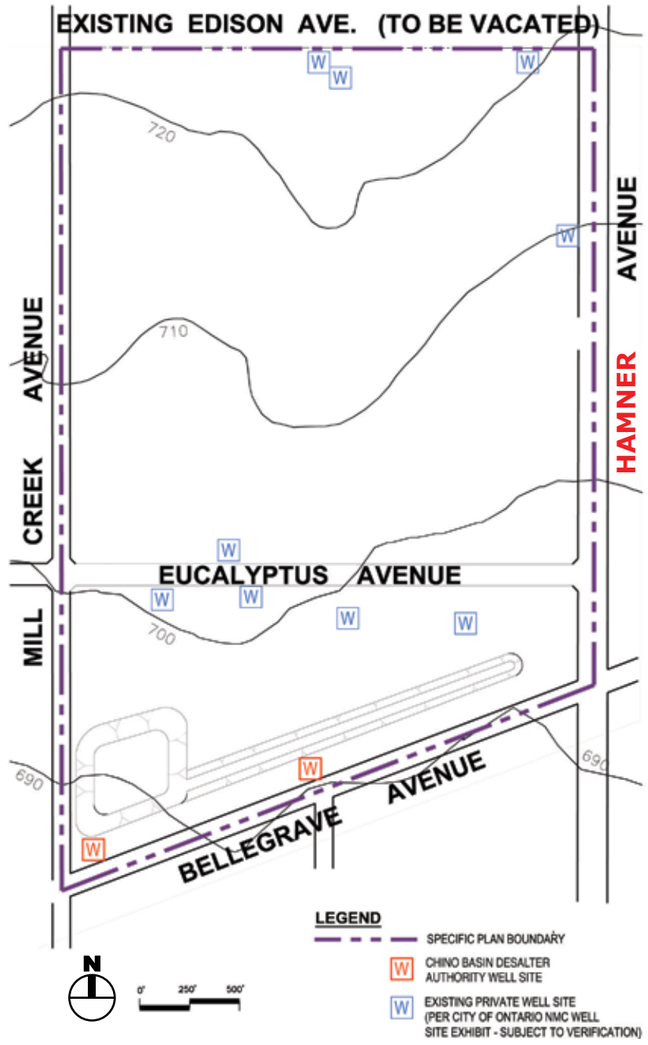


Exhibit 7
Existing Site Topography and Well Locations

3.7 EXISTING INFRASTRUCTURE / UTILITIES / PUBLIC SERVICES

3.7.1 Water

The Specific Plan area is located within the 925' Zone. The City of Ontario does not have water facilities in the vicinity of the project. The nearest City of Ontario water mains are in Riverside Drive, approximately 1.5 miles north of the Specific Plan area. These existing water mains have not been sized to serve development in the 925' Zone. On site residential use on the site are served by private wells. Existing well locations within the Specific Plan area are illustrated on Exhibit 7, "Existing Site Topography and Well Locations." A well use/destruction plan and schedule for all existing private or agricultural wells shall be submitted prior to issuance of permits for any construction activity. If a private well is actively used for water supply, the developer shall submit a plan to abandon the well and connect residential users to the City's domestic water system and agricultural users to the City's recycled water system when available. Well destruction requires permitting from the County Health Department. A copy of the permit and Well Completion Report DWR form 188 shall be provided to the City's Development Engineering Department and the Utilities Engineering Department prior to issuance of grading and/or building permits. If the developer proposes temporary use of an existing agricultural well for purposes other than agriculture, such as grading or dust control during project construction, the developer shall make a formal request to the City of Ontario for such use prior to issuance of permits for the construction activity. Upon approval, the developer shall enter into an agreement with the City of Ontario and pay any applicable fees as set forth by the agreement.

An existing 16" high-pressure water main is located along the east side of ~~Milliken~~ Hamner Avenue, adjacent to the Specific Plan area, in the County of Riverside, and is owned by Jurupa Community Services District, (JCSD). JCSD also owns a 30" water main in Bellegrave Avenue east of ~~Milliken~~ Hamner Avenue and a 30" water main in Hamner Avenue south of Bellegrave Avenue which provides water to the existing residential areas on the south side of Bellegrave Avenue.

3.7.2 Sewer

The City of Ontario does not have sewer facilities in the vicinity of the Specific Plan area. Existing on site residences utilize private septic systems. Prior to grading operations, existing septic tanks and subsurface disposal fields will need to be abandoned in accordance with Department of Health Services requirements. An existing 42" Santa Ana Regional Interceptor (SARI) sewer main extends southerly in Hamner Avenue south of Bellegrave Avenue. The SARI line is primarily available for industrial wastewater, which is conveyed to Orange County for treatment and disposal. JCSD is currently utilizing the SARI line for the disposal of residential wastewater, and has excess capacity for this purpose.

3.7.3 Drainage

The County Line Channel is located within Bellegrave Avenue. The channel is a City of Ontario Master Plan facility intended to carry urban runoff from those properties tributary to the north, to the Cucamonga Creek Channel. With the exception of the County Line Channel, the existing storm drain system throughout the Specific Plan area, is generally unimproved and consists primarily of open earthen swales along area roadways and the earthen drainage interceptor ditch paralleling the southerly boundary of the Specific Plan area which outlets into the existing drainage basin located at the southwest corner of the site. The drainage basin outlets into an existing Riverside County storm drain line in Mill Creek Avenue, formerly known as Cleveland Avenue. The on site basin and the connection to the Riverside County storm drain line are interim improvements. Upon development of the Specific Plan area the basin will be eliminated and the storm flows from the Specific Plan area will be tributary to the County Line Channel.

3.7.4 Recycled Water

The Specific Plan area is located within the 930 Zone. The City of Ontario does not have recycled water facilities in the vicinity of the project. As a part of the development of the Specific Plan area, the construction of new recycled water system facilities will be required by the developer consistent with the City's approved Recycled Water Master Plan.

3.7.5 Electricity

The Esperanza Specific Plan is located within the service territory of Southern California Edison Company.

3.7.6 Natural Gas

The Southern California Gas Company provides natural gas service within the Specific Plan area. Facilities in this area include an existing 6-inch main on ~~Milliken~~ Hamner Avenue; an existing 2-inch main on Eucalyptus Avenue; and an existing 2inch main on Cleveland Avenue (future Mill Creek Avenue).

3.7.7 Communication Systems

Verizon provides telephone service within the Specific Plan area.

3.7.8 Solid Waste

The City of Ontario Public Works Agency currently, by request, provides solid waste collection and disposal to the ~~NMC~~ Ontario Ranch.

3.8 HYDROLOGY

Since most of the Specific Plan area has been in agricultural use, only a limited portion of the Specific Plan area is now covered with impervious surfaces. Normal rainfall to the area is able to percolate through on-site soils and does not result in high volumes of surface runoff as is typically associated with urban use. During periods of heavy rainfall, when ground surfaces are saturated, surface runoff is collected in the existing storm drains, culverts, and retention basins located within the Specific Plan area.

With the exception of major regional flood control channels such as the Cucamonga Creek Channel, intended primarily to carry urban runoff, the existing storm drain system throughout the Specific Plan area is generally unimproved and consists primarily of open earthen swales along area roadways or curbed roadway surfaces.

Ground waters within the ~~NMC~~ Ontario Ranch; as a whole, contain high concentrations of salt, attributable to historic agricultural activities such as dairy farming. The high organic content of on-site soils has contributed incrementally to the degradation of surface and groundwater quality. Removal of the organic materials, which constitute by-products of those dairy operations, and compliance with National Pollution Discharge Elimination System (NPDES) and other storm water permit requirements, will beneficially impact regional water quality.

3.9 GEOLOGY AND SOILS

The City of Ontario ~~NMC~~ Ontario Ranch General Plan EIR identifies the Specific Plan area as underlain by Pleistocene age (older than 12,000 years) and Holocene age (less than 12,000 years old) alluvial deposits. The youngest surficial deposit is eolian sands (Qhs), comprising wind-blown sands having fine- to medium-sized grains.

These loose sands form sheets and low-dune deposits that have been stabilized by vegetation. These deposits are exposed in the eastern portion of the ~~NMC~~ Ontario Ranch area and extend westward to an area defined generally by a diagonal line extending from Harrison Avenue, within Riverside County, on the south to Vineyard Avenue on the north.

It is expected that most of these materials will be uncemented and subject to consolidation when saturated under structural loads. Erosion potential is considered high. Foundation and backfill suitability should be satisfactory with proper over-excavation, mixing with a finer-grained binder material, and compaction.

The Specific Plan area contains delhi series soils, as mapped by the United States Department of Agriculture, Soil Conservation Service in 1971 and 1980. Delhi series soils have been used for agriculture, primarily for grapes and citrus, since the 1800's. As part of the EIR prepared for the Esperanza Specific Plan additional geologic and soils information for the Specific Plan area will be provided.

3.10 Seismicity

The City of Ontario ~~NMC~~ Ontario Ranch General Plan EIR identified numerous earthquake faults within a 50-mile radius of the Specific Plan area. Major mapped faults include, but are not limited to, the Chino, Whittier and North Elsinore, and Cucamonga Faults. For the "maximum probable earthquake" (MPE), defined as the 100-year event normally considered in the design of noncritical structures, the values range from about 0.13 to 0.20 g (i.e., the unit force of gravity). In the design of certain critical or important facilities such as hospitals and dams, the "maximum credible earthquake" (MCE) event is considered. For the three faults, the MCE should yield an estimated peak horizontal acceleration in the range of 0.33 to 0.52 g.

A zone of concentrated, relatively low-magnitude seismicity extends to the southwest from the San Jacinto fault zone (Rialto-Colton branch) along what is referred to an "inferred fault near Fontana." Where the "inferred fault" (Fontana trend) stops, this zone of micro-seismicity continues in a southwesterly to westerly direction terminating in the Sphere of Influence area. It is expected that the MPE for this fault structure could produce horizontal accelerations in the range of 0.3 to 0.5g. More distant faults are capable of larger earthquakes with a higher probability of occurrence. The San Andreas fault is expected to generate a MCE event every 150 to 200 years, yielding a peak horizontal ground acceleration of approximately 0.21 to 0.26 g in the ~~NMC~~ Ontario Ranch.

In accordance with the "Uniform Building Code" (UBC), the Esperanza Specific Plan area is located within Seismic Zone No. 4. UBC procedures have been designed to ensure that all subsequent development occurs in a safe manner relative to those known hazards. As part of the EIR prepared for the Esperanza Specific Plan, additional seismicity analysis will be prepared.

3.11 Vegetation

The Specific Plan area has been extensively used for agricultural operations including dairy use. Those areas not in active agricultural production are occupied by rural residential housing. The natural vegetation and soils conditions that once occurred throughout the Specific Plan area have been significantly altered through agricultural uses, leaving little or no native vegetation. As part of the EIR prepared for the Esperanza Specific Plan, additional vegetation analysis will be prepared.

Section 4. Land Use

4.1 Introduction

The Esperanza Specific Plan offers a variety of residential housing types within a community designed around a system of parks located within easy walking distance from each residential Planning Area. Pedestrian and bicycle connectivity is provided through a system of street separated walkways and on-street bicycle trails linking each residential Planning Area and connecting to parks located within Esperanza.

Residential development, comprised of approximately ~~164.08~~ 174.10 net acres, is designed to address a variety of lifestyles, such as singles, families, executives and "empty nesters." Single family detached housing types will include conventional detached homes on lots varying between 3,900 and 4,900 square feet in size, homes designed in a 2-Pack configuration, alley loaded cottage homes, and two types of courtyard homes. Attached housing will include row townhomes and motorcourt townhomes designed around a common motorcourt.

Parks comprise approximately 9.89 net acres of Esperanza and are distributed throughout the community offering recreational opportunities within close proximity to each residential neighborhood.

The Land Use Plan shown in Exhibit 8, "Land Use Plan" depicts the proposed land uses for Esperanza. The "Land Use Summary," Table 2, provides a tabulation of land uses by acreage and residential density.

4.2 Residential Use

The Esperanza Specific Plan permits the development of up to ~~1,594~~ 1,652 residential dwelling units providing single-family detached homes and single family attached homes. Residential land use areas are contained within 11 distinctive Planning Areas linked by a network of street separated sidewalks and on-street bicycle paths connecting all the Planning Areas to a centrally located park.

4.2.1 Variety of Housing Types

Esperanza provides a mix of housing types to address a variety of lifestyle choices and economic segments. Single family detached and single family attached residential products, with a variety of architectural styles, will be offered within Esperanza. Altogether, a total of ~~1,594~~ 1,652 residential dwelling units will be developed at an overall average density of ~~7.65~~ 7.41 dwelling units per gross acre.

4.2.1.1 Single Family Detached – RD-1 (50' wide lots)

The Esperanza Specific Plan allows for the development of approximately 158 conventional single-family detached dwelling units at an average density of approximately 6.12 dwelling units per net acre. The RD-1 neighborhoods will be designed with access to homes from the local street with an emphasis on architectural orientation toward the street. Garage configurations will include shallow recessed garages, mid or deep recessed garages, split garages, and tandem garages, to highlight the home's architecture and create a more attractive streetscene. RD-1 homes are located within Planning Areas 7 and 9.

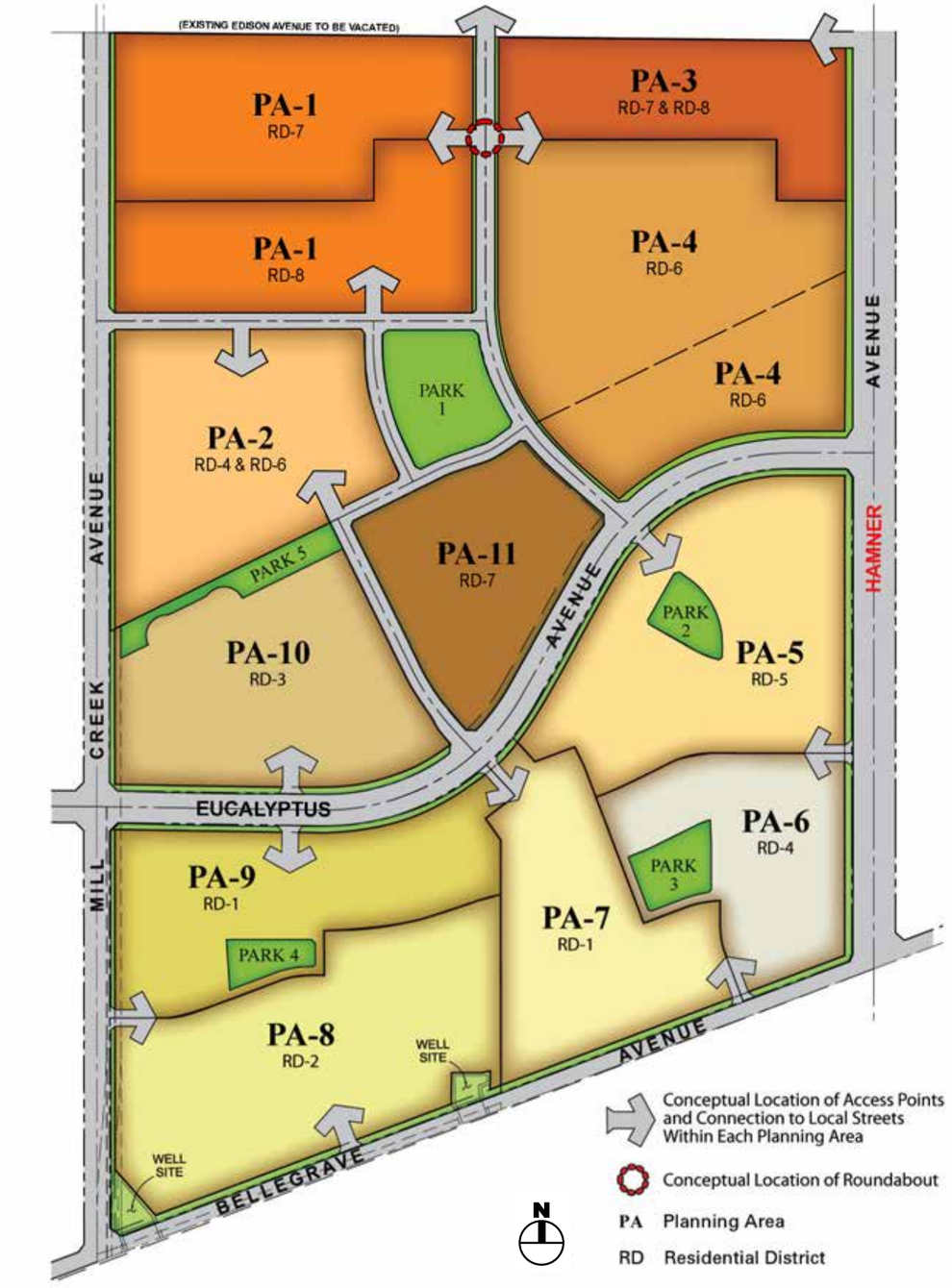


EXHIBIT 8
Land Use Plan

LAND USE	UNITS	GROSS ACRES	UNITS/ GROSS ACRES	NET ACRES	UNITS/ NET ACRES
Residential Uses					
PA-1 (RD-7/ Row Townhomes, RD-8/ Motorcourt Townhomes)	319 DU	29.35 AC	10.87 DU/AC	28.97 AC	11.01 DU/AC
PA-2 (RD-4/ SFD Cottages, RD-6/ 6-Pack Courtyard)	113 DU	22.84 AC	4.95 DU/AC	17.36 AC	6.51 DU/AC
PA-3 (RD-7 & RD-8/ Row Townhomes)	156 DU	11.40 AC	13.68 DU/AC	11.10 AC	14.05 DU/AC
PA-4 (RD-6/ 6-Pack Courtyard, 8-Pack Courtyard, Row Townhomes)	303 DU	27.41 AC	11.05 DU/AC	19.30 AC	15.70 DU/AC
PA-5 (RD-5/ 4-Pack Courtyard)	157 DU	23.78 AC	6.60 DU/AC	17.64 AC	8.90 DU/AC
PA-6 (RD-4/ SFD Cottages)	78 DU	13.64 AC	5.72 DU/AC	10.00 AC	7.80 DU/AC
PA-7 (RD-1/ SFD 50' wide lots)	76 DU	14.36 AC	5.29 DU/AC	12.56 AC	6.05 DU/AC
PA-8 (RD-2/ SFD 55' wide lots)	107 DU	23.72 AC	4.51 DU/AC	19.26 AC	5.56 DU/AC
PA-9 (RD-1/ SFD 50' x 80')	82 DU	17.75 AC	4.62 DU/AC	13.27 AC	6.18 DU/AC
PA-10 (RD-3/ SFD 2-Pack)	100 DU	19.92 AC	5.02 DU/AC	14.62 AC	6.84 DU/AC
PA-11 (RD-7/ Row Townhomes)	161 DU	13.10 AC	12.29 DU/AC	10.02 AC	16.07 DU/AC
Park 1		5.75*AC			
Residential land Use Total	**1,652 DU**	**223.00 AC**	**7.41 DU/AC**	**174.10 AC**	**9.49 DU/AC**
Parks				9.89 AC	
Neighborhood Edge Buffers				6.62 AC	
Roadways				28.25 AC	
SCE Easements and Well Sites				4.14 AC	
PROJECT TOTAL	**1,652 DU**	**223.00 AC**		**223.00 AC**	

NOTES:

1. *Gross residential acres do not include the 13.10 gross acres for a school site.*
2. *Net residential acres are gross acres less parks, neighborhood edge buffers, roadways, and easements and net area for school site.*

** PA-2 includes 3.45 AC of Park 1*

TABLE 2
Land Use Summary

2051

4.2.1.2 Single Family Detached – RD-2 (55' wide lots)

The Esperanza Specific Plan allows for the development of approximately 107 conventional single-family dwelling units at a density of approximately 5.56 dwelling units per net acre. The RD-2 neighborhood is designed with access from the local street with garage configurations which include recessed garages, mid or deep recessed garages, split garages and tandem garages to present an architecture forward streetscene. RD-2 homes are planned within Planning Area 8.

4.2.1.3 Single Family Detached – RD-3 (2-Pack)

Approximately 100 residential 2-Pack dwelling units will be developed on approximately 14.62 acres at a density of 6.84 dwelling units per net acre with a minimum lot size of 3,400 square feet. By configuring the units in a 2 Pack design, a larger usable sideyard area is provided for each unit and garages can be either located to the rear of the lot or set back from the front of the homes at a distance, which preserves the streetscene for home frontage. Residential housing in a 2 Pack design is planned for Planning Area 10.

4.2.1.4 Single Family Detached – RD-4 (Cottage Homes)

Esperanza will allow for approximately 243 single family detached cottage home residential dwelling units developed on approximately 30.81 acres on lots of approximately 2,400 minimum square feet at an average density of 7.89 dwelling units per net acre. This alley loaded residential development will be designed to embrace the street and maintain an architectural orientation for the street. Cottage single family detached residential dwelling units are proposed for Planning Areas 2 and 6 within Esperanza.

4.2.1.5 Single Family Detached or Attached – RD-5 and RD-6 (Courtyard & Row-Townhomes)

Two types of single family detached housing in a courtyard design are proposed for Esperanza. A total of 157 dwelling units will be developed as RD-5 residential housing within a module comprised of 4 residential units surrounding a common motorcourt. RD-5 residential products are proposed for 17.64 acres of Esperanza within Planning Area 5 at a density of 8.90 dwelling units per net acre. A total of 303 dwelling units will be developed as RD-6 residential housing within a module comprised of 6 residential units surrounding a common motorcourt or row townhomes. RD-6 residential products are proposed for 19.92 acres of Esperanza within Planning Areas 2 and 4 at a density of 16.72 dwelling units per net acre. Garages are accessed from the motorcourt or alley, which allows for the fronts of garages to be turned away from the street or set back far enough from the street that the residential architecture is the predominant streetscene feature.

4.2.1.6 Single Family Attached – RD-7 (Row Townhomes)

RD-7 residential product proposed for Esperanza consists of 319 units of attached row and motorcourt townhomes within Planning Area 1, 156 units of attached row townhomes to be developed on approximately 11.1 acres at density of 14.05 dwelling units per net acre within Planning Area 3 and ~~46~~ 161 row townhomes at approximately 16.07 dwelling units per net acre in PA 11. RD-7 residential product is designed with alley access maintaining an architectural streetscene.

4.2.1.7 Single Family Attached – RD-8 (Motorcourt Townhomes)

RD-8 residential product proposed for Esperanza consists of 238 units of attached townhomes designed around a common motorcourt. RD-8 residential product will be developed on approximately 19.42 acres at a density of 13.76 dwelling units per net acre within Planning Area 3.

4.2.2 Neighborhood Design

The community plan for Esperanza offers a neighborhood design reminiscent of older traditional Southern California neighborhoods. The design features described below are intended to create a strong identity and sense of neighborhood for the residents of Esperanza.

A "modified grid" style of street design in residential neighborhoods with sidewalks separated by landscaped parkways provide visual interest, slow traffic on each street by providing alternate routes, and enhance a pedestrian orientation for neighborhoods. Sidewalks separated from streets by landscaped parkways promote pedestrian mobility and encourage opportunities for neighbors to meet and greet each other along the street.

A human scale of architecture within Esperanza will enhance the pedestrian friendly character of the community. Architectural features such as front porches, railings, enhanced entries, a mix of materials and textures, and authentic detailing on elements such as windows and doors, columns, balconies, and lighting combine to create a human scale of residential architecture.

Innovative garage designs will be utilized in order to de-emphasize the visual impact of garage doors on the streetscene. Such design techniques will include shallow, mid, or deep recessed garages , split-garages, turn-in garages, tandem garages, garages located on rear alleys, and garages located around a common courtyard in order to de-emphasize their view from the street.

4.3 PARKS

Parks are provided throughout the Esperanza Specific Plan area within easy walking distance to any residential neighborhood. Exhibit 9, "Master Plan of Parks," illustrates the types and locations of parks planned for Esperanza.

4.3.1 Neighborhood Park

An approximately 5.39 net acre centrally located neighborhood park will be developed as part of Esperanza. The neighborhood park will include picnic areas, tot lots, trails, and open play fields.

4.3.2 Pocket Parks

An approximately .84 net acre park will be provided for recreational use within Planning Area 9. An approximately 1.29 net acre park will be located within Planning Area 6, a one acre park will be provided within Planning Area 5, and an approximately 1.39 net acre linear park will be provided in Planning Area 10. Private open space areas of approximately ½ acre in size will be provided as part of the development of Planning Areas 1, 3 and 4. The exact size and locations of these private open space areas will be determined as part of the final site design for these neighborhoods.

4.4 SCHOOL SITE

A 10.02 net acre site was originally reserved within the Esperanza Specific Plan for the development of an elementary school to serve the K-5 school age needs of the Ontario community. In the event the school site in Esperanza is not purchased by the Mountain View School District the 10.02 acre site may revert to a residential zone for the development of an additional ~~46~~ 161 row townhome residential dwelling units pursuant to the provisions established in Section 7, "Implementation."

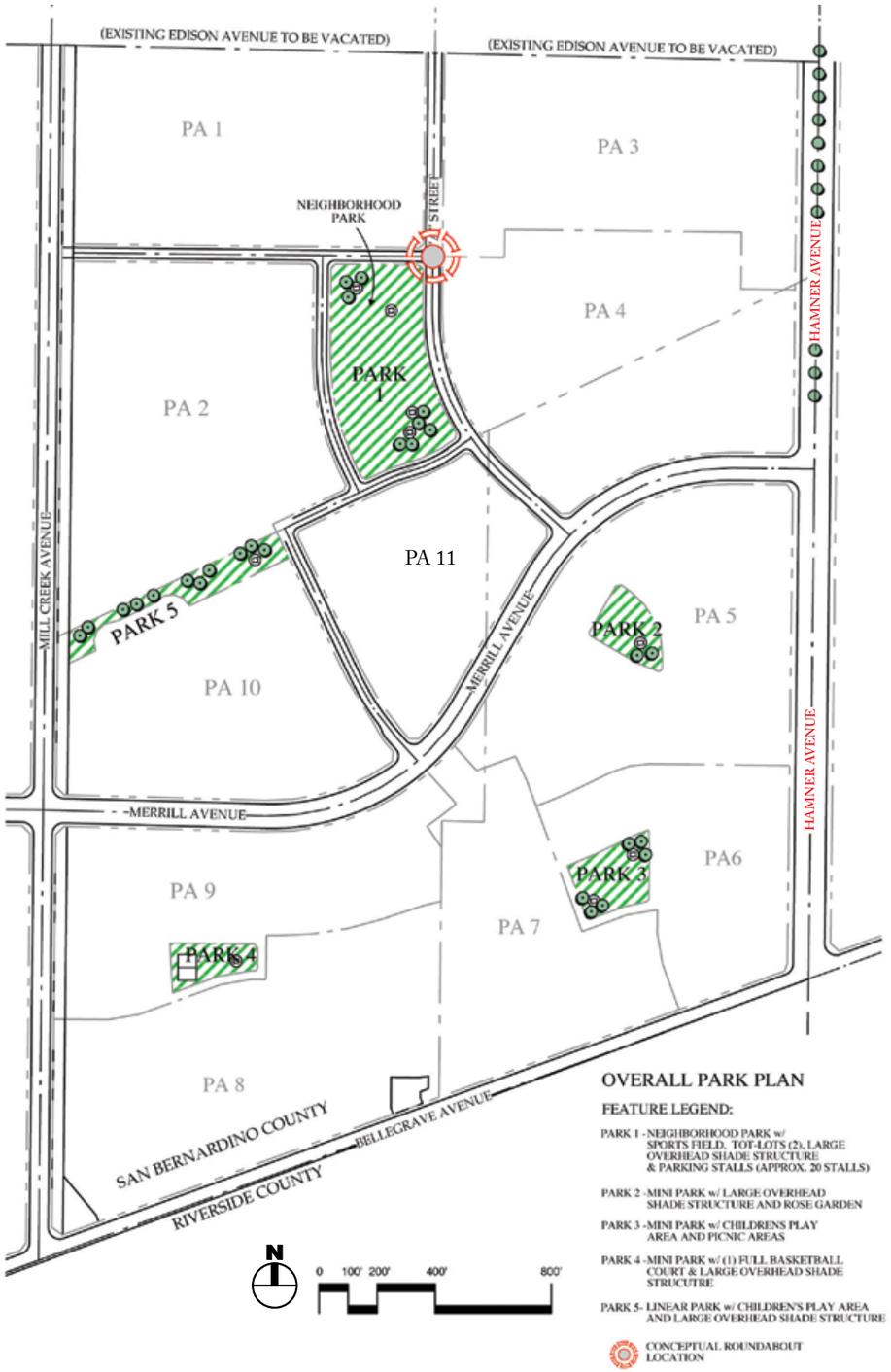


Exhibit 9
Master Plan of Parks

Section 5. Infrastructure and Services

The infrastructure, utilities, and public services to be provided as part of the development of the Esperanza Specific Plan are discussed in this section.

5.1 Circulation

The circulation plan for Esperanza reinforces the objectives of providing a traditional neighborhood design. In addition to providing safe and efficient movement of vehicular traffic through the project, the Circulation Plan also provides a safe environment for pedestrian movement and bicycle traffic reducing the reliance on the automobile as a means of travel. In addition, transit stops and bus turnouts will be provided as required by Omnitrans, along the Master Plan streets, which are a part of the Esperanza community. The "Master Circulation Plan," Exhibit 10 establishes the hierarchy and general location of roadways within Esperanza.

The minimum design speeds to be used for centerline curve radii, super elevation, corner sight distance; vertical and horizontal alignment and sight distance, etc. are listed below:

Hamner Avenue	50 m.p.h.
Eucalyptus Avenue	40 m.p.h.
Bellegrave Avenue	45 m.p.h.
Mill Creek Avenue	40 m.p.h.
"A" Street	45 m.p.h.

5.1.1 Master Planned Roadways

The Esperanza Specific Plan is bounded on the east, south, west, and is bisected by four City of Ontario Master Plan roadways, which will provide access to and from the Specific Plan area. Additional rights of way may be needed at critical intersections to accommodate additional left and right turn lanes pursuant to the recommendations of the traffic study prepared for the Ontario Ranch. Hamner Avenue bounds the Specific Plan area to the east and is the county line between San Bernardino and Riverside Counties; Bellegrave Avenue bounds the Specific Plan area to the south and is also the county line between San Bernardino and Riverside Counties; Mill Creek Avenue bounds the Specific Plan area to the west, and Eucalyptus Avenue bisects the Specific Plan area in an east/west direction.

Where the Specific Plan limits extend to the centerline of any roadway, the development project shall construct the full half-width street improvement, plus a 14-foot travel lane with a 5-foot paved shoulder beyond the centerline. If the roadway includes a raised median, the project shall construct the full median, and the additional 14-foot travel lane with a 5-foot paved shoulder. The 14-foot travel lane is a minimum that may be increased as necessary pursuant to the requirements of the City Engineer.

5.1.1.1 Hamner Avenue

Hamner Avenue abuts the Specific Plan area on the east. Hamner Avenue is a designated Divided Arterial Parkway 1-1 roadway with a total right-of-way of 148 feet. Hamner Avenue will carry regional traffic to and from Esperanza and will provide access to the specific plan area along the eastern boundary of the specific plan area. Exhibit 11, "Hamner Avenue" illustrates the improvements for Hamner Avenue. The developer of the Specific Plan area adjacent to Hamner Avenue will be responsible for all on site improvements for the westerly half of Hamner Avenue as determined by the City Engineer and pursuant to the mitigation measures identified in the EIR and the Conditions of Approval established on the approved tentative maps for the project. Bus turnouts will be required along Hamner Avenue to the satisfaction of the City Engineering Department and Omnitrans. Parking will be prohibited on Hamner Avenue.

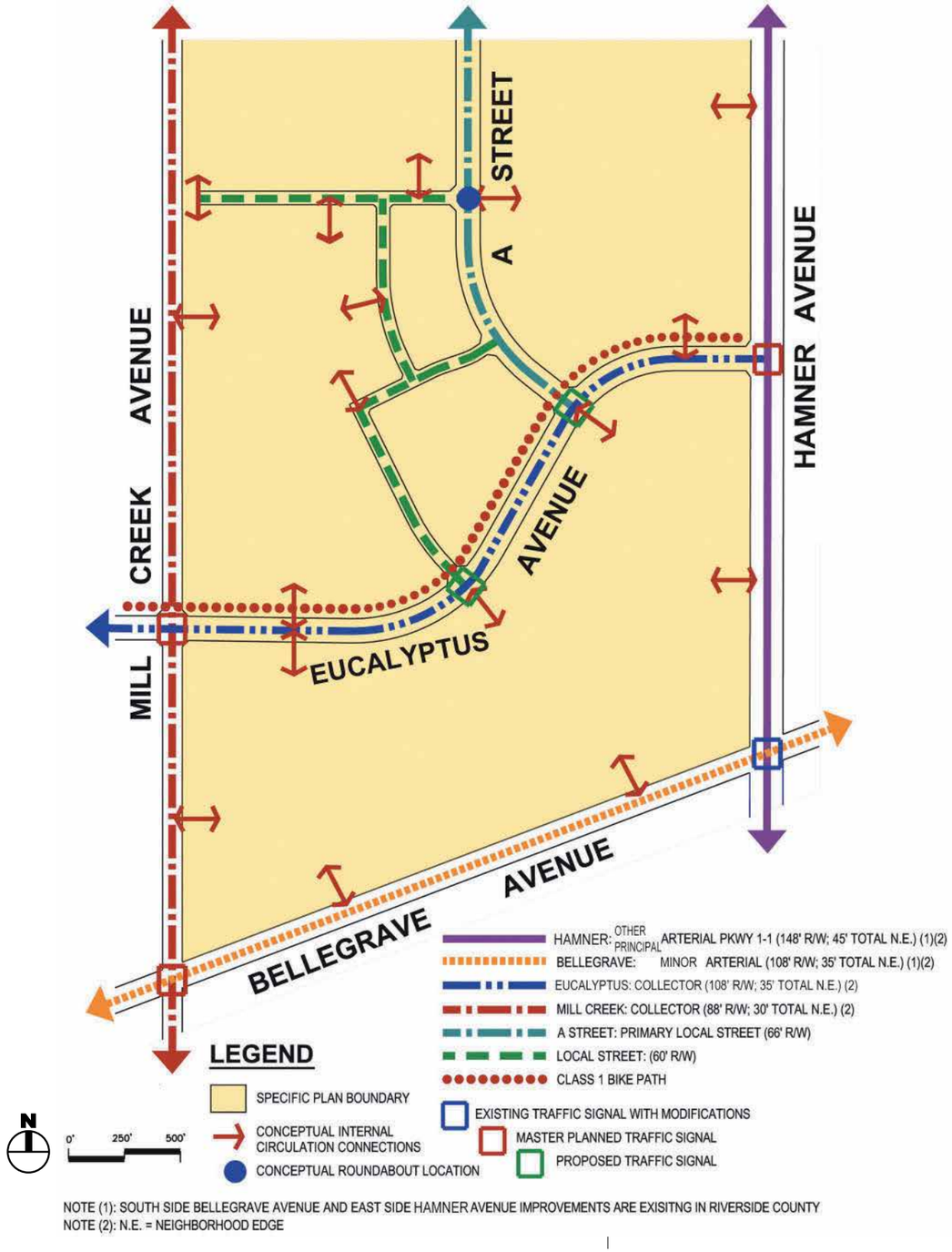


Exhibit 10
Master Circulation Plan

5.1.1.2 Bellegrave Avenue

Bellegrave Avenue, a Standard Arterial roadway, abuts the Specific Plan area on the south and carries regional east/west traffic to and from Esperanza. Improvements to the south side of Bellegrave Avenue currently exist. Exhibit 12, "Bellegrave Avenue" illustrates the half-street improvements for Bellegrave Avenue. The developer will be responsible for all on site improvements for the northerly half of Bellegrave Avenue. Phasing of the improvements will be determined by the City Engineer and pursuant to the mitigation measures identified in the EIR and the Conditions of Approval established on the approved tentative maps for the project. Bus turnouts will be required along Bellegrave Avenue to the satisfaction of the City and Omnitrans.

5.1.1.3 Mill Creek Avenue

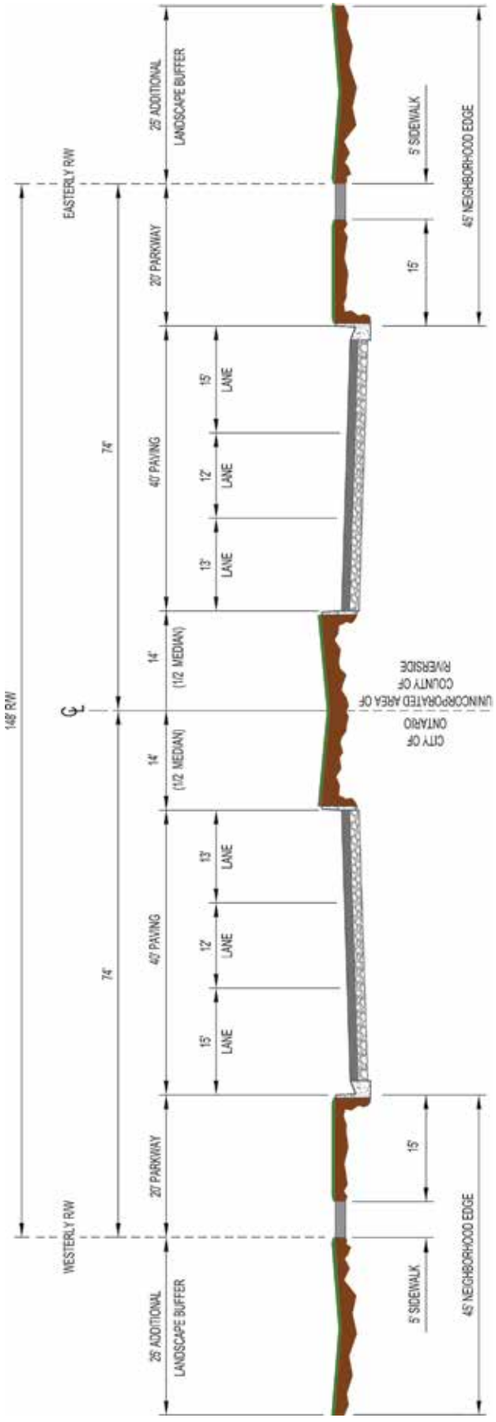
Mill Creek Avenue abuts the Specific Plan area on the west. Mill Creek Avenue is a designated Collector Street with an ultimate right-ofway of 88 feet, with 64 feet of paved area and a 12-foot parkway on each side of the street, to include a 5-foot sidewalk separated from the street by a 7-foot landscaped area. In addition a landscaped buffer of 18 feet in width will be provided between the back of the sidewalk and the residential community wall. The rightof-way improvements required to Mill Creek Avenue are illustrated in Exhibit 13, "Mill Creek Avenue." The developer(s) will be responsible for the off site improvements as determined by the City Engineer and pursuant to the mitigation measures identified in the EIR and the Conditions of Approval established on the approved tentative maps for the project. Bus turnouts will be required along Mill Creek Avenue to the satisfaction of the City and Omnitrans. Parking will be prohibited on Mill Creek Avenue. Exhibit 13, "Mill Creek Avenue" illustrates these improvements.

5.1.1.4 Eucalyptus Avenue

Eucalyptus Avenue bisects the Specific Plan area and is designated as a Standard Arterial roadway. Exhibit 14, "Eucalyptus Avenue" illustrates the Eucalyptus Avenue full-street improvements. The developer will be responsible for all improvements to Eucalyptus Avenue. The phasing of these improvements will be determined by the City Engineer and pursuant to the mitigation measures identified in the EIR and the Conditions of Approval established on the tentative maps for the project. Parking will be prohibited on Eucalyptus Avenue.

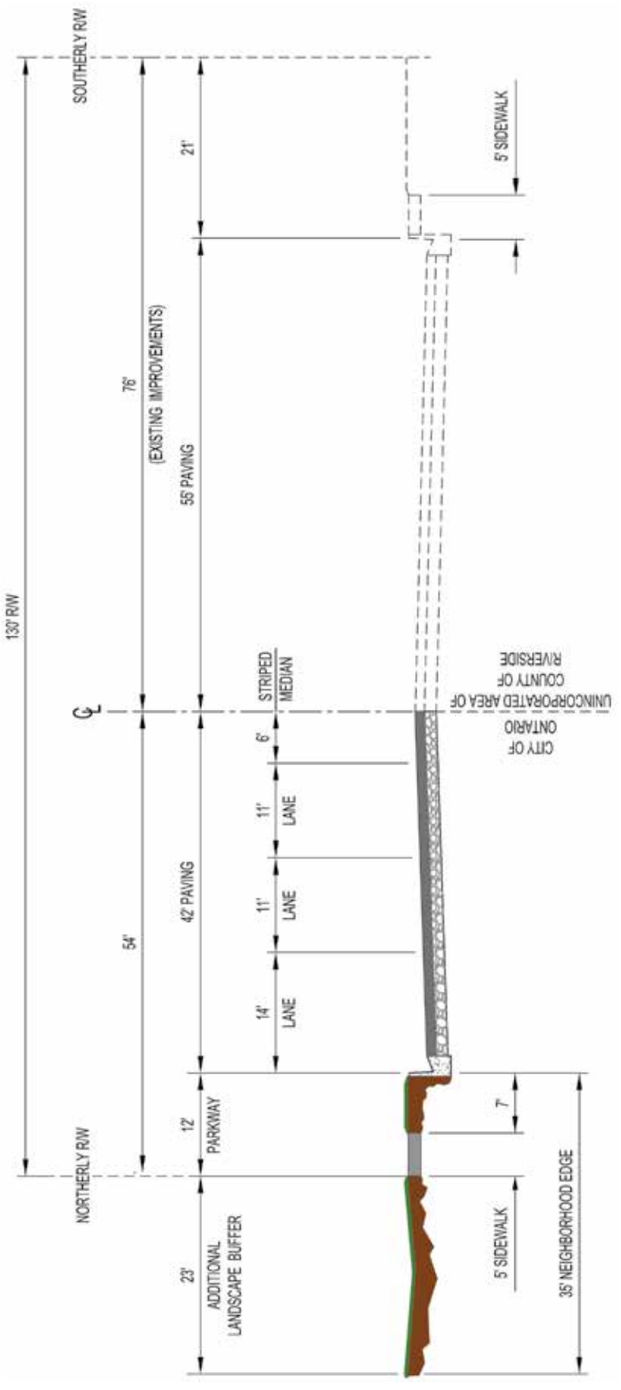
5.1.2 Local Streets and Alleys

Within the Specific Plan area neighborhood streets of varying design will provide access and circulation through the community. Many of the neighborhoods will be served by private alleys, which are located in the rear of residences, in order to maintain a traditional, "architecture forward" streetscape for the community. Public and private local streets within residential areas are designed to distribute vehicular traffic from the public arterial and collector streets adjacent to the Specific Plan area into and through residential neighborhoods. Local streets and private alleys proposed for Esperanza are illustrated on Exhibit 15, "A Street" – Primary Local Street" Exhibit 16, "Local Streets and Cul-De-Sac Sections;" Exhibit 17, "Private Neighborhood Streets;" and Exhibit 18, "Private Alley and Drive Aisle Sections;" and discussed below.



Other Principal Arterial Parkway 1-1
Hamner Avenue
(On Street Parking is Prohibited)

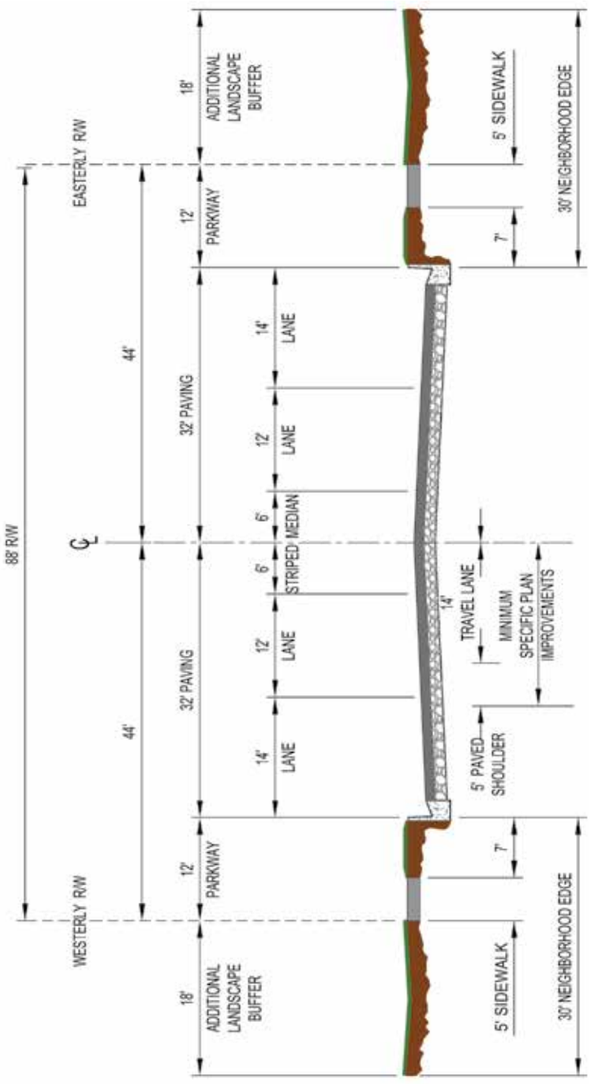
Exhibit 11
Hamner Avenue



Minor Arterial
Bellegrave Avenue
(On Street Parking is Prohibited)

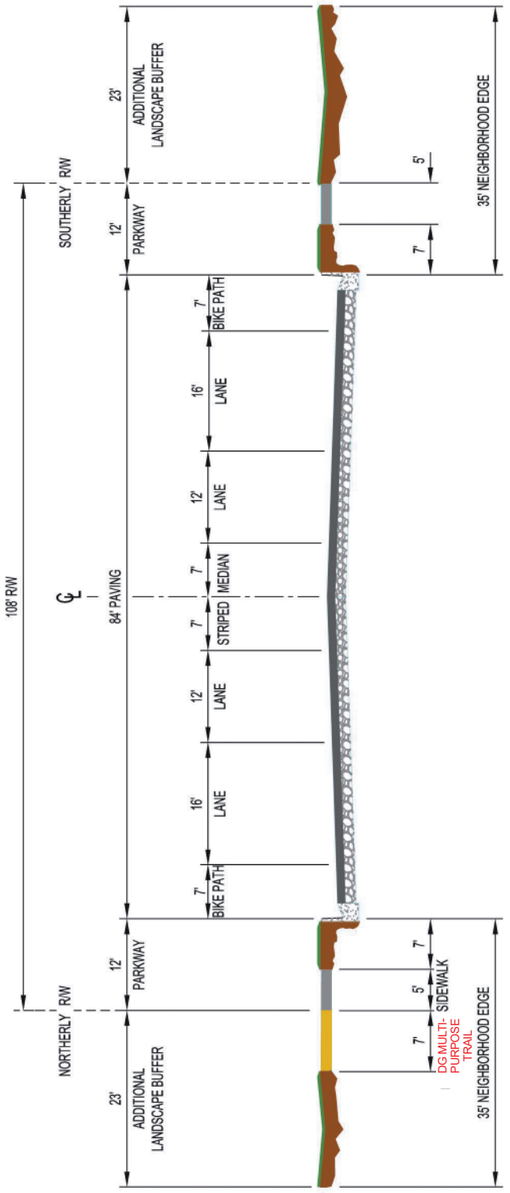
Note: Final required level of improvement of Bellegrave Avenue within the City of Ontario to be determined by City of Ontario and Riverside County.

Exhibit 12
Bellegrave Avenue



Collector
Mill Creek Avenue
(On Street Parking is Prohibited)

Exhibit 13
Mill Creek Avenue



Collector
Eucalyptus Avenue
(On Street Parking is Prohibited)

Exhibit 14
Eucalyptus Avenue

5.1.2.1 "A" Street

"A Street" bisects the Specific Plan area in a north/south direction and is designated as a Primary Local Street. "A Street" will provide internal access and connectivity between residential areas and the Neighborhood Park. Exhibit 15, "A Street" – Primary Local Street" illustrates the improvements planned for "A Street."

5.1.2.2 Local Neighborhood Streets and Cul-De-Sac Streets

A network of local public neighborhood streets and cul-de-sac streets will provide internal circulation throughout Esperanza for residents. Exhibit 16, "Local Streets and Cul-de-sac Sections" illustrates these street concepts.

5.1.2.3 Private Neighborhood Streets

Private neighborhood streets will provide internal circulation within single family attached and single family courtyard product areas. Water, recycled water, and sewer utilities may be designated as "public utilities" if located within public or private streets. All public utilities within private streets shall be designed per City standards and contained within acceptable easements. The CC&Rs for the project shall contain language requiring all work proposed by the HOA within such easements to be plan checked and inspected by the City, including applicable fees. Generally, utilities will not be accepted as public within alleys, parking areas or driveways. The extent to which said utilities will be accepted as public utilities shall be at the full discretion of the City during final design review. Private Neighborhood Streets planned for Esperanza are illustrated in Exhibit 17, "Private Neighborhood Streets."

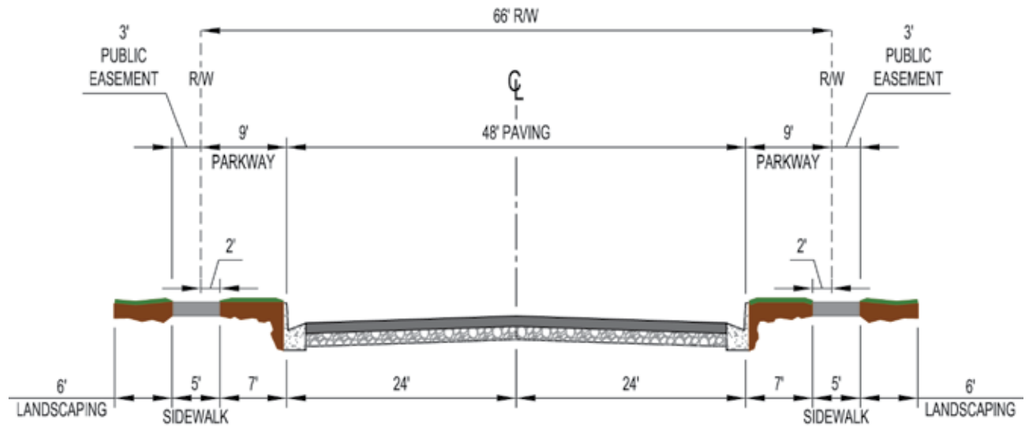
5.1.2.4 Private Alleys

Private alleys within the residential development will have a minimum of 20 feet of paved area with 5 feet of landscaping on each side. In areas where fire access is required, the minimum paved area will be 24 feet with 3 feet of landscaping on each side. Alleys with "dead end" conditions will be a maximum length of 150 feet. Parking is prohibited along alleys. Tapers will be incorporated at the point where private alleys intersect with public streets. The taper width will be determined per the approval of City of Ontario Fire Department, Engineering Department and Planning Department.

5.1.2.5 Private Drive Aisles

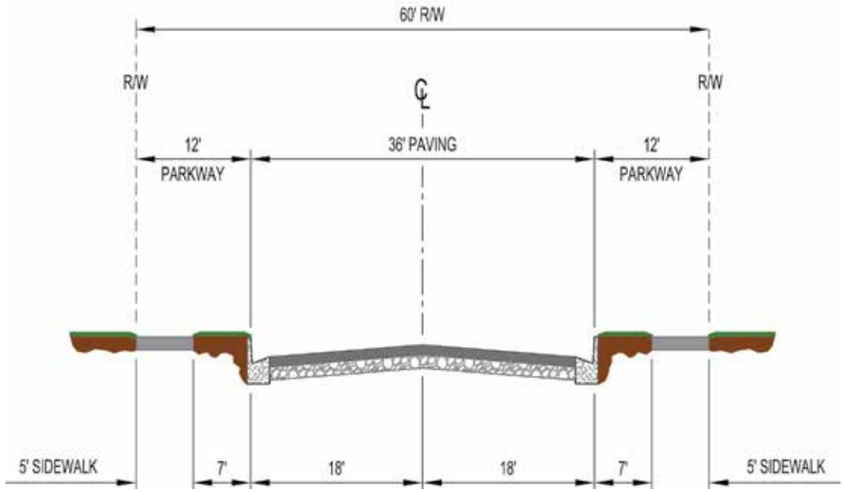
Private drive aisles are planned with a total paved width of 24 feet and an 18 foot deep parking area on each side.

Water, recycled water, and sewer utilities may be designated as "public utilities" if located within public or private streets. All public utilities within private streets shall be designed per City standards and contained within acceptable easements. The CC&Rs for the project shall contain language requiring all work proposed by the HOA within such easements to be plan checked and inspected by the City, including applicable fees. Generally, utilities will not be accepted as public within alleys, parking areas or driveways. The extent to which said utilities will be accepted as public utilities shall be at the full discretion of the City during final design review. Private Alleys and Private Drive Aisles planned for Esperanza are illustrated in Exhibit 18, "Private Alley and Drive Aisle Sections."



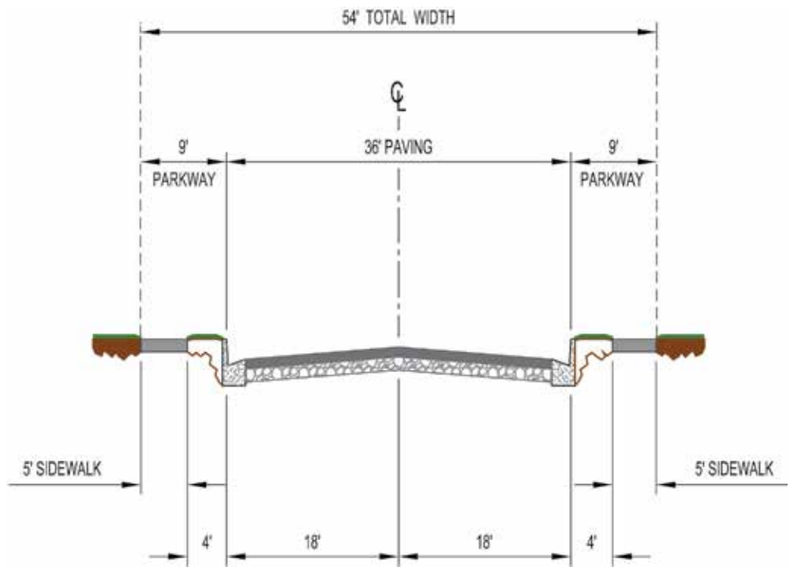
"A" Street
(Parking Permitted)

Exhibit 15
"A" Street - Primary Local Street



Note: Parking may be restricted within 100-150 feet of ~~Merrill~~ Eucalyptus Avenue, 'A' Street, Mill Creek Avenue and Hamner Avenue Intersections.

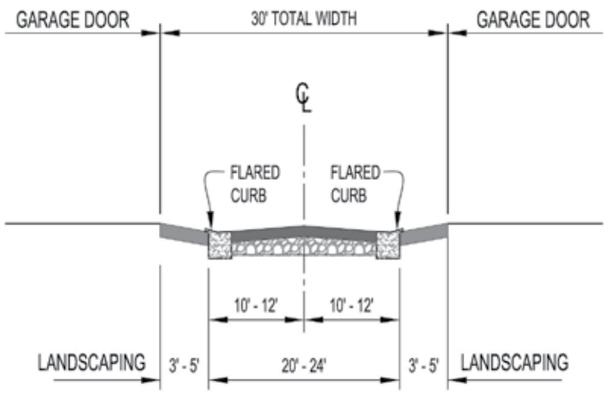
Exhibit 16
Local Street and Cul-De-Sac Sections



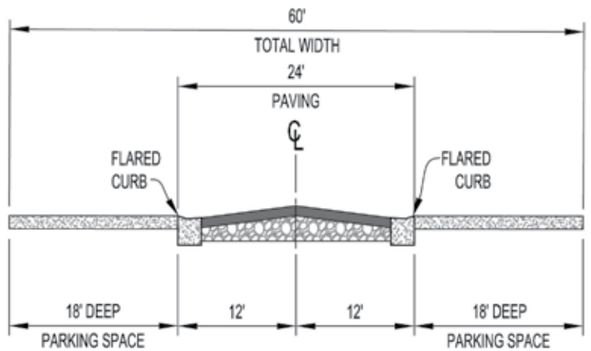
Private Neighborhood Streets
(Located in Planning Areas 1, 3, 4, 5 & 11)

Note: All public utilities within private streets shall be designed per City standards and contained within acceptable easements. The extent to which said utilities will be accepted as public utilities shall be determined at the full discretion of the City during final design reviews.

Exhibit 17
Private Neighborhood Streets



Private Alley
(On Street Parking is Prohibited)



Private Drive Aisle

Notes:

1. *Final Alley Design is subject to approval by the City Engineer, Fire Department and Planning Department.*
2. *All public utilities within private streets shall be designed per City standards and contained within acceptable easements. The extent to which said utilities will be accepted as public utilities shall be determined at the full discretion of the City during final design review.*

Exhibit 18
Private Alley and Drive Aisle Sections

5.1.3 Traffic Calming

The Esperanza Specific Plan includes design features within residential neighborhoods to encourage drivers to proceed slowly and reduce traffic noise on streets contributing to safe and livable neighborhoods in which to walk, bike, and drive.

Traffic calming within the Esperanza Specific Plan is designed to address the following goals:

- Reduction in traffic speeds.
- Reduction in traffic related noise.
- A safe and pedestrian friendly circulation system to encourage walking.

The following design features will be implemented in the roadways within Esperanza.

Local Neighborhood Street Design

Neighborhood streets within Esperanza are designed in a "modified grid" with landscaping on either side within parkways to add interest in the street encouraging drivers to slow their travel speed and observe their surroundings. Incorporating tapered intersections for local streets as illustrated in Exhibit 19, "Neighborhood Street Tapers," may reduce traffic speeds on local residential streets.

Alleys Tapers

Private alleys within Esperanza will consist of 20-24 feet of paved travel area with 3-5 feet of landscaping on each side. Speeds for traffic entering the alleys and cut through traffic can be reduced by incorporating tapers at the entrance to these alleys as illustrated on Exhibit 20, "Alley Tapers."

Landscaping

Landscaping adjacent to streets within the Specific Plan area will combine the use of shade trees, shrubs, and groundcover adjacent to sidewalks to create a more intimate streetscape encouraging drivers to reduce driving speeds. The landscape concept for Esperanza is designed to contribute to a sense of the street system as a pedestrian protected area to promote slower traffic speeds.

Roundabouts

A roundabout will be incorporated into the street design at the intersection of two local streets as illustrated in Exhibit 10, "Master Circulation Plan." The use of a roundabout rather than a conventional all-way stop at this intersection will maintain traffic flow by requiring traffic entering the roundabout to yield to traffic traveling within the roundabout. The lack of a stop sign allows entering traffic to merge with the flow of traffic.

5.1.4 Pedestrian Circulation

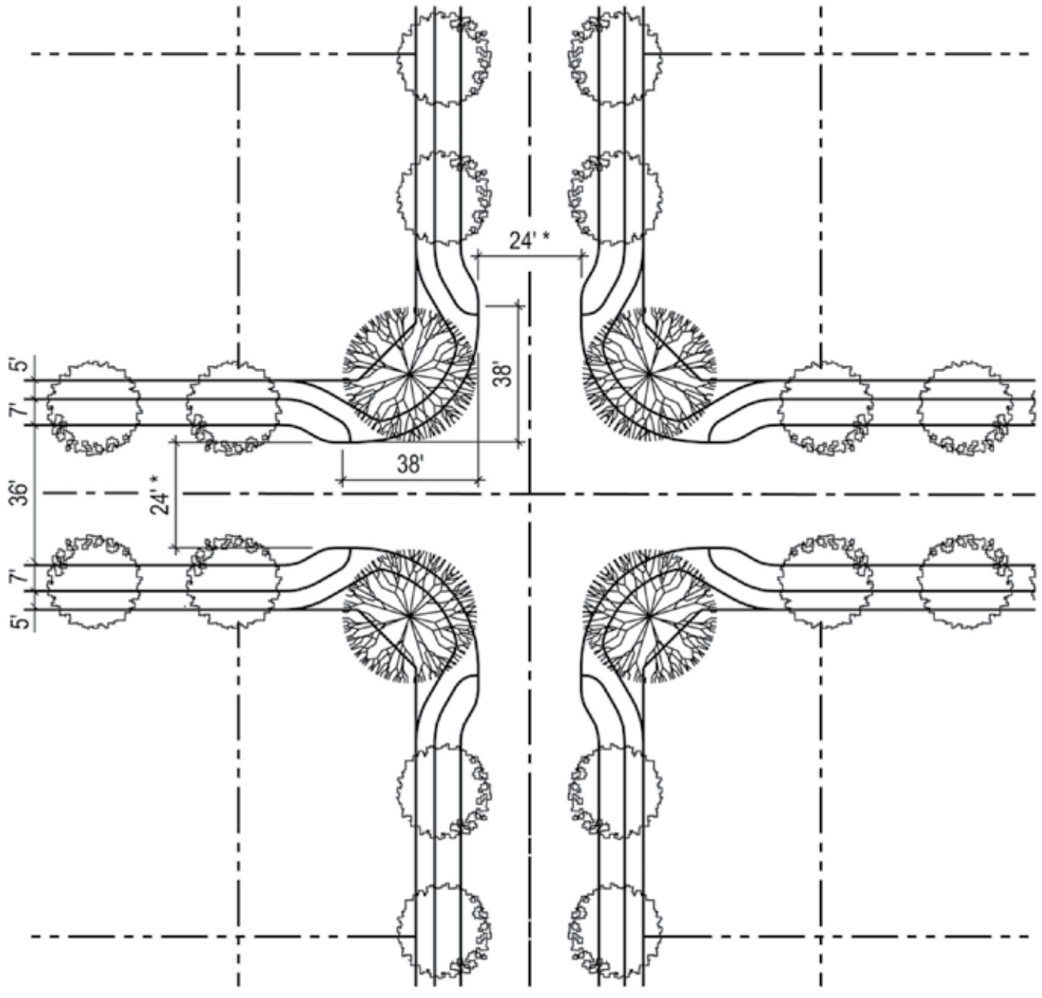
Off-street pedestrian circulation will be available throughout Esperanza by means of the interconnected, paved sidewalk system within the roadway right-of-way, separated from vehicular travel lanes by a landscaped parkway. The Esperanza pedestrian system provides connectivity among residential neighborhoods to the Neighborhood Park and pocket parks within the Specific Plan area.

5.1.5 Bicycle Trails

Bicycle trails are an integral element to creating accessibility and mobility within Esperanza. A Class 1 bike trail will be provided within the parkway on the north side of Eucalyptus Avenue and an on-street bike trail will be provided on both sides of Eucalyptus Avenue connecting to on-street bike trails provided on local residential streets within the Specific Plan to connect all residential neighborhoods to one another, and to the Neighborhood Park located towards the center of the Specific Plan boundary.

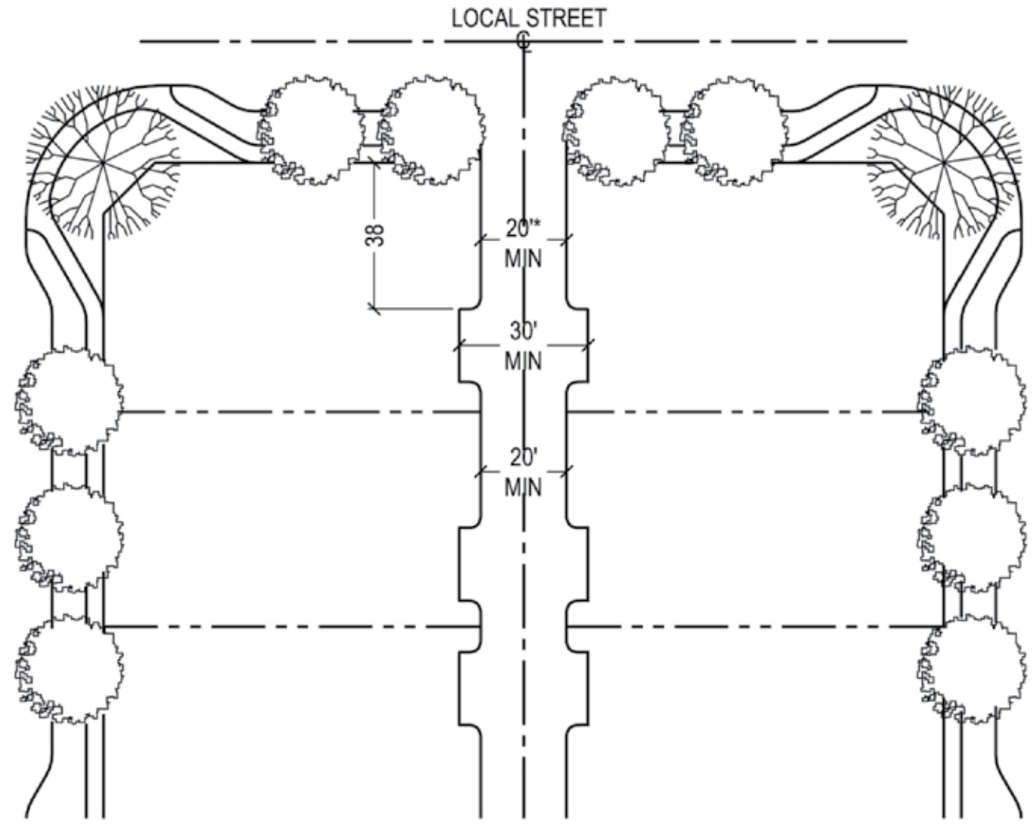
Class II on-street striped bike lanes shall be provided on roadways within the Esperanza Specific Plan area as determined by City Engineer.

The Master Plan for pedestrian and bicycle circulation for Esperanza is illustrated on Exhibit 21, "Pedestrian and Bicycle Circulation Plan."



* (TAPER WIDTHS SUBJECT TO PLANNING, ENGINEERING, & FIRE DEPARTMENT APPROVAL)

Exhibit 19
Neighborhood Street Tapers



(*) TAPER WIDTHS ARE SUBJECT TO PLANNING, ENGINEERING, & FIRE DEPARTMENT APPROVAL

Exhibit 20
Alley Tapers

Exhibit 21
Pedestrian and Bicycle Circulation Plan

5.2 Domestic and Recycled Water Master Plan

Domestic water will be provided by the City of Ontario. The Ontario Ranch Water Master Plan Phase 1 (Phases 1a–1d) identifies new water facilities to include one reservoir, three groundwater wells and potable and reclaimed transmission water lines. Construction of the on site and off site Master Plan water service improvements shall be the responsibility of the developer(s) and is required prior to issuance of building permits for Esperanza. Two of the waterlines included in the Phase 1 improvements are a 24 inch water line in Hamner Avenue, adjacent to the site on the east, and a 24-inch water main in Eucalyptus Avenue, which goes through the center of the project.

5.2.1 Domestic Water

The project lies within the 925 Zone. New domestic water mains to be constructed as part of the development of Esperanza will include a 12-inch Master Plan water main in Mill Creek Avenue, from the northerly boundary of the Specific Plan to Eucalyptus Avenue. Within the Specific Plan area, a network of 8-inch and 12' inch water lines will be installed. The On Site water system will include connections to two different transmission mains.

The City is in the process of updating the Water Master Plan. Any changes resulting from the updated Master Plan will be incorporated into the Esperanza Water Master Plan.

There are two groundwater wells located adjacent to Bellegrave Avenue to the north. These wells and water transmission lines in Bellegrave Avenue, are owned and operated by the Chino Basin Desalter Authority (CDA). As part of the development of the Specific Plan area, improvements shall be made, to the satisfaction of the CDA and the City of Ontario, surrounding the two existing well sites located at the north side of the ultimate right of way of Bellegrave Avenue. Improvements shall include, but are not limited to, perimeter fencing, relocation of existing utilities within the ultimate right of way, street landscaping within the right of way fronting the project, and driveway approaches. The Master Plan for domestic water for Esperanza is illustrated on Exhibit 22, "Conceptual Domestic Water Master Plan." The conceptual on site domestic water system is illustrated on Exhibit 23 "On Site Domestic Water Plan."

5.2.2 Recycled Water System

The Inland Empire Utilities Agency (IEUA) will ultimately provide recycled water from IEUA's RP-1 and RP-1 outfall parallel located in Carpenter Avenue via City of Ontario recycled water mains as presented in the Water Master Plan for the Ontario Ranch. The Specific Plan area is located within the 930 Zone. The construction phase source of recycled water to serve the Specific Plan area will be conveyed to the 930 Zone from the 1050 Zone via a Master Plan pressure reducing station located in Archibald Avenue north of Chino Avenue. The master planned recycled water mains to be constructed as part of the development of Esperanza will include the following:

- A 12-inch recycled water line in Mill Creek Avenue from the northerly boundary of the Specific Plan area to Eucalyptus Avenue.
- An 8-inch recycled water line in Hamner Avenue from the northern boundary of the Specific Plan area to Eucalyptus Avenue.
- An 8-inch recycled water line in Eucalyptus Avenue from Hamner Avenue to Mill Creek Avenue.
- A 12-inch line in Eucalyptus Avenue from Mill Creek Avenue to Haven Avenue.
- A 16-inch line in Eucalyptus Avenue from Haven Avenue to Archibald Avenue.
- A 16-inch line in Archibald Avenue from Eucalyptus Avenue to Edison Avenue.
- A 20-inch line in Archibald Avenue from Edison Avenue to Schaefer Avenue.
- A 36-inch line in Archibald Avenue reducing to a 24-inch line from Schaefer Avenue to Chino Avenue.
- Utilization of the existing 10-inch main which extends from the IEUA facility adjacent to Westwind Park to the intersection of Archibald Avenue and Schaefer Avenue.

The developer will provide all recycled water lines required to serve the Specific Plan area.

Within the Specific Plan area, 8-inch recycled water mains are proposed to serve the development. The City's goal is to maximize the use of recycled water including but not limited to irrigation of parks, schools, street landscaping, recreation trails, common area residential landscaping and commercial/industrial landscaping edges. The parks and landscaped areas that will be irrigated with recycled water and the calculated recycled water demand are contained in the report titled, "Esperanza Water and Recycled Water Hydraulic Analysis." An Engineer's Report approved by the City and the Department of Health is required prior to the use of recycled water.

The conceptual Master Plan for recycled water for Esperanza is illustrated on Exhibit 24, "Conceptual Recycled Water Plan." The conceptual on site recycled water system is illustrated on Exhibit 25, "Conceptual On Site Recycled Water System."

5.3 Sewer Master Plan

Sewer service for Esperanza will be provided by the City of Ontario. The City's Sewer Master Plan identifies ultimate sewer facilities from the Specific Plan area to the Eastern Trunk Sewer. These Master Planned facilities include a 15inch sewer main extending from the northerly boundary of the Specific Plan area, along Mill Creek Avenue increasing to a 21-inch sewer main at Eucalyptus Avenue and a 24-inch sewer main along Bellegrave Avenue westerly to the Master Planned Eastern Trunk Sewer. Completion of these Master Plan improvements is required to provide the ultimate sewer service to Esperanza. Within the Specific Plan area a network of 8-inch and 15-inch sewer lines will be installed. The sizing and alignment of all off site sewer improvements necessary for mitigation of impacts shall follow the results of the approved Sanitary Sewer Technical Study.

The Conceptual Sewer Master Plan for Esperanza is illustrated on Exhibit 26, "Sewer Master Plan." The conceptual on site sewer lines are illustrated on Exhibit 27, "Conceptual On Site Sewer."

5.4 Drainage

The City's Storm Drain Master Plan identifies new storm drain facilities to serve the Specific Plan area extending northerly from the County Line Channel within Mill Creek Avenue. Completion of these Master Plan improvements will provide permanent storm drain service to Esperanza.

That portion of the Master Planned line, which lies within Esperanza, will be constructed as a part of the development of the project. These improvements include a 90-inch storm drain in Mill Creek Avenue transitioning to a 102inch storm drain, connecting to the County Line Channel.

On site storm drains will be constructed to convey the on site flows to the proposed Master Planned storm drain line in Mill Creek Avenue. The locations and size of on site storm drains within Esperanza will be established in accordance with City requirements as part of the approval by the City of Ontario of tentative tract maps for the Esperanza Specific Plan area.

The Drainage Master Plan for Esperanza is illustrated in Exhibit 28, "Storm Drain Master Plan." The size and location of the proposed storm drain may change based on the final design.

5.4.1 NPDES Compliance

The grading and drainage of the Esperanza Specific Plan area shall be designed to detain, filter and treat surface runoff, in a manner and combination which is practical, to comply with the most recent requirements of the San Bernardino County NPDES Storm Water Program's Quality Management (WQMP) for significant new development projects. The objective of the WQMP for this project is to minimize the detrimental effects of urbanization on the beneficial uses of receiving waters, including effects caused by increased pollutants and changes in hydrology. These effects may be minimized through the implementation of site designs that reduce runoff and pollutant transport by minimizing impervious surfaces and maximizing on-site infiltration, Source Control Best Management Practices (BMP's) and/or either on-site Structural Treatment Control BMP's, or participation in regional or watershed-based Treatment Control BMP's.

Prior to the issuance of a grading or construction permit, a Storm Water Pollution Prevention Plan (SWPPP) will also be prepared. The SWPPP will be prepared to comply with the California State Water Resources Control Board's (State Water Board) current, "General Permit to Discharge Storm Water Associated With Construction Activity" and the current Area Wide Urban Storm Water Runoff (Regional NPDES Permit). The SWPPP will identify and detail all appropriate Best Management Practices (BMP's) to be implemented or installed during construction of the project.

In addition to the preparation of a SWPPP for construction-related activities, and as part of the approval of any grading plans within the Specific Plan Area, the applicant will be required to submit a Water Quality Management Plan (WQMP) on the regional model form provided by the City. The WQMP shall identify and detail all Site Design BMP's, Source Control BMP's and Treatment Control BMP's to be implemented or installed at this site in order to reduce storm water pollutants and site runoff.

An off site regional stormwater runoff treatment facility with capacity to accept and treat drainage from portions of the Specific Plan Area has been constructed. This regional treatment facility will be part of an overall solution for storm water treatment within this planned development area. Projects with reserved treatment capacity allocations sin the regional facility will utilize this off-site facility as their primary BMP for addressing urban runoff water quality and hydro-modification impacts, in their respective WQMPs. If a project cannot obtain treatment capacity in the regional stormwater treatment facility, alternative on-site or off-site Low Impact Design BMBs will be required based on the must current MS4 Permit requirements.

5.5 Schools

The Mountain View School District is the school district serving the K-8 school needs of Esperanza. The Chaffey Joint Union High School District serves the 9-12 school age needs of the Specific Plan area. Additional elementary, middle, and high schools are needed to serve the needs of school age children within the Ontario Ranch. An elementary school site has been proposed within the Esperanza Specific Plan and a middle school site has been proposed in Planning Subarea 24. Colony High School is located at the southwest intersection of Mill Creek Avenue and Riverside Drive and a future high school has been proposed in Planning Subarea 23. Development of the Esperanza Specific Plan area will generate an estimated student population as follows (based on student generation numbers supplied by the City of Ontario, "School Generation for Ontario Ranch Subareas," July 2, 2004. The developer(s) of Esperanza will be required to pay school fees as required by State of California.

Grades K- 5
Generation Factor 0.38/D.U.
0.38 x 1594 = 606

Grades 6-8
Generation Factor 0.22/D.U.
0.22 x 1594 = 351

Grades 9-12
Generation Factor 0.20/D.U.
0.20 x 1594 = 319

5.6 Public Utilities

5.6.1 Natural Gas

The Gas Company will provide natural gas to the Specific Plan area. Gas mains will be installed to the Specific Plan area by the Gas Company as necessary.

5.6.2 Electricity

Southern California Edison will provide electricity to the Specific Plan area from existing facilities in the vicinity of the Specific Plan area. Proposed new facilities to serve the project will be owned and operated by the City of Ontario and located underground. Existing lines within the Specific Plan area shall be placed underground by developer and according to the City of Ontario adopted ordinance.

5.6.3 Telecommunications

The City of Ontario will be providing OntarioNet, fiber-to-the-home. OntarioNet is a fiber-optic telecommunications system capable of providing advanced Internet/data services to all homes and businesses within the Ontario Ranch. OntarioNet will provide community related services including: traffic management; on-line civic services; meter reading; educational services; and a variety of other community services. Based on the demographics of the Ontario Ranch and the traffic issues into Orange and Los Angeles Counties, the demand for telecommuting in the Ontario Ranch is anticipated to be significant. OntarioNet and the high-speed data services it provides will allow residents of the Esperanza Specific Plan to effectively telecommute to their jobs and in general provide a significant economic benefit to Ontario. Verizon currently provides telephone service within the Specific Plan area and can provide telecommunication service if they choose to do so.

5.6.4 Solid Waste

The City of Ontario provides solid waste collection services for the Ontario Ranch and will service the Specific Plan area. The project will comply with Municipal Code Section 6-3.314, "Commercial Storage Standards" and Section 6-3.601, "Business Recycling Plan" for the use of any commercial bin service for apartment development. All residential development shall comply with Municipal Code Section 6-3.308.9 (a) and (d), "Residential Receptacles, Placement" for curbside automated container service. The project shall comply with Municipal Code Article 6, "Recycling Requirements for Specified Business Activity", Section 6-3.601 Business Recycling Plan, and Section 6-3.602, "Construction and Demolition Recycling Plan." All site development shall comply with the City of Ontario refuse collection standards. All project sites shall be designed to meet all the Integrated Waste Department's requirements, including the requirements for Sizing of Storage, Location of Collection Area, Accessibility for Collection Vehicles, and Collection of Sorted/ Diverted Waster Types including Organics.

5.7 Grading Concept

The site falls at an average slope of approximately two percent (2%). The Grading Concept for Esperanza is to work with the existing topography to maintain natural grade and elevations wherever possible. The grading operation for the Specific Plan area will generally consist of the removal of any manure remaining from dairy operations, clearing and grubbing, demolition of existing structures, and moving of surface soils to construct building pads and streets. Additionally, where slope conditions are present, the property shall be located at the top of the slope. In areas adjacent to a ridgeline or in moderate slope areas, dwelling units and structures should be sited to:

- Use the natural ridgeline as a backdrop for structures;
- Use landscape plant materials as a backdrop; and
- Use structure to maximize concealment of cut slope.

If retaining walls are required, the following criteria shall be used:

- Exposed walls and fences facing roadways shall be no greater than 3-feet retaining (9-foot total wall) in height, except as necessary for acoustical purposes to satisfy the intent of the noise ordinance.
- Where retaining walls or fences face roadways, they shall be built, when feasible, of decorative materials consistent with the wall theme of the neighborhood.

The Conceptual Grading Plan, as illustrated in Exhibit 29, "Conceptual Grading Plan," will provide for a balance of cut/fills for the site Grading plans for each tract in the Specific Plan area will be reviewed and approved by the City of Ontario Building, Planning, and Engineering Departments prior to the issuance of grading permits. All grading plans and activities will conform to the City grading ordinance and dust and erosion control requirements.

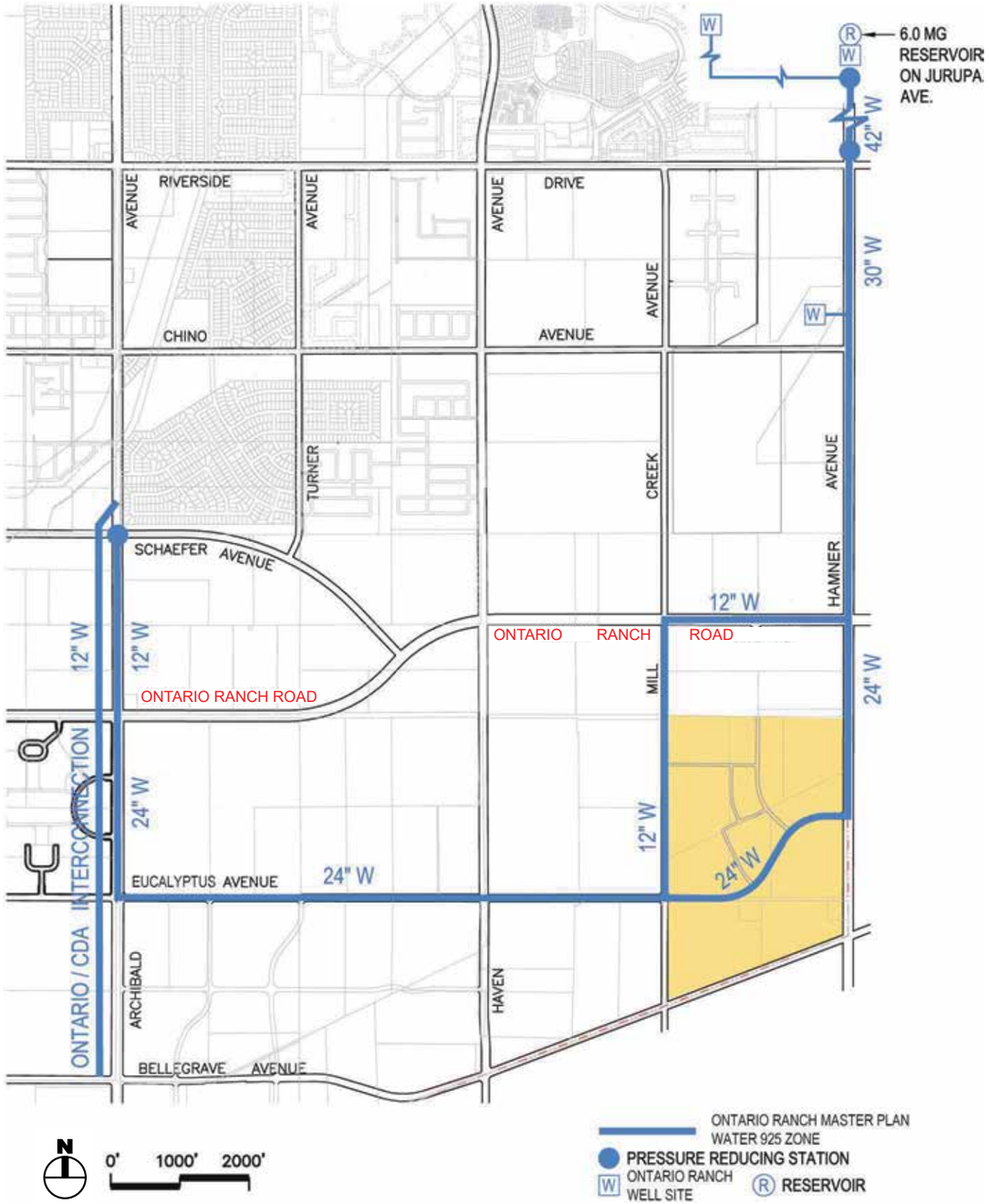


Exhibit 22

Conceptual Domestic Water Master Plan

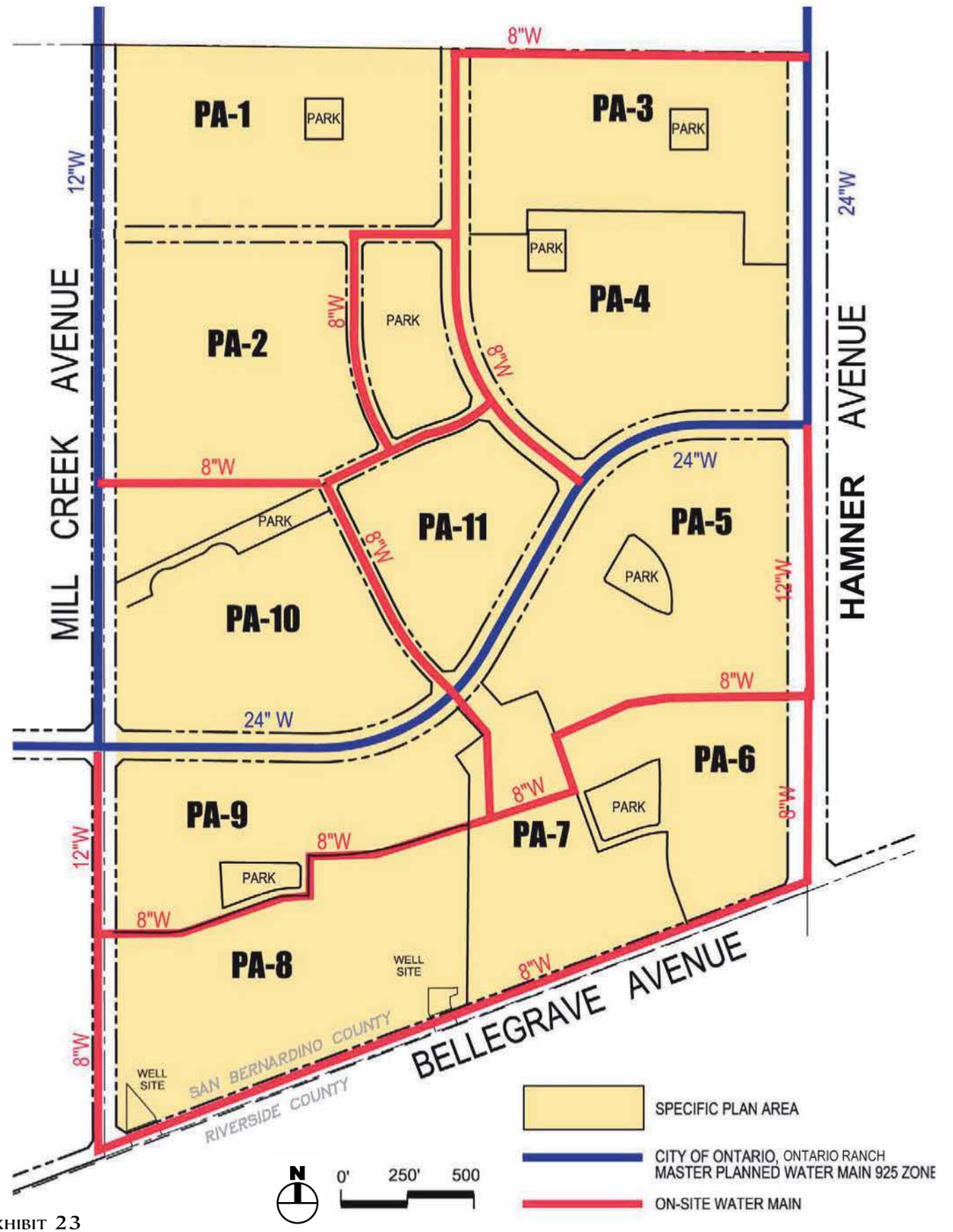


Exhibit 23

On Site Domestic Water Plan

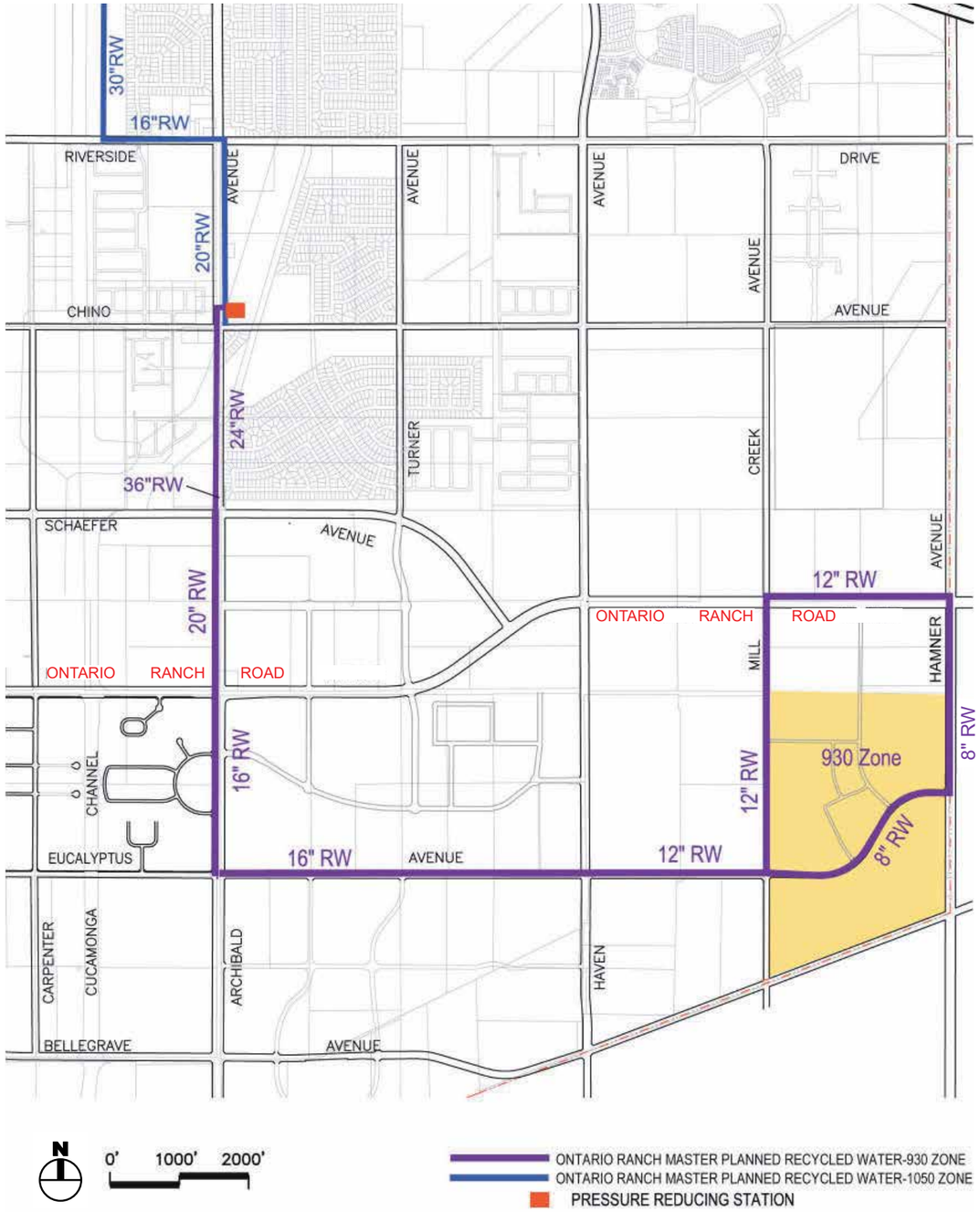
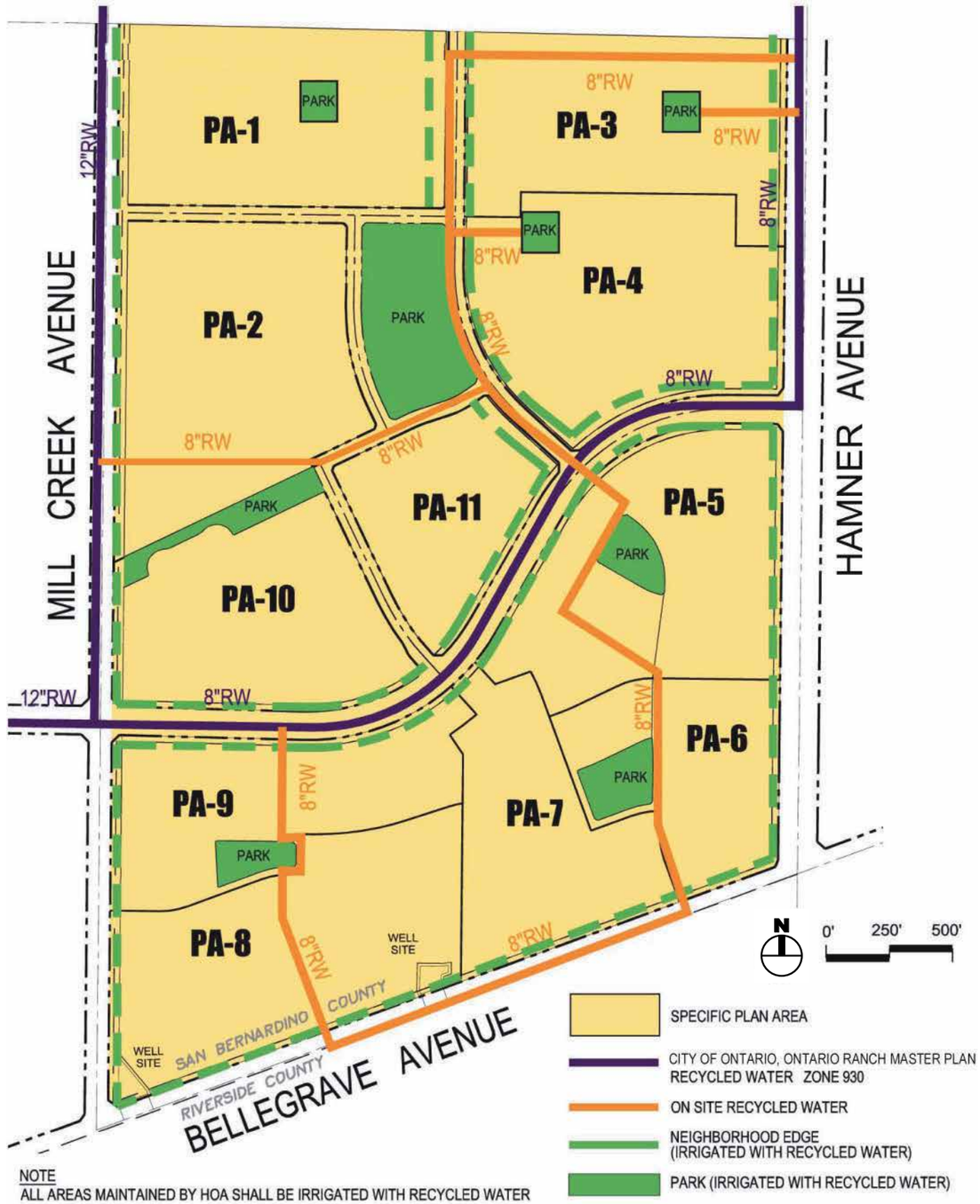


Exhibit 24
Conceptual Recycled Water Plan



NOTE
ALL AREAS MAINTAINED BY HOA SHALL BE IRRIGATED WITH RECYCLED WATER

Exhibit 25
Conceptual On Site Recycled Water System

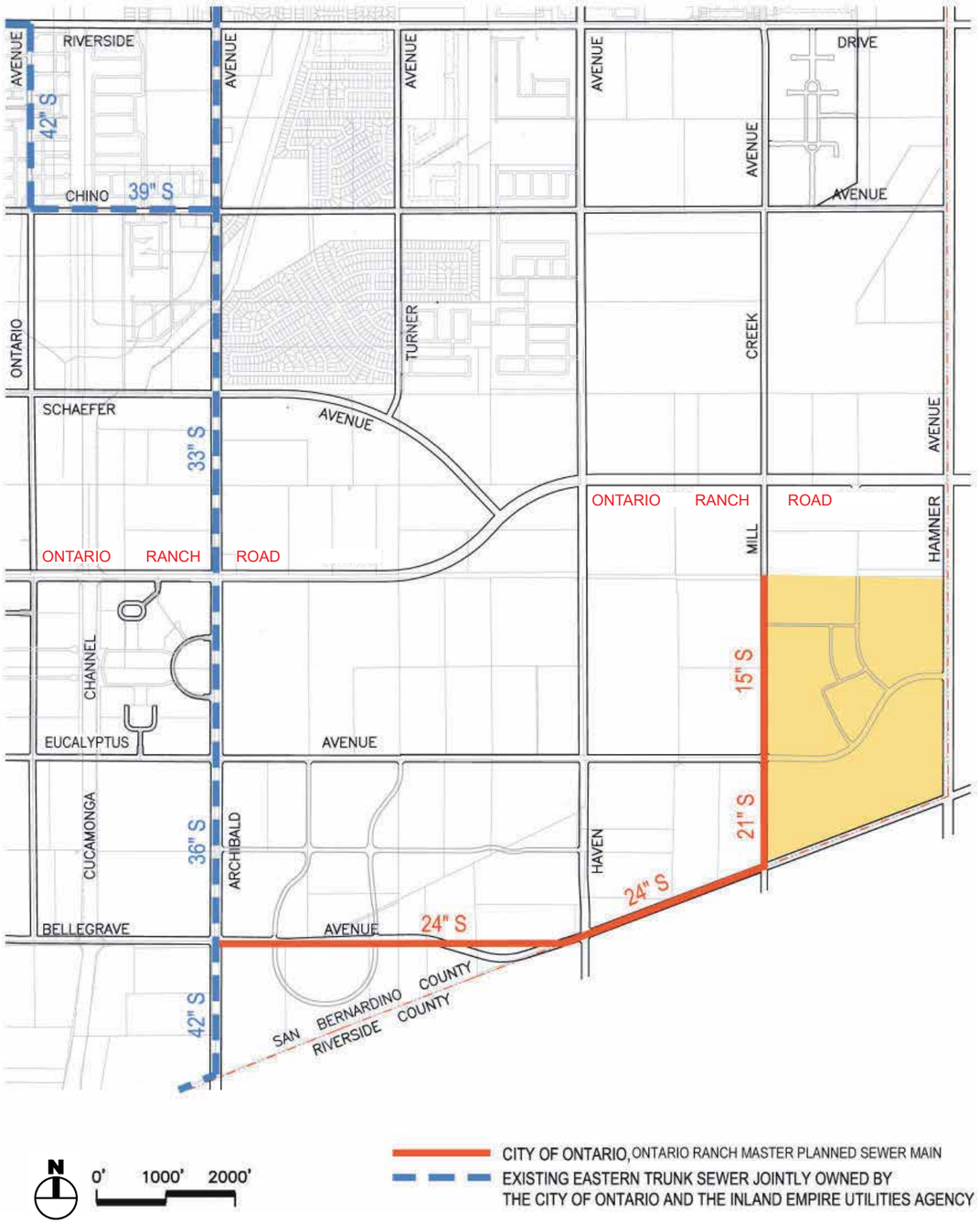


Exhibit 26
Sewer Master Plan

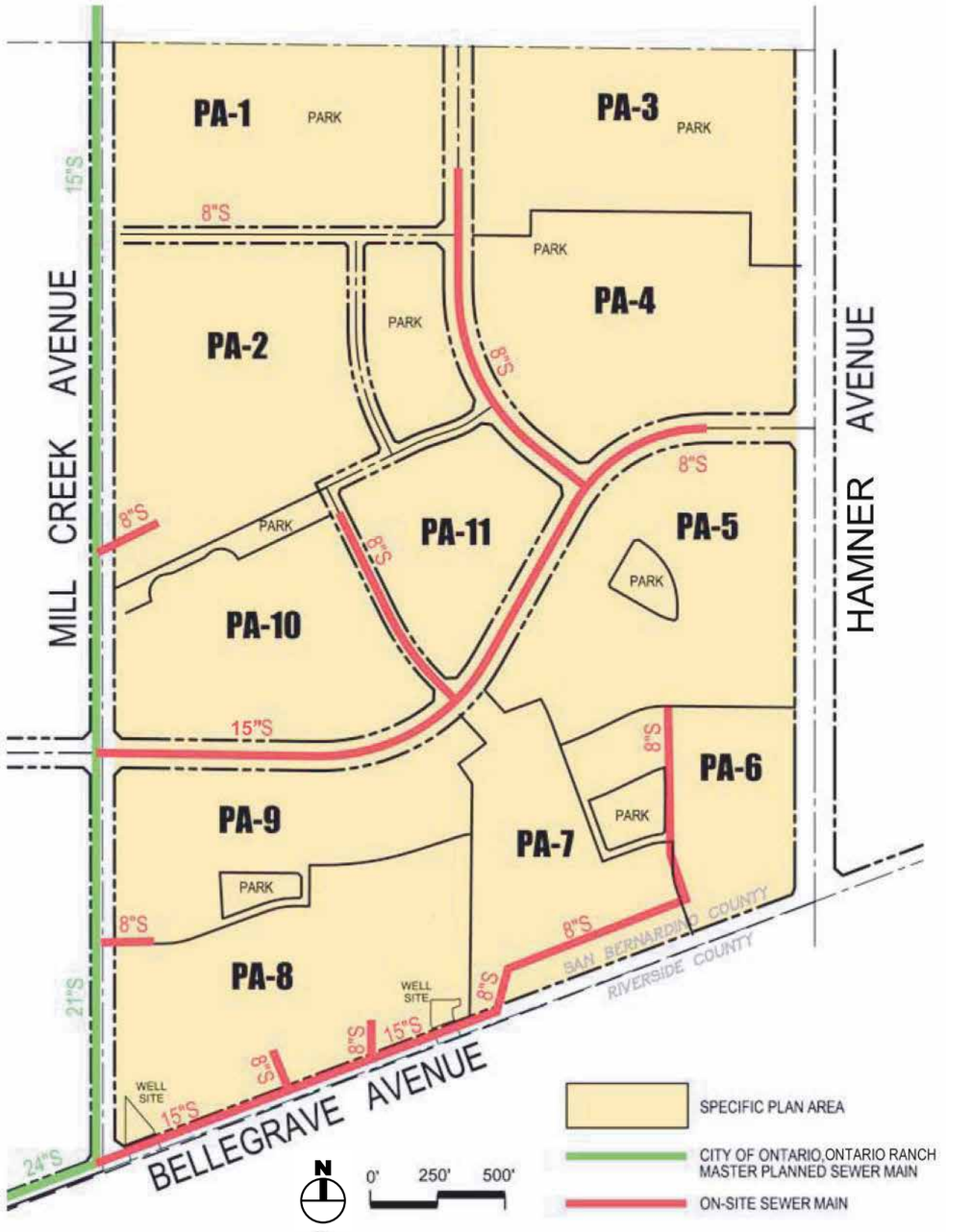


Exhibit 27
Conceptual On Site Sewer

Exhibit 28
Storm Drain Master Plan

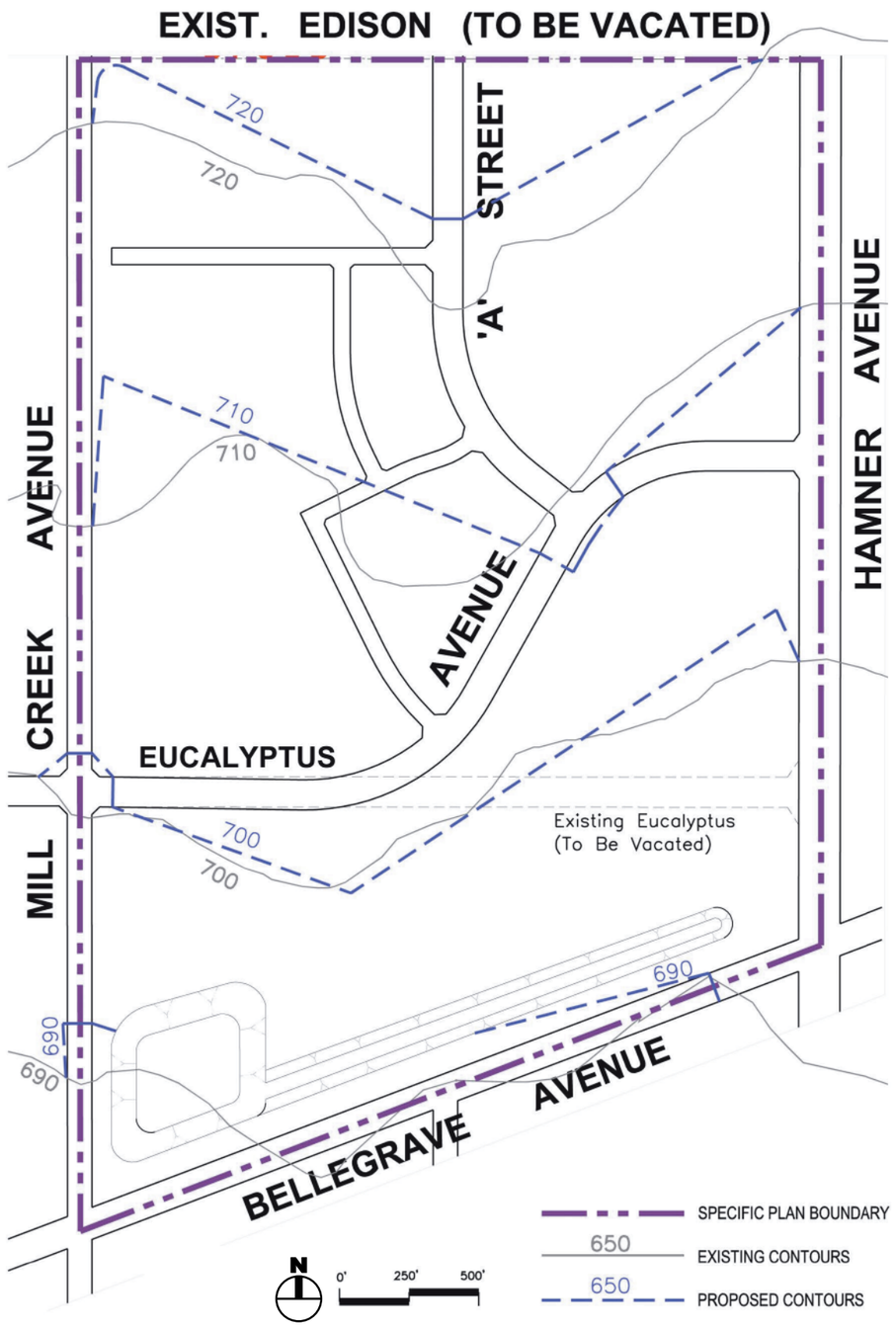


Exhibit 29
Conceptual Grading Plan

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Section 6. Development Regulations

6.1 Introduction

The provisions contained herein will regulate design and development within the Esperanza Specific Plan.

6.2 Definition of Terms

The meaning and construction of words, phrases, titles, and terms shall be the same as provided in the City of Ontario Development Code Article 2, "Definitions," unless otherwise specifically provided herein. The definitions of product types shall be those defined in Section 4, "Land Use" within the discussion of each respective product type. The definition of architectural and design terms shall be the same as those provided in the City of Ontario Glossary of Design Terms which follows the City of Ontario Development Code.

6.3 Applicability

The development regulations contained herein provide specific standards for land use development within the Esperanza Specific Plan area. Regulations address residential land uses and provide for general landscaping regulations. Application of the following regulations is intended to encourage the most appropriate use of the land, ensure the highest quality of development, and protect the public health, safety, and general welfare. Whenever the provisions and development standards contained herein conflict with those contained in the City of Ontario Development Code, the provisions of the Esperanza Specific Plan shall take precedence. Where the Esperanza Specific Plan is silent, City codes shall apply. These regulations shall reinforce specific site planning, architectural design, and landscape design guidelines contained in Section 8, "Design Guidelines" of the Esperanza Specific Plan.

6.4 Administration

The Esperanza Specific Plan, upon adoption, will serve as the implementation tool for the General Plan as well as the zoning for the Specific Plan area. The Esperanza Specific Plan Development Regulations address general provisions, permitted uses, and development standards for the community.

6.5 General Site Development Criteria

The following general site development criteria shall apply to all land development proposed in Esperanza.

1. **Gross Acres** - Except as otherwise indicated, gross acres for all development areas are measured to the centerline of streets.
2. **Grading** - Development within the Specific Plan area shall utilize grading techniques as approved by the City of Ontario. Grading concepts shall respond to the design guidelines included in the Esperanza Specific Plan which guide the development of land use toward the goal of providing for a livable community with streets and entries designed for walking and resident interaction.
3. **Building Modification** - Additions and alterations permitted by the Esperanza Specific Plan shall match the architectural style of the primary unit and shall be constructed of the same materials, details, and colors as the primary unit.
4. **Utilities** - All new and existing public utility distribution lines of 35.5kV or less shall be subsurface throughout the planned community.
5. **Technology** - All homes and businesses shall accommodate modern telecommunications technology (OntarioNet) for computer internet access, phone, fax, and television. Broadband fiber optics cable will be installed to all the properties per the approved Fiber Optic Master Plan.

6. **Transfer of Dwelling Units** -The Esperanza Specific Plan allocates a total number of units to each Planning Area as indicated in the "Land Use Summary" Table 2, Section 4, of the Esperanza Specific Plan. Variations in the number and type of dwelling units within each residential Planning Area may occur at the time of final design of the neighborhood depending upon the residential product identified for development. Changes in allocation of residential units, up to a maximum of fifteen percent (15%), are permitted among the residential planning areas within the Esperanza Specific Plan, subject to approval by the City and upon agreement of each respective property owner/developer, provided the total number of units established for the Esperanza Specific Plan area is not exceeded.

7. **Best Management Practices –** Development of storm water runoff improvements, within the Esperanza Specific Plan, shall adhere to currently adopted Best Management Practices (BMP's). The Site Design BMP's may include but not be limited to creating landscape strips and landscaped setback areas that can be swaled and depressed to retain and infiltrate irrigation water and runoff from smaller storm events, drain rooftops into rain gutters which would drain into an area of porous subgrade, and depressing the park areas to provide storm water infiltration and water quality treatment. Common area landscaping and parks shall be designed to function as a series of shallow storm water treatment basins and infiltration zones for storm water runoff from surrounding areas wherever moderately well draining soils exist. Currently the City of Ontario is considering construction of a regional storm water runoff treatment facility for the sub-watershed area that this project lies within. If the treatment facility is constructed, it may satisfy the requirement for on-site treatment control BMP's for the Esperanza project.

8. **Maximum Number of Dwelling Units** - The maximum number of residential dwelling units permitted within the Esperanza Specific Plan is ~~1,594~~ 1,491 unless the 10.02 acre elementary school site is not purchased by the Mountain View School District. Pursuant to approval of a Specific Plan Amendment the total permitted residential dwelling units within the Esperanza Specific Plan area shall be ~~1,640~~ 1,652 dwelling units.

9. **Agricultural Buffer** - A minimum 100-foot separation shall be required between a new residential structure and an existing animal feed trough, corral/pen or an existing dairy/feed lot including manure stockpiles and related wastewater detention basins. The 100-foot separation requirement may be satisfied through an off-site easement with adjacent properties, acceptable to the Planning Director, submitted with a final map, and recorded prior to or concurrent with a final map.

10. **Solid Waste/Recycling** - Development within the Esperanza Specific Plan area shall comply with City of Ontario requirements for the provision and placement of solid waste and recycling receptacles.

6.6 Residential Development Standards

6.6.1 Residential Detached (RD-1 through RD-6)

6.6.1.1 General

This category includes the development of single family detached dwelling units. The purpose of the residential standards for single family detached housing is to establish the minimum criteria for the development of these product types on individual lots within the neighborhoods specified within Esperanza.

6.6.1.2 Permitted Uses

1. Single family detached dwellings.
2. Public or private parks, recreational buildings, greenbelts, and open space.
3. Accessory uses to include the following:
   a. Garages.
   b. Granny Flats (i.e. Second Dwelling Units, in accordance the City's Development Code.)
   c. Home occupations.
   d. Swimming pools, spas, sports courts, and other similar outdoor recreational amenities.
   e. Patios and patio covers.
   f. Storage, garden structures, cabanas, and greenhouses.
   g. Monument signage.
   h. Model home and subdivision sales trailers; temporary construction parking, offices, and facilities; real estate signs, signage indicating future development and directional signage in accordance with the City's Development Code.
   i. Second story additions to existing single story dwelling units.
   j. Small family child care/day care facilities (up to 8 children), in accordance with the City's Development Code.

6.6.1.3 Conditionally Permitted Uses

1. Places of worship including but not limited to churches and synagogues.
2. Large family child/day care facilities (between 8-14 children), in accordance with the City's Development Code.

6.6.1.4 Temporary Uses

1. Temporary uses shall be permitted pursuant to Article 13 of the City's Development Code.

6.6.1.5 Free Standing Satellite Dish / Antennas

1. Free standing satellite dishes and/or antennas are permitted pursuant to Article 32, Section 9.1.3289 of the City of Ontario Development Code.

6.6.1.6 Recreational Vehicle Storage and Parking

1. Recreational Vehicle (RV) storage is prohibited on public and private streets and in private alleys. RV parking on public and private streets is limited to 72 hours.

PRODUCT TYPE	RD-1	RD-2	RD-3	RD-4	RD-5	RD-6
	50' Wide Lots PA-7 & PA-9	55' Wide Lots PA-8	40' 2-Pack PA-10	Cottage PA-2 & PA-6	4-Pack Courtyard PA-5	6-Pack/8-Pack Courtyard Row Townhomes PA-2 & PA-4
LOT CRITERIA						
Min. Lot Width at Front Setback Line for Standard Lot	50'	55'	40'	33'	NA	NA
Min. Lot Width at PL for Cul de sac, standard knuckle or modified knuckle lots (Min. side and rear yard setbacks to be maintained)	35'	35'	35'	33'	NA	NA
Min. Lot Width on Corner	55'	60'	45'	38'	NA	NA
Min. Lot Depth	80'	90'	75'	75'	NA	NA
Min. Lot Size	3,900 sq.ft.	4,800 sq.ft.	3,400 sq.ft.	2,400 sq.ft.	2,500 sq.ft.	2,200 sq.ft.
MINIMUM SETBACKS [1]						
All setbacks are measured from PL except for RD-5 and RD-6 where front and streetside setbacks are measured from back of sidewalk.						
Front Setbacks						
• Living Area	10'	12'	10'	10'	10'	10'
• Porch w/single story plate	8' [2]	8' [2]	8' [2]	8' [2]	8'	8'
• Front Entry Garage (street facing door) [3]	18'	18'	18'	NA	18'	18'
• Turn in Garage	10'	10'	NA	NA	NA	NA
Side [4]						
• From Interior PL	5'	5'	5'	4'	4'	4'
• From Residential Street or Parking Lot	10'	10'	10'	10'	10'	10'
Rear						
• Main Structure 1st Floor	15'	15'	10'	5' from Alley ROW	10'	5'
• Main Structure 2nd Floor	15'	15'	10'	5'	10'	5'
• Garage (Single Story Plate Line)	5'	5'	5'	3'	5'	5'
• Patio Cover / 2nd Story Deck	5'	5'	5'	5'	5'	10'
LOT COVERAGE						
Max. Coverage	50%	50%	50%	55%	55%	55%

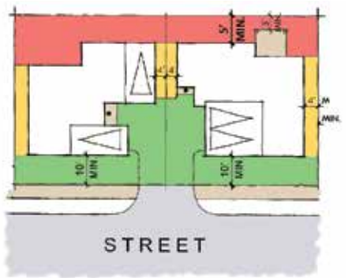
TABLE 3
Residential Detached Site Development Standards

PRODUCT TYPE	RD-1	RD-2	RD-3	RD-4	RD-5	RD-6
	50' Wide Lots PA-7 & PA-9	55' Wide Lots PA-8	40' 2-Pack PA-10	Cottage PA-2 & PA-6	4-Pack Courtyard PA-5	6-Pack/8-Pack Courtyard Row Townhomes PA-2 & PA-4
MINIMUM BUILDING SEPARATION						
Between main structures rear to rear	20'	20'	15'	30'	6'	10'
Between main structures front to front	NA	NA	NA	20'	NA	30'
Between structures side to side [1]	10'	10'	10'	8'	6'	6'
Between main structures front to side	NA	NA	NA	NA	8'	6'
Between front porch/ balcony to front porch/balcony	NA	NA		15'		
MAXIMUM BUILDING HEIGHT						
Main Structure	35'	35'	35'	35'	35'	35'
MAXIMUM BUILDING HEIGHT						
Maximum Height at Front and Street Side Property Line [5]	3'	3'	3'	3'	3'	3'
Maximum Height at Interior or Rear Property Line [6]	6'	6'	6'	6'	6'	6'
Maximum Height of Retaining Walls	3'	3'	3'	3'	3'	3'
PARKING						
Min. Number of Parking Spaces Required Per Unit [7]	2	2	2	2	2	2

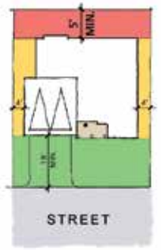
NOTES:

1. *Architectural projections may project a maximum of 3 feet into required front, rear or side setback areas; however, in no case shall such projection be closer than 3 feet to any property line. An architectural projection is defined as an element that articulates the building elevation such as eaves, window and door pop-out surrounds, media niches, bay windows, pot shelves, chimneys, enhanced window sills, shutter details, window trim, balconies and entry gates, and other similar elements.*
2. *The minimum depth of a porch shall be 7 feet with a minimum clear area of 70 square feet.*
3. *Minimum 20' for front facing/ garage forward design.*
4. *RD-3, RD-4, RD-5 and RD-6 with shared-use easement sideyards.*
5. *Solid masonry walls or wood fencing materials may be permitted on the front property line. Fences, walls, hedges or similar view obstructing structures or plants that reduce safe ingress or egress of vehicles or pedestrians shall not exceed three feet in height in any required front yard.*
6. *Walls may exceed six feet in height for noise attenuation purposes subject to an Acoustical Study and Planning Department approval.*
7. *All parking spaces to be within an enclosed garage (minimum 20' x 20' clear inside dimension) for two spaces and 10' x 20' for single spaces.*
8. *For single story homes only, the maximum lot coverage may increase up to a maximum of 60%.*

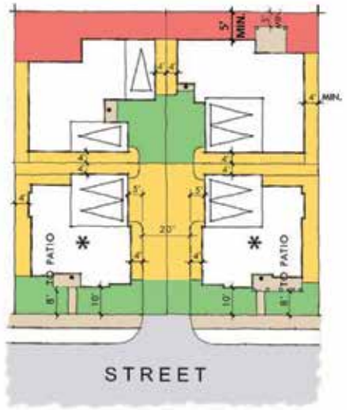
TABLE 3
Residential Detached Site Development Standards (cont.)



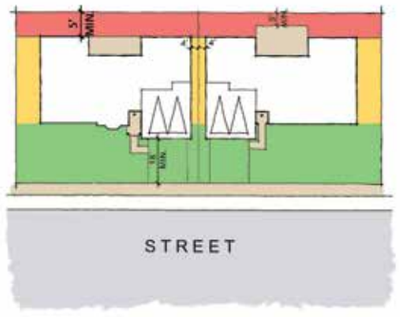
FOUR PACK / 1/2 MODULE



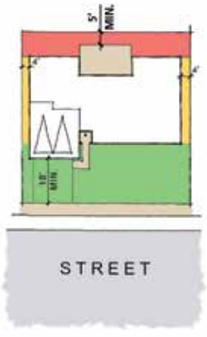
4-PACK SINGLE LOT



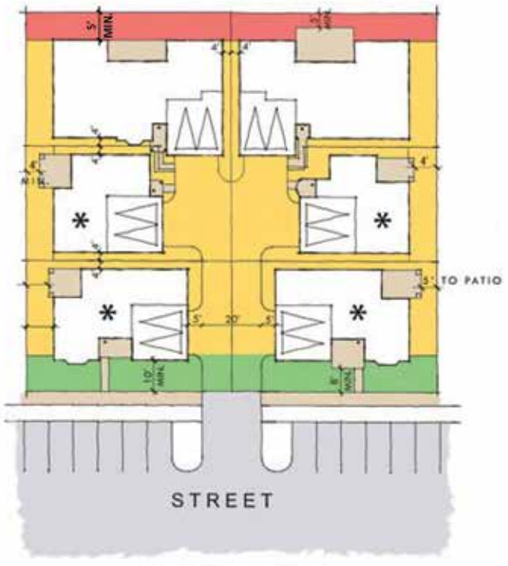
4-PACK TYPICAL YARDS



6-PACK PARTIAL MODULE



6-PACK / SINGLE LOT



6-PACK TYPICAL MODULE

LEGEND

- FRONT YARD
- SIDE YARD
- REAR YARD

Notes:
All setbacks illustrated are minimums.

✻ *Units plotted in these configurations do not have rear yard setback standards.*

4-Pack and 6-Pack Typical Plotting

6.6.2 Residential Attached (RD-7 and RD-8)

6.6.2.1 General

This category includes the development of attached type residential dwelling units such as townhomes, and other attached multi-family products.

6.6.2.2 Permitted Uses

1. Single family attached row townhomes, motorcourt townhomes, paired homes, condominiums, apartments, and duplexes.
2. Public or private parks, recreational buildings, greenbelts, pocket parks, and/or open space.
3. Accessory uses to include the following:
   - Garages.
   - Home occupations in accordance with the City's Development Code.
   - Swimming pools, spas, tennis courts, sports courts, and other similar outdoor recreational amenities.
   - Patios and patio covers.
   - Mailboxes.
   - Recreation center buildings.
   - Maintenance storage buildings.
   - Monument signage.
   - Model units, sales offices, and subdivision sales trailers, temporary construction offices and facilities, real estate signs, signage indicating future development and directional signage in accordance with the City's Development Code.
   - Small family child care facilities/day care facilities, up to 8 children in accordance with the City's Development Code.
   - Permanent Leasing Offices.

6.6.2.3 Conditionally Permitted Uses

1. Places of worship including but not limited to churches and synagogues.
2. Large family child care facilities/day care facilities (8-14 children) in accordance with the City's Development Code.

6.6.2.4 Temporary Uses

1. Temporary uses shall be permitted pursuant to Article 13 of the City's Development Code.

6.6.2.5 Free Standing Satellite Dish/Antennas

1. Free standing satellite dishes and/or antennas are permitted pursuant to Article 32, Section 9.1.3289 of the City of Ontario Development Code.

6.6.2.6 Recreational Vehicle Storage and Parking

1. Recreational Vehicle (RV) storage is prohibited on public and private streets and in private alleys. RV parking on public and private streets is limited to 72 hours.

6.6.2.7 Open Space

1. A minimum of 150 square feet of private open space shall be provided per dwelling unit as follows:
   a. Private open space features may include fenced yards, patio areas, and balconies.
   b. At least one-half (½) of the required open space area must be provided at the ground level, not including front yard setbacks, and not more than ½ of the open space requirement is to be satisfied by balconies or roof decks. For the Row Townhome product (RD-6) open space may be satisfied by balconies for up to 33% of the units proposed.

c. Private open space located at ground level shall have a minimum contiguous area of one hundred and fifty (150) square feet in area with a minimum dimension ten (10) feet in any one direction and shall be landscaped. Open space located on roof decks or balconies must have a minimum contiguous area of fifty (50) square feet in area and a minimum dimension of five (5) feet in any one direction.

d. Private, ground level open space on the street side of a structure is to be suitably screened from streets by a fence, densely planted shrub, or combination of both.

2. A minimum of 250 square feet of common open space shall be provided per unit as follows:

a. Common Open space features include, but are not limited to, landscaping, picnic and barbecue areas, pools and spas, tennis and sport courts, clubhouse, tot lots or playgrounds, paseos, and trails.

b. Common open space shall have a minimum contiguous area of three hundred (300) square feet with no dimension less than 15 feet in any direction.

c. All required ground level common open spaces shall be planted with permanent landscaping or be devoted to recreational facilities, such as swimming pools, tennis courts, tot lots, patios or similar open space and/or recreational facilities.

d. Common and private open spaces are to be permanently maintained in an orderly fashion.

e. Parking areas, driveways or service areas shall not be counted in the minimum open space requirement.

PRODUCT TYPE	**RD-6 & RD-7**	RD-8
	Row Townhomes **PA-1**. PA-3. **PA-4** & PA-11	**Motorcourt Townhomes** PA-1 & **PA-3**
MINIMUM SETBACKS [1]		
All front and corner setbacks for RD-8 are measured from the property line at back of sidewalk. All other setbacks for RD-8 are measured from the parcel line of the cluster. All setbacks for RD-7 are measured from property line unless otherwise noted.		
Front		
• Living Area	10'	10'
• Porch [2]	8'	8'
Side		
• From Residential Street	10'	10'
• From any local streetside property line	10'	10'
• From interior property line for RD-7 or parcel line for RD-8	5'	4'
Rear		
• 1st floor from alley R/W for RD-7 or parcel line for RD-8	3'	10'
• 2nd floor from alley R/W for RD-7 or parcel line for RD-8	3'	15'
MINIMUM BUILDING SEPARATION		
• Front to front	25'	25'
• Side to Side	10'	25'
• Front to Side	NA	25'
• Rear to Rear	25'	NA
• Front of garage to front of garage	30'	30'
BUILDING SITE COVERAGE		
Max. Coverage	60% of site	60% of site
MAXIMUM BUILDING HEIGHT		
Main Structure	45'	35'

TABLE 4
Residential Attached Site Development Standards

PRODUCT TYPE	RD-6 & RD-7	RD-8
	Row Townhomes **PA-1. PA-3. PA-4 & PA-11**	**Motorcourt Townhomes** **PA-1 & PA-3**
WALLS, FENCES, AND HEDGES		
Maximum Height at Front and Street Side Property Line [3]	3'	3'
Maximum Height at Interior or Rear Property Line [4]	6'	6'
Maximum Height of Retaining Walls	3'	3'
PARKING [5]		
Min. Resident Parking Required	1.75 spaces per one bedroom unit including 1 in a garage or carport, 2 spaces per two bedroom unit including 1 in a garage or carport, and 2.5 spaces per three or more bedroom unit including 2 in a garage or carport.	
Min. Guest Parking Required	1 space for each 4 units under 50 on the building lot. 1 space for every 5 units between 51-100 units on the building lot. 1 space for every 6 units over 100 units on the building lot. Public on-street parking may be counted toward guest requirement.	

NOTES:

1. *Architectural projections may project a maximum of 3 feet into required front, rear or side setback areas; however, in no case shall such projection be closer than 3 feet to any property line. An architectural projection is defined as an element that articulates the building elevation such as eaves, window and door pop-out surrounds, media niches, bay windows, pot shelves, chimneys, enhanced window sills, shutter details, window trim, balconies and entry gates, and other similar elements.*
2. *The minimum depth of a porch shall be 7 feet with a minimum clear area of 70 square feet.*
3. *Solid masonry walls or wood fencing materials may be permitted on the front property line. Fences, walls, hedges or similar view obstructing structures or plants that reduce safe ingress or egress of vehicles or pedestrians shall not exceed three feet in height in any required front yard.*
4. *Walls may exceed six feet in height for noise attenuation purposes subject to an Acoustical Study and Planning Department approval.*
5. *All parking spaces within an enclosed garage shall have a minimum 20'x20' clear inside dimension for double spaces and 10' x 20' single spaces.*

TABLE 4
Residential Attached Site Development Standards (cont.)

6.7 LANDSCAPE STANDARDS

6.7.1 General Provisions

1. All landscape and irrigation plans for streetscapes and graphic designs with regard to the identity of Esperanza, neighborhood identity or entry monuments shall conform to the Design Guidelines and regulations as set forth herein and shall be subject to review and approval by the City of Ontario at the time of Development Plan review. The form and content of landscape plans for streets, parks, and other common areas shall conform to the requirements of the City's Development Plan application requirements.
2. The Landscape/Streetscape improvements for the Esperanza Specific Plan shall establish a landscape theme reminiscent of the regional landscape character of the surrounding area.
3. The design and improvement of all parks, including landscape and irrigation plans, within Esperanza shall be reviewed and approved by the City at the time of Development Plan review and shall conform with the requirements of the City's Parks and Maintenance Department.
4. Installation of landscaping and automatic irrigation within the front yards of all residential areas will be provided by the home builder. At a minimum, the builder will install turf and appropriate shrubs and trees in the front yards of homes within residential areas. At a minimum two trees shall be installed, of which at least one, is a shade tree. A variety of front yard landscape designs shall be provided by the developer for use by homeowners. Within multi-family residential areas the builder shall be responsible for the installation of full landscape improvements within the multi-family development. Areas not used for hardscape shall be fully landscaped. All landscape plans shall be reviewed and approved by the City at the time of Development Plan review.

6.7.2 Landscape Standards

1. Landscaping within the Esperanza Specific Plan area shall be provided in accordance with the Design Guidelines utilizing plant materials specified on the Plant Palette included in Section 8, "Design Guidelines" established for the Esperanza Specific Plan.
2. Boundary landscaping will be required adjacent to residential areas. Landscaping shall generally be placed along the entire perimeter property line.
3. Landscaping and automatic irrigation systems within the public rights of way of the Esperanza Specific Plan area shall be installed by the developer.
4. Freestanding perimeter walls and view fencing shall be provided within, and at the perimeter of the Specific Plan area as specified in the Wall and Fence Master Plan contained within, Section 8, "Design Guidelines." Such walls and fences will be constructed concurrently with the construction of improvements required for development of the neighborhoods of the Specific Plan.
5. Walls and Fencing - Perimeter walls shall be constructed in locations and of a design consistent with the "Wall Master Plan" and "Wall Details" Exhibits located within Section 8, "Design Guidelines." Perimeter walls shall not exceed six feet in height from finished grade. If required for sound attenuation, perimeter walls may exceed six feet in height, subject to the recommendations of an acoustical study and approval by the Planning Department. Perimeter walls shall be constructed of either masonry or other permanent, durable, low maintenance material. Thematic perimeter fencing shall be constructed of all durable materials, which may include materials with a wood-like appearance, or tubular steel subject to approval by the City. In no instance shall wooden fencing be permitted along perimeters.

Individual residential lot side and rear yard walls and fencing shall not exceed six feet in height from highest adjacent finished grade. Side and rear walls may exceed six feet (6') in height if required by the City for sound attenuation pursuant to the recommendations of an Acoustical Report. Walls and fencing within the residential front yard setback area shall not exceed three feet in height. Side and rear yard walls shall be of decorative masonry construction on both sides of the wall or other permanent low maintenance materials. Front yard fences may be constructed of either wood, or any other durable materials with a wood like appearance, subject to approval by the Planning Department. View fencing may be of a decorative wrought iron, tubular steel/aluminum glass panels, or other durable material approved by the City.

6. All perimeter wall and fence materials throughout Esperanza will be of uniform manufacture with colors specified for the overall design theme.
7. The developer will provide site inspection of all construction and installation of open space areas in accordance with City of Ontario requirements.
8. Non-toxic vegetation shall be utilized adjacent to all public open space areas.

6.8 Signage

A Master Sign Program shall be submitted by the developer(s) of Esperanza and approved by the City of Ontario pursuant to Article 31 of the City's Development Code to address residential project entries, residential neighborhood identification signs, and way finding signs within Esperanza. No project signs shall be permitted in the public right-of-way. All other signs shall be subject to the approval of a sign permit pursuant to the City's Development Code.

6.8.1 Master Sign Program Contents

All sign programs shall address, at a minimum, the following:

1. Permitted signs.
2. Prohibited signs.
3. The hierarchy of signage.
4. Definition of types of signs.
5. Locations and dimensions for monument signs, neighborhood identification signs, and public facilities signs.
6. Locations and dimensions of directional signage.
7. Provisions for size, location, and duration of display of temporary signs.
8. Permitted sign types, styles, construction materials, colors, and lettering styles.
9. Requirements for a sign permit application.
   a. Procedures for obtaining approval of a sign permit.
   b. Procedures for amendments to the sign program.

6.9 Lighting

6.9.1 Street Lights along Public Streets

Streetlights along public streets, within the Esperanza Specific Plan shall be high-pressure sodium vapor. Design of fixtures shall be approved by the City as part of the City's Development Plan Review.

6.9.2 Alley Lighting Fixtures

Alley lighting fixtures shall be on sensors for automatic nighttime lighting. Style and specifications for alley lights shall be approved by the City as part of the City's Development Plan Review.

6.9.3 Lighting within Parks, Paseos, Tot Lots and Other Recreational Areas

Lighting within Parks, paseos, tot lots and other recreational areas shall be approved by the City as part of the City's Development Plan Review of these facilities.

6.10 Park Furniture

Park furniture, including but not limited to, benches, barbeques and picnic tables, shall be approved as part of the City's Development Plan Review of parks, paseos and other public gathering places.

6.11 Bus Shelters

Bus shelters shall be installed in a number of locations designated by OmniTrans and shall be compatible with the architectural character established at the project entries to Esperanza.

6.12 Mailboxes

Within RD-3 through RD-8 Residential Planning areas mailboxes shall be clustered and installed in locations approved by the City as part of the City Development Plan Review of each resident project within Esperanza.

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SECTION 7. IMPLEMENTATION

The City of Ontario will adopt the Esperanza Specific Plan by ordinance. Following approval by the City, the Esperanza Specific Plan will serve as the implementation tool for the ~~NMC~~ Ontario Ranch General Plan as well as the zoning for the Specific Plan area. Concurrently with the adoption of the Specific Plan, the City Planning Commission will also approve tentative tract maps establishing legal residential lots within the Esperanza Specific Plan area.

7.1 METHODS AND INTERPRETATION

Development within the Esperanza Specific Plan shall be implemented through the approval by the City of tentative and final tract maps and through development plans approved through the Development Plan Review process as established in the City of Ontario Development Code. The implementation process described below provides the mechanisms for review and approval of development projects within the Esperanza Specific Plan area.

7.2 APPLICABILITY

All development proposals within the Esperanza Specific Plan shall be subject to the implementation procedures established herein. Whenever the provisions and development standards contained herein conflict with those contained in the City of Ontario Development Code, the provisions of the Esperanza Specific Plan shall take precedence.

7.3 INTERPRETATION

Unless otherwise provided, any ambiguity concerning the content or application of the Esperanza Specific Plan shall be resolved by the City of Ontario Planning Director (Director) or his/her designee in a manner consistent with the goals, policies, purpose and intent established in this Specific Plan.

7.4 SEVERABILITY

If any portion of these regulations is declared to be invalid or ineffective in whole or in part, such decision shall not affect the validity of the remaining portions thereof. The legislative body hereby declares that they would have enacted these regulations and each portion thereof irrespective of the fact that any one or more portions be declared invalid or ineffective.

7.5 IMPLEMENTATION OF DESIGN GUIDELINES

Adoption of the Esperanza Specific Plan by the City includes adoption of the design guidelines contained herein, which shall be the design criteria by which development projects within the Specific Plan area will be reviewed during Development Plan Review. The design guidelines are intended to be flexible in nature while establishing basic evaluation criteria for the review by the City of developer projects during Development Plan Review.
Any major deviation from the design guidelines within the Esperanza Specific Plan shall require approval by the Planning Commission. The determination of a major deviation from the design guidelines shall be made by the Director.

7.6 DEVELOPMENT REVIEW PROCESS

7.6.1 Subdivision Maps

Approval of tentative tract maps may occur concurrently with the adoption of the Esperanza Specific Plan. All tentative and final tract maps will be reviewed and approved pursuant to applicable provisions of the City of Ontario Subdivision Ordinance and consistent with the applicable provisions of Land Use, Infrastructure, Design Guidelines, and Development Regulations contained within the Esperanza Specific Plan.

7.6.2 Development Plan

All development projects within Esperanza shall be subject to the Development Plan Review Process as established in Article 8 of the City's Development Code. Pursuant to these provisions, the Development Plan process constitutes a design review of project architecture, site plans, and landscape plans. Adoption of the Specific Plan by the City includes adoption of the design guidelines contained within the Specific Plan and which provide direction for the design of development projects within Esperanza. Where the Esperanza Specific Plan development regulations and design guidelines are silent, the applicable development regulations and design guidelines contained within the City's Development Code shall apply. The design guidelines are intended to be flexible in nature while establishing basic evaluation criteria for the review by the City of developer projects during design review.

All development project applications shall include a landscape and irrigation plan describing plant materials and their growth habits, plant size and spacing, methods of irrigation and landscaping maintenance, site plans, architectural elevations, floor plans, grading plans and other requirements as specified by the City.

7.6.3 Additional Entitlement Requirements

All entitlement applications shall prepare and submit a Conceptual Utilities Systems Map, Integrated Waste Management Report, and Solid Waste Handling Plan in accordance with requirements of the Development Application.

7.7 Dwelling Unit Allocations

The Esperanza Land Use Plan allocates a maximum number of dwelling units to each residential Planning Area. Variations in number of dwelling units, per Planning Area, may occur at the time of final design of the Planning Area subject to approval by the City and agreement by affected property owners/developers, depending upon the residential product identified for development. Variations in allocation of units within the Planning Areas of the Esperanza Specific Plan are permitted provided the increased number of dwelling units in a Planning Area does not exceed 15% and the maximum dwelling unit count for the entire Specific Plan area does not exceed that established for Esperanza.

1. Water and Sewer Technical Studies shall be prepared to study how the transfers change the quantity and locations of sewer and water demands and how those changes impact the Water and Sewer Master Plan Systems and local sewer and water systems.
2. If unit transfers result in net changes to the overall projected water demands, then the initializing project shall be responsible for processing an Amendment to the Water Master Plan as part of the entitlement process of Implementation.
3. If unit transfers result in net changes to the overall projected sewer demands or the sewer demands are transferred between different Master Plan Trunk Sewer Tributary Areas and Specific Plan Sewer Tributary Areas, then the initializing project shall be responsible for processing an Amendment to the Sewer Master Plan as part of the entitlement process of Implementation.

7.8 Specific Plan Modifications and Amendments

7.8.1 Minor Modifications

The following constitute minor modifications to the Specific Plan, not requiring a Specific Plan Amendment, and are subject to review and approval by the Zoning Administrator. The Zoning Administrator shall have the discretion to refer any such request for modification to the Planning Commission or the City Council.

1. Change in utility and/or public service provider.
2. Collector roadway alignment when the change results in a centerline shift of less than 250 feet.
3. An increase of more than fifteen percent (15%) in the number of units within an individual Planning Area are subject to approval of the City and agreement of the property owners, provided the total number of units for the entire Specific Plan area does not exceed that established in the Specific Plan.
4. Adjustment of a Planning Area boundary or acreage designated for a Planning Area provided the total acreage of the affected Planning Area does not increase by more than 15%.
5. Minor changes to landscape materials, wall materials, wall alignment, entry design, and streetscape design which are consistent with the conceptual design set forth in the design guidelines contained within the Specific Plan.
6. Minor changes to the design guidelines, which are intended to be conceptual in nature only, and are intended to be flexible in implementation.
7. Other modifications of a similar nature to those listed above, which are deemed minor by the Zoning Administrator, which are in keeping with the purpose and intent of the approved Esperanza Specific Plan and which are in conformance with the ~~NMC~~ Ontario Ranch General Plan.

7.8.2 Reversion of Planning Area 11 to Residential Uses

The ~~NMC~~ Ontario Ranch General Plan establishes a total residential unit allocation of ~~1,456~~ 1,652 units for the Esperanza Specific Plan. The Land Use Plan for Esperanza designates a total of ~~1,410~~ 1,491 residential dwelling units within Planning Areas 1-10 and reserves Planning Area 11, a 10.02 acre site, ~~for~~ was not purchased ~~and use~~ by the Mountain View School District (School District). ~~of an elementary school. In the event the School District does not purchase Planning Area 11 for development of an elementary school,~~ Planning Area 11 ~~may revert~~ will be converted to a Residential – Medium Density zoning district permitting development of a maximum of ~~46~~ 161 residential dwelling units subject to approval by the City of a Specific Plan Amendment. On ~~XX XX, 2020~~ 10-20-2020 a request for an increase in density for Planning Area 4, from 6.26 gross DU/AC to 14.0 gross DU/AC and an accompanying general plan amendment to increase the density from low density residential (2.1-5 DU/AC) to medium density residential (11.1-25 DU/AC) was approved, which increased the total residential allocation of ~~1,640~~ 1,652 units (~~1,594~~ 1,491 units if the school remains a school). The Environmental Impact Report prepared for the Esperanza Specific Plan has evaluated the impacts of development of Planning Area 11 alternatively for ~~46~~ 161 residential dwelling units in conjunction with the analysis of all other project related impacts. Development of Planning Area 11 for residential land uses shall be subject to all other review and administrative and discretionary approvals requirements required for residential land uses as established within the Esperanza Specific Plan.

7.8.3 Specific Plan Amendments

Amendments to the Esperanza Specific Plan may be requested by the applicant or by the City at any time pursuant to Section 65453(a) of the Government Code. Amendments shall be processed pursuant to the provisions of the Government Code for Specific Plan Amendments. In the event the proposed amendment requires supplemental environmental analysis pursuant to the California Environmental Quality Act (CEQA), the applicant(s) are responsible for preparing the necessary CEQA documentation.

7.9 VARIANCES

Variances and Administrative Exceptions to the development regulations contained in the Esperanza Specific Plan with respect to landscaping, screening, site area, site dimensions, yards and projects into yards, heights of structures, distances between buildings, open space and off-street parking and loading can be considered pursuant to Article 10, "Variances and Administrative Exceptions" of the City of Ontario Development Code.

7.10 CONDITIONAL USE PERMITS

Uses specified as conditionally permitted uses within Section 6, "Development Regulations, of the Esperanza Specific Plan shall be reviewed and approved by the City pursuant to the requirements of Article 9, "Conditional Use Permits."

7.11 COMPLIANCE WITH MITIGATION MONITORING PLAN

Certification of an Environmental Impact Report (EIR) shall be required prior to approval of the Esperanza Specific Plan. Development within the Esperanza Specific Plan area shall comply with all approved mitigation measures as described in the Mitigation Monitoring Program included as part of the Esperanza EIR.

7.12 PROJECT PHASING

Phasing of the Esperanza Specific Plan will meet the following objectives:

- Orderly build-out of the community based upon market and economic conditions.
- Provision of adequate infrastructure and public facilities as determined and deemed necessary by the City Engineer concurrent with development of each phase.
- Protection of public health, safety and welfare.
- Accommodation of continued agricultural operations within the proposed Specific Plan area.

7.12.1 Residential Development

The phasing of residential development areas will be determined by the developer. The development of residential uses will be implemented through the approval of tentative and final tract maps and development permits for each Planning Area as developed. Appropriate levels of infrastructure and community facilities shall be subject to the review and approval of the City Engineer and shall be installed and available to serve each subsequent phase of residential development as it occurs.

7.12.2 Infrastructure

Backbone infrastructure to serve all areas of Esperanza shall be installed by the developer in accordance with the City's adopted Master Plan or any approved amendments to it. Infill service mains will be installed and constructed in phases as development proceeds and conditioned by the City Engineer's office to support individual phases of development, which may require installation of offsite infrastructure improvements beyond a given phase boundary.

Grading and installation of infrastructure to serve Esperanza are anticipated to be completed in three phases. Following completion of grading and infrastructure installation, the developer will construct models for each product type within each neighborhood. Phase I will include installation of infrastructure adequate to serve Planning Areas 5-9 located south of Eucalyptus Avenue between Hamner Avenue and Mill Creek Avenue. Phase II will include installation of infrastructure adequate to serve Planning Areas 4A and 10. Phase III will include installation of infrastructure adequate to serve Planning Areas 1-4B and the Neighborhood Park. As the Specific Plan is Phased, the following minimum criteria shall be met for each Subdivision and Development of each Phase:

1. For Domestic Water, all the Master Plan, Regional and Local Infrastructure identified in Section 5 and the Conceptual Domestic Water Plan for the Water Pressure Zone that the Phase is within shall be completed as part of the Phase's infrastructure requirements. Also, any domestic water infrastructure necessary to provide primary looping, secondary looping, and meet all hydraulic criteria and fire fl ow shall be completed as part of the Phase's infrastructure requirements.
2. For Recycled Water, all the Master Plan, Regional and Local Infrastructure identified in Section 5 and the Conceptual Recycled Water Plan for the Recycled Water Pressure Zone that the Phase is within shall be completed as part of the Phase's infrastructure requirements. Also, any recycled water infrastructure necessary to provide primary looping, secondary looping, and meet all hydraulic criteria shall be completed as part of the Phase's infrastructure requirements.
3. For Sewer, all the Master Plan, Regional and Local Infrastructure identified in Section 5 and the Conceptual Sewer Plan for the Master Plan Sewer Tributary Area that the Phase is within and upstream of shall be completed as part of the Phase's infrastructure requirements. Also, any sewer infrastructure necessary to meet all hydraulic criteria shall be completed as part of the Phase's infrastructure requirements.

7.12.4 Parks

Following issuance of Certificates of Occupancy for no more than 50% of the total dwelling units within Esperanza, Park 1, the Neighborhood Park, will be developed. The timing for installation of infrastructure and utilities and the provision of public services will be determined as part of the City's approval of tentative maps or development plans. Facilities will be constructed and services made available in a timely manner as development progresses. Pocket Park 2 will be developed at the time of issuance of 50% of Certificates of Occupancy for Planning Area 5. Pocket Park 3 will be developed at the time of build-out of Planning Areas 6 and 7 combined. Pocket Park 4 will be developed at the time of issuance of 50% of Certificates of Occupancy for Planning Areas 8 and 9. Pocket Park 5 will be developed at the time of issuance of 50% of Certificates of Occupancy for Planning Area 10.

7.12.4 Community Facilities and Services

The timing for installation of community facilities and payment of impact fees for public improvements and services for the Esperanza Specific Plan will be determined as part of the City's approval of tentative tract maps in accordance with the provisions of the existing City development impact fee ordinances. Community facilities such as bike trails will be developed in conjunction with construction of the public street improvements.

7.13 APPEALS

Appeals from any determination of the City Planning Director, Zoning Administrator or the Planning Commission, may be made by the applicant or any other aggrieved party filing an application on forms provided by the City of Ontario and accompanied by the appropriate filing fee, where applicable, within ten (10) days following the final date of action for which an appeal is made. Appeals shall be processed consistent with the provisions of Article 5, "Appeals" of the City of Ontario Development Code.

7.14 PROJECT FINANCING

The financing of construction, operation, and maintenance of public improvements and facilities (the "facilities"), and public services will include funding through a combination of financing mechanisms. Final determination as to the facilities to be constructed and as to maintenance responsibilities, whether publicly or privately maintained, will be made prior to recordation of final maps. In order for the project to be fiscally self sufficient, the following financing options can be considered for implementation:

7.14.1 Facilities and Services

- Private capital investment for the construction of facilities.
- Community Facilities District (CFD) established pursuant to the Mello-Roos Community Facilities District Act of 1982, or other special district, to provide funding for the construction of a variety of public facilities and the provision of public services.

7.14.2 Operation and Maintenance

- By individual private property owner.
- By private property owners or Home Owners Association (HOA).
- By Community Facilities District (CFD) established pursuant to the Mello-Roos Community Facilities District Act of 1982, or other special district.

City Council approval is a prerequisite for the implementation and establishment of any and all special district-financing mechanisms. The use of the Mello-Roos Community Facilities District Act of 1982 (the "Act") to finance public facilities and services will be at the City's sole discretion. Moreover, the use of the Act must be consistent with the City's adopted goals and policies concerning the use of the Act.

7.15 MAINTENANCE RESPONSIBILITIES

The public and private improvements constructed within Esperanza will be maintained through a combination of public and private entities as described below and in Table 5.

7.15.1 Public Maintenance

1. All streets and sidewalks serving residential product areas RD–1 through RD–6 single family detached or attached residential will be dedicated as public streets to the City of Ontario and will be maintained by the City.
2. Landscape improvements within the public right-of-way of Master Plan streets, neighborhood edges, community and neighborhood entries, and public street lights within Esperanza shall be maintained through a landscape and lighting district or other special maintenance district established by the City for the ~~New Model Colony~~ Ontario Ranch.
3. All on site water, sewer, and storm drain facilities that meet public improvement design criteria within the public streets or easements dedicated to the City shall be constructed by the developer and, upon acceptance, shall be maintained by the City.
4. Offsite infrastructure improvements such as water, sewer and storm drain facilities will be maintained by the City. The City intends to participate in a Regional Water Quality Basin. In the event permanent on site basins are developed within Esperanza as an alternative to a regional water quality basin, such facilities shall be maintained by the HOA.
5. NPDES facilities within public streets and/or easements. Operation and Maintenance (O&M) requirements for all NPDES storm water runoff source control and treatment control Best Management Practices (BMP's) shall be identified in the approved Water Quality Management Plan for the project. An O&M Plan shall be created to ensure ongoing long-term maintenance of all structural and non-structure BMP's.

7.15.2 Homeowner Association

A Homeowner Association will be established for the maintenance of common area landscape improvements within residential areas of Esperanza. Improvements to be maintained by the Homeowner Association include: Designated private alleys and adjacent landscaping.

- Designated private streets and landscaping. During the course of maintenance of public utilities within public streets, private streets, private drive aisles, or alleys, the City will restore the streets to City standards for trench backfill, pavement repair, and hardscape or landscape, as applicable. Restoration of any enhancements above and beyond City standards, including but not limited to architectural paving, hardscape and landscape enhancements shall be the responsibility of the HOA or other entity maintaining those enhancements.
- Courts, parkways and landscaping within the residential areas.
- Parkways of Interior Local Streets including sidewalks, landscaping and street lights as well as common areas distinct to individual residential types and neighborhoods.
- Maintenance of interior local streets including landscaping and associated architectural monument elements required to restore these areas to their condition as originally installed.
- Internal slopes fronting streets and slope areas in the rear of homes.
- All internal open spaces, parks, and common areas.
- NPDES facilities within private streets and/or common areas.

	City CFD	Private Homeowners Association (HOA)	Private Homeowner	Utility Entity
Master Plan Roadways (Bellegrave Avenue, ~~Milliken~~ Hamner Avenue, Mill Creek Avenue, ~~Merrill~~ Eucalyptus Avenue)	●			
Interior Public Project Streets (curb to curb for primary entry streets, secondary entry streets, and neighborhood streets)	●			
Parkways of Master Plan Roadways and Neighborhood Edges (curb to perimeter walls, including landscape, sidewalks and street lights)	●			
Parkways of Interior Project Streets (landscaping and sidewalks)		●		
Traffic Signals and Street Lights	●			
Traffic Control Signs	●			
Alleys and Drive Aisles		●		
Interior Streets within Single Family Attached (Multi-Family) Developments		●		
Off -site and In-Tract Water, Sewer, and Storm Drain Improvements (only those facilities in public roads and those in private streets within public utilities easements that meet public improvement design criteria)				●
On-site water, sewer, and storm drain improvements (improvements that are: private, laterals, and lines behind meters and /or DCDAs, improvements serving only one lot/parcel, not within public or private roads, not within public utility easements, or not meeting public improvement design criteria)		●		
Neighborhood Park		●		
Pocket Parks		●		
Linear Parks		●		
Private Recreation Areas		●		
Front Yard and Corner Streetside Landscaping for Single Family Detached Areas RD-1 through RD-4			●	
Front Yard and Corner Streetside Landscaped Areas RD-5 through RD-8		●		
Community Theme Wall on Master Planned Roadways (outside face for graffiti removal and paint)	●			
Community Theme Wall on Master Planned Roadways: Surface (interior) opposite streetside (structural integrity and face repair)		●		
Private Interior Yard Walls		●	●	
Alley Landscaping and Lighting		●		
Police and Fire	●			
Electricity and Natural Gas				●
Communication Systems	●			●
NPDES Facilities (onsite) W.Q.M.P. (1)	●			
NPDES Facilities/Interim Detention Basin on Private Property		●		

NOTES:

(1) Only those facilities in public roads and/or easements, including restoration work following public street repair.

TABLE 5
Maintenance Responsibilities

SECTION 8. DESIGN GUIDELINES

8.1 INTRODUCTION

On a sunny morning in the fall of 1882, George Chaffey stands on a mesa between the floodwater washes of Cucamonga Canyon to the east and San Antonio Canyon on the west, gazing at the country directly in front of him lying at the foot of snow-capped Old Baldy, beneath the Sierra Madre Mountain Range. Having little capital, George would rely on his powers of leadership and vision and, at that moment, would throw his heart and soul into the new colonizing movement sweeping Southern California. With help of his brother William and surveyor J. C. Dunlap, he would purchase 6,218 acres and design what would become the "City of Ontario," named after his former home in Ontario, Canada. His vision of a model colony featured the first reclamation irrigation system, abundant electricity power and a beautiful parkway that captured the imagination and interest of people throughout the world. His vision was one of hope for a great community. "Esperanza," which means "hope" in Spanish and accurately describes the original vision intended for the "new" Ontario.

Ontario is a thriving city today, although the orchards and packing houses have since given way to new landmarks such as Ontario Mills, Ontario Convention Center and Ontario International Airport. Hundreds of new businesses have discovered that Ontario is "The Gateway" to Southern California, conveniently located 35 miles east of Los Angeles, and easily accessible to I-10, I-15 and I-60 freeways.

Ontario spans nearly 28,000 square miles, with a population of over 168,000, and is one of Southern California's fastest growing cities. Ontario's sun-belt mild weather and 312 days of sunshine, allows you to enjoy the many parks as well as the nearby mountains, beaches, and deserts. The world-class Empire Lakes Golf Course, designed by Arnold Palmer, will challenge the avid golfer. The wine aficionados will love sampling California's finest at Galleano Winery, Joseph Filippi Winery, and Vineyards.

8.2 DESIGN GUIDELINES FOR ARCHITECTURAL CHARACTER

Architectural design should provide for high quality neighborhoods.

- Residential project design should consider the total context of the site with the incorporation of appropriate scale and proportions of building massing and details.
- The use of transitional spaces between common and private areas such as entry courtyards, private patios, low walls, and porches is encouraged.
- The variation of both front and rear building setbacks should be implemented to create visual variety.
- The variation of garage placement on adjacent lots is encouraged to provide a more diverse street scene.
- Residential structures should be varied in massing and articulation to provide visual interest.

Neighborhoods should be sustained over time.

- Architectural design themes should reflect historic Southern California styles.
- The use of natural indigenous building materials and colors is encouraged.
- Structures should incorporate genuine architectural details and decorative features.
- Architectural design should relate to human scale.
- The location of doors and windows should consider indoor/outdoor relationships to create intimate and secure spaces.
- Architectural designs should create a cohesive community without dominating the overall street scene.

Building design should be sensitive to climatic conditions and context.

- Building elevations should consider sun orientation by including shaded and sheltered areas.
- Variation of architectural designs should include methods of protection from inclement weather.
- Residential structures should be compatible with, and responsive to, the environmental setting.
- Building designs should incorporate spaces that encourage outdoor use to take advantage of temperate climatic conditions.

Architectural design should incorporate materials and techniques that are cost effective.

- The use of building materials should reflect the implementation of efficient construction methods.
- Building elevations should include compatible window and doors sizes that create a consistent design theme.
- Construction techniques should incorporate the use of standard components and dimensions.

Varied floor plans and elevations in single-family detached residential architectural packages should be incorporated as follows:

Reverse elevations and floor plans are considered as a separate elevation and floor plan. Reverse floor plans and elevations are considered as a separate floor plan and/or elevation for purposes of implementing the table below.

Diversity is a fundamental guiding principle at Esperanza. This ensures that neighborhoods are varied and that blanket uniformity is avoided.

Builders are required to produce a minimum of two styles for a 3-plan design program, and three styles for a 4-plan or more design program.

Number of Dwelling Units	Number of Differing Floor Plans and Elevations
5-10	As required by Planning Commission
11-25	2
26-50	3
51-75	3
76-100	4
Over 100	4; +1 additional floor plan with 4 elevations for each additional 50 units exceeding 100

8.3 Architectural Context

The original model colony of Ontario has a rich agricultural legacy of farming including citrus orchards, grape vineyards and alfalfa fields. Typical of Southern California farming communities, Ontario has a variety of traditional architectural styles. Western European and East Coast architectural details and forms were incorporated into the farm houses and local styles evolved from Country French and Tuscan styles and new interpretations of Monterey, Traditional, Craftsman and Ranch styles were erected. Architectural styles, elements and massing were reinvented utilizing available indigenous building materials. Plan designs and elements such as window sizes and proportions were modified to address local climatic conditions which were warmer and drier. Materials were plaster, stucco and siding with brick, stone or other masonry accent materials. The sunny Southern California climate allowed year round use of outdoor spaces and inspired covered porches and balconies.

Southern California was also influenced by Spanish architectural styles brought to the region by Spanish settlers and missionaries. These homes were well suited for the temperate climate of Southern California. The architectural theme for Esperanza is based upon these historical styles found in Ontario and the architectural styles have been selected in order to be reflective of older neighborhoods of historic Ontario.

Each architectural style outlined in these guidelines should be detailed with elements that represent the authentic character of that particular style.

Together the styles should be designed to create a neighborhood character that will be sustainable over time. Each home should contribute to the architectural character of the neighborhood. Design elements such as porches, recessed windows, architectural details and accents, alternate garage configurations / orientations, covered balconies, and articulated elevations are encouraged to enhance individual homes and to promote the overall neighborhood character.

8.3.1 Residential Design Objectives

- Interpret architectural styles that are authentic and reflect the historical character of the region.
- Emphasize styles of architecture that are compatible, yet vary enough to create interest and diversity.
- Create visually interesting neighborhood streets by varying elevation and floor plan plotting.
- Utilize authentic materials and colors that reinforce the overall design theme.
- Emphasize front elevations that relate strongly to the street and contribute to the livability of that realm.
- Provide alternative garage configurations.

The Esperanza Design Guidelines are to be used as a tool to ensure the character and design quality anticipated for the Community. The Guidelines express objectives and approaches rather than formulas and standards, allowing certain architectural creativity and flexibility. The images and sketches illustrated in the Guidelines are intended to be conceptual in nature and are to be used as general visual aids in understanding the basic architectural design intent of Esperanza. They are not meant to depict specific floor plans or architectural elevations.

These Guidelines are organized into the following sections:

- Architectural Styles
- Massing Principles
- Materials & Detailing
- Home Types
- Landscape Design

8.3.2 Architectural Styles

The architectural character within each neighborhood shall consist of complementary traditional architectural styles. The materials and colors of these home styles shall complement the overall neighborhood design.

Architectural styles within each neighborhood and product area within each neighborhood should be compatible with one another and blend with the character of each neighborhood.

Within cluster court style residential products, a consistent architectural style shall be used throughout the individual cluster.

Acceptable architectural styles within Esperanza include:

- Country French
- Tuscany
- Monterey
- Spanish Colonial
- Craftsman
- Traditional
- Western Ranch

The styles selected share similar design attributes and have been selected in response to the following considerations:

- They have a historic relevance to the region.
- They are compatible and complementary.
- They can be interpreted in a variety of ways.
- They are generally accepted by the market.
- They can be constructed using current building materials and methods.

Note: Additional styles proposed by the homebuilder must be submitted to, and approved by, the City of Ontario. Builders may submit home designs using alternative architectural styles that meet the design objectives of the specific plan, provided they are appropriate to the region and compatible with the character of Esperanza.

8.3.2.1 Country French

History and Character:

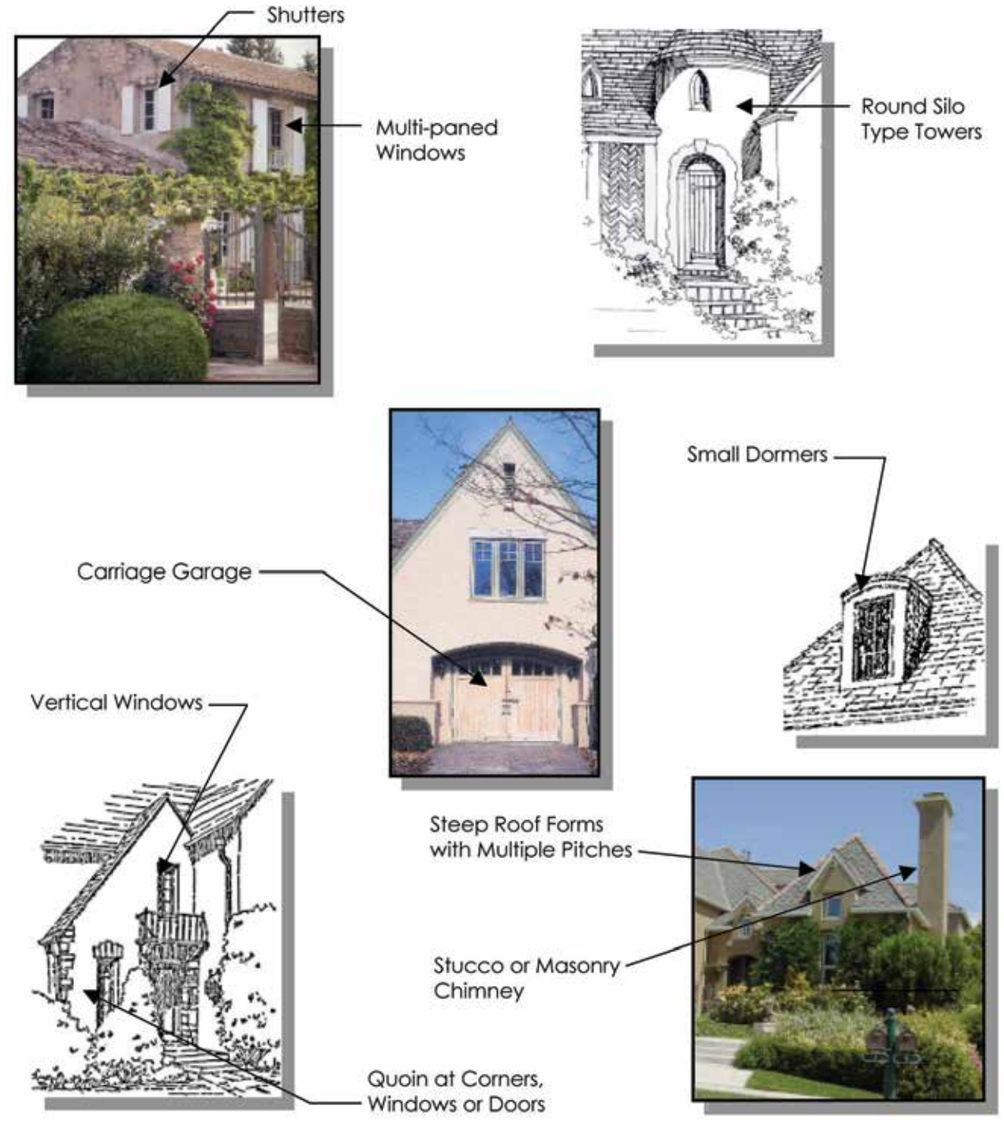
French Country architectural style is based upon early American interpretations of French Medieval architecture that made their way across the United States from the Mississippi regions around the turn of the century. Usually taking the form of larger manor homes and estates, this architectural style was adapted to fit smaller rural homes. The French Country style conveys a romantic and picturesque architecture. American interpretations include houses with simple forms with steeply-pitched roofs.

Massing:

- Simple massing with asymmetrical forms and gable roofs.

General Materials:

- Stucco finished walls.
- Deep recessed accents.
- Vertical windows.
- Simple detailing.
- Stucco or masonry chimneys.
- Decorative chimney caps.
- Carriage garage doors or roll-up doors with a variety of panel patterns to reflect architectural style.



Country French

Roof Materials and Forms:

- Small dormers.
- Steep roof forms with multiple pitches.
- Gable roof forms, accented with flared roof treatments.
- Large, simple roof planes. • Gable end venting in various styles.
- Rooflines may extend below window.
- Extended roof overhangs.
- Flat concrete tile to simulate slate materials.
- Round silo type towers.

Detail Elements:

- Decorative shutters.
- Wood balcony railings.
- Deep recessed windows.
- Multi-paned windows.
- Quoin at corners, windows or doors.

8.3.2.2 Tuscany

History and Character:

Tuscan-inspired homes began appearing at the turn of the 20th Century in Southern California as an interpretation of the picturesque movement in art where the architecture was less formalized and more responsive to the natural environs. Arranged building forms of predominantly stucco and stone with tile roofs reflecting the architectural styles of Northern Italy took root in informal plan arrangements and massing.

Massing:

- Simple massing with assembled forms and varied roof forms.

General Materials:

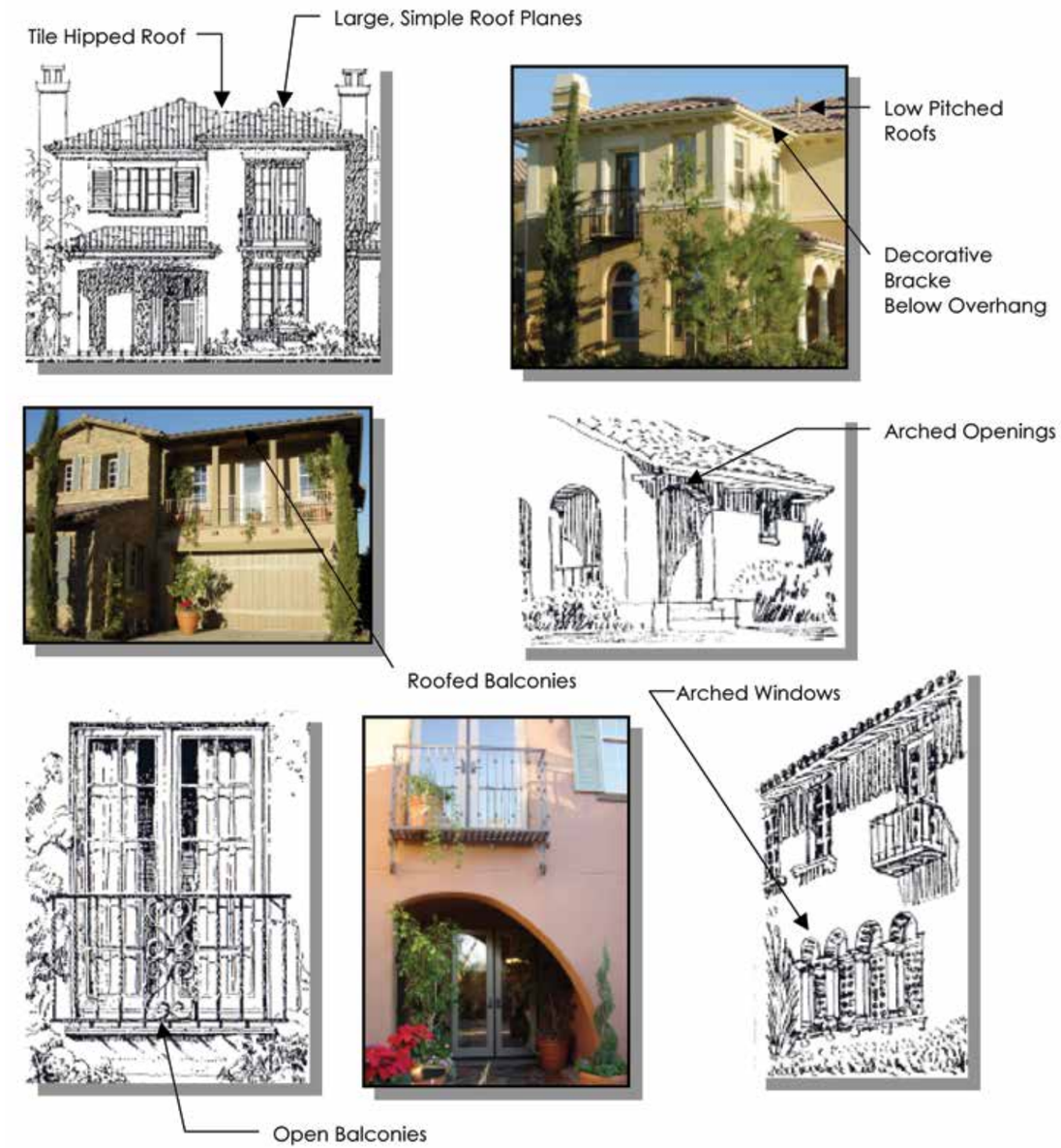
- Stucco finished walls and columns.
- Large, simple roof planes.
- Extended roof overhangs.
- Wood posts or masonry columns.
- Simple stucco chimneys.
- Decorative columns accents.
- Simple wrought iron, metal railings and details.
- Shutters as occasional accent.
- Deep recessed openings.
- Covered patios /porches.

Roof Materials and Forms:

- Tile hipped roofs.
- Low-pitched roofs.
- Stucco eave details or wood corbeled rafter tails.
- Gable end roof vents with decorative stucco accents.
- Gables and appropriate hip roofs.
- Shallow sloped, concrete 'S' tile roofs.

Detail Elements:

- Barrel/S-Tile roof.
- Varied stucco finish.
- Shallow pitch roof.
- Exposed rafter tails.
- Arched openings.
- Recessed windows.
- Wrought iron accents below windows.
- Vertical proportioned or arched windows.
- Balconies opened or roofed.
- Decorative brackets below roof overhangs.



Tuscany

8.3.2.3 Monterey

History and Character:

The Monterey style is a combination of Spanish construction methods and the basic two-story Eastern Colonial house. The wooden second story enabled single story Spanish Adobe homes to be developed as two story homes. Cantilevered balcony elements defined the front of the house which originally used adobe wall construction. Exposed rafters, gable or hipped roof, simple wood posts and side chimneys that anchor one end of the house, accompany the balcony as Monterey design elements.

Massing:

- Simple, straightforward rectangular or "L" shaped building forms.
- Cantilevered balcony and covered colonnades.

General Materials:

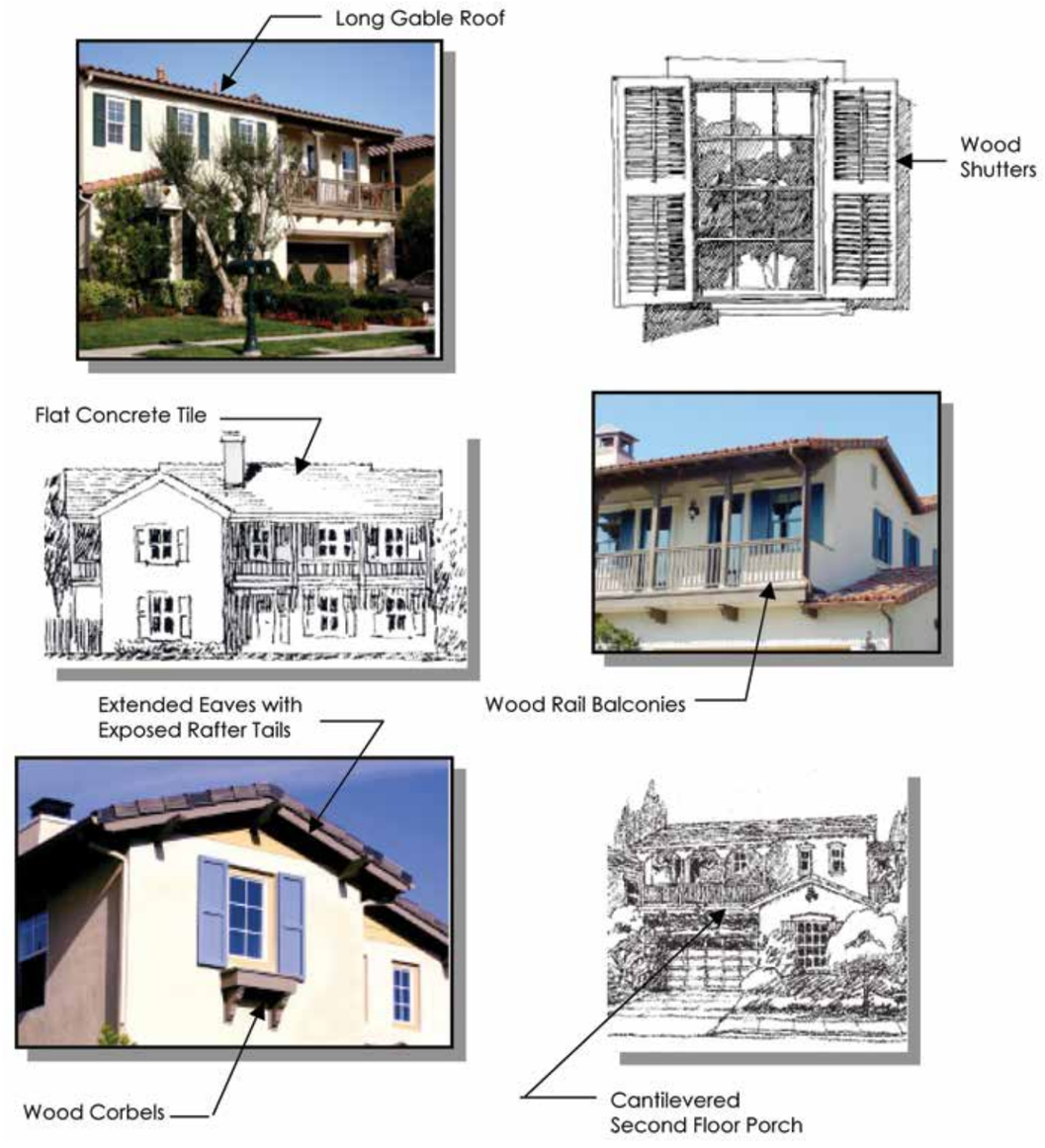
- Stucco on first level.
- Siding on second floor.
- Use of brick or stone on first level.
- Shutter accents.
- Wood or stucco trim.
- Brick and siding used to accent stucco forms.

Roof Materials and Forms:

- Flat concrete tile.
- Simple forms with low pitch.
- Gable forms are predominant. (Long gable roof)
- Tight rake ends.
- Extended eaves with exposed rafter tails.

Detail Elements:

- Wood balcony railing.
- Recessed windows, single hung.
- Wood corbels.
- Accent shutters.
- Cantilevered second floor porch.



Monterey

8.3.2.4 Spanish Colonial

History and Character:

Spanish Colonial homes are an adaptation of the Mission Revival style, reflecting features such as strong form and mass, plain wall surfaces, and tile roofs. The Spanish Colonial style is often characterized by a semi-formal plan arrangement such as a courtyard design.

Massing:

- Simple massing and forms and varied roof forms.

General Materials:

- Stucco finished walls.
- Wood / stucco columns.
- Decorative stucco chimneys.
- Round arches.
- Decorative columns and trim.
- Ornate wrought iron railing and accents.
- Wood shutter accents.
- Thick walls.
- Deep recessed openings.
- Stucco or tile details at gable ends.

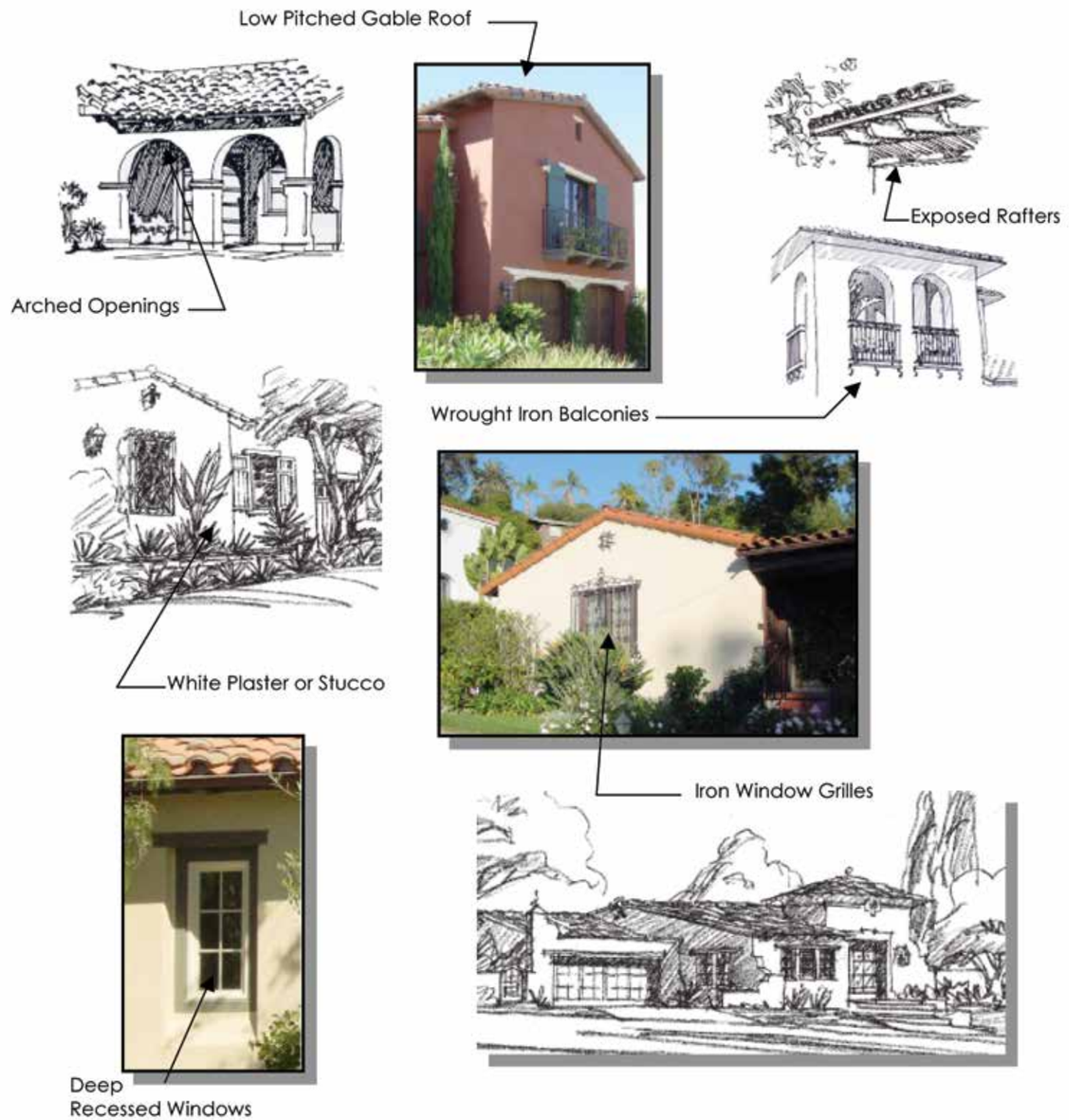
Roof Materials and Forms:

- Low-pitched roofs, with minimal overhang.
- Tight rake ends.
- Extended eaves with exposed rafter tails.
- Gables and hip roofs typical.
- Shallow sloped, concrete 'S' tile roofs.

Detail Elements:

- S-Tile roof.
- Arched window/door openings.
- Recessed window.
- Ornamental wrought iron details.
- Vertical proportioned windows.
- Wrought iron window. Grilles on windows.

Section 8. DESIGN GUIDELINES



Spanish Colonial

8.3.2.5 Craftsman

History and Character:

The Craftsman style home evolved from the late 19th century American Arts and Crafts movement. These moderately detailed buildings are characterized by the use of handcrafted architectural elements and details. Broad open porches, low sloping roofs, deep overhangs, multiple gables, trellis features, oversized first floor windows, expressive trim, rafters, brackets, and wood columns with masonry bases characterize the Craftsman style.

Massing:

- Horizontal proportions simple massing often asymmetrical at the second level.

General Materials:

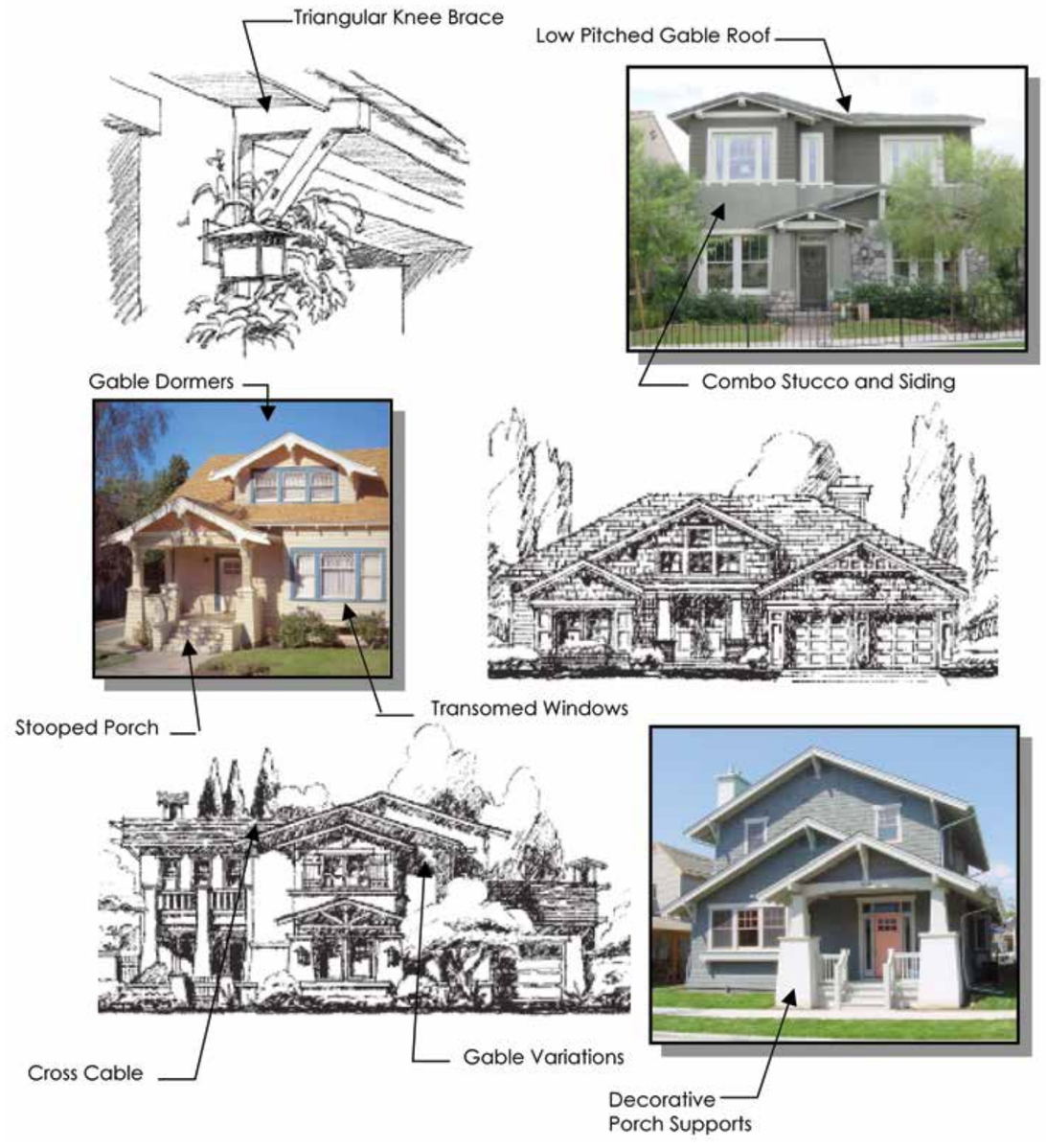
- Simple roof lines with wide projecting gables.
- Covered entry and roofed porches.
- Deep, broad porch elements.
- Expressive structural elements such as rafters, posts, and columns.
- Use of wood, stone or brick at porch columns typical.
- A mixture of materials such as stucco, stone, brick and shingle siding.
- Asymmetrical window and door compositions.

Roof Materials and Forms:

- Predominantly low-pitched gabled roofs, occasional hipped or shed roofs.
- Shallow-pitched roofs with deep overhangs.
- Roof dormers.
- Flat concrete tile or architectural grade asphalt shingle.
- Variation of the gable roof (i.e.: cross gable).

Detail Elements:

- Large gables
- Low pitch roofs with flat concrete tile.
- Windows with accent mullions.
- Exposed rafters and outlookers, triangular knee brace.
- Decorative gable vent detail.
- Decorative porch supports and railings.
- Transomed Windows.



Craftsman

8.3.2.6 Traditional

History and Character:

The Traditional style is based on classical design principles established the American Colonial period and interpreted or blended with the Prairie and Bungalow regional styles. Massing is horizontal in appearance with vertical proportioned windows and door surrounds. Front porches are common. The houses are composed of simple forms with centered entry elements over the front door.

Massing:

- Simple, symmetrical massing.
- Typical two story rectangular masses with added one-story elements such as porches forming more complex building configurations.

General Materials:

- Symmetrical and asymmetrical composition of doors and windows are common.
- Simple classical details such as columns.
- Siding or stucco with brick veneer accents.
- Front porches with wood columns and railings.
- Porches that extend length of the front elevation.
- Stone and brick veneer.

Roof Materials and Forms:

- Medium roof pitch with pitched roof dormer.
- Shallow roof pitch used over the porch.
- Flat concrete roof tile.
- Dormers reinforce symmetrical elevations.
- Bay windows and shed roofed elements added to simple building forms.
- Cupolas, weather vanes and other decorative roof ornamentations.

Detail Elements:

- Symmetrical or centered entry feature.
- Shutters accented with color.
- Columns at entries and porches.
- Roof dormers.
- Stooped porches.

Traditional

8.3.2.7 Western Ranch

History and Character:

The Western Ranch style is reminiscent of the early ranchers and farmers of Southern California. The Ranch Style evolved regionally in response to available building materials and environmental considerations. The distinctive porch covered terrace elements are a natural response to the temperate Southern California climate. Ranch style homes utilized simplified architectural details inspired by Spanish Colonial, Colonial and Monterey architecture.

Massing:

- Simple horizontal massing and rectilinear forms.

General Materials:

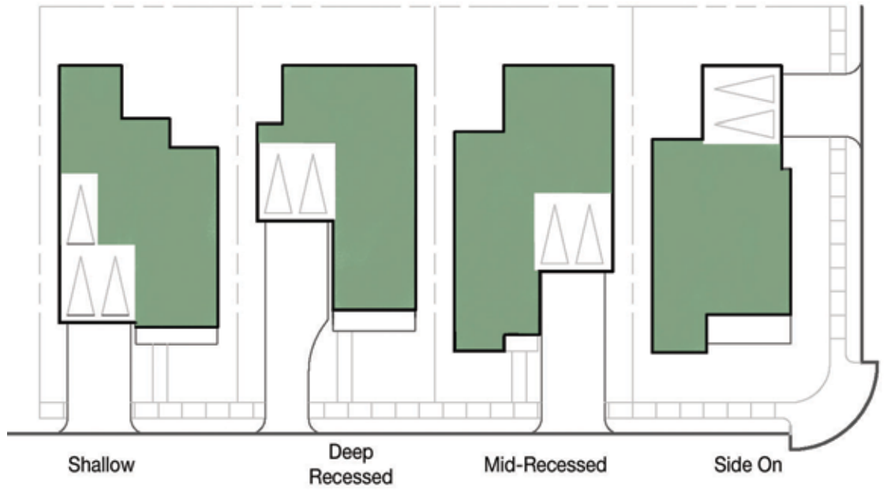
- Stucco, board and batten, and horizontal siding.
- Porches along front and rear elevations with a shallow roof break.
- Decorative shutters at windows.
- Wood window trim surrounds.
- Simple column and railing detailing.
- Substantial (8" x 8" min.) wood columns.

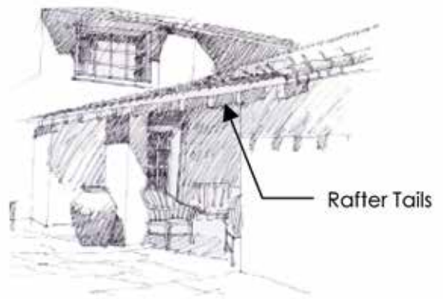
Roof Materials and Forms:

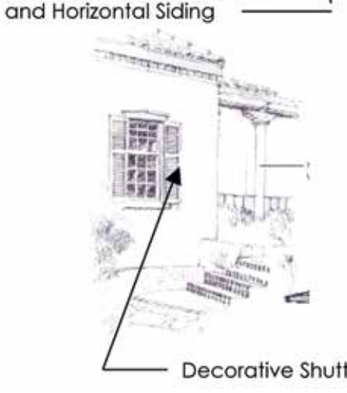
- Horizontal gable roofs with medium pitch and deep overhangs.
- Porches with shallow roof pitch.
- Gabled dormers.

Detail Elements:

- Corbeled wood columns.
- Heavy rafter elements.
- Simple accent shutters.
- Minimum 8" x 8" wood posts.







Western Ranch

8.4 Massing Principles

This section provides suggestions for creating neighborhoods and street scenes that have a variety of building forms that are proportionate to a human-scale and inviting to the pedestrian.

General Elements:

The general elements of building massing include:

- Front Articulation.
- Rear Articulation.
- Garage Placement.
- Roof Form.
- Balconies and Projections.
- Building Offsets/Variable Setbacks.

Objectives:

- Incorporate single-story elements.
- Avoid large flat two-story walls.
- Minimize two-story dominance on street scene, sidewalks and open spaces.
- Vary building setbacks along the street.
- Minimize visual impact of garages.

8.4.1 Front Articulation

Intent:

The front elevation of the home is an important element in creating a quality community at Esperanza. Close attention will be placed on the elevations and how they address the streetscene. Emphasis on location and entry designs, living areas and garages will provide a special street appeal. Emphasis on a variety of building massing will create a diverse street scene.

Guidelines:

- Building massing should reflect the architectural style.
- Massing elements should project enough to avoid elevations that appear to be "tacked on."
- Building details such as doors and windows should be in proportion to the overall massing.
- Building form is encouraged to reflect the interior uses of the home.
- Front elevations for two-story homes should incorporate a single-story element.
- Recessed two-story elements should create human-scale buildings.
- All homes should have at least two plane variations (excluding the garage) in front elevation massing.

8.4.2 Rear Articulation

Intent:

Special attention shall be given to the design of those dwellings adjacent to, or in close proximity of, major community roadways, common areas, open spaces, or entry features. Whether viewed from distant or close range, massing requirements will be implemented to ensure positive community character in these conditions. Generally, repetitious elements such as similar building profiles and continuous gable ends are to be avoided.

Guidelines:

- Architectural massing and articulation should be consistent with the style of the home.
- Plans shall incorporate projections and/or offsets that extend from the main wall lane.
- Vertical and horizontal plane breaks are encouraged.
- Homes directly adjacent to arterial roadways, collector roads, entry drives, common areas, and open spaces should be given particular attention in their rear articulation, contributing positively to these edges.

8.5 Garage Placement

Intent:

The configuration, location and orientation of the garage on the lot are integral design elements, both for the composition of the home and its contribution to the streetscene. Deemphasizing the garage is important in order to maintain the overall community design. Emphasizing the living areas of the home as they address the street will achieve this goal.

Placing living areas forward promotes social interaction and facilitates 'eyes on the street' for neighborhood security, while at the same time establishing neighborhood orientation to the pedestrian instead of the automobile.

Guidelines:

- Garage door patterns should vary among elevation types and reinforce the architectural theme of the home.
- Standard 3-car garage configurations are discouraged.

8.5.1 Garage Treatments

The home and the yard rather than the garage must be the primary emphasis of the elevation as seen from the street. Each plan shall incorporate one of the garage design techniques listed below and each parcel shall include at least two of these techniques to reduce the emphasis on the garage; and therefore, enhance the variable massing of the streetscene.

8.5.1.1 Shallow Recessed Garages

Setting the garage back a minimum of three feet in relationship to the front of the house/ or porch is intended to reduce the overall visual mass of the garage. The number of homes with shallow recess garage configurations shall be limited to 25% of the total number of units in each builder package.

8.5.1.2 Mid or Deep Recessed Garages

Setting the garage back to the middle or rear of the lot. This design treatment is intended to expose more living space areas toward the street, further reducing the visual impact of the garage along the street.

8.5.1.3 Alley Loaded

The use of the alleyways locates garages off a main loop road and creates a more traditional streetscene, with the fronts of the houses facing the street.

8.5.1.4 Split Garage

This treatment de-emphasizes the garage by reducing the length of the continuous door. Typically a one car garage and a one or two car garage are split to provide a variation in the appearance of the home. The single car garage elements in this split condition may option into living space that further enhances the streetscene by replacing the garage door with windows.

8.5.1.5 Tandem Garage

This garage layout de-emphasizes the third garage by concealing it behind a standard two-car garage condition. The tandem space is located so that it may option into living space. The two car garage is typically either shallow or deeply recessed into the lot and incorporated into the architecture of the home.

8.5.1.6 Setbacks

A varied setback is encouraged along the street frontage. Refrain from strict compliance to the minimum garage setback so as not to contribute to a repetitious and monotonous appearance along the street.

Where garages are adjacent to one another at common property lines, a two-foot minimum difference in setbacks shall occur.

8.6 Accessory Structures

Intent:

Accessory structures should be designed to reinforce the architectural style of the primary residence.

Guidelines:

- Detached structures, such as casitas, pool cabanas and guest quarters associated with the single-family lot shall be designed to match the style, detail, roof material/pitch and massing criteria of the primary home.
- Detached garages, storage buildings and outdoor sheds should incorporate design features, materials and colors compatible with the primary home.

8.7 Roof Form/Pitch

Intent:

- Roof form is another important design element as it relates to the character of the community, observed from both the external edges and inside the neighborhood.
- Variety of roof form along streets creates a positive visual edge.
- Appropriate massing of roof forms helps to create human scale architecture to the street.

Guidelines:

- Roof forms/pitch should reinforce the architectural style of the homes.
- Roofs shall be composed of a series of simple roof forms.
- Primary roof forms should be gable or hip designs.
- Roofs shall vary in massing along street scene and open spaces.
- Changes in the primary roof (ridge) orientation are encouraged.
- Flat roof elements should be minimized and incorporated only if appropriate to the architectural style.

8.8 Balconies And Projections

Intent:

As part of the overall design of a two-story dwelling, balconies and projections provide relief and interest at the second story. Balcony projections shall be consistent with the architectural character of the home. Additionally, these elements create ideal outdoor spaces.

8.9 Building Offsets/ Variable Setbacks

Intent:

Quality neighborhood design orients the 'living' areas of the home towards the street. To encourage this orientation, alternative setbacks are allowed for living areas as measured from the back of walk.

The development standards for each planning area/home type including building setbacks are established by the Esperanza Specific Plan. Additionally, building offsets or variable setbacks for both living and garages are encouraged to create variety in street scenes.

Guidelines:

- Setbacks shall be appropriate and proportionate to the housing type and lot size.
- Front setback should be varied along the street. A front offset of a minimum of two feet (2') is encouraged between the front walls of adjacent homes.
- Edge conditions such as homes backing to collector roads and back-to-back homes should incorporate variable rear setbacks to create variety.

8.10 Materials and Details

Architectural materials and detailing are central elements to creating quality communities. Appropriate focus should be given to the architectural details and the design of the details and architectural elements of the home.

General Elements:

The general elements comprising the materials and details of a building are:

- Wall Materials/Finishes.
- Doors and Windows.
- Roofing Materials and Slope.
- Fascias, Eaves and Rakes.
- Accent Materials.
- Exterior Colors.

8.10.1 Wall Materials/Finishes

Approved Materials:

- Board and batten siding.
- Cement plank siding.
- Stucco.
- Exposed masonry walls (brick, slump block, etc.)
- Stone, brick, brick veneers (accent materials).

Approved Finishes:

- Stucco finishes appropriate to the architectural style of the home.
- Smooth or sand finishes are encouraged. Heavy or Spanish Lace stucco finishes are prohibited.

Guidelines:

- Building materials should reflect the architectural style of the home.
- Siding materials should be wrapped beyond front elevations and should terminate at an inside corner or extend to the location of the lateral fence.
- Masonry elements and accents should reflect building forms and not appear as an applied veneer.
- Footings shall be exposed no higher than six inches (6") above finished grade.

8.10.2 Accent Materials

Accent materials promote individuality in each home and ensure diverse character within the neighborhood. Accents can be used to reinforce the architectural theme of the home.

Guidelines:

- Accent materials should complement the overall color and style of the home.
- Accent materials shall terminate at inside corners and be wrapped to coincide with an architectural element.
- Accent materials may terminate at location of the lateral fence or at logical end.
- Architectural trim applied to all elevations should be consistent with front elevation of the home.

8.10.3 Doors and Windows

The design and detail of the doors and windows on a home reinforce the architectural style and are key elements in the composition of the exterior elevation of the home.

Guidelines:

- Door designs shall be consistent with the architectural style of the home.
- Doors should be protected by porch elements or recessed entries.
- Garage and entry door design shall be appropriate to the style of the home.
- Maximum garage door height shall be eight feet (8').
- Garage doors should be recessed a minimum of twelve inches (12") from building plane.
- Alignment and proportions of windows shall be appropriate to the architectural style of the home.
- All windows (including garage door windows) are to be consistent with the architectural style of the home.
- Divided light windows are encouraged in keeping with the architectural style.
- Highly reflective glazing is not permitted.
- Window details such as shutters, trim surrounds, window boxes and window recesses are encouraged in keeping with the architectural style.

8.10.4 Roofing Materials and Details

Roofing materials as well as roof forms, pitch and design details are integral elements that reinforce the intended architectural style of the home.

Proposed roofs should be reflective of the architectural style of the home.

Attention should be given to address the context of the roof of each home relative to the adjacent homes along the street.

Approved Roofing Materials:

(Subject to compatibility with the intended architectural style)

- Concrete tile (flat or curved profile)
- Clay tile
- Slate
- High profile composition shingle (3-Dimensional)

Prohibited Roof Materials:

- Wood Shake
- Wood Shingle
- Low Profile Asphalt Composition
- Corrugated Metal

Guidelines:

- Roof materials and roof pitches need to be selected to reinforce the architectural style.
- Standing seam metal roofs painted in non-reflective neutral colors are allowed in appropriate architectural styles.
- Avoid repetition in continuous gable-ends and similar ridge heights.
- Skylights are not allowed on the sloped roofs of the front elevations of the building.

8.10.5 Roof Options

8.10.5.1 Eaves, Fascias and Rakes

Guidelines:

- Eave, fascia and rake proportions are to be appropriate to the architectural style.
- Larger eave overhangs provide opportunities for shading and should be used in appropriate architectural styles.
- Exposed rafter tails shall be a minimum of four inches (4") in thickness.
- Wood fascias and rafters shall be painted or stained to reinforce the style of the home.
- Attention shall be given to rake return detail.

8.10.5.2 Color

Intent:

Home colors are important to establishing a blended community at Esperanza, yet they should give the impression that each home was designed on its own.

Appropriate color selections make each home unique, but still look natural and in place in the neighborhood context.

Guidelines:

- Diversity of color is encouraged.
- Color shall contribute to distinguishing the overall architectural style of the home.
- Colors should reflect the natural hues found in Southern California.
- Color and hue variation in adjacent homes shall be provided to create neighborhood diversity.

8.10.6 Additional Design Elements

Intent:

Design elements that are utilitarian in nature should be designed as integral features that support the intended architectural style.

Guidelines:

- Exposed gutters and downspouts shall match roof or wall color.
- Faux copper patina is acceptable.
- Rooftop mechanical equipment is prohibited.
- Air conditioning/heating equipment shall be screened from the street and neighboring views and shall be ground mounted.
- Pool, spa, and water softening equipment shall be screened from neighboring views.
- Meters shall be screened from public view to the extent possible.

8.11 HOME TYPES

A variety of housing types, utilizing an architectural program composed of detached and attached housing, are offered at Esperanza. This diversity ensures a range of choices and a mix of homes within each neighborhood. Residences ranging from attached row townhomes and motorcourt townhome/condominiums to alley loaded and traditional single family homes along with innovative home types such as "two-pack" homes and courtyard homes, shall be articulated in traditional architectural styles. Providing a variety of housing programs allows homeowners the opportunity to move-up within the community as their lifestyles and needs change over time.

All project sites shall be designed to meet all the Integrated Waste Department's requirements, including the requirements for Sizing of Storage, Locations of Collection Area, Accessibility for Collection Vehicles and Collection of Sorted/ Diverted Waste Types.

The following pages provide graphic and written information that describes the general appearance of each anticipated home type. Future homebuilders within Esperanza should use these descriptive pages as a guide when designing the home type designated for the appropriate planning area.

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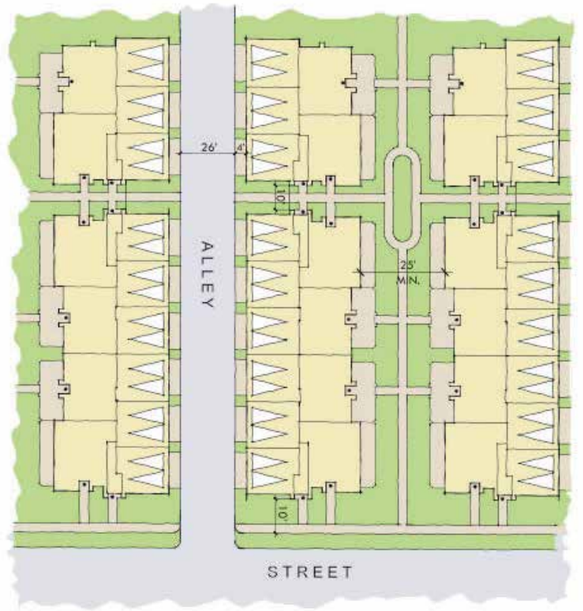
8.11.1 Row Townhomes

ROW TOWNHOMES

- Neo-traditional design places garages onto alleys, hidden from streets.
- Grid street pattern reinforces traditional neighborhood pattern.
- Front doors and porches face onto streets and/or greenbelts.
- Neighborhood open space provides a focal point of the neighborhood.



ROW TOWNHOMES

Patios / Balconies enhance social interaction

Front Doors face open space greenbelts

Street architecture creates traditional front door character

Garage doors oriented away from neighborhood streets

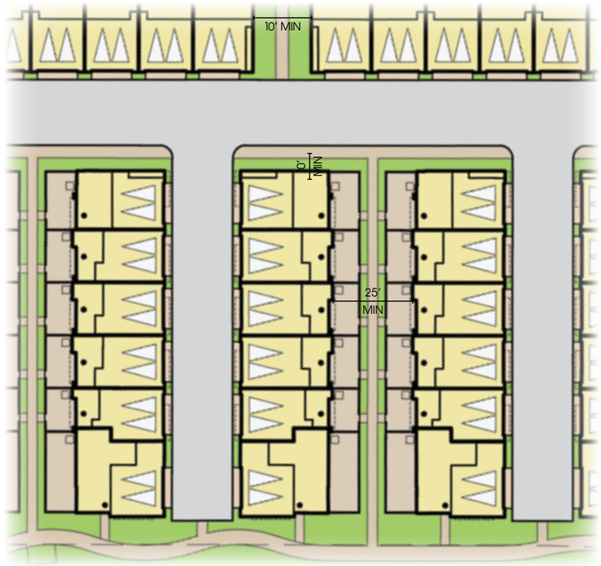
Building setbacks per Ontario Esperanza Specific Plan

CONCEPTUAL FRONT ELEVATIONS

CONCEPTUAL REAR ELEVATIONS

* Images suggest concept

Row Townhomes (2-Story)



Building setbacks per Ontario Esperanza Specific Plan

ROW TOWNHOMES

Patios / Balconies enhance social interaction

Front Doors face open space greenbelts

Street architecture creates traditional front door character

Garage doors oriented away from neighborhood streets

CONCEPTUAL FRONT ELEVATIONS

CONCEPTUAL REAR ELEVATIONS

* Images suggest concept

Row Townhomes (3-Story)

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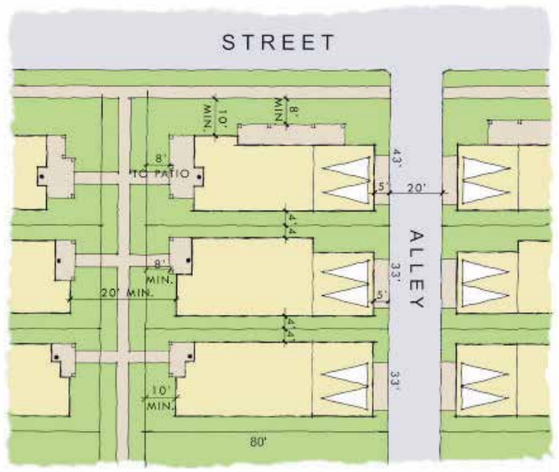
8.11.2 Cottage Single Family Homes

COTTAGE SINGLE FAMILY HOMES

- Neo-traditional design places garages onto alleys, hidden from streets.
- Grid street pattern reinforces traditional neighborhood pattern.
- Front doors and porches typically face onto streets.
- Alternative front door orientation onto greenbelts provide compatible neighborhood edge conditions.
- Public park provides a focal point of the neighborhood.



Building setbacks per Ontario Esperanza Specific Plan

COTTAGE SINGLE FAMILY HOMES

Porches enhance social interaction
Front Doors can face open space greenbelts
Garage doors oriented away from neighborhood streets

Neotraditional street scene places front doors and porches facing neighborhood streets

CONCEPTUAL FRONT ELEVATIONS

CONCEPTUAL STREET SCENE

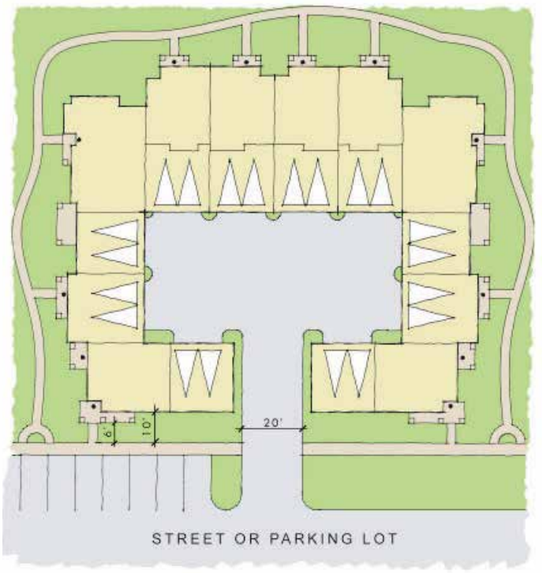
* Images suggest concept

Cottage Single Family Homes

8.11.3 Motorcourt Homes

MOTORCOURT TOWNHOMES

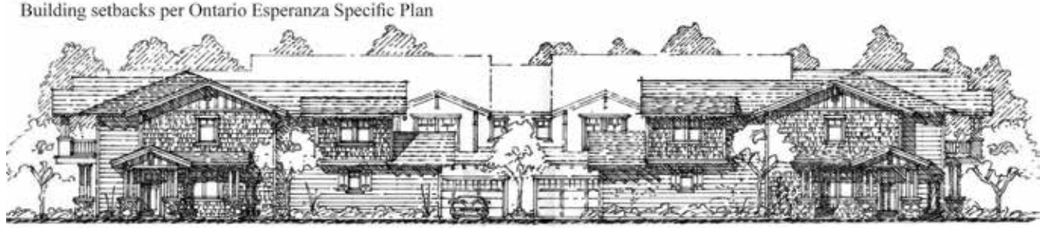
- Motorcourt building design minimizes garage orientation along streets and common drives.
- Grid circulation pattern reinforces traditional neighborhood pattern.
- Orientation of front doors, porches and patios onto streets and/or greenbelts is encouraged.
- Neighborhood open space provides a focal point of the neighborhood.



MOTORCOURT TOWNHOMES

- Garage doors are oriented around a motorcourt hidden from residential streets
- Front doors face onto open space greenbelts

Building setbacks per Ontario Esperanza Specific Plan



CONCEPTUAL FRONT ELEVATION

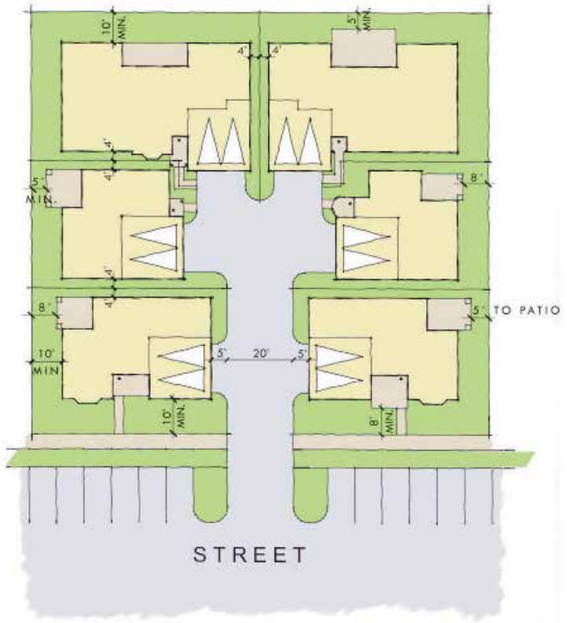
CONCEPTUAL REAR ELEVATION

Motorcourt Townhomes

8.11.4 6-Pack Courtyard Single Family Homes

6-PACK COURTYARD SINGLE FAMILY HOMES

- Courtyard design minimizes garage orientation along streets.
- Grid circulation pattern reinforces traditional neighborhood pattern.
- Conventional building design places front doors, porches and patios onto private motorcourts.
- Neighborhood open space provides a focal point of the neighborhood.



Building setbacks per Ontario Esperanza Specific Plan

6-PACK COURTYARD SINGLE FAMILY HOMES

CONCEPTUAL FRONT ELEVATIONS

CONCEPTUAL PEDESTRIAN COURT VIEW

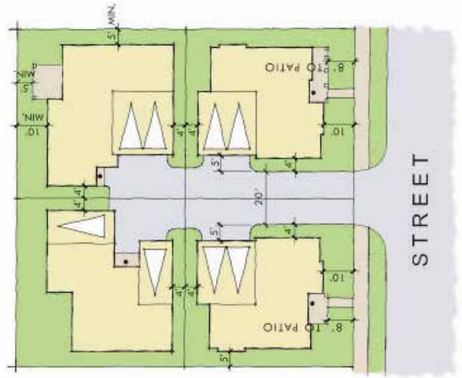
* Images suggest concept

6-Pack Courtyard
Single Family Homes

8.11.5 4-Pack Courtyard Single Family Homes

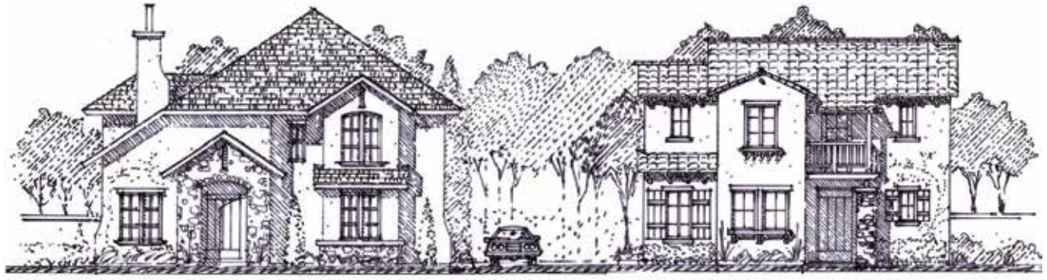
4-PACK COURTYARD SINGLE FAMILY HOMES

- Courtyard design minimizes garage orientation along streets.
- Modified grid street pattern reinforces traditional neighborhood pattern.
- Front doors and porches face onto streets and/or greenbelts.
- Central pocket park provides a focal point of the neighborhood.



Building setbacks per Ontario Esperanza Specific Plan

4-PACK COURTYARD SINGLE FAMILY HOMES



CONCEPTUAL STREETSCENE

CONCEPTUAL PEDESTRIAN COURT VIEW

* Images suggest concept

4-Pack Courtyard
Single Family Homes

8.11.6 50 Foot Wide Lots (40' Wide Homes)

50 FOOT WIDE LOTS
(40' WIDE HOMES)

- Architecture forward design places living space and porches closer to the street than garages to reinforce pedestrian scale along streets.
- Alternative garage configurations provide further visual relief from the garage along streets.
- Grid street pattern reinforces traditional neighborhood pattern.
- Central pocket park/school provides a focal point of the neighborhood.

Building setbacks per Ontario Esperanza Specific Plan

50 FOOT WIDE LOTS
(40' WIDE HOMES)

- Architectural elements minimize garage door presence along neighborhood streets
- Front porches and entries are placed forward of the garage
- Alternate garage configurations create pededstrian oriented street scenes.

CONCEPTUAL FRONT ELEVATIONS

CONCEPTUAL STREET SCENE

* Images suggest concept

50 Foot Wide Lots
(40' Wide Homes)

8.11.7 55 Foot Wide Lots (45' Wide Homes)

55 FOOT WIDE LOTS
(45' WIDE HOMES)

- Architecture forward design places living space and porches closer to the street than garages to reinforce pedestrian scale along streets.
- Alternative garage configurations provide further visual relief from the garage along streets.
- Grid street pattern reinforces traditional neighborhood pattern.
- Central pocket park provides a focal point of the neighborhood.

Building setbacks per Ontario Esperanza Specific Plan

55 FOOT WIDE LOTS
(45' WIDE HOMES)

- Architectural elements minimize garage door presence along neighborhood streets.
- Front porches and entries are placed forward of the garage.
- Alternate garage configurations create pedestrian oriented streetscenes.

CONCEPTUAL FRONT ELEVATIONS

CONCEPTUAL STREETSCENE

* Images suggest concept

55 Foot Wide Lots
(45' Wide Homes)

8.11.8 2-Pack Single Family Homes

2-PACK SINGLE FAMILY HOMES

- Innovative design provides alternating recessed and deeply recessed garages along streets.
- Grid street pattern reinforces traditional neighborhood pattern.
- Architecture forward design places living space and porches closer to the street than garages to reinforce pedestrian scale along streets.
- Front doors and porches face onto streets.
- Neighborhood open space provides a focal point of the neighborhood.

TO LIVING
40'
TO GARAGE/ SINGLE STORY
50'
TO LIVING
40'
TO PATIO/ BALCONY MIN.
TO GARAGE
50'
10'
5'
12'
5'
5'
5

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8.12 DESIGN GUIDELINES FOR LANDSCAPE ARCHITECTURAL CHARACTER

Careful consideration has been given to the design of the community landscape architectural character for the Ontario Esperanza Specific Plan. The following design guidelines are organized to help define the basic landscape design principles for the Ontario Esperanza Specific Plan. Observing these guidelines will help to assure the "design vision" and integrity of this planned community.

All landscape plans, streetscape plans, and graphic designs with regard to community identity, neighborhood identity, or entry monumentation shall conform to the guidelines as set forth herein, and shall be subject to review and approval by the City of Ontario.

The "Conceptual Landscape Master Plan," Exhibit 30 on the next page shows the perimeter streetscape design, Community entries and monumentation, neighborhood park and mini parks, pedestrian greenbelts, and general landscape features of the Ontario Esperanza Specific Plan area.

8.12.1 Perimeter Streetscape Design

Streetscape design guidelines establish a hierarchy for the landscape development along the surrounding roadways, as well as establishing a framework for consistency of design. Three major arterial roadways surround the Ontario Esperanza Specific Plan area: Hamner Avenue to the West, Bellegrave Avenue to the North, and Mill Creek Avenue to the East. Landscape easements associated with these roadways have been defined, as noted in the City of Ontario Ontario Ranch General Plan.

Landscape development surrounding this community will help to set the character, while maintaining consistency with the City of Ontario's pedestrian pathway system illustrated in the Trails and Bikeways section of the Ontario Ranch General Plan. The following section discusses the streetscapes for the Esperanza Specific Plan area. Exhibit 31, "Streetscapes Legend" provides a guide to the location of the streetscapes discussed below.

8.12.2 Hamner Avenue

Hamner Avenue streetscape shall include the following:

- A landscaped parkway (15' wide min.) with a row of street trees (24" Box min.) along both sides of the street.
- A 5' wide sidewalk along west side of the street.
- A 14' wide landscaped median with a single row of street trees.
- A landscape easement (neighborhood edge) of 45' taken from face of curb to perimeter wall.
- Background trees and shrub masses planted in series of layers (foreground, midground, background) to help define borders and plant groupings while combining interesting foliage textures and color.
- Monumentation as shown in Exhibit 30, "Conceptual Landscape Master Plan."
- Refer to Exhibit 32, "Hamner Avenue" section for streetscape illustration."

Exhibit 30

Conceptual Landscape Master Plan

Exhibit 31

Streetscapes Legend

8.12.3 Bellegrave Avenue

Bellegrave Avenue streetscape shall include the following:

- A 5 foot wide lineal sidewalk and a 7 foot wide landscaped parkway along north side of the street.
- A landscape easement (neighborhood edge) of 35' taken from face of curb to perimeter wall on both sides of the street.
- Background trees and shrub masses planted in series of layers (foreground, midground, background) to help define borders and plant groupings while combining interesting foliage textures and color.
- Monumentation as shown in the Conceptual Landscape Master Plan, Exhibit 30, "Conceptual Landscape Master Plan."
- Refer to Exhibit 33, "Bellegrave Avenue" section below for streetscape illustration.
- Additional landscaping requirements for well sites along Bellegrave Avenue may include: landscape screening, earth berming or combination of both to screen undesirable views from public.

8.12.4 Mill Creek Avenue

Mill Creek Avenue streetscape shall include the following:

- A 12 foot wide landscaped parkway on the west with an additional 23' landscape easement include a single row of street trees (24" Box min.) along both sides of the street. The east side of Mill Creek Avenue includes a 12 foot wide landscaped parkway with an additional 50' Southern California Edison (SCE) easement taken from back of improved street right-of-way.
- Provide drought tolerant large shrub (max. 15') and drought tolerant landscaping within the SCE easement.
- Background trees and shrub masses planted in series of layers (foreground, midground, background) to help define borders and plant groupings while combining interesting foliage textures and color.
- Monumentation as shown in Exhibit 30, "Conceptual Landscape Master Plan."
- Refer to Exhibit 34, "Mill Creek Avenue" and Exhibit 35 "Mill Creek Avenue at the SCE Corridor" for streetscape illustration."

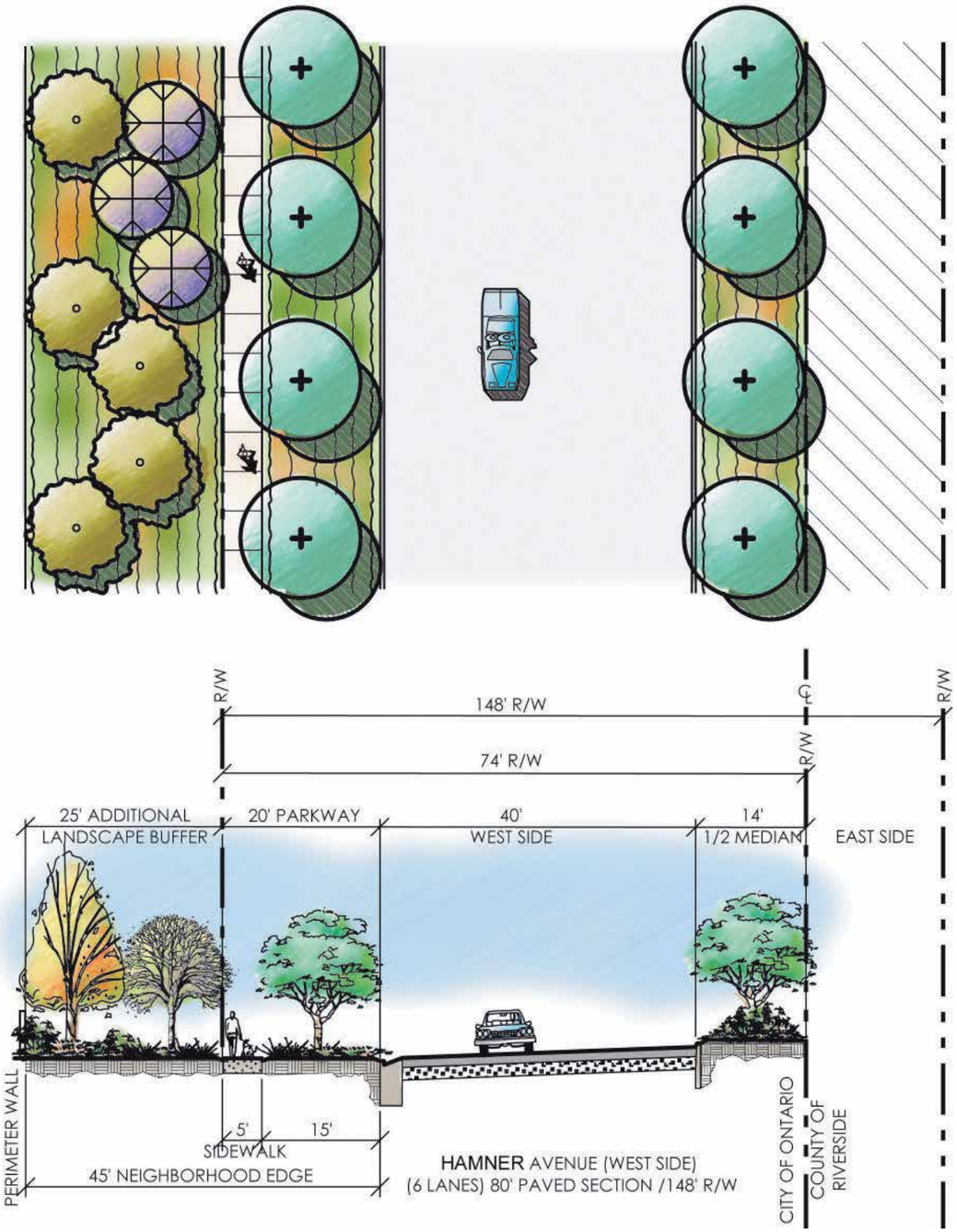


EXHIBIT 32
~~Milliken~~ Hamner Avenue

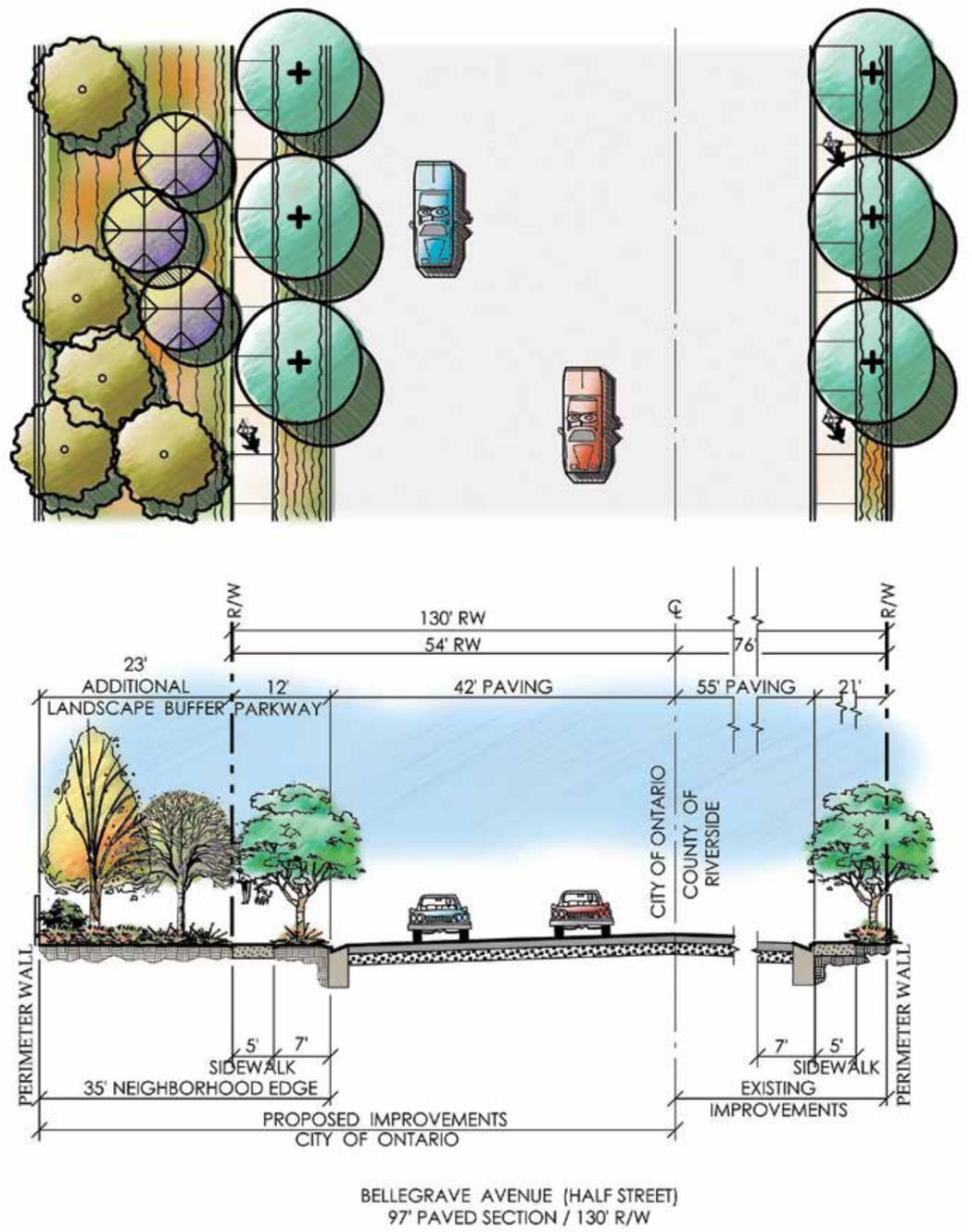


Exhibit 33
Bellegrave Avenue

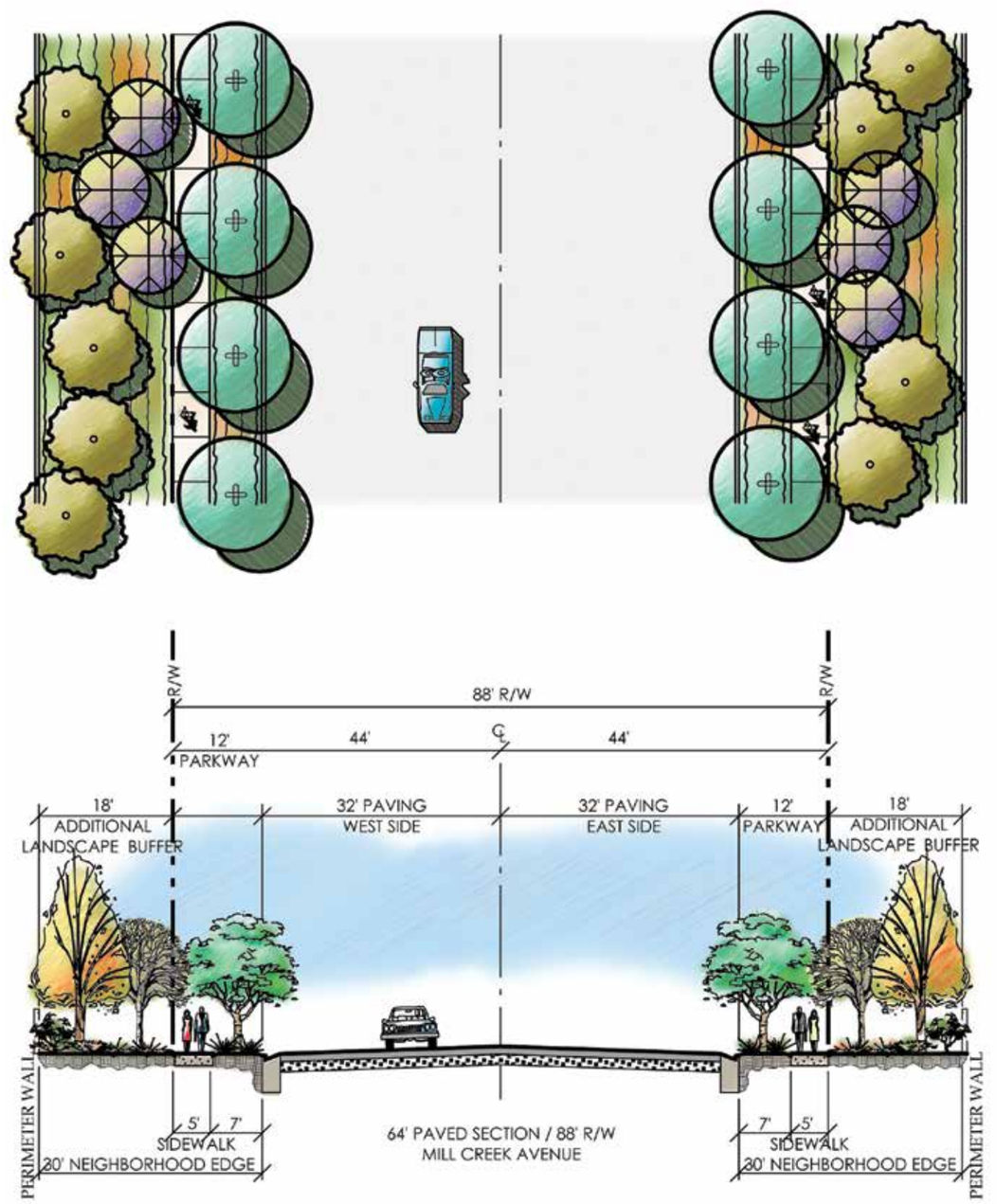


Exhibit 34
Mill Creek Avenue

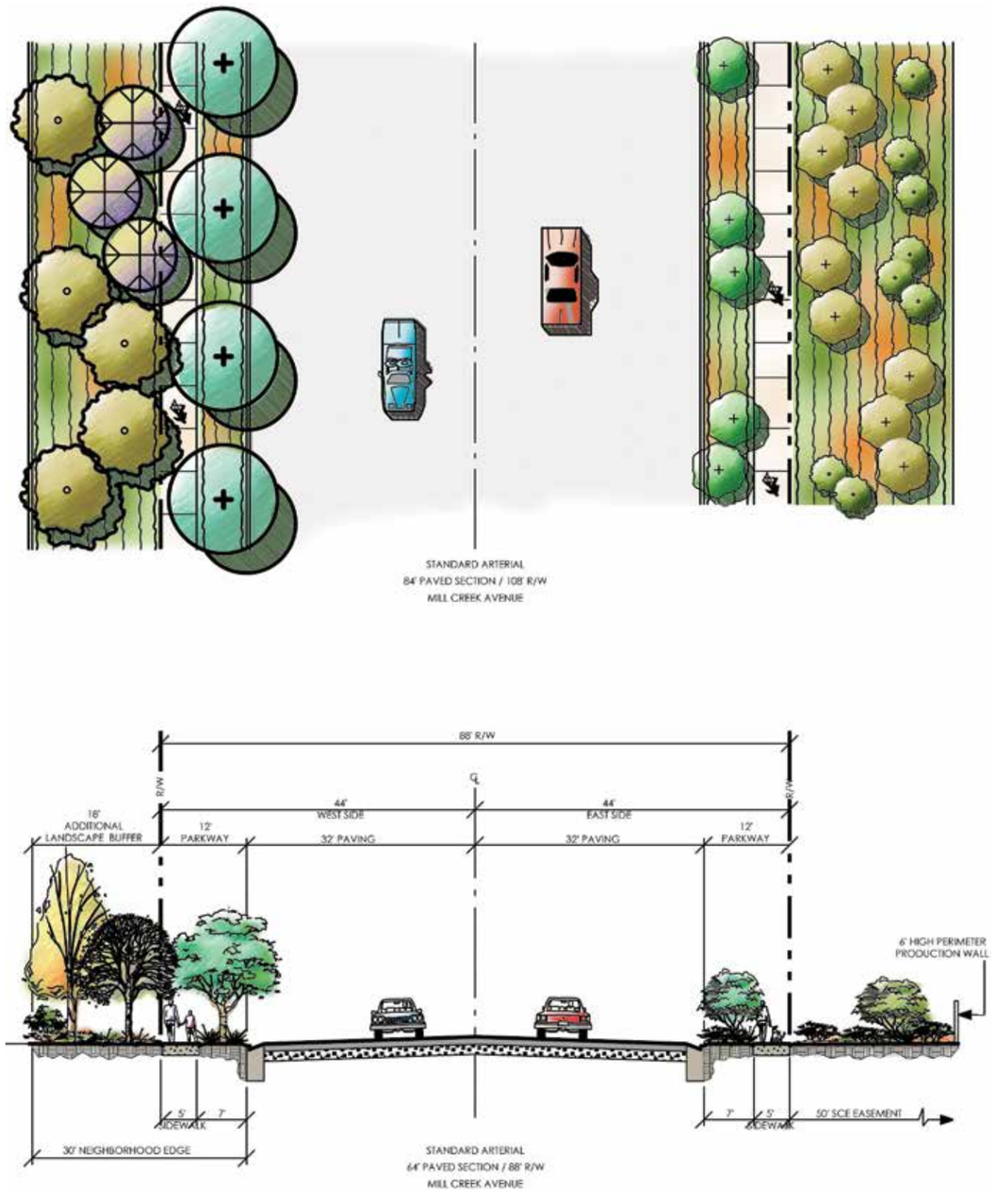


Exhibit 35
Mill Creek Avenue at the SCE Corridor

8.12.5 Interior Streetscape Design

Streetscape design within the interior of the Ontario Esperanza Specific Plan community shall be consistent in character with the perimeter streetscapes and should help to promote pedestrian circulation into the "Community Core."

Where interior streetscapes interface with neighborhood/mini parks and open space, special consideration should be taken to integrate pedestrian circulation into these areas via a streetside pedestrian system that links city sidewalks to active walking trails and open space uses. This is especially important within the multi-family/high density residential planning areas.

Two interior roadways bring residents into the "Community Core," Eucalyptus Avenue, running East/West, and "Street A" that intersects with Eucalyptus Avenue, running North/South.

8.12.6 Eucalyptus Avenue

Eucalyptus Avenue streetscape shall include the following:

- A 7 foot wide landscaped parkway with a single row of street trees (24" Box min.) along both sides of the street.
- A 5' wide concrete sidewalk with a 7' wide decomposed granite multi-purpose trail.
- A 7 foot wide Class II striped on-street bicycle trail within the right of way on both sides of the street.
- A landscape easement (neighborhood edge) of 35' taken from face of curb to perimeter wall on both sides of the street.
- Background trees and shrub masses planted in series of layers (foreground, midground, background) to help define borders and plant groupings while combining interesting foliage textures and color.
- Monumentation as shown in Exhibit 30, "Conceptual Landscape Master Plan."
- Refer to Exhibit 36, "Eucalyptus Avenue" section for streetscape illustration.

8.12.7 "A" Street

"A" Street streetscape shall include the following:

- A landscaped parkway (7' wide minimum) with a single row of street trees (24" box minimum) along both sides of the street.
- A 5' sidewalk separated from the street by a 7 foot wide landscaped parkway on both sides of the street.
- A landscaped buffer of 6' to 10' taken from the back of sidewalk to the perimeter wall on both sides of the street.
- Background trees and shrub masses planted in a series of layers (foreground, midground and background) to help define borders and plant groupings while combining interesting textures and colors.
- Monumentation as shown in Exhibit 30, "Conceptual Landscape Master Plan."
- Refer to Exhibit 37, "A Street" section for streetscape illustration.

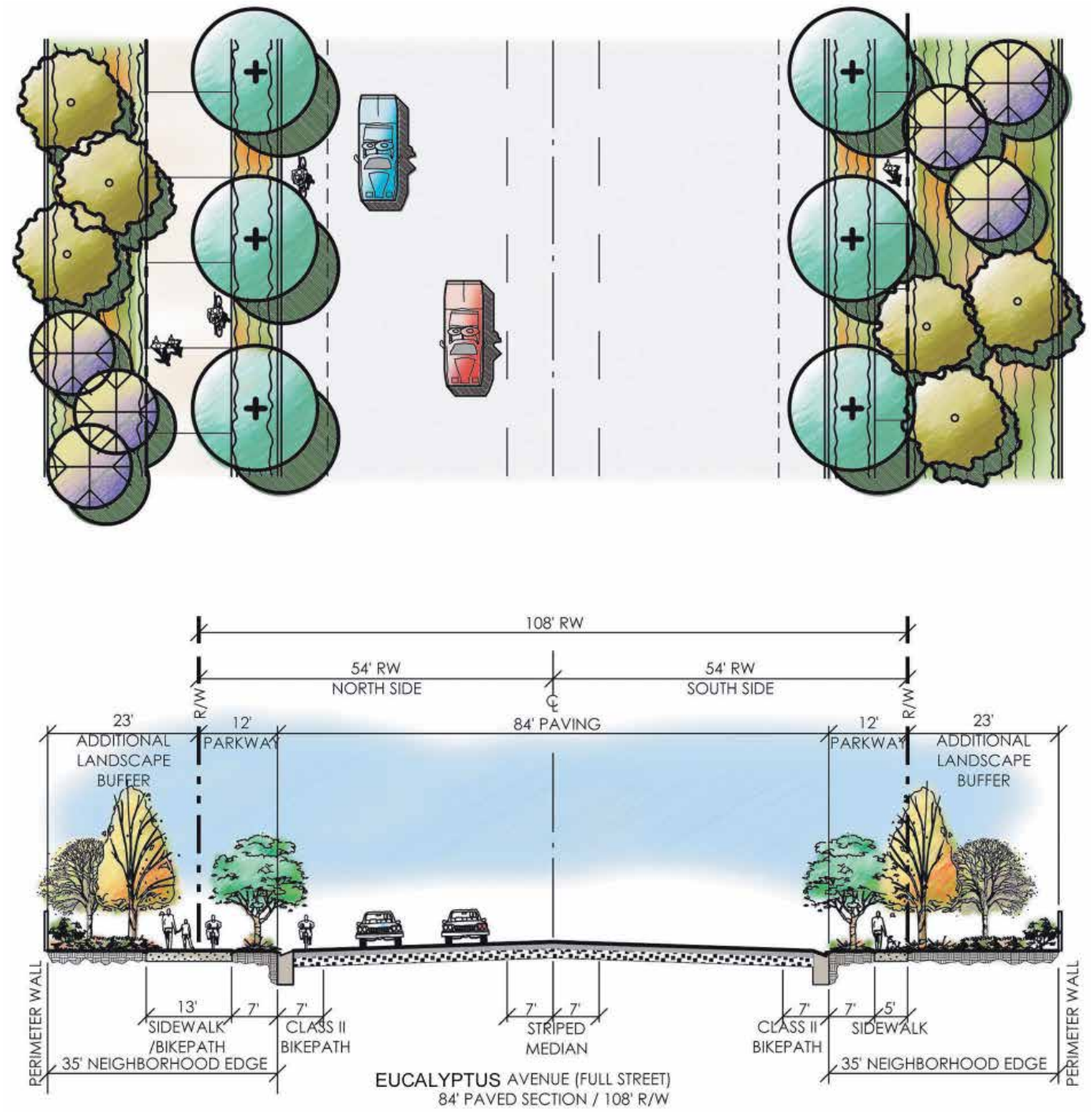


Exhibit 36
Eucalyptus Avenue

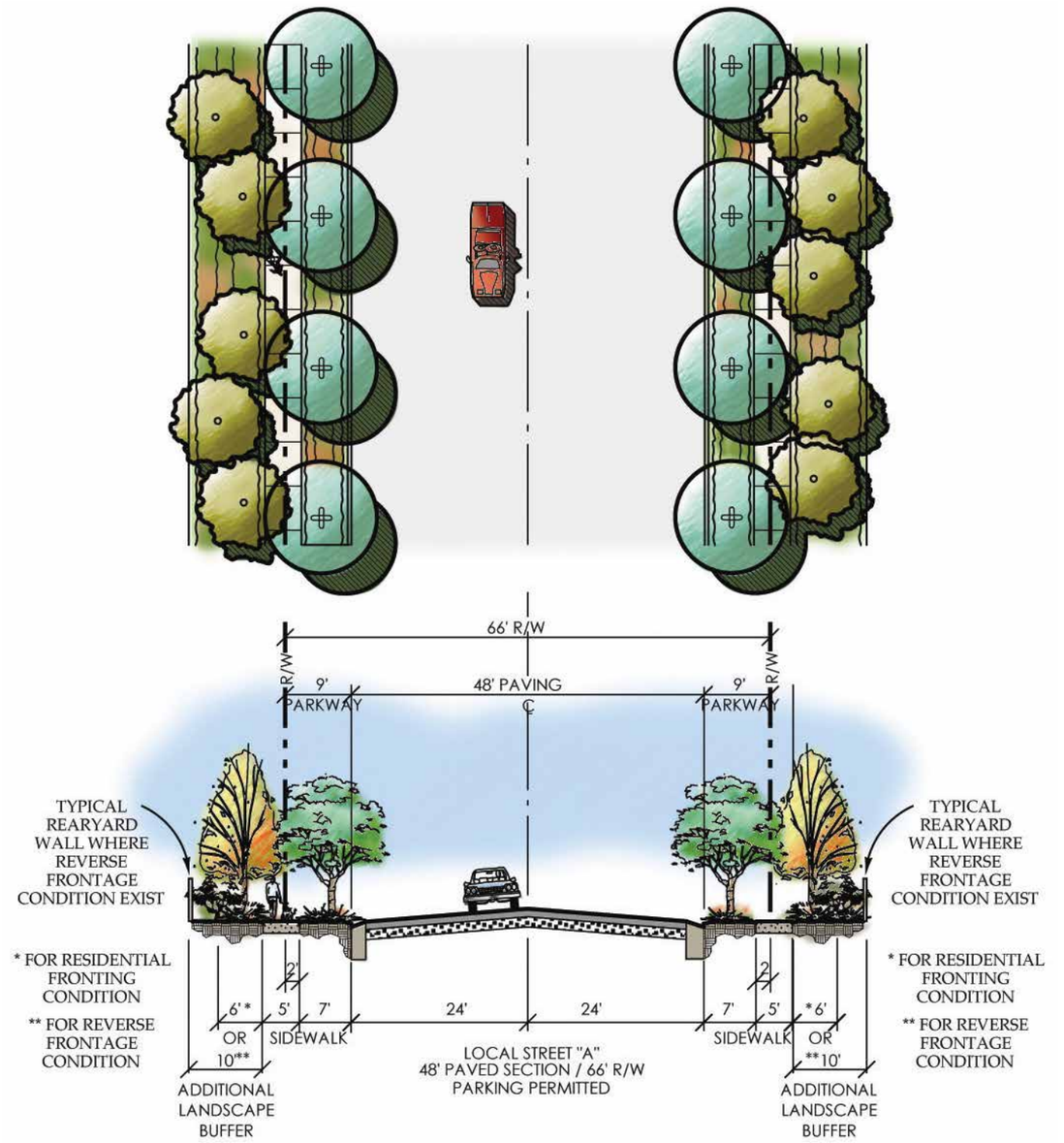


Exhibit 37
"A" Street

8.12.8 Local Streets, Private Alleys, and Private Neighborhood Streets

Local Streets

Local Street streetscapes shall include the following:

- A landscaped parkway (7' wide minimum) with a single row of street trees, 24" box minimum, along both sides of the street.
- A 5' wide sidewalk on both sides of the street.
- A 5' wide minimum planter area from sideyard wall to back of sidewalk along reverse frontage conditions.
- Refer to Exhibit 38, "Local Street and Cul-de-Sac" for streetscape illustration.

Private Neighborhood Streets

Private Neighborhood streets shall include the following:

- A landscaped parkway (7' wide minimum) with a single row of street trees, 24" box minimum, along both sides of the street.
- A 4' wide sidewalk on both sides of the street.
- A 7' wide minimum planter area from sideyard wall to back of sidewalk along reverse frontage conditions.
- Refer to Exhibit 39, "Private Neighborhood Street Section" for streetscape illustration.

Private Alleys

Private Alleys shall include a 5' wide landscaped area on both sides of the alley when the paved area is a maximum of 20' in width. Landscaping will be provided as appropriate in areas of less than 5' in width depending upon the final design of the private alley. Refer to Exhibit 40, "Private Alleys" for illustration.

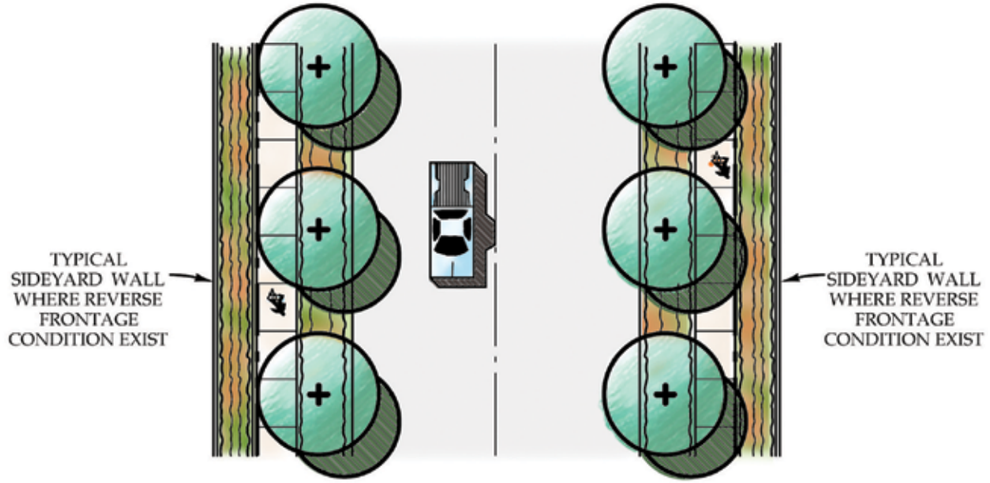


EXHIBIT 38
Local Street and Cul-de-Sac

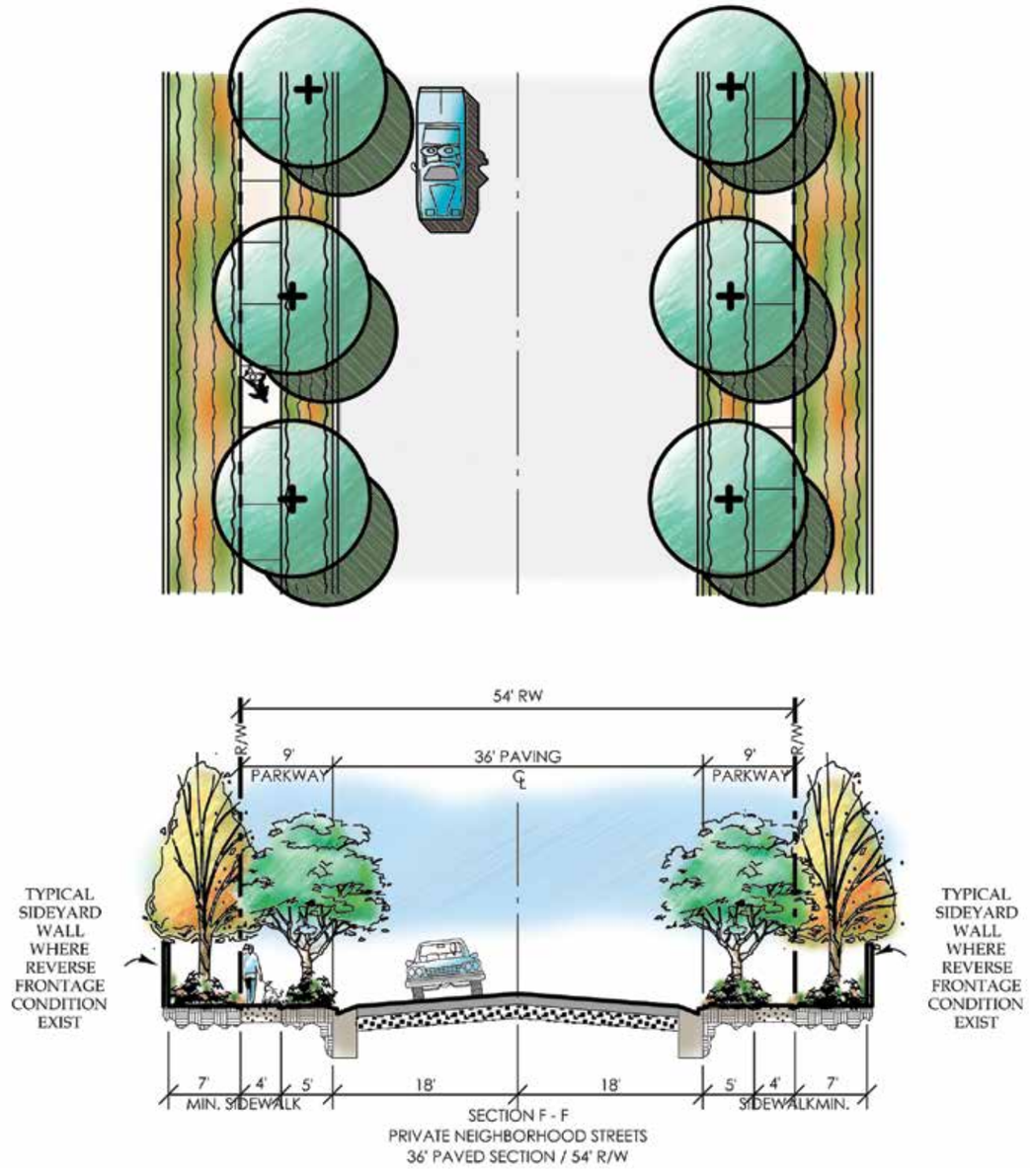


Exhibit 39
Private Neighborhood Street Section

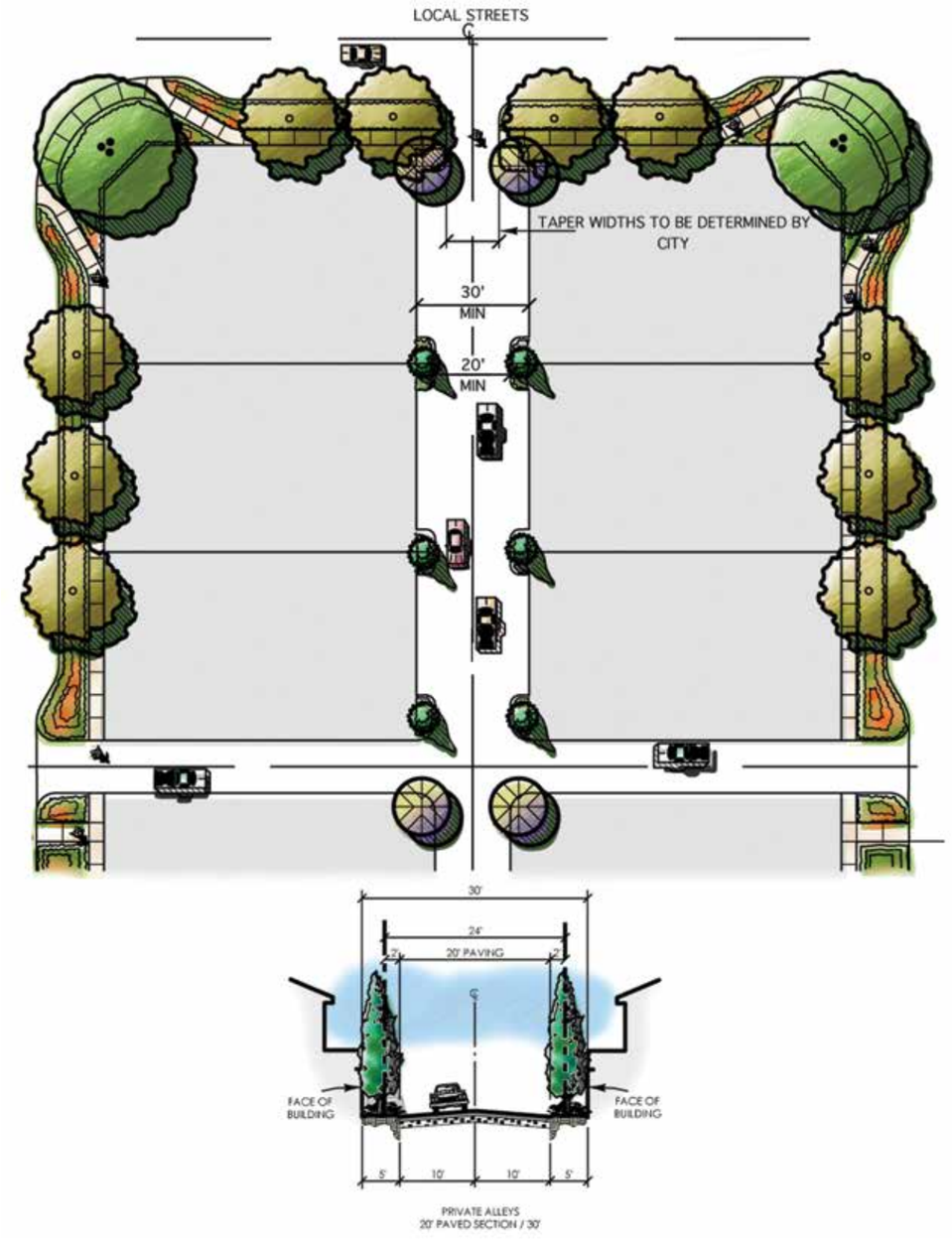


Exhibit 40
Private Alleys

8.13 City of Ontario "Gateway" Monument

At the corner of Hamner Avenue and Bellegrave Avenue, a city "Gateway" monument will be located. Special consideration should be made to integrate the perimeter landscaping along Hamner and Bellegrave Avenue into the final monument design and landscape character. The City of Ontario is currently developing the "Gateway" monument program for the Ontario Ranch. Additional coordination with the City of Ontario will be needed prior to developing this area.

8.14 Entries and Monumentation

Monumentation occurs throughout the Ontario Esperanza Specific Plan community and is designed to establish a basic hierarchy for entering each area of the community. Along the perimeter edges there are several entry points into the community. At key entries a landscape and monumentation program will be utilized to help identify the community as well as convey a "welcoming" feeling for both vehicular and pedestrian traffic. Inspired by the local historical village of "Guasti," home of the Italian Vineyard Company, the project monuments for Ontario Esperanza embody some of the character of this Ontario icon, through the use of similar materials, architectural styles/detailing and landscaping.

Three basic monument treatments are used to set the hierarchy of the entries and monumentation: the Primary Community Entry and Monumentation, the Secondary Community Entry and Monumentation, and the Neighborhood Entry and Monumentation.

8.14.1 Primary Community Entry and Monumentation

The Primary Community Entry and Monumentation shall include the following:

- Freestanding curved monument walls at each corner with highlighted pedestrian portal.
- Identification field for potential sign lettering placement.
- Architectural concrete caps, trim, and bases to help delineate architectural detailing and veneer material used.
- Use of "real" veneer materials instead faux concrete veneers.
- Use of large specimen native trees to anchor each side of entry drive at site entry.
- Seasonal perennial flowering to allow for seasonal flowering interest throughout the year.
- Enhanced pedestrian paving at street crossing and at monument location as approved by the City Engineer.
- Accent trees and shrub masses planted in series of layers (foreground, midground, background) to help define borders and plant groupings while combining interesting foliage textures and color.
- Accent lighting of landscape/monumentation.
- Handicapped ramps designed to City standards.
- Refer to Exhibit 30, "Conceptual Landscape Master Plan" and Exhibits 41-43, "Primary Community Entry and Monumentation" and, "Primary Community Entry and Monumentation – Hamner Avenue, and, "Primary Community Entry and Monumentation – Mill Creek Avenue" for detailed conceptual illustration.

8.14.2 Secondary Community Entry and Monumentation

The Secondary Community Entry and Monumentation shall include the following:

- Freestanding curved walls at each corner with anchoring entry pilaster.
- Identification field for potential sign lettering placement on enhanced perimeter corner cut wall.
- Architectural concrete caps, trim, and bases to help delineate architectural detailing and veneer material used
- Enhancement of corner cut wall and use of accent pilasters to balance each side.
- Use of "real" veneer materials instead faux concrete veneers.
- Use of large specimen native trees to anchor each side of entry drive at site entry.
- Seasonal perennial flowering to allow for seasonal flowering interest throughout the year.
- Enhanced pedestrian paving at street crossing and at monument location as approved by the City Engineer.
- Accent trees and shrub masses planted in series of layers (foreground, midground, background) to help define borders and plant groupings while combining interesting foliage textures and color.
- Accent lighting of landscape/monumentation.
- Handicapped ramps designed to City standards.
- Refer to Exhibit 30, "Conceptual Landscape Master Plan" and Exhibit 44, "Secondary Community Entry and Monumentation Elevation/Plan" for detailed conceptual illustration.

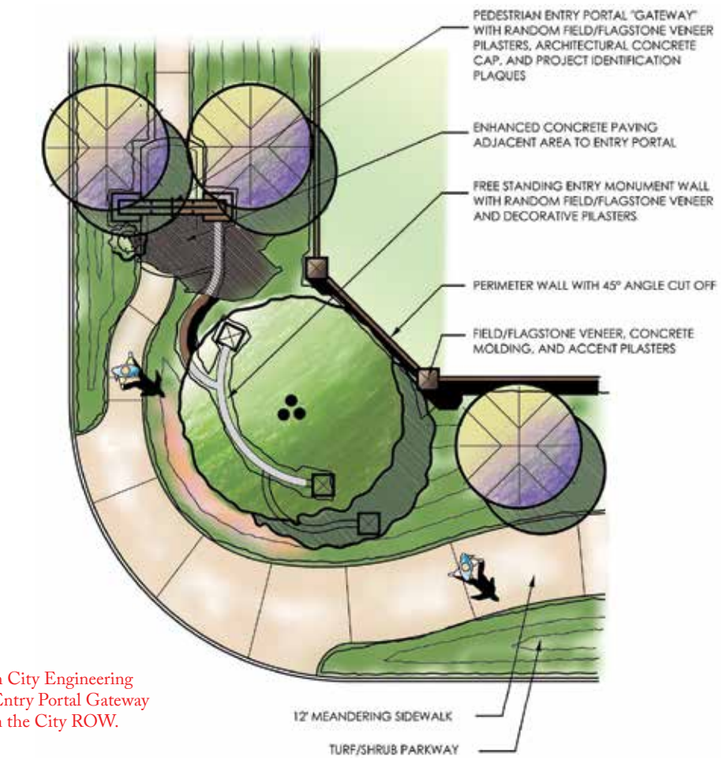
8.14.3 Neighborhood Entry and Monumentation

Neighborhood entries and monumentation should occur on interior corner entries within the Ontario Esperanza Specific Plan Community. These entries should be used to help continue the landscape character theme to the "core" of the community. Each neighborhood built within the project will have the opportunity to identify their individual project character while providing the basic design features of the other monuments. Refer to The Neighborhood Entry and Monumentation shall include the following:

- Freestanding large entry pilaster set within the landscaped parkway. This pilaster should embody the same character as that of the Primary Community Entry Monument portal, but is reduced in scale to create a "pedestrian gateway" into each neighborhood. Project identification plaque or icon can be located at this pilaster
- Identification field for potential sign lettering placement on enhanced perimeter corner cut wall.
- Architectural concrete caps, trim, and bases to help delineate architectural detailing and veneer material used.
- Enhancement of corner cut wall and use of accent pilasters to anchor each side.
- Use of "real" veneer materials instead faux concrete veneers.
- Seasonal perennial flowering to allow for seasonal flowering interest throughout the year.
- Enhanced pedestrian paving at street crossing and at monument location as approved by the City Engineer.
- Accent trees and shrub masses planted in series of layers (foreground, midground, background) to help define borders and plant groupings while combining interesting foliage textures and color.
- Accent lighting of landscape/monumentation.
- Handicapped ramps designed to City standards.
- Refer to Exhibit 30, "Conceptual Landscape Master Plan" and Exhibit 45, "Neighborhood Entry and Monumentation" for detailed conceptual illustration.

EXHIBIT 41

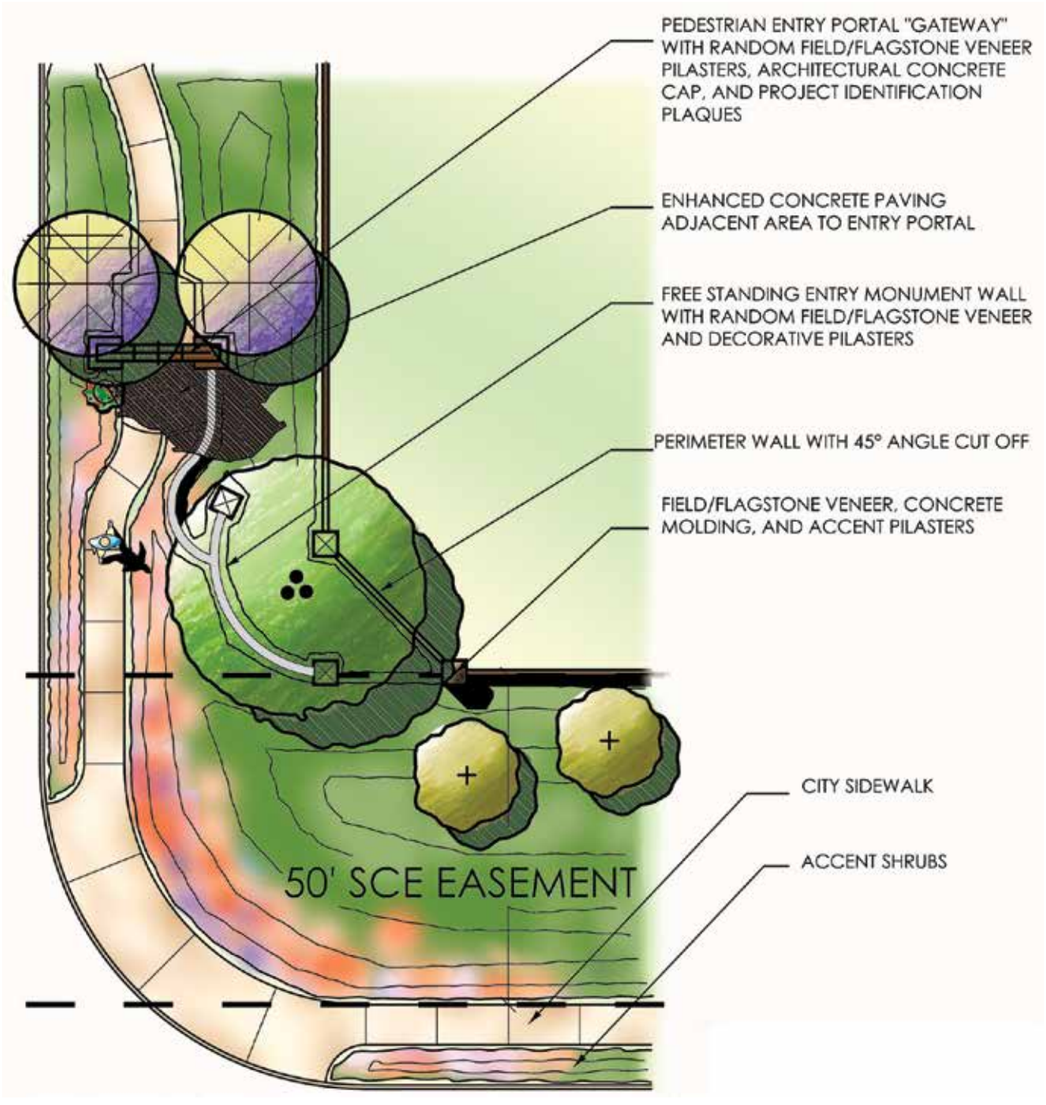
Primary Community Entry and Monumentation



Developer to verify with City Engineering Development that the Entry Portal Gateway will be permitted within the City ROW.

EXHIBIT 42

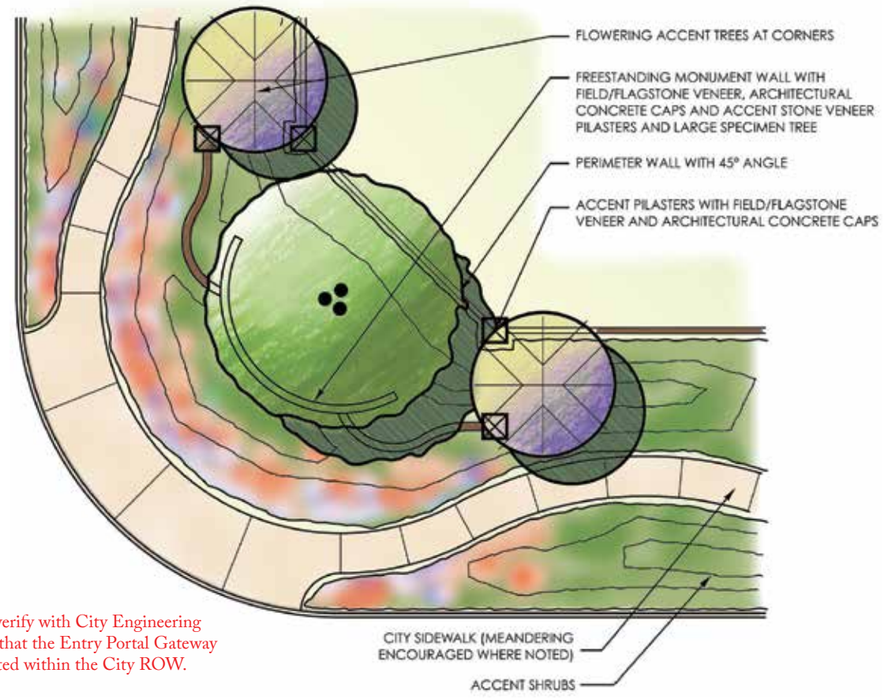
Primary Community Entry and Monumentation – Hamner Avenue



Developer to verify with City Engineering Development that the Entry Portal Gateway will be permitted within the City ROW.

Exhibit 43

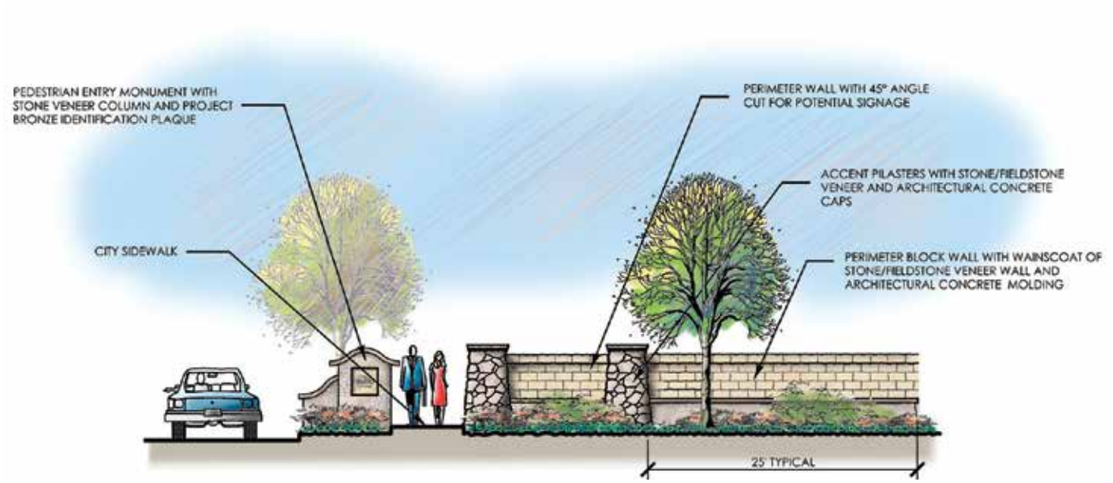
Primary Community Entry and Monumentation – Mill Creek Avenue

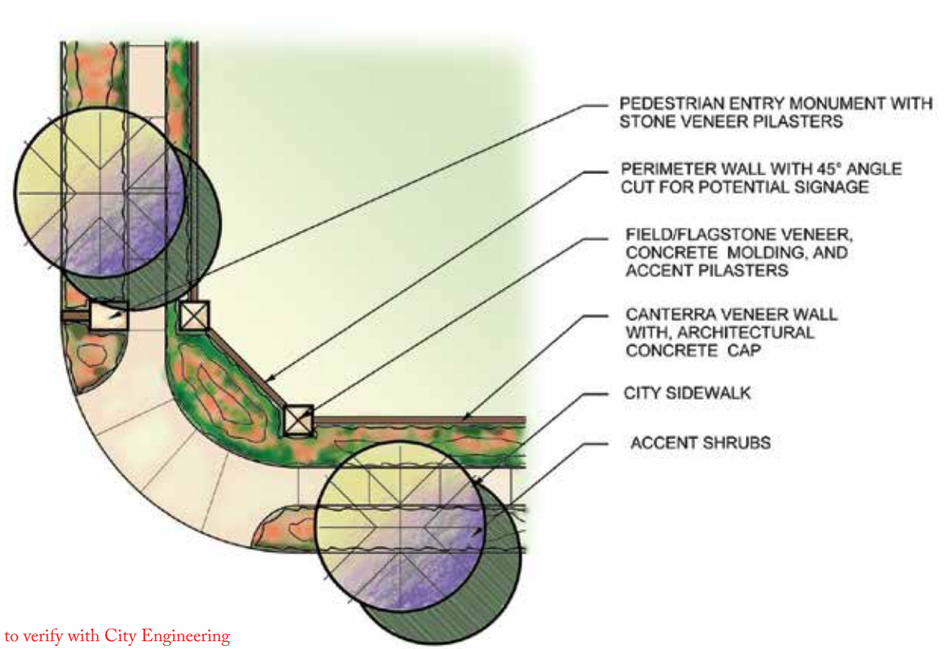


Developer to verify with City Engineering Development that the Entry Portal Gateway will be permitted within the City ROW.

Exhibit 44

Secondary Community Entry and Monumentation Elevation/Plan





Developer to verify with City Engineering Development that the Entry Portal Gateway will be permitted within the City ROW.

Exhibit 45

Neighborhood Entry and Monumentation Elevation/Plan

8.15 Parks and Open Space

The Ontario Esperanza Specific Plan Community will have a central "Community Core" that centers on the Neighborhood Park and the School. Exterior walkways and trails should lead to this centralized area. Exhibit 46, "Pedestrian Circulation Plan" illustrates the pedestrian accessibility and connectivity throughout the Esperanza Specific Plan area. Exhibits 47 through 50 illustrate the planning concepts for the Neighborhood Park and Mini-Parks planned for the Esperanza Specific Plan area.

- All project sites shall be designed to meet all the Integrated Waste Department's requirements, including the requirements for Sizing of Storage, Location of Collection Area, Accessibility for Collection Vehicles, and Collection of Sorted/Diverted Waste Types.

8.15.1 The Neighborhood Park

Park 1, the Neighborhood Park, consists of the following:

- Parking - Parking shall be adequate to accommodate daily use of the park, and should be screened from public view using a combination of berming and landscaping. In addition, the parking configuration should take into consideration alignment with proposed neighborhood streets and provide a minimum of (15) fifteen to (20) twenty parking stalls (including one van accessible handicap stall/unloading area).
- Children's Tot Lot Play Area - A Tot Lot will be located within close proximity to the parking lot and Restroom Building. Play structures and equipment should be staged to allow for separated use based on age (2-5 yr. and 5-12 yr.). The Tot Lot should also follow ADA guidelines and provide access based off of equipment selected. Play areas and fall zones shall be constructed with synthetic surfacing per ADA standards with wood fiber ("Fibar") being available as an alternative in non-fall zone areas. Seating areas shall be located near the Tot Lot to provide areas for parental supervision.
- Open turf area/Barbecue Picnic Facilities - The Neighborhood Park should provide an open turf area and barbecue picnic facilities scattered throughout a looped concrete walkway system. Barbecue facilities (minimum of 50%) should be located adjacent to the walkway system for ADA accessibility; the remaining percentage set in open turf areas. Each barbecue picnic facility shall provide a picnic table, freestanding barbecue, and trash receptacle. These barbecue facilities can be placed on concrete or any other ADA acceptable surfacing. The design of the Neighborhood Park open space should take into account pedestrian circulation and the linkage to the two adjacent roads as well as the surrounding community.
- Sports Fields for unorganized play – The open space turf area should be arranged to accommodate two baseball/softball fields and a soccer field overlay. Sports lighting should be discouraged at the park. Wherever feasible a minimum distance of 20 feet should be provided between streets and play areas. Sports fields will be improved in accordance with the City's Parks and Maintenance Department requirements.
- Landscaping – Landscaping within the Neighborhood Park shall harmonize with the surrounding streetscapes. Large specimen trees should be used within the open turf areas to help provide shade and screening of unwanted views. Accent trees should also be used at pedestrian entries and around the Tot Lot for color and seasonal interest. The park shall be irrigated with reclaimed water by an automated system per the City Standard Specifications for irrigation systems.
- Lighting – Security walkway lighting shall be provided in accordance with City requirements and the design guidelines contained herein.

- Restroom Building – A restroom building shall be located adjacent to the tot lot in clear view of the public streets surrounding the park. The building should be designed to provide separate restroom facilities for both sexes and shall conform to ADA design guidelines. Additional provisions for a storage room for the City of Ontario maintenance personnel shall also be designed (all designs shall be submitted to the City of Ontario and County Health Department for approval).
- Park monumentation/signage and a lockable trash enclosure area.
- Refer to Exhibit 47, "Neighborhood Park" for detailed conceptual illustrations.

8.15.2 Mini Parks and Pedestrian Trails

Pedestrian circulation is highly encouraged within the Ontario Esperanza Specific Plan Community. Landscape easements are provided along major roadways and are encouraged within the neighborhood communities.

- Interior walkways should be designed to provide connections to adjacent neighborhoods as well as linking the Neighborhood Park and School to dedicated neighborhood edge treatments and enhanced landscaped areas.
- Exhibit 47, shows a Neighborhood Park example (5 Acre)."
- Enhanced paving at pedestrian connections where pedestrian circulation crosses roadways.
- Paseos should provide strong connections to "Community Core" (~~school~~/5 AC neighborhood park).
- Connection of neighborhood pocket parks to community. The pocket parks are intended to provide minimal amenities, and should designed with strong neighborhood "eyes-on" approach. Pocket Parks should range between 3/4 – 1 acre in size.

Mini parks for children's play areas may contain the following amenities:

- Paseo walkway (meandering encouraged/ ADA accessible).
- Landscaping - Landscaping shall harmonize with the surrounding streetscapes and utilize trees, shrubs, and groundcovers identified in the plant matrix.
- Lighting – Pole mounted fixtures spaced at appropriate intervals for safety and security.
- Open turf play area

The Mini Parks might contain one or more of the following amenities:

- Barbecue Picnic Facilities
- Basketball/Volleyball Courts
- Tot Lots
- Rose Garden
- Covered Picnic Structures
- Seatwalls/benches
- Community Garden
- Refer to Exhibits 48 through 51 for detailed conceptual illustrations.

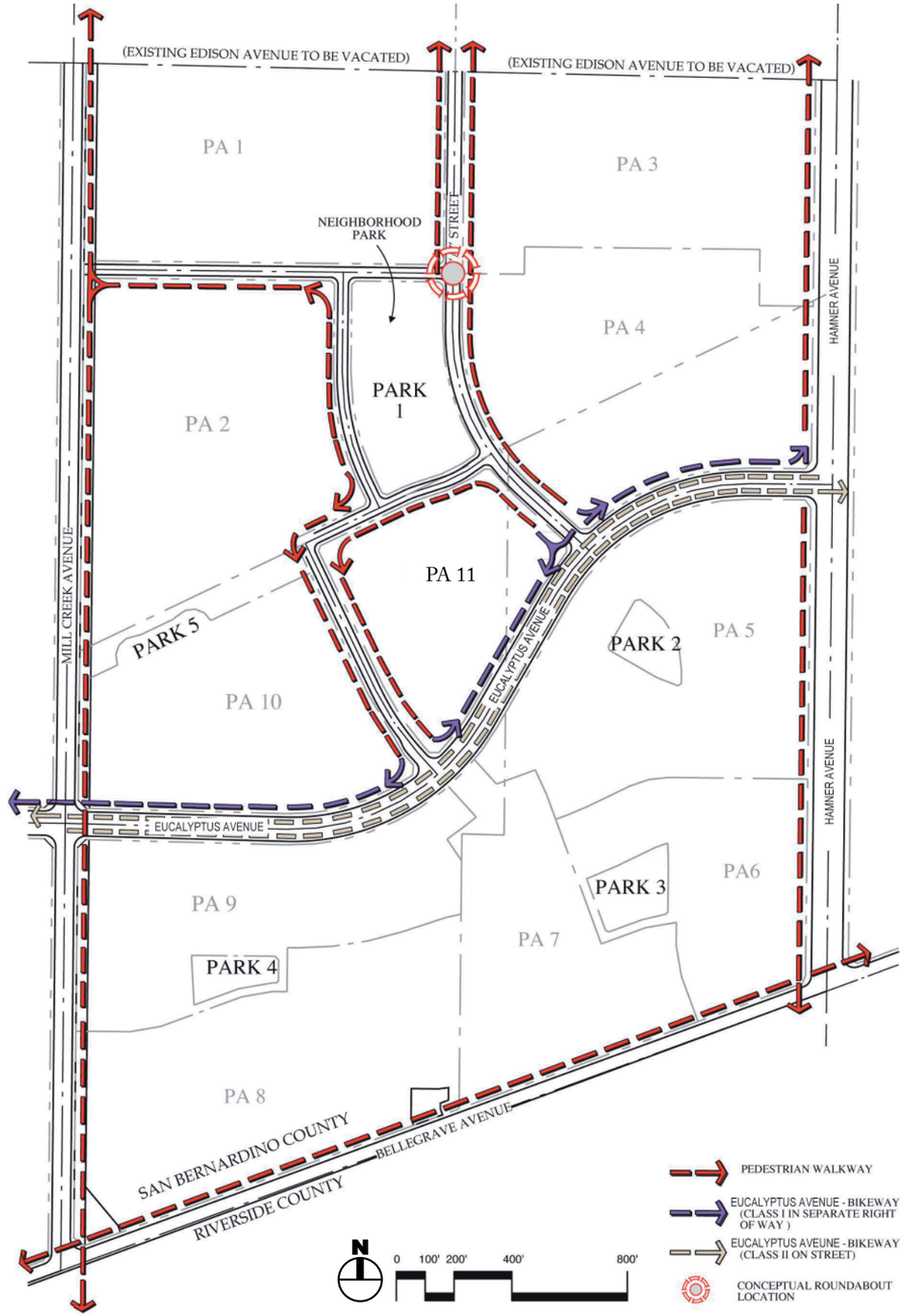


EXHIBIT 46
Pedestrian Circulation Plan

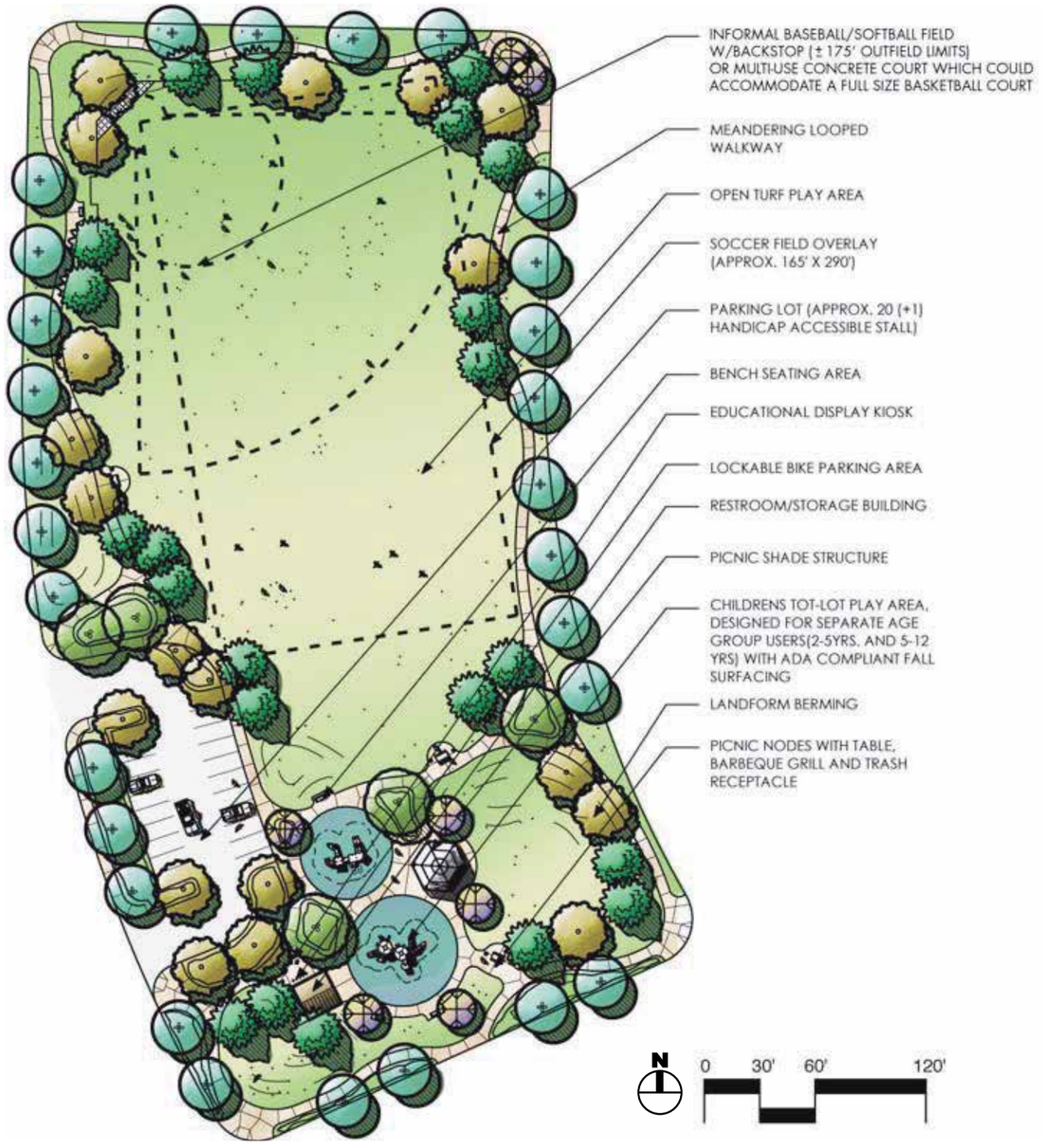


Exhibit 47
Neighborhood Park

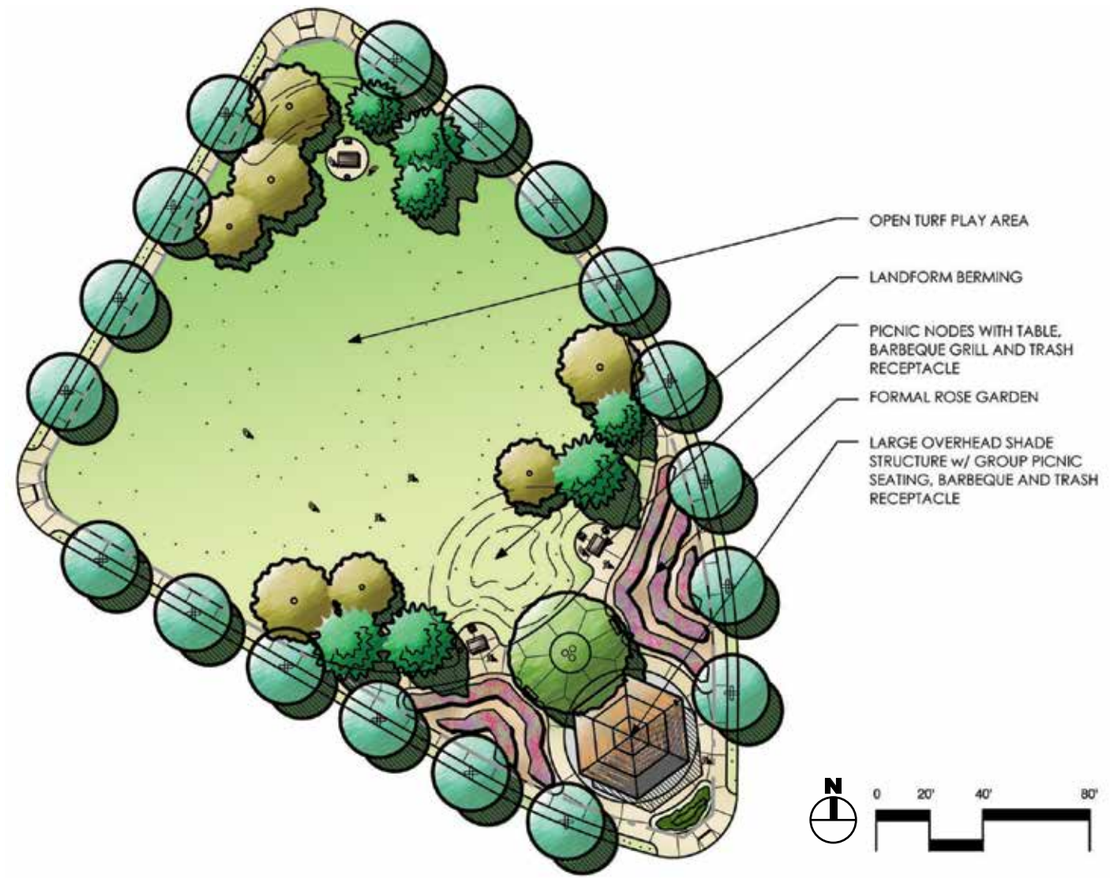


Exhibit 48
Mini Park Example (Park 2)

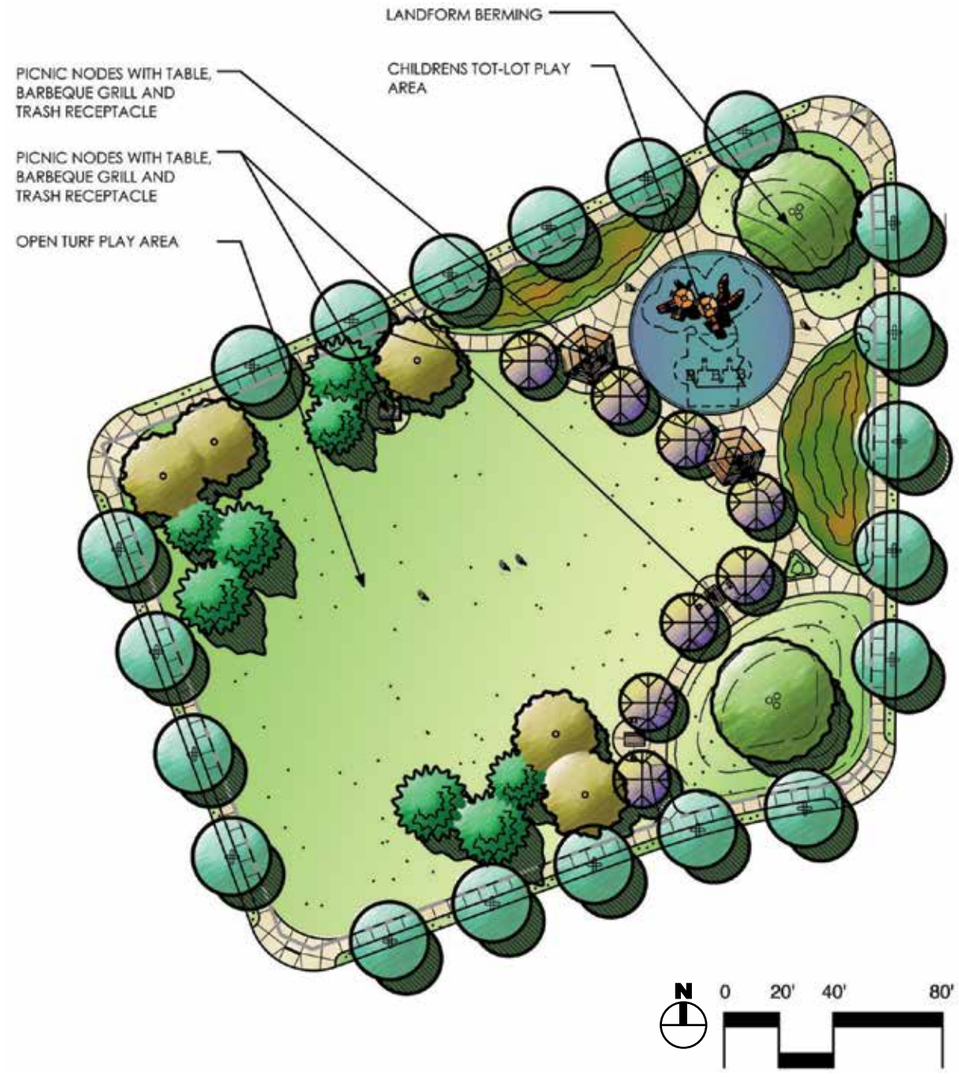


Exhibit 49
Mini Park Example (Park 3)

Section 8. **Design Guidelines**

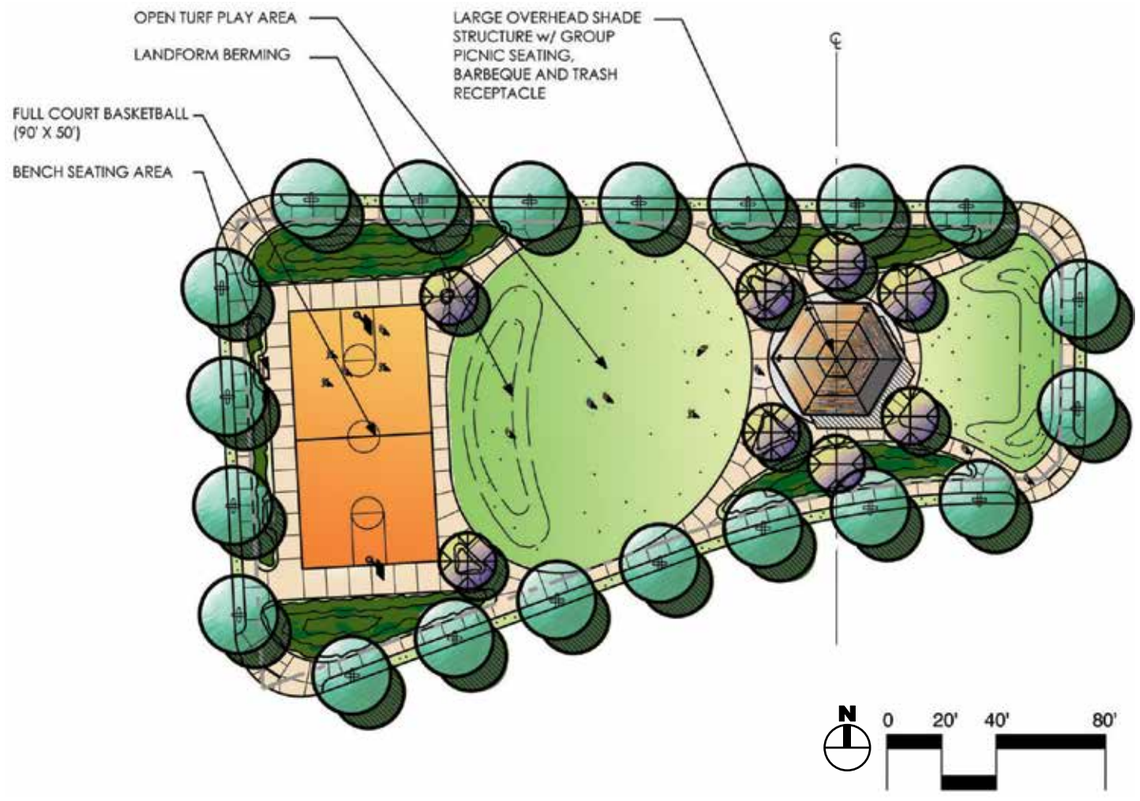


Exhibit 50
Mini Park Example (Park 4)

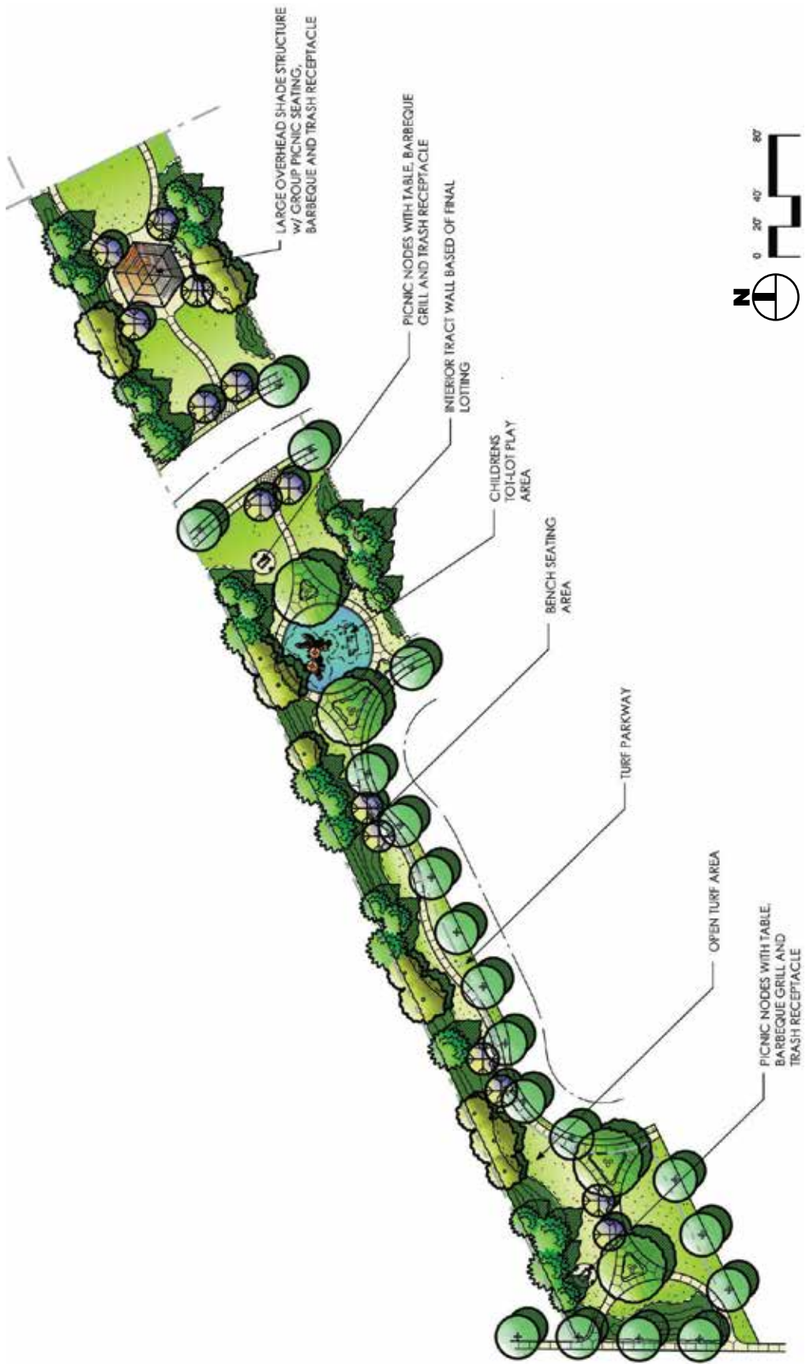


Exhibit 51
Mini Park Example (Park 5)

8.16 Community Walls and Fencing

Walls are a major component in achieving an overall community theme within the Ontario Esperanza Specific Plan. A strong cohesive appearance is achieved through the use of "community walls" and general overall wall guidelines as illustrated in Exhibit 52, "Master Walls and Fence Plan" and Exhibit 53, "Wall and Fence Details."

All walls that adjoin community street scenes (major streetscapes identified under Perimeter/ Interior Streetscapes) shall be deemed "community walls." All wall and fencing designs and layout shall be approved by the City of Ontario prior to construction.

8.16.1 Community Walls

Community walls shall be decorative in nature. Community walls shall incorporate the use of pilasters of a design consistent with the materials of the community walls. The location and spacing of pilasters shall be subject to Planning Department review and approval.

8.16.2 Solid Walls and Fencing

Solid walls shall be decorative. The use of vinyl fencing and wood fencing is prohibited. Reverse frontage walls and any wall return that is visible from public view, shall be constructed of split-face block or precision block that is veneered, burnished (using color other than common gray), plastered or stuccoed, and should complement color scheme dictated in Ontario Esperanza Specific Plan color palette. Decorative caps and the use of pilasters to help enhance the perimeter appeal of the walls are encouraged. Walls visible from the community streets may not be made of exposed or painted precision block or slumped block.

8.16.3 View Fencing

If applicable, view fences should be located in the rear yards of those properties abutting large slope areas where the adjacent property is a minimum of 15' above/below the house pad. These fences allow open views but not physical access; they shall be 5'-6" high and made of tubular steel or lexan glass panel construction. Areas where view fencing occurs will be subject to review by the City of Ontario. The use of tubular steel view fencing shall incorporate pilasters utilizing materials consistent with adjacent walls.

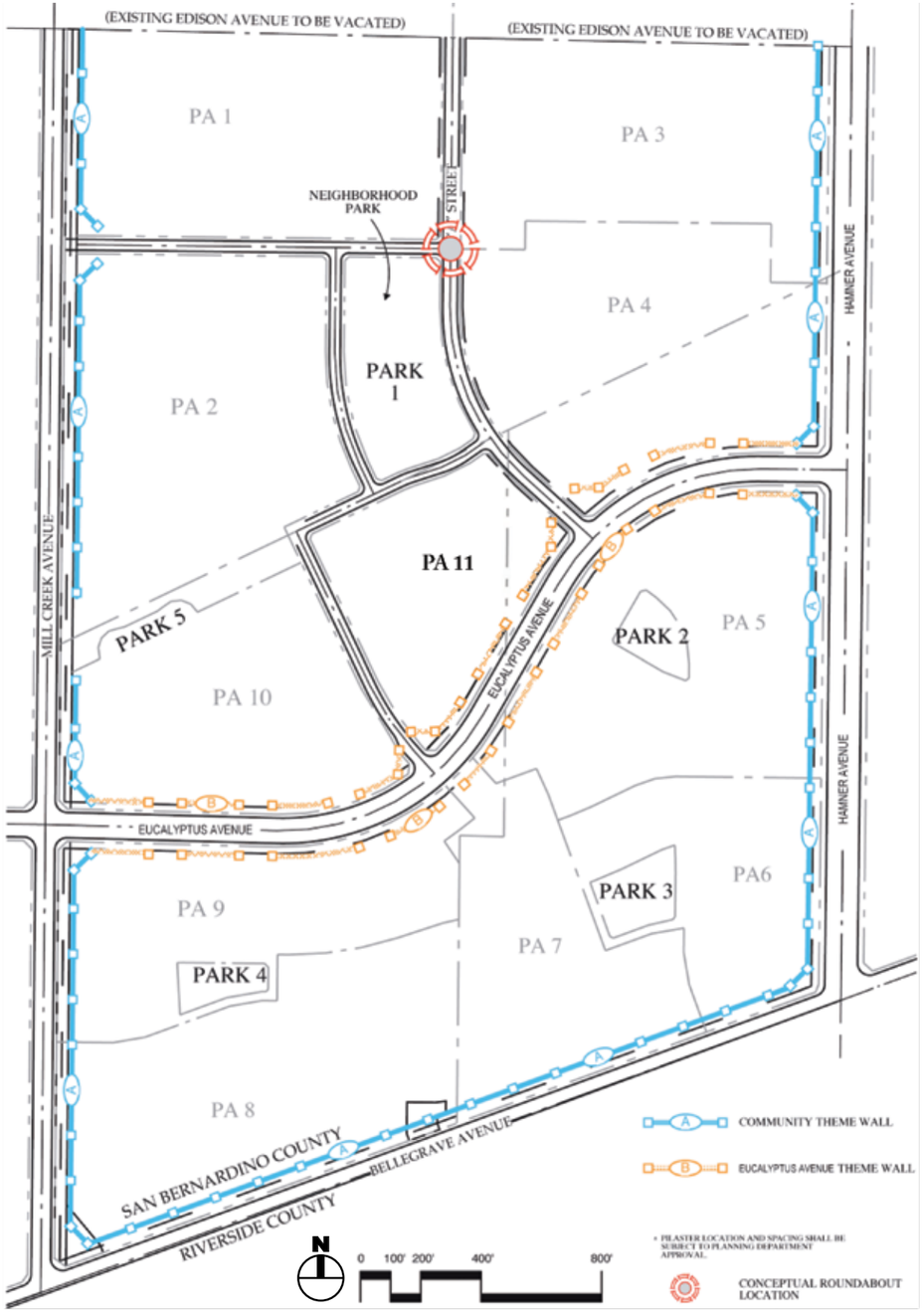
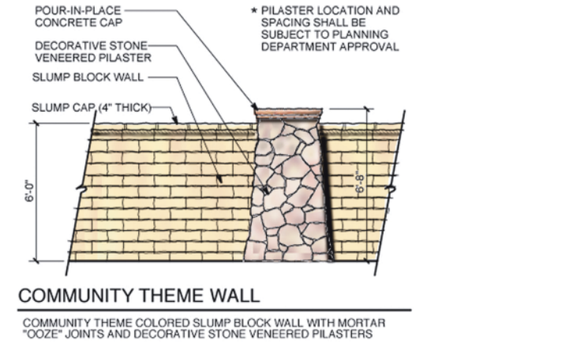
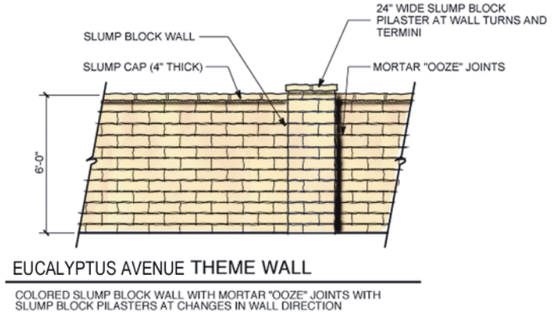
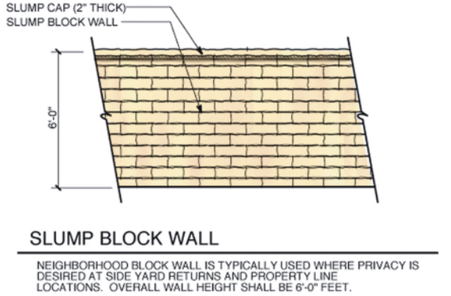


Exhibit 52
Master Walls and Fence Plan







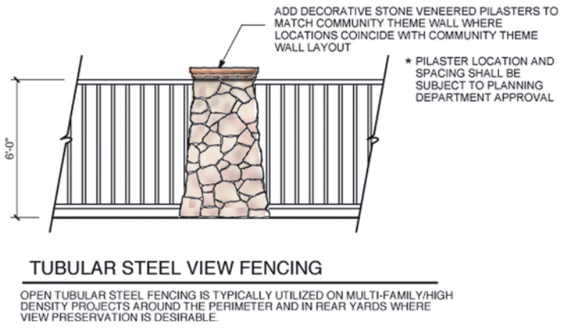


Exhibit 53
Wall and Fence Details

8.17 OUTDOOR LIGHTING

Lighting standards within the Ontario Esperanza community shall be consistent in style, color, and materials in order to maintain uniformity throughout. Lighting should be subtle, providing a soft wash of light over illuminated objects such as monumentation. Hierarchy shall be established by using a variety of lighting fixtures and illumination levels based off of lighting design intent. Lighting styles shall tie into architectural styles and provide sufficient illumination for the safety and well being of the community. Preservation of "Night-Sky" should be considered in lighting design layout and fixture selection. Use of "cutoff" or louvered lamps to preserve ambiance of "Night-Sky" is highly encouraged. Fixture locations should be designed so that light source is not visible by pedestrian or vehicular traffic. Frosted, louvered, or prismatic lens should be considered where decorative lighting fixtures are visible and part of the aesthetic lighting program. Accent lighting of landscape and monumentation shall be incorporated into the following areas:

8.17.1 Entry Monument Lighting:

Avoid intensely bright or "hot" lighting of monuments; rather, each should be lit to provide a soft wash of light across the monument signage. Specimen trees should be up-lit with several fixtures into the canopy to avoid creating dark sides of the trees.

8.17.2 Neighborhood Park/ Mini Parks/ Walkway Lighting

Lighting of the walkways, tot lots, restroom facility, and parking areas within the Parks should be considered for safety and security. All planned parking areas shall have a minimum maintained lighting level of one-foot candle (1 F.C.) or greater. The lighting shall be from sunset to sunrise and be operated by a photocell. The site plan shall be provided to the Police Department. It shall show all buildings, parking areas, walkways, detailed landscape areas and point-by-point photometry calculation of required light levels. Utilization of a traditional Globe/Acorn Post mounted light fixture should be considered for both the park open space areas as well as interior street lighting fixtures. Keeping with the character of traditional materials, (like those found in the "Model Colony" in Downtown Ontario) this will help to create a better sense of scale to the pedestrian. Fixtures shall be vandal resistant, not less than (8) eight feet from ground level. Luminaries of not less than (42") may be utilized to illuminate a walkway if adjacent landscaping is of a variety which does not mature higher than (2) two feet.

8.18 LANDSCAPE DESIGN

8.18.1 Public Landscapes

- Landscape plantings in public areas should reflect a commitment to both developing a "sense of place" and maintaining harmony with the Ontario Ranch.
- Community Facilities District (CFD) areas shall be separated with a 6" by 6" concrete mow strip when adjacent to private property.
- A landscape architect licensed in California shall be retained to prepare planting and irrigation plans for all public areas. Arrangement of plants should incorporate the concepts of mass planting; plants should be placed to allow them to grow to their natural sizes and forms, and sheared hedges should be kept to a minimum.

The plant matrix at the end of this section offers a suggested plant palette for Ontario Esperanza; while it is by no means all-inclusive, plantings in public areas should draw primarily from this palette for visual community continuity.

8.18.2 Front Yard Landscapes

Plantings in front yards may vary substantially from the Ontario Esperanza palette, but should retain some of the character and style of the public plantings. ~~No more than 25% of the total square footage of any front yard shall be lawn~~ Turf shall not exceed 25% of the landscape area in residential front yards; the balance shall be composed of shrubs and groundcovers, with an emphasis on drought tolerant plant species. No more than ~~55%~~ 45% of the front yard area shall be hardscape. Turf areas shall be sized and shaped to optimize irrigation efficiency. If turf is used in isolated areas such as driveway strips, subsurface irrigation or microspray heads shall be required to avoid overspraying of these areas. Irregular shapes that cannot be irrigated should be avoided.

- Each single-family lot shall be provided with front yard landscaping and a permanent automatic irrigation system. At a minimum, a seeded turf lawn, appropriate shrubs and trees shall be provided as landscaping materials. A variety of typical landscape designs shall be provided for use on each lot within the subdivision.
- Multiple family residential product areas shall be provided with full landscape improvements throughout the development. At a minimum, a seeded turf lawn, appropriate shrubs and trees, and a permanent irrigation system shall be provided.
- Landscape and irrigation drawings for each development shall be submitted in conjunction with house construction plans. The plans shall be approved by the Planning Department and the Landscape Planning Division prior to the issuance of building permits.
- Areas of a lot or site which are not used for drive entries, parking, or approved outdoor uses shall be fully landscaped; all unpaved areas shall be landscaped; and all future development phase areas shall be hydroseeded.

8.18.3 Soil Testing

Soil samples shall be taken from several locations after the completion of rough grading operations, and a reputable soil-testing laboratory shall perform an agronomic soils test. The test shall assess soil fertility needs for water-wise California native and Mediterranean plant types. No planting shall take place until the soil has been properly prepared based on the recommendations of the soils testing laboratory. Organic soils amendments shall be incorporated as necessary to achieve a recommended percolation rate of one inch per hour.

8.18.4 Slope Landscaping

All manufactured and cut/fill slopes which exceed 3' in height shall be planted with an effective mixture of groundcover, shrubs, trees, and include jute matting. Such slopes shall also be irrigated as necessary to ensure germination and establishment. Landscape slopes shall not exceed 3:1 or greater and shall include the installation of jute matting. Where 2:1 landscape slopes are unavoidable, erosion blankets shall be installed with a 3-year durability.

8.18.5 Interior Slopes: Residential Interior

- Interior slopes may be more ornamental in character than exterior slopes. They may have a somewhat broader range of plant materials than exterior slopes, but should still be chosen primarily from the Ontario Esperanza plant palette and are subject to the same fuel modification restrictions.
- All manufactured and cut/fill slopes which exceed 3' in height shall be planted with an effective mixture of groundcover, shrubs, and trees. Such slopes shall also be irrigated as necessary to ensure germination and establishment.

8.18.6 Streetscape Landscaping

Streetscape Development Standards

- Turf grass ~~shall only be used in areas with street side parking and shall be located adjacent to the sidewalk or curb line.~~ is only permitted within streetscapes where streetside parking is identified and recycled water is available.
- All new plantings within the Ontario Esperanza planned community shall draw substantially from the Ontario Esperanza Plant List included in this document.
- All streetscape landscaping within the Ontario Esperanza planned community will be implemented by the Developer in accordance with this Specific Plan.
- The Developer shall install all primary and secondary improvements concurrently with the construction of the roadway on which they front. Neighborhood intersections shall be constructed as each neighborhood street is built.
- The Developer shall provide site inspection of all construction and installation of entries and intersections in accordance the City of Ontario requirements.

8.18.7 Irrigation Design

Irrigation for both public and private landscapes should be designed to be as water-efficient as possible. All irrigation systems shall have automatic controllers designed to properly water plant materials given the site's soil conditions, and irrigation systems for all public landscapes shall have automatic rain shut-off devices. Drip irrigation is not permitted with CFD landscape areas. Spray systems shall have low volume (gpm) matched-precipitation heads. All CFD areas are to be controlled with a central control irrigation system and all trees are to be irrigated utilizing a flush grade bubbler system on a separate valve. All CFD areas shall be designed to City Standard Specifications.

All irrigation products specified shall achieve an irrigation operational distribution uniformity of ~~70%~~ 65% or greater in all turf areas and ~~80%~~ in all other landscaped areas. Turf areas shall be irrigated with equipment that has a precipitation rate of one inch or less per hour as specified by the manufacturer. Stream rotator heads or low volume spray heads are acceptable for turf areas. Use of standard spray heads shall be avoided. Non turf shrub areas shall be irrigated with low volume micro spray or point application devices, where manufacturer's specification indicates output measured and expressed in gallons per hour.

Botanical Name	Common Name	Eucalyptus Avenue (Per Ontario Ranch Streetscape Master Plan	Bellgrave Avenue (Per Ontario Ranch Streetscape Master Plan)	Mill Creek Avenue (Per Ontario Ranch Streetscape Master Plan)	Hamner Avenue (Per Ontario Ranch Streetscape Master Plan)	SCE Easement (Mill Creek Avenue)	Primary Community Entries	Secondary Community Entries	Neighborhood Entries	Neighborhood Park Open Space	Mini Parks	Alleys
~~*Arbutus unedo*~~	~~Strawberry Tree~~					•						•
Acacia cultriformis	Knife Acacia					•						
Brachychiton populneus	Bottle Tree									•	•	•
Callistemon viminalis	Weeping Bottlebrush											•
Cedrus deodara	Deodar Cedar									•		
Chionanthus retusus	Chinese Fringe Tree									•	•	
Cupressus sempervirens	Italian Cypress						•	•	•			
Dodonaea vicosa	Hopseed Bush					•						•
Cercis canadensis	Eastern Redubd					•						•
Juniperus chinensis 'Torulosa'	Hollywood Juniper											•
Lagerstroemia indica hybrids	Crape Myrtle								•	•	•	
~~*Liquidambar styraciflua*~~	~~American Sweet Gum~~									•		
Olea europea	Olive										•	
Olea europea	Olive									•	•	•
Melalueca linariifolia	Falxleaf Paperbark									•		
Melalueca nesophila	Pink Melalueca					•						•
Melalueca quinquinervia	Cajeput Tree									•		
Pinus canarensis	Canary Island Pine									•	•	
Platanus acerifolia	London Plane Tree									•	•	
Platanus racemosa	Western Sycamore						•			•		
Podocarpus gracilior	Yew Pine								•		•	
Tristania conferta	Brisbane Box									•	•	
Fraxinus uhdei	Ash								•		•	•
Quercus agrifolia	Coast Live Oak						•	•		•		
Quercus ilex	Holly Oak									•		
Rhus lancea	African Sumac											•
Schinus molle	California Pepper						•	•		•		
Tristania laurina	Water Gum											•

TABLE 6
Plant Matrix - Trees

Botanical Name	Common Name	Eucalyptus Avenue	Bellgrave Avenue	Mill Creek Avenue	Hamner Avenue	SCE Easement (Mill Creek Avenue)	Primary Community Entries	Secondary Community Entries	Neighborhood Entries	Community Park Open Space	Linear Park	Paseo Trail System	Alleys
Agapanthus species	Lily of the Nile											•	•
Anigozanthos species	Kangaroo Paws	■		■		■		■		■		■	
~~*Arbutus unedo 'Compacta'*~~	~~Compact Strawberry Tree~~					•							
Arctostaphylos d. 'Howard McMinn'	McMinn Manzanita	■		■		•		■		•	•	■	
Asparagus densiflorus 'Myers'	Myers Asparagus											•	•
Bergenia cordifolia	Bergenia	■		■		•		■		■		■	
Buxus japonica	Japanese Boxwood						•	•	•				
Calliandra haematocephala	Pink Powder Puff	■		■		■		•		■		■	•
Callistemon 'Little John'	Dwarf Callistemon					•						•	
Camellia species	Camellia	■		■		■		■		■		■	
Campanula poschcharskyana	Serbian Bellflower												
Carex tumulicola	Berkeley Sedge	■		■		■	•	•	•	■		■	
Cercis occidentalis	Western Redbud						•	•	•				
Salvia	Sage	■	•	■	•	•		■		■		•	
Salvia	Sage					•	•	•	•			•	
Correa pulchella 'Mission Bells'	Australian Fuchsia	■		■		•	•	•	•	■		•	•
Cotoneaster lacteus	Cotoneaster						•	•	•				
Deschampsia cespitosa	Hair Grass	■	•	■	•	■	•	•	•	■		■	
Dietes iridioides	Fortnight Lily	•		•						•	•	•	•
Dodonaea vicosa	Hopseed-Bush	■		■		■		■		■		■	
Echium fastuosum	Pride of Madiera	•				•							
Festuca mairei	*Atlas Fescue*	■	•	■	•	■	•	•	•	■		■	
Geranium incanum	Carpet Geranium												•
Geranium 'Johnson's Blue'	Johnson's Blue Geranium	■	•	■	•	■		■		■		■	
~~*Helictotrichon*~~	~~Oat Grass~~		•		•								
~~*Helictotrichon*~~	~~Oat Grass~~	•	•	•	•	■		■		■		■	
Helictotrichon sempervirens	Blue Oat Grass									•	•	•	•
Hemerocallis hybrids (evergreen)	Daylily - mixed colors	■	•	■	•	■	•	•	•	•	•	•	•
Heuchera sanguinea	Coral Bells						•	•	•				
Juniperus species	Juniper	■		■		■		■		■		■	
Kniphofia uvaria	Red Hot Poker											•	•
Lantana species	Lantana	■		■		■		■		■		■	
Lavatera maritima	Tree Mallow												
Leptospermum scoparium	New Zealand Tea Tree	■	•	■	•	■		■		■		■	
Ligustrum japonicum 'Texanum'	Japanese Privet	•											•
Mahonia aquifolium	Oregon Grape	■		■		■	•	•	•	■		■	
Mimulus species	Monkey Flower												
Muhlenbergia rigens	Deer Grass	•		■		•		■		■		■	
Myoporum parvifolium	Trailing Myoporum					•							
Myrtus communis 'Compacta'	Dwarf Myrtle	■		■		■		■		■		■	
Nandina domestica	Heavenly Bamboo		•				•	•	•	•	•	•	•
Nephrolepis cordifolia	Southern Sword Fern	■		■		■		■		■		■	
~~*Nessella tenuissima*~~	~~Mexican Feather Grass~~								•			•	
Penstemon species	Beard Tongue	■		■		■	•	•	•	■		■	
~~*Phormium hybrids*~~	~~Hybrid New Zealand Flax~~	•											
~~*Photinia x fraseri*~~	~~Photinia~~	■		■		■		■		■		■	
Plumbago auriculata	Cape Plumbago												
Prunus c. 'Bright 'n Tight'	Carolina Laurel Cherry	■		■		■		■		■		■	
Rosa species	Rose		•		•					•	•		
Rosmarinus officianalis and hybrids	Rosemary	•		■		•		■		■		■	
Salvia greggii and cultivars	Autumn Sage						•	•	•				
Sedum 'Autumn Joy'	Autumn Joy Stonecrop	■	•	■	•	■		■		■		■	
Tecomaria capensis	Cape Honeysuckle												
Teucrium x lucidrys	Bush Germander	■	•	■	•	■		■		■		■	
Xylosma congestum	Shiny Leaf Xylosma												
Viburnum tinus 'Spring Boquet'	Spring Boquet Laurustinus	■	•	■	•	■		■		•	•	■	

Table 7
Plant Matrix - Shrubs

Section 9. General Plan Consistency

California Government Code (Title 7, Division 1, Section 3, Article 8, Section 65440- 65457) permits the adoption and administration of Specific Plans as an implementation tool for elements contained within a jurisdiction's local General Plan. Specific plans must demonstrate consistency in regulations, guidelines, and programs with the goals and policies set forth in the general plan.

The Esperanza Specific Plan has been prepared in conformance with the goals and policies of the City of Ontario General Plan. The "~~City of Ontario New Model Colony~~ Ontario Ranch Specific Plan Policy Matrix" which follows, describes the manner in which the Specific Plan complies with the General Plan.

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The Ontario Plan 2050
Specific Plan Policy Matrix

Following are policies from the Ontario Plan 2050. The Ontario Plan establishes the direction and vision for the City of Ontario and provides a single comprehensive document to shape its future. The Ontario Plan provides for policies to accommodate change over its 30 year lifespan. The Ontario Plan consists of a six (6) part Component Framework: ***1) Vision, 2) Governance Manual, 3) Policy Plan, 4) City Council Priorities, 5) Implementation, and 6) Tracking and Feedback****. The following matrix is intended to determine the adequacy of the proposed Specific Plan in meeting the polices of the Ontario Plan. The checklist shall be completed and submitted with the Specific Plan application. Check if the Specific Plan fully complies or partially complies with each respective policy, or if not applicable.*

Policy		Fully Complies	Partially Complies	SP Sec. No.	N/A
LAND USE ELEMENT					
LU-1 Balance					
Goal	**A community that has a spectrum of housing types and price ranges that match the jobs in the City and that make it possible for people to live and work in Ontario and maintain a quality of life.**				
LU-1.1	**Strategic Growth.** We concentrate growth in strategic locations that help create place and identity, maximize available and planned infrastructure, foster the development of transit, and support the expansion of the active and multimodal transportation networks throughout the City.	X		4 and 7	
Comments:					
LU-1.2	**Sustainable Community Strategy.** We integrate state, regional, and local Sustainable Community/Smart Growth principles into the development and entitlement process.	X		7	
Comments:					
LU-1.3	**Adequate Capacity.** We require adequate infrastructure and services for all development.	X		5	
Comments:					

Policy		Fully Complies	Partially Complies	SP Sec. No.	N/A
LU-1.4	**Multimodal Mobility.** We require development and urban design, where appropriate, that reduces reliance on the automobile and capitalizes on active transportation, transit, electric vehicles, and multimodal transportation opportunities.	X		5	
Comments:					
LU-1.5	**Jobs-Housing Balance.** We coordinate land use, infrastructure, and transportation planning and analysis with regional, county, and other local agencies to further regional and subregional goals for jobs-housing balance.	X		4 and 7	
Comments:					
LU-1.6	**Complete Community.** We incorporate a variety of land uses and building types in our land use planning efforts that result in a complete community where residents at all stages of life, employers, workers, and visitors have a wide spectrum of choices of where they can live, work, shop and recreate within Ontario.	X		4 and 7	
Comments:					
LU-1.7	**Revenues and Costs.** We require future amendments to our Land Use Plan to be accompanied by analyses of fiscal impacts.	X		7	
Comments:					
LU-2 Compatibility					
Goal	**Compatibility between a wide range of uses and resultant urban patterns and forms.**				
LU-2.1	**Land Use Decisions.** We minimize adverse impacts on adjacent properties when considering land use and zoning requests.	X		3 and 4	
Comments:					
LU-2.2	**Buffers.** We require new uses to provide mitigation or buffers between existing uses where potential adverse impacts could occur. Additional mitigation is required when new uses could negatively impact environmental justice areas.	X		4 and 5	
Comments:					
LU-2.3	**Hazardous Uses.** We regulate the development of industrial and similar uses that use, store, produce, or transport toxic substances, air emissions, other pollutants, or hazardous materials.				X
Comments:	*The General Plan does not designate the Esperanza Specific Plan for industrial land uses.*				

Policy		Fully Complies	Partially Complies	SP Sec. No.	N/A
LU-2.4	**Regulation of Nuisances.** We regulate the location, concentration, and operation of potential nuisances.	X		4	
Comments:					
LU-2.5	**Regulation of Uses.** We regulate the location, concentration, and operation of uses that have impacts on surrounding land uses.	X		4	
Comments:					
LU-2.6	**Infrastructure Compatibility.** We require infrastructure to be aesthetically pleasing and in context with the community character.	X		4, 5 and 8	
Comments:					
LU-2.7	**Inter-jurisdictional Coordination.** We maintain an ongoing liaison with ONT, Caltrans, Public Utilities Commission, the railroads, and other agencies to help minimize impacts and improve the operations and aesthetics of their facilities.	X		7	
Comments:					
LU-2.8	**Transitional Areas.** We require development in transitional areas to protect the quality of life of current residents.	X		4	
Comments:					
LU-2.9	**Methane Gas Sites.** We require sensitive land uses and new uses on former dairy farms or other methane-producing sites be designed to minimize health risks.	X		4 and 7	
Comments:					
LU-2.10	**Sensitive Uses.** We monitor and share information with the community about stationary and non-stationary emission sources. We encourage siting and design of facilities to minimize health and safety risks on existing and proposed sensitive uses, especially in environmental justice areas.	X		7	
Comments:					
LU-2.11	**Context-Aware Transitions and Connections.** We require new development projects and land-planning efforts to provide context-aware and appropriate transitions and connections between existing and planned neighborhoods, blocks, sites, and buildings.	X		4	
Comments:					

Policy		Fully Complies	Partially Complies	SP Sec. No.	N/A
LU-3 Flexibility					
Goal	**Staff, regulations and processes that support and allow flexible response to conditions and circumstances in order to achieve the Vision.**				
LU-3.1	**Development Standards.** We maintain clear development standards which allow flexibility to achieve our Vision and provide objective standards that ensure predictability and deliver the intended physical outcomes.	X		6 and 7	
Comments:					
LU-3.2	**Design Incentives.** We offer design incentives to help projects achieve the Vision.	X		6, 7 and 8	
Comments:					
LU-3.3	**Land Use Flexibility.** We consider uses not typically permitted within a land use category if doing so improves livability, reduces vehicular trips, creates community gathering places and activity nodes, and helps create identity.	X		6 and 8	
Comments:					
LU-4 Phased Growth					
Goal	**Development that provides short-term value only when the opportunity to achieve our Vision can be preserved.**				
LU-4.1	**Commitment to Vision.** We are committed to achieving our Vision but realize that it may take time and several interim steps to get there.	X		4 and 7	
Comments:					
LU-4.2	**Interim Development.** We allow development in urban, mixed use, and transit-oriented Place Types that is not immediately reflective of our ultimate Vision for the Place Type, provided it can be modified or replaced when circumstances are right to support development aligned with the Place Type Vision. We will not allow development that impedes, precludes, or compromises our ability to achieve our Vision.				X
Comments:	*The plan does not include the development of urban, mixed use, or transit-oriented Place Types.*				

Policy		Fully Complies	Partially Complies	SP Sec. No.	N/A
LU-4.3	**Infrastructure Timing.** We require that the necessary infrastructure and services be in place prior to or concurrently with development.	X		4 and 5	
Comments:					
LU-4.4	**Shared Infrastructure.** We encourage and facilitate the use of shared infrastructure (including shared or managed parking) in urban, mixed use, and transit-oriented Place Types.	X		4 and 5	
Comments:					
LU-5 Airport Planning					
Goal	**Integrated airport systems and facilities that minimize negative impacts to the community and maximize economic benefits.**				
LU-5.1	**Coordination with Airport Authorities.** We collaborate with FAA, Caltrans Division of Aeronautics, airport owners, neighboring jurisdictions, and other shareholders in the preparation, update, and maintenance of airport-related plans.				X
Comments:	*The plan is not within the airport impact zone.*				
LU-5.2	**Airport Planning Consistency.** We coordinate with airport authorities to ensure The Ontario Plan is consistent with state law, federal regulations, and/or adopted master plans, and airport land use compatibility plans for ONT and Chino Airport.				X
Comments:	*The plan is not within the airport impact zone.*				
LU-5.3	**Airport Impacts.** We work with agencies to maximize resources to mitigate the impacts and hazards related to airport operations – their homes.				X
Comments:	*The plan is not within the airport impact zone.*				
LU-5.4	**ONT Growth Forecast.** We support and promote an ONT that accommodates 30 million annual passengers and 1.6 million tons of cargo per year, as long as the impacts associated with that level of operations are planned for and mitigated.				X
Comments:	*The plan is not within the airport impact zone.*				
LU-5.5	**Airport Compatibility Planning for ONT.** We create and maintain the Airport Land Use Compatibility Plan for ONT.				X
Comments:	*The plan is not within the airport impact zone.*				

Policy		Fully Complies	Partially Complies	SP Sec. No.	N/A
LU-5.6	**Alternative Process.** We fulfill our responsibilities and comply with state law with regard to the Alternative Process for proper airport land use compatibility planning.				X
Comments:	*The plan is not within the airport impact zone.*				
LU-5.7	**ALUCP Consistency with Land Use Regulations.** We comply with state law that requires general plans, specific plans, and all new development to be consistent with the policies and criteria set forth within an Airport Land Use Compatibility Plan for any public-use airport.				X
Comments:	*The plan is not within the airport impact zone.*				
LU-5.8	**Chino Airport.** We will support the creation and implementation of the Airport Land Use Compatibility Plan for Chino Airport.				X
Comments:	*The plan is not within the airport impact zone.*				
HOUSING ELEMENT					
H-1 Neighborhoods & Housing					
Goal	**Stable neighborhoods of quality housing, ample community services and public facilities, well-maintained infrastructure, and public safety that foster a positive sense of identity.**				
H-1.1	**Housing Rehabilitation.** We support the rehabilitation, maintenance, and improvement of single-family, multiple-family, and mobile homes through code compliance, removal of blight where necessary, and provision of rehabilitation assistance where feasible.	X		4 and 8	
Comments:					
H-1.2	**Neighborhood Conditions.** We direct efforts to improve the long-term sustainability of neighborhoods through comprehensive planning, provision of neighborhood amenities, rehabilitation and maintenance of housing, and community building efforts.	X		4 and 8	
Comments:					
H-1.3	**Community Amenities.** We shall provide adequate public services, infrastructure, open space, parking and traffic management, pedestrian, bicycle, and equestrian routes and public safety for neighborhoods consistent with City master plans and neighborhood plans.	X		4 and 8	
Comments:					

Policy		Fully Complies	Partially Complies	SP Sec. No.	N/A
H-1.4	**Historical Preservation.** We support the preservation and enhancement of residential structures, properties, street designs, lot configurations, and other reminders of Ontario's past that are considered to be local historical or cultural resources.	X		3	
Comments:					
H-1.5	**Neighborhood Identity.** We strengthen neighborhood identity through creating parks and recreational outlets, sponsoring neighborhood events, and encouraging resident participation in the planning and improvement of their neighborhoods.	X		4 and 8	
Comments:					
H-2 Housing Supply & Diversity					
Goal	**Diversity of types of quality housing that are affordable to a range of household income levels, accommodate changing demographics, and support and reinforce the economic sustainability of Ontario.**				
H-2.1	**Corridor Housing.** We revitalize transportation corridors by encouraging the production of higher density residential and mixed-uses that are architecturally, functionally, and aesthetically suited to corridors.	X		3 and 4	
Comments:					
H-2.2	**Historic Downtown.** We foster a vibrant historic downtown through facilitating a wide range of housing types and affordability levels for households of all ages, housing preferences, and income levels.				X
Comments:	*The plan does not include the development of a historic downtown.*				
H-2.3	**Ontario Airport Metro Center.** We foster a vibrant, urban, intense, and highly amenitized community in the Ontario Airport Metro Center Area through a mix of residential, entertainment, retail, and office-oriented uses.				X
Comments:	*The plan does not include the development of a Ontario airport metro center.*				
H-2.4	**Ontario Ranch.** We support a premier lifestyle community in the Ontario Ranch, distinguished by diverse housing, highest design quality, and cohesive and highly amenitized neighborhoods.	X		4 and 8	
Comments:					

Policy		Fully Complies	Partially Complies	SP Sec. No.	N/A
H-2.5	**Housing Design.** We require architectural excellence through adherence to City design guidelines, thoughtful site planning, environmentally sustainable practices, and other best practices.	X		6 and 8	
Comments:					
H-2.6	**Infill Development.** We support the revitalization of neighborhoods through the construction of higher-density residential developments on underutilized residential and commercial sites.	X		3 and 4	
Comments:					
H-3 Governmental Regulations					
Goal	**A City regulatory environment that balances the need for creativity and excellence in residential design, flexibility and predictability in the project approval process, and the provision of an adequate supply and prices of housing.**				
H-3.1	**Incentives.** We maintain incentive programs that can be offered to projects that provide benefits to the community such as exceptional design quality, economic advantages, environmental sustainability, or other benefits that would otherwise be unrealized.	X		7	
Comments:					
H-3.2	**Flexible Standards.** We allow flexibility in the application of residential and mixed-use development standards in order to gain benefits such as exceptional design quality, economic advantages, sustainability, or other benefits that would otherwise be unrealized.	X		6 and 8	
Comments:					
H-3.3	**Development Review.** We maintain a residential development review process that provides certainty and transparency for project stakeholders and the public, yet allows for the appropriate review to facilitate quality housing development.	X		4 and 7	
Comments:					
H-3.4	**Financial Incentives.** We consider financial incentives to facilitate and encourage the production, rehabilitation or improvement of housing, or provision of services where such activity furthers housing and community-wide goals.	X		7	
Comments:					

Policy		Fully Complies	Partially Complies	SP Sec. No.	N/A
H-4 Housing Assistance					
Goal	**Increased opportunities for low- and moderate-income households and families to afford and maintain quality ownership and rental housing opportunities, including move-up opportunities. Inclusive communities, racial equity, fair housing choice, and access to opportunity.**				
H-4.1	**Preservation of Affordable Apartments.** We strive to facilitate the preservation of the affordability of publicly assisted apartments for lower-income households through financial assistance, technical assistance, rehabilitation, and collaborative partnerships.				X
Comments:					
H-4.2	**Homeownership Opportunities.** We increase and expand homeownership rates for lower- and moderate-income households by offering financial assistance, low-interest loans, and educational resources, and by working in collaboration with partnerships.		X	4 and 7	
Comments:	*The plan provides a variety of homeowner ownership opportunities but does not include any affordable housing units.*				
H-4.3	**Rental Assistance.** We support the provision of rental assistance for individuals and families earning extremely low, very low, and low income with funding from the state and federal government.	X		7	
Comments:					
H-4.4	**Mixed-income Housing.** We encourage the integration of affordable housing in the Ontario Ranch, Ontario Airport Metro Center Area, and existing neighborhoods.	X		4 and 7	
Comments:					
H-4.5	**Collaborative Partnerships.** We support collaborative partnerships of nonprofit organizations, affordable housing developers, major employers, and for-profit developers to produce affordable housing.	X		7	
Comments:					
H-4.6	**Fair Housing.** We further fair housing by prohibiting discrimination in the housing market, lifting barriers that restrict access to housing, and providing education, support, and enforcement services to address discriminatory practices.	X		4 and 7	
Comments:					

Policy		Fully Complies	Partially Complies	SP Sec. No.	N/A
H-5 Special Needs					
Goal	**A full range of housing types and community services that meet the special housing needs for all individuals and families in Ontario, regardless of income level, age, or other status.**				
H-5.1	**Senior Housing.** We support the development of accessible and affordable senior housing and provide financial assistance for seniors to maintain and improve their homes.	X		4 and 7	
Comments:	*The plan does not include the development of senior housing.*				
H-5.2	**Family Housing.** We support the development of larger rental apartments that are appropriate for families with children, including, as feasible, the provision of services, recreation, and other amenities.				X
Comments:					
H-5.3	**Disabled People.** We increase the supply of permanent, affordable, and accessible housing for people with disabilities, and provide assistance to allow them to maintain and improve their homes.				X
Comments:	*The plan meets all current ADA requirements but does not include any affordable housing units.*				
H-5.4	**Homeless People.** We partner with nonprofit partners to provide emergency shelters, transitional housing, permanent supportive housing, and supportive services for people who are homeless.				X
Comments:	*The plan does not include any emergency or homeless shelters.*				
H-5.5	**Supportive Services.** We financially support organizations, as feasible, that provide support services that meet the needs of those with special needs and further the greatest level of independence.				X
Comments:					
H-5.6	**Partnerships.** We collaborate with nonprofit organizations, private developers, employers, government agencies, and other interested parties to develop affordable housing and provide support services.				X
Comments:					

Policy		Fully Complies	Partially Complies	SP Sec. No.	N/A
PARKS & RECREATION ELEMENT					
PR-1 Planning & Design					
Goal	**A system of safe and accessible parks that meets the needs of the community.**				
PR-1.1	**Access to Parks.** In all new residential development areas, we strive to provide a park and/or recreational facility within walking distance (¼ mile) of every residence and prioritize the establishment of parks in environmental justice areas that do not have adequate access to parks.	X		4 and 8	
Comments:					
PR-1.2	**Adjacency to Schools.** We examine locating parks adjacent to school sites to promote joint-use opportunities.				X
Comments:	*The plan no longer includes plans to develop a school site.*				
PR-1.3	**Funding.** We shall seek outside, one-time sources of funding for capital improvements and reserve ongoing City funds primarily for operations and maintenance.	X		7	
Comments:					
PR-1.4	**Joint-use Opportunities.** In areas where there is a need but no City recreational facility, we explore joint-use opportunities. (e.g., school sites).	X		7	
Comments:					
PR-1.5	**Acreage Standard.** We strive to provide 5 acres of parkland (public and private) per 1,000 residents.	X		4 and 7	
Comments:					
PR-1.6	**Private Parks.** We expect development to provide a minimum of 2 acres of developed private park space per 1,000 residents.	X		4 and 7	
Comments:	*The Project developers will participate in the development impact fee program a s required for park fees.*				
PR-1.7	**Special Needs/Universal Design.** We attempt to provide recreational opportunities at parks for people of all ages and abilities.	X		7 and 8	
Comments:					
PR-1.8	**Renovation.** We examine renovating existing facilities prior to building replacement facilities.	X		7	
Comments:					

Policy		Fully Complies	Partially Complies	SP Sec. No.	N/A
PR-1.9	**Phased Development. We require parks be built in new communities before a significant proportion of residents move in.**	X		4 and 7	
Comments:					
PR-1.10	**Master Plans for Individual Park Facilities.** We require an individual park master plan for parks in excess of 10 acres.				X
Comments:	*The plan does not include any parks in excess of 10 acres. The City of Ontario is the entity responsible for updating the Parks & Recreational Facilities Master Plan.*				
PR-1.11	**Environmental Function of Parks.** We require new parks to meet environmental management objectives.	X		4 and 7	
Comments:					
PR-1.12	**Trails.** We promote connections between parks and local trails including those managed by other public agencies.	X		4 and 7	
Comments:	*The plan includes parks and trails that connect to Citywide planned trails.*				
PR-1.13	**Equestrian Trails.** We require the design, construction, and maintenance of equestrian trails in Rural Residential designated areas.				X
Comments:	*The plan does not include any equestrian trails.*				
PR-1.14	**Multi-family Residential Developments.** We require that new multi-family residential developments of five or more units provide recreational facilities or open space, in addition to paying adopted impact fees.				X
Comments:	*The project developers will participate in the development impact fee program as required for park fees.*				
PR-1.15	**Trail Connectivity.** We strengthen and improve equestrian, bike, and multipurpose trail connections within the City and work to improve trail connections into adjacent jurisdictions.	X		4 and 7	
Comments:	*The plan includes multipurpose trails that connect to Citywide planned trails.*				
PR-1.16	**Equestrian Master Plan.** We use Homer Briggs Park as the primary focal point for the development of a Master Plan of Equestrian Trails in the Rural Residential area.				X
Comments:	*The plan does not include any equestrian trails.*				

Policy		Fully Complies	Partially Complies	SP Sec. No.	N/A
PR-2 Programming					
Goal	**A range of recreational programs provided by public, private, and nonprofit organizations that meet the needs of the community's varied interests, age groups, and abilities.**				
PR-2.1	**Participation.** We program park facilities to maximize utilization and participation, while considering park size, location, and population served.	X		4 and 8	
Comments:					
PR-2.2	**Needs Assessment.** We track the needs and priorities for recreational programming and look for ways to meet demand.	X		7	
Comments:					
PR-2.3	**Community Involvement.** We involve the local community in planning programs for neighborhood and community park facilities.	X		7	
Comments:					
PR-2.4	**Access to Programs.** We provide a range of recreational and physical exercise programs that are accessible to residents of all income levels throughout the community and prioritize establishing and maintaining equitable access for residents in environmental justice areas.	X		7	
Comments:					
PR-2.5	**Partnerships.** We partner with local and regional agencies, nonprofit organizations, and the private sector to provide a comprehensive range of recreational programs.	X		7	
Comments:					
PR-2.6	**Crime Deterrents.** We promote and participate in recreational programming as part of our crime prevention effort.	X		7	
Comments:					

Policy		Fully Complies	Partially Complies	SP Sec. No.	N/A
ENVIRONMENTAL RESOURCES ELEMENT					
ER-1 Water & Wasterwater					
Goal	**A reliable and cost-effective system that permits the City to manage its diverse water resources and needs.**				
ER-1.1	**Local Water Supply.** We increase local water supplies to reduce our dependence on imported water. New and redevelopment projects are aligned with our available water supply and/or to enhance our available water supply.	X		3 and 5	
Comments:	*The plan incorporates the City's Master Plan for water.*				
ER-1.2	**Matching Supply to Use.** We match water supply and quality to the appropriate use.	X		3 and 5	
Comments:					
ER-1.3	**Conservation and Sustainable Water Supply.** We work with regional water providers and users to conserve water and ensure sustainable local water supplies as more frequent droughts reduce long term local and regional water availability	X		3 and 5	
Comments:	*The plan incorporates the City's Master Plan for water.*				
ER-1.4	**Supply-Demand Balance.** We require that available water supply and demands be balanced.	X		3 and 5	
Comments:	*The plan incorporates the City's Master Plan for water.*				
ER-1.5	**Water Resource Management.** Environmental justice areas are prioritized as we coordinate with local agencies to protect water quality, prevent pollution, address existing contamination, and remediate contaminated surface water and groundwater.	X		3 and 5	
Comments:	*The plan incorporates the City's Master Plan for water.*				
ER-1.6	**Urban Run-off Quantity.** We encourage the use of low impact development strategies, including green infrastructure, to intercept run-off, slow the discharge rate, increase infiltration, and ultimately reduce discharge volumes to traditional storm drain systems.	X		3 and 5	
Comments:					
ER-1.7	**Urban Run-off Quality.** We require the control and management of urban run-off, consistent with Regional Water Quality Control Board regulations.	X		3 and 5	
Comments:	*The plan will comply with the City's Master Plan requirements for Wastewater management.*				

Policy		Fully Complies	Partially Complies	SP Sec. No.	N/A
ER-1.8	**Wastewater Management.** We require the management of wastewater discharge and collection consistent with waste discharge requirements adopted by the Regional Water Quality Control Board.	X		3 and 5	
Comments:	*The plan will comply with the City's Master Plan requirements for Wastewater management.*				
ER-2 Solid Waste & Recycling					
Goal	**A cost effective, integrated waste management system that meets or exceeds state and federal recycling and waste diversion mandates.**				
ER-2.1	**Waste Diversion.** We shall meet or exceed AB 939 requirements.	X		3 and 5	
Comments:					
ER-2.2	**Hazardous and Electronic Wastes.** We prohibit the disposal of hazardous and electronic waste into the municipal waste stream pursuant to state law.	X		3 and 5	
Comments:					
ER-2.3	**Purchase Products Made from Recycled Materials.** We purchase recycled-content products where it is cost effective.	X		3 and 5	
Comments:					
ER-3 Energy					
Goal	**Cost-effective and reliable energy system sustained through a combination of low impact buildings, site and neighborhood energy conservation, and diverse sources of energy generation that collectively helps to minimize the region's carbon footprint.**				
ER-3.1	**Conservation Strategy.** We require conservation as the first strategy to be employed to meet applicable energy-saving standards.	X		3 and 5	
Comments:					

Policy		Fully Complies	Partially Complies	SP Sec. No.	N/A
ER-3.2	**Green Development– Communities.** We encourage the use of the LEED Neighborhood Development rating system, or similar mechanism, to guide the planning and development of all new communities.	X		3 and 5	
Comments:					
ER-3.3	**Building and Site Design.** We require new construction to incorporate energy efficient building and site design strategies, which could include appropriate solar orientation, maximum use of natural daylight, passive solar, and natural ventilation.	X		3 and 5	
Comments:					
ER-3.4	**Green Development– Public Buildings.** We require all new and substantially renovated City buildings in excess of 10,000 square feet achieve a LEED Silver Certification standard, as determined by the U.S. Green Building Council.	X		3 and 5	
Comments:					
ER-3.5	**Fuel-Efficient and Alternative Energy Vehicles and Equipment.** We require purchase and use vehicles and equipment that are fuel efficient and meet or surpass state emissions requirements and/or use renewable sources of energy.	X		3 and 5	
Comments:					
ER-3.6	**Generation- Renewable Sources.** We promote the use of renewable energy sources (e.g., solar, wind, biomass) in public and private sector development.	X		3 and 5	
Comments:					
ER-4 Air Quality					
Goal	**Improved indoor and outdoor air quality and reduced locally generated pollutant emissions.**				
ER-4.1	**Land Use.** We reduce GHG and other local pollutant emissions through compact, mixed use, and transit-oriented development and development that improves the regional jobs-housing balance.	X		3 and 5	
Comments:					
ER-4.2	**Sensitive Land Uses.** We prohibit the future siting of sensitive land uses within the distances defined by the California Air Resources Board for specific source categories, without sufficient mitigation.	X		3 and 5	
Comments:					

Policy		Fully Complies	Partially Complies	SP Sec. No.	N/A
ER-4.3	**Greenhouse Gases (GHG) Emissions Reductions.** We will reduce GHG emissions in accordance with regional, state, and federal regulations.	X		3 and 5	
Comments:					
ER-4.4	**Indoor Air Quality.** We will comply with State Green Building Codes relative to indoor air quality. We seek funding to improve indoor air quality for households with poor indoor air quality, with priority for lower income households in environmental justice areas.	X		3 and 5	
Comments:					
ER-4.5	**Transportation.** We promote mass transit and non-motorized mobility options (walking, biking) to reduce air pollutant emissions.	X		3 and 5	
Comments:					
ER-4.6	**Particulate Matter.** We support efforts to reduce particulate matter to meet State and Federal Clean Air Standards.	X		3 and 5	
Comments:					
ER-4.7	**Other Agency Collaboration.** We collaborate with other agencies within the South Coast Air Basin to improve regional air quality at the emission source, with a particular focus on sources that affect environmental justice areas in Ontario.	X		3 and 5	
Comments:					
ER-4.8	**Tree Planting.** We protect healthy trees within the City and plant new trees to increase carbon sequestration and help the regional/local air quality. We expand the tree canopy in environmental justice areas to enhance air quality and reduce the "heat island" effect.	X		3 and 5	
Comments:					

Policy		Fully Complies	Partially Complies	SP Sec. No.	N/A
ER-4.9	**New Localized Air Pollution Sources Near Existing Sensitive Receptors.** We require new developments to conduct a Health Risk Assessment for land uses that generate more than 100 trucks per day or 40 trucks per day by trucks operating transportation refrigeration units (TRU's) within 1,000 feet from sensitive land uses (California Health and Safety Code § 42705.5(a)(5)). If the health risk assessment determines the new development poses health hazards that increase the incremental cancer risk above the threshold established by the South Coast Air Quality Management District (AQMD), we will only approve permits upon the condition that adequate mitigation measures are proposed and implemented for potential impacts on the sensitive uses around the site and along the route within Ontario taken by the trucks to and from freeways. We require new developments that must perform a health risk assessment to conduct additional public outreach by sending notifications in multiple languages to all residents living within 500 feet, and encourage hosting a public meeting.	X		3 and 5	
Comments:					
ER-5 Biological, Mineral & Agricultural Resources					
Goal	**Protected high value habitat and farming and mineral resource extraction activities that are compatible with adjacent development.**				
ER-5.1	**Habitat Conservation Areas.** We support the protection of biological resources through the establishment, restoration, and conservation of high-quality habitat areas.				X
Comments:	*The Plan area is not within or near any habitat conservation areas.*				
ER-5.2	**Entitlement and Permitting Process.** We comply with state and federal regulations regarding protected species.	X		3 and 5	
Comments:					
ER-5.3	**Right to Farm.** We support the right of existing farms to continue their operations within the Ontario Ranch.				X
Comments:					
ER-5.4	**Transition of Farms.** We protect both existing farms and sensitive uses around them as agricultural areas transition to urban uses.	X		3, 4, 5, 6 and 7	
Comments:					

Policy		Fully Complies	Partially Complies	SP Sec. No.	N/A
ER-5.5	**Mining Operations.** We prohibit future mining operations where the resource extraction activities are incompatible with existing or proposed adjacent land uses.	X		3 and 5	
Comments:					
COMMUNITY ECONOMICS ELEMENT					
CE-1 Complete Community					
Goal	**A complete community that provides for all incomes and stages of life.**				
CE-1.1	**Jobs-Housing Balance.** We pursue improvement to the Inland Empire's balance between jobs and housing by promoting job growth that reduces the regional economy's reliance on out-commuting.				X
Comments:					
CE-1.2	**Jobs and Workforce Skills.** We use our economic development resources to: 1. Attract jobs suited for the skills and education of current and future City residents; 2. Work with regional partners to provide opportunities for the labor force to improve its skills and education; and 3. Attract businesses that increase Ontario's stake and participation in growing sectors of the regional and global economy.				X
Comments:					
CE-1.3	**Regional Approach to Workforce Development.** We work with our partners to provide workforce training and development services throughout the region, recognizing that Ontario employers rely on workers living outside of the City.				X
Comments:					
CE-1.4	**Business Retention and Expansion.** We continuously improve two-way communication with the Ontario business community and emphasize customer service to existing businesses as part of our competitive advantage.				X
Comments:					

Policy		Fully Complies	Partially Complies	SP Sec. No.	N/A
CE-1.5	**Business Attraction.** We proactively attract new and expanding businesses to Ontario in order to increase the City's share of growing sectors of the regional and global economy.				X
Comments:					
CE-1.6	**Diversity of Housing.** We collaborate with residents, housing providers, and the development community to provide housing opportunities for every stage of life; we plan for a variety of housing types and price points to encourage the development of housing supportive of our efforts to attract business in growing sectors of the community while being respectful of existing viable uses.	X		4 and 7	
Comments:					
CE-1.7	**Retail Goods and Services.** We seek to ensure a mix of retail businesses that provide the full continuum of goods and services for the community.				X
Comments:					
CE-1.8	**Regional Attraction.** We encourage the development and programming of regional, cultural, and entertainment destinations in Ontario.				X
Comments:					
CE-1.9	**Regional Leadership.** We provide leadership for public, quasi-public, and private-sector partners that help Ontario and its residents and businesses realize our goals and achieve our Vision.				X
Comments:					
CE-1.10	**Life-Long Education.** We work with our partners who provide life-long learning to ensure that our residents and workforce have access to education at all stages of life.				X
Comments:					
CE-1.11	**Socioeconomic Trends.** We continuously monitor, plan for, and respond to changing socioeconomic trends.				X
Comments:					
CE-1.12	**Circulation.** We continuously plan and improve public transit and non-vehicular circulation for the mobility of all, including those with limited or no access to private automobiles.	X		4 and 7	
Comments:					

Policy		Fully Complies	Partially Complies	SP Sec. No.	N/A
CE-1.13	**Safety and Security.** We invest in public safety and communicate our successes because the perception and reality of safety and security are necessary prerequisites for private investment and economic growth.				X
Comments:					
CE-2 Placemaking					
Goal	**A City of distinctive neighborhoods, districts, corridors, and centers where people choose to be.**				
CE-2.1	**Development Projects.** We require new development and redevelopment to create unique, high-quality places that add value to the community.	X		6 and 8	
Comments:					
CE-2.2	**Development Review.** We require those proposing new development and redevelopment to demonstrate how their projects will create appropriately unique, functional, and sustainable places that will compete well with their competition within the region.	X		6 and 8	
Comments:					
CE-2.3	**Interim Development.** We require interim development that does not reflect the long-term Vision, be limited in scale of development so that the investment can be sufficiently amortized to make Vision-compatible redevelopment financially feasible.				X
Comments:					
CE-2.4	**Protection of Investment.** We require that new development and redevelopment protect existing investment by providing architecture and urban design of equal or greater quality.	X		6 and 8	
Comments:					
CE-2.5	**Private Maintenance.** We require adequate maintenance, upkeep, and investment in private property because proper maintenance on private property protects property values.	X		7	
Comments:					

Policy		Fully Complies	Partially Complies	SP Sec. No.	N/A
CE-2.5	**Public Maintenance.** We require the establishment and operation of maintenance districts or other vehicles to fund the long-term operation and maintenance of the public realm whether on private land, in rights-of-way, or on publicly-owned property.	X		7	
Comments:					
CE-3 Fiscal Decision-making					
Goal	**Decision-making deliberations that incorporate the full short-term and long-term economic and fiscal implications of proposed City Council actions.**				
CE-3.1	**Fiscal Impact Disclosure.** We require requests for City Council action to disclose the full fiscal impacts, including direct and indirect costs.				X
Comments:					
CE-3.2	**General Plan Amendments.** We require those proposing General Plan amendments to disclose reasonably foreseeable impacts through a fiscal analysis.				X
Comments:					
CE-3.3	**Long-Term Funding Disclosure.** We require those requesting City support or funding for projects or programs to disclose if and how they can be continued without further City support.				X
Comments:					
CE-3.4	**Improving Fiscal Decision-Making.** We periodically assess the accuracy of projections for staff time and City resources and use the assessment results to improve our fiscal decision-making process.				X
Comments:					
CE-3.5	**Sustainable Development.** We recognize impacts to municipal finances as an element of sustainability, and we require claims of sustainability to assess fiscal impacts.				X
Comments:					
CE-3.6	**Fully Funded Liability.** We require long-term liabilities, such as retiree medical benefits, employee accrued leave balances, and self-insured liability claims to be fully funded to ensure sound, long-term fiscal health.				X
Comments:					

Policy		Fully Complies	Partially Complies	SP Sec. No.	N/A
CE-3.7	**Programmatically Balanced Budget.** We require that the annual budget include appropriations allocated in a manner to meet the goal of the programmatically balanced budget.			7	X
Comments:					
CE-3.8	**Budget Margins.** We require that the adopted budget for revenue and expenditures reflect sufficient budget margins to minimize negative impacts to City services due to economic uncertainties.			7	X
Comments:					
SAFETY ELEMENT					
S-1 Seismic & Geologic Hazards					
Goal	**Minimized risk of injury, loss of life, property damage, and economic and social disruption caused by earthquake-induced and other geologic hazards.**				
S-1.1	**Implementation of Regulations and Standards.** We require that all new habitable structures be designed in accordance with the most recent California Building Code adopted by the City, including provisions regarding lateral forces and grading.	X		6 and 8	
Comments:					
S-1.2	**Entitlement and Permitting Process.** We follow state guidelines and the California Building Code to determine when development proposals must conduct geotechnical and geological investigations.	X		7	
Comments:					
S-1.3	**Continual Update of Technical Information.** We maintain up-to-date California Geological Survey seismic hazard maps.				X
Comments:					
S-1.4	**Seismically Vulnerable Structures.** We conform to state law regarding unreinforced masonry structures and coordinate with not-for-profits to facilitate seismic retrofits in environmental justice areas and for low-income households.				X
Comments:					

Policy		Fully Complies	Partially Complies	SP Sec. No.	N/A
S-2 Flood Hazards					
Goal	**Minimized risk of injury, loss of life, property damage and economic and social disruption caused by flooding and inundation hazards.**				
S-2.1	**Entitlement and Permitting Process.** We require hydrological studies prepared by a state-certified engineer when new development is located in a 100-year or 500-year floodplain to assess the impact that the new development will have on the flooding potential of existing development down-gradient.	X		7	
Comments:	*Per project EIR.*				
S-2.2	**Floodplain Mapping.** We require any new development partially or entirely in 100-year flood zones to provide detailed floodplain mapping for 100- and 200-year storm events as part of the development approval process.	X		7	
Comments:					
S-2.3	**Facilities that Use Hazardous Materials.** We comply with state and federal law and do not permit facilities using, storing, or otherwise involved with substantial quantities of onsite hazardous materials to be located in the 100-year flood zone or 500-year flood zone unless all standards of elevation, floodproofing, and storage have been implemented to the satisfaction of the Building Department.				X
Comments:					
S-2.4	**Prohibited Land Uses.** We prohibit the development of new essential and critical facilities in the 100-year floodplain and discourage the development of new essential and critical facilities in the 500-year floodplain unless all standards of elevation and flood proofing demonstrate that a facility can be safe and operational during a flood event, implemented to the satisfaction of the Building Department.				X
Comments:					
S-2.5	**Stormwater Management.** We maintain the storm drain system to convey a 100-year storm, when feasible, and encourage environmental site design practices to minimize flooding and increase groundwater recharge, including natural drainage, green infrastructure, and permeable ground surfaces.	X		5 and 7	
Comments:					

Policy		Fully Complies	Partially Complies	SP Sec. No.	N/A
S-2.6	**Use of Flood Control Facilities.** We encourage joint use of flood control facilities as open space or other types of recreational facilities.				X
Comments:					
S-2.7	**Collaboration Between Agencies.** Collaborate with the San Bernardino County Flood Control District and other state and federal agencies to maintain flood-control infrastructure to minimize flood damage.				X
Comments:					
S-3 Fire & Rescue Hazards					
Goal	**Reduced risk of death, injury, property damage and economic loss due to fires, accidents and normal everyday occurrences through prompt and capable emergency response.**				
S-3.1	**Prevention Services.** We proactively mitigate or reduce the negative effects of fire, hazardous materials release, and structural collapse by implementing the regularly adopted California Fire Code and California Building Code.	X		7	
Comments:					
S-3.2	**Community Outreach.** We provide education to local schools and community groups to promote personal and public safety.				X
Comments:					
S-3.3	**Fire and Emergency Medical Services.** We maintain sufficient fire stations, equipment and staffing to respond effectively to emergencies and meet the needs of the community and state requirements.				X
Comments:					
S-3.4	**Special Team Services.** We maintain effective special rescue services.				X
Comments:	*The City of Ontario is the entity responsible for maintaining effective special rescue services.*				
S-3.5	**Emergency Notifications.** We maintain a public alert notification system that efficiently conveys information about imminent, developing, ongoing, and concluding emergency events to residents and visitors, working with network providers that translate information into other languages.				X
Comments:					

Policy		Fully Complies	Partially Complies	SP Sec. No.	N/A
S-3.6	**Interagency Cooperation.** In order to back up and supplement our capabilities to respond to emergencies, we participate in the California Fire Rescue and Mutual Aid Plan.				X
Comments:					
S-3.7	**Water Supply and System Redundancy.** We monitor our water system to manage and ensure adequate firefighting water supplies.				X
Comments:					
S-3.8	**Fire Prevention through Environmental Design.** We require new development to incorporate fire prevention consideration in the design of streetscapes, sites, open spaces, and buildings.	X		4, 5, 6, 7 and 8	
Comments:					
S-3.9	**Resource Allocation.** We analyze fire data to evaluate the effectiveness of our fire prevention and reduction strategies and allocate resources accordingly.				X
Comments:					
S-4 Noise Hazards					
Goal	**An environment where noise does not adversely affect the public's health, safety, and welfare.**				
S-4.1	**Noise Mitigation.** We utilize the City's Noise Ordinance, building codes, and subdivision and development codes to mitigate noise impacts.	X		6, 7 and 8	
Comments:	*Per project EIR noise study.*				
S-4.2	**Coordination with Transportation Authorities.** We collaborate with airport owners, FAA, Caltrans, SBCTA, SCAG, neighboring jurisdictions, and other transportation providers in the preparation and maintenance of, and updates to transportation-related plans to minimize noise impacts and provide appropriate mitigation measures.				X
Comments:					
S-4.3	**Airport Noise Mitigation.** We aggressively pursue funding and utilize programs to reduce effects of aircraft noise in impacted areas of our community.				X
Comments:	*The plan is not within the airport impact zone.*				

Policy		Fully Complies	Partially Complies	SP Sec. No.	N/A
S-4.4	**Truck Traffic.** We manage truck traffic to minimize noise impacts on sensitive land uses.	X		3, 5 and 6	
Comments:					
S-4.5	**Roadway Design.** We design streets and highways to minimize noise impacts.	X		3, 5 and 6	
Comments:					
S-4.6	**Airport Noise Compatibility.** We utilize information from Airport Land Use Compatibility Plans to prevent the construction of new noise-sensitive land uses within airport noise impact zones.				X
Comments:	*The plan is not within the airport impact zone.*				
S-4.7	**Rail Noise Mitigation.** We require residential and mixed use development of vibration-sensitive uses in areas within 200 feet of rail to evaluate for indoor vibration levels and mitigate any exceedances of the Federal Transit Administration vibration-annoyance criteria.				X
Comments:	*The plan is not within 200 feet of any rail system.*				
S-5 Wind-Related Hazards					
Goal	**Minimize the risk of injury, property damage, and economic loss resulting from windstorms and wind-related hazards.**				
S-5.1	**Dust Control Measures.** We require the implementation of Best Management Practices for dust control at all excavation and grading projects.	X		7	
Comments:					
S-5.2	**Grading in High Winds.** We prohibit excavation and grading during strong wind conditions, as defined by the Building Code.	X		7	
Comments:					
S-5.3	**Public Safety Power Shutoffs.** We coordinate with utility companies to minimize service interruptions, such as Public Safety Power Shutoffs, before, during, and after windstorms and wind-related hazards.				X
Comments:					

Policy		Fully Complies	Partially Complies	SP Sec. No.	N/A
S-6 Hazardous Materials & Waste					
Goal	**Reduced potential for hazardous materials exposure and contamination.**				
S-6.1	**Disclosure and Notification.** We enforce disclosure laws that require all users, producers, and transporters of hazardous materials and wastes to clearly identify the materials that they store, use, or transport.				X
Comments:					
S-6.2	**Response to Hazardous Materials Releases.** We respond to hazardous materials incidents and coordinate these services with other jurisdictions.				X
Comments:					
S-6.3	**Safer Alternatives.** We minimize our use of pesticides and other hazardous materials by choosing non-toxic alternatives that do not pose a threat to the environment, especially when it could affect public park facilities and open spaces.	X		7	
Comments:					
S-6.4	**Safe Storage and Maintenance Practices.** We require that the users of hazardous materials be adequately prepared to prevent and mitigate hazardous materials releases.				X
Comments:					
S-6.5	**Location of Hazardous Material Facilities.** We regulate facilities that will be involved in the production, use, storage, or disposal of hazardous materials, pursuant to federal, state, county, and local regulations, so that impacts to the environment and sensitive land uses are mitigated. We prohibit new hazardous waste facilities in close proximity to sensitive land uses and environmental justice areas.				X
Comments:					
S-6.6	**Location of Sensitive Land Uses.** We prohibit new sensitive land uses from locating within airport safety zones and near existing sites that use, store, or generate large quantities of hazardous materials.				X
Comments:	*The plan does not have any sensitive land uses.*				
S-6.7	**Household Hazardous Waste.** We support the proper disposal of household hazardous substances.	X		7	
Comments:					

Policy		Fully Complies	Partially Complies	SP Sec. No.	N/A
S-6.8	**Mitigation and Remediation of Groundwater Contamination.** We actively participate in local and regional efforts directed at both mitigating environmental exposure to contaminated groundwater and taking action to clean up contaminated groundwater once exposure occurs.	X		7	
Comments:					
S-6.9	**Remediation of Methane.** We require development to assess and mitigate the presence of methane, per regulatory standards and guidelines.	X		7	
Comments:					
S-7 Law Enforcement					
Goal	**Residential neighborhoods, commercial areas, and industrial districts that are kept safe through a multi-faceted approach of prevention, suppression, and community involvement in public safety.**				
S-7.1	**Police Unit Response.** We respond to calls for service in a timely manner.				X
Comments:					
S-7.2	**Community Oriented Problem Solving (C.O.P.S.).** We support and maintain the mission of COPS to identify and resolve community problems.				X
Comments:					
S-7.3	**Prevention Services.** We provide crime prevention programs targeted to youth, parents, seniors, businesses, and neighborhoods.				X
Comments:	*The City of Ontario is the entity responsible for providing crime prevention programs.*				
S-7.4	**Crime Prevention through Environmental Design (CPTED).** We require new development to incorporate CPTED in the design of streetscapes, sites, open spaces, and buildings.	X		4, 6 and 8	
Comments:					
S-7.5	**Interdepartmental Coordination.** We utilize all City departments to help reduce crime and promote public safety.				X
Comments:					

Policy		Fully Complies	Partially Complies	SP Sec. No.	N/A
S-7.6	**Partnerships.** We partner with other local, state, and federal law enforcement agencies and private security providers to enhance public safety services in Ontario.				X
Comments:					
S-7.7	**Resource Allocation.** We analyze crime data to evaluate the effectiveness of crime prevention and reduction strategies and allocate resources accordingly.				X
Comments:					
S-7.8	**Social Services.** We support behavioral health and social services as part of the public safety solution.				X
Comments:					
S-8 Emergency Management					
Goal	**Disaster resilient, prepared community through effective emergency/disaster preparedness, response, mitigation, and recovery.**				
S-8.1	**State and Federal Mandates.** We maintain emergency management programs that meet the requirements of the State of California Standardized Emergency Management System (SEMS) and the National Incident Management System (NIMS).				X
Comments:					
S-8.2	**Emergency Management Plans.** We maintain, update, and adopt the Emergency Operations Plan (EOP) and incorporate, by reference the City's Hazard Mitigation Plan (HMP).				X
Comments:					
S-8.3	**Emergency/Disaster Training Exercises.** We conduct training and exercises to prepare for and evaluate emergency/disaster response and recovery procedures.				X
Comments:					
S-8.4	**Interagency Collaboration.** We maintain partnerships, including automatic aid agreements, with fire protection, police and sheriff departments, and emergency management agencies in San Bernardino and Riverside County to strengthen emergency response.				X
Comments:					

Policy		Fully Complies	Partially Complies	SP Sec. No.	N/A
S-8.5	**Interdepartmental Coordination.** We utilize all City departments to help support emergency/disaster preparedness, response, mitigation, and recovery.				X
Comments:	*The City of Ontario is the entity responsible for interdepartmental coordination to support emergency/disaster situations.*				
S-8.6	**Community Outreach.** We provide education to the community to promote personal, family, and community emergency preparedness to both natural and human-generated hazards.				X
Comments:	*The City of Ontario is the entity responsible for providing education to the community.*				
S-8.7	**Extreme Heat and Air Quality.** We work to ensure that all community members are informed about and have access to community cooling centers and clean air centers during extreme heat events or wildfires, with a focus on serving environmental justice communities. We support the development of extreme heat emergency response policies and practices to address these critical health risks in the community.				X
Comments:	*The City of Ontario is the entity responsible for providing the community with information and access to situations of extreme heat and air quality conditions.*				
S-8.8	**Regional Partnerships for Climate Adaptation.** We partner with local governments in San Bernardino County, Riverside County, and Inland Southern California Climate Collaborative to develop regional climate change adaptation strategies and programs.				X
Comments:	*The City of Ontario is the entity responsible for local and regional partnerships for climate change adaptation strategies and programs.*				
S-8.9	**Backup Power in Critical Facilities.** We require backup power be maintained in critical facilities. We encourage backup power solutions that include renewable energy components.				X
Comments:	*The City of Ontario is the entity responsible for maintaining/providing backup power in critical facilities.*				
S-9 Energy Resiliency					
Goal	**Incorporate energy efficient practices and renewable energy systems to improve air quality, comfort, and energy reliability during temporary power outages.**				
S-9.1	**Solar Energy.** We support and may incentivize the installation of residential and commercial solar panels and battery storage systems that can provide electricity during power outages.	X		7	
Comments:	*The City of Ontario is the entity responsible for supporting and incentivizing the installation and use of solar energy.*				

Policy		Fully Complies	Partially Complies	SP Sec. No.	N/A
S-9.2	**Renewable Energy.** Renovate existing city-owned facilities and plan future facilities to include renewable energy generation capacity and battery storage as part of an effort to make public facilities and services greener and more resilient to power outages.				X
Comments:					
S-9.3	**Energy Efficiency Retrofits.** We support and may incentivize retrofits to residential and commercial buildings that improve energy efficiency and insulation from extreme temperatures, giving priority towards low-income applicants.				X
Comments:					
MOBILITY ELEMENT					
M-1 Roadway System					
Goal	**A system of roadways that meets the mobility needs of a dynamic and prosperous Ontario.**				
M-1.1	**Roadway Design and Maintenance.** We require our roadways to: 1. Comply with federal, state, and local design and safety standards; 2. Meet the needs of multiple transportation modes and users; 3. Handle the capacity envisioned in the City of Ontario Master Plan of Streets and Highways; 4. Be maintained in accordance with best practices; 5. Be compatible with the streetscape and surrounding land uses; and 6. Promote the efficient flow of all modes of traffic through the implementation of intelligent transportation systems and travel demand management strategies.	X		5, 7 and 8	
Comments:	*Per project EIR traffic study.*				
M-1.2	**Mitigation of Impacts.** We require development to mitigate its traffic impacts.	X		5	
Comments:					

Policy		Fully Complies	Partially Complies	SP Sec. No.	N/A
M-1.3	**Agency Coordination on Roadway Improvements.** We work with Caltrans, SBCTA, and others to identify, fund, and implement needed improvements to roadways when necessary. We work with neighboring jurisdictions to promote regional connectivity, access, and meet operational level of service standards at the City limits.				X
Comments:					
M-1.4	**Complete Streets.** We work to provide a complete, balanced, context-aware, multimodal transportation network that meets the needs of all users of streets, roads, and highways, including motorists, pedestrians, bicyclists, children, persons with disabilities, seniors, movers of commercial goods, and users of public transportation. We prioritize implementation of complete streets improvements in environmental justice areas to facilitate opportunities for residents to use active transportation systems.	X		5 and 8	
Comments:					
M-1.5	**Level of Service.** Maintain a peak hour Level of Service (LOS) E or better at all intersections. Maintain Level of Service D or better on arterial streets in the City. Develop and maintain a list of locations where LOS E or LOS F are considered acceptable and would be exempt from this level of service policy. Considerations for LOS exemption include being restricted by environmental constraints, lacking available right-of-way, deterring an increase in VMT, or degrading other modes of travel (such as bicycle or pedestrian infrastructure).				X
Comments:					
M-1.6	**Reduce Vehicle Miles Traveled.** We will strive to reduce VMT through a combination of land use, transportation projects, travel demand management strategies, and other trip reduction measures in coordination with development projects and public capital improvement projects.				X
Comments:					

Policy		Fully Complies	Partially Complies	SP Sec. No.	N/A
M-2 Active Transportation					
Goal	A system of trails and corridors that facilitate and encourage active modes of transportation.				
M-2.1	**Active Transportation.** We maintain our Active Transportation Master Plan to create a comprehensive system of on- and off-street bikeways and pedestrian facilities that are safe, comfortable, and accessible and connect residential areas, businesses, schools, parks, and other key destination points.	X		5 and 8	
Comments:					
M-2.2	**Bicycle System.** We provide off-street multipurpose trails and Class II bikeways as our preferred paths of travel and use the Class III for connectivity in constrained circumstances. When truck routes and bicycle facilities share a right-of-way, we prefer Class I or Class IV bicycle facilities. We require new development to include bicycle facilities, such as bicycle parking and secure storage areas.	X		5 and 8	
Comments:					
M-2.3	**Pedestrian Walkways.** We require streets to include sidewalks and visible crosswalks at major intersections where necessary to promote safe and comfortable mobility between residential areas, businesses, schools, parks, recreation areas, and other key destination points.	X		5 and 8	
Comments:					
M-2.4	**Network Opportunities.** We use public rights-of-way and easements such as, utility easements, levees, drainage corridors, road rights-of-way, medians, and other potential options to maintain and expand our bicycle and pedestrian network. In urban, mixed- use, and transit-oriented Place Types, we encourage the use of underutilized public and private spaces to expand our public realm and improve pedestrian and bicycle connectivity.	X		5 and 8	
Comments:					

Policy		Fully Complies	Partially Complies	SP Sec. No.	N/A
M-3 Public Transit					
Goal	**A public transit system that is a viable alternative to automobile travel and meets basic transportation needs of the transit-dependent.**				
M-3.1	**Transit Partners.** We maintain a proactive working partnership with transit providers to ensure that adequate public transit service is available, cost-efficient, and convenient, particularly for residents in environmental justice areas.				X
Comments:					
M-3.2	**Alternative Transit Facilities at New Development.** We require new development adjacent to an existing or planned transit stop to contribute to the creation of transit facilities, such as bus shelters, transit bays and turnouts, and bicycle facilities, such as secure storage areas.				X
Comments:					
M-3.3	**Transit-Oriented Development.** We may provide additional development-related incentives to those inherent in the Land Use Plan for projects that promote transit use and reduce vehicle miles traveled.	X		4, 5, and 8	
Comments:					
M-3.4	**Bus Rapid Transit (BRT) Corridors.** We work with regional transit agencies to implement BRT service and reduce vehicle miles traveled by targeting destinations and corridors with the highest number of potential riders.				X
Comments:					
M-3.5	**Light Rail.** We support extension of the Metro Rail Gold Line to Ontario, and will work to secure station locations at the proposed multimodal transit center.				X
Comments:	*The plan is not within proximity of a light rail station location.*				
M-3.6	**Metrolink Expansion.** We advocate expansion of Metrolink service to include the Downtown and the multimodal transit center.				X
Comments:	*The plan is not within proximity of a multimodal transit center or Downtown.*				
M-3.7	**High Speed Rail.** We encourage the development of high-speed rail systems that would enhance regional mobility in Southern California and serve the City of Ontario.				X
Comments:	*The plan is not within proximity of the high speed rail system.*				

Policy		Fully Complies	Partially Complies	SP Sec. No.	N/A
M-3.8	**Feeder Systems.** We work with regional transit agencies to secure convenient feeder service from the Metrolink station and the proposed multimodal transit center to employment centers in Ontario.				X
Comments:					
M-3.9	**Ontario Airport Metro Center Circulator.** We will explore development of a convenient mobility system, including but not limited to shuttle service, people mover, and shared car system, for the Ontario Airport Metro Center.				X
Comments:	*The plan is not within proximity of the Ontario Airport.*				
M-3.10	**Multimodal Transportation Center.** We intend to ensure the development of a multimodal transportation center near ONT airport to serve as a transit hub with amenities for transit riders, pedestrians, and bicyclists transitioning to local buses, BRT, the Gold Line, high-speed rail, the proposed Ontario Airport Metro Center Circulator, and other future transit modes. We support locations for the multimodal transportation center that are north of ONT airport, between Vineyard Avenue and Interstate 15.				X
Comments:	*The plan is not within proximity of the ONT airport.*				
M-3.11	**Transit and Community Facilities.** We require the future development of community-wide serving facilities to be sited in transit-ready areas that can be served and made accessible by public transit. Conversely, we plan (and coordinate with other transit agencies to plan) future transit routes to serve existing community facilities.				X
Comments:					
M-4 Goods Movement					
Goal	**An efficient flow of goods through the City that maximizes economic benefits and minimizes negative impacts.**				
M-4.1	**Truck Routes.** We designate and maintain a network of City truck routes that provide for the safe and efficient transport of goods while minimizing negative impacts on local circulation and noise-sensitive land uses, as shown on Exhibit M-04, Truck Routes. We will minimize conflicts on truck routes through the design and implementation of buffers between travel lanes and pedestrian and bicycle facilities on designated truck routes.				X
Comments:					

Policy		Fully Complies	Partially Complies	SP Sec. No.	N/A
M-4.2	**Regional Participation.** We work with regional and subregional transportation agencies and adjacent cities to plan and implement goods movement strategies, including regional truck routes, plans and projects that improve mobility, support the efficient movement of goods, and minimize negative environmental impacts.				X
Comments:					
M-4.3	**Railroad Grade Separations.** We eliminate at-grade rail crossings identified on Exhibit M-01, Roadway Classifications.				X
Comments:	*The plan is not within proximity of a railroad.*				
M-4.4	**Environmental Considerations.** We support both local and regional efforts to reduce/eliminate the negative environmental impacts of goods movement through the planning and implementation of truck routing and the development of a plan to evaluate the future needs of clean fueling/recharging and electrified truck parking.	X		5 and 7	
Comments:					
M-4.5	**Air Cargo.** We support and promote a ONT airport that accommodates 1.6 million tons of cargo per year, as long as the impacts associated with that level of operations are planned for and mitigated.				X
Comments:	*The plan is not within proximity of the ONT airport.*				
M-5 Regional Transportation					
Goal	**A proactive leadership role in helping identify and facilitate implementation of strategies that address regional transportation challenges.**				
M-5.1	**Regional Leadership.** We maintain a leadership role to help identify and implement potential solutions to long-term regional transportation problems.				X
Comments:					
M-5.2	**Land Use Compatibility with Regional Transportation Facilities.** We work with ONT, railroads, Caltrans, SBCTA, and other transportation agencies to minimize impacts.				X
Comments:					

Policy		Fully Complies	Partially Complies	SP Sec. No.	N/A
COMMUNITY DESIGN ELEMENT					
CD-1 Image & Identity					
Goal	**A dynamic, progressive city containing distinct and complete places that foster a positive sense of identity and belonging among residents, visitors, and businesses.**				
CD-1.1	**City Identity.** We take actions that are consistent with the City being a leading urban center in Southern California while recognizing, enhancing, and preserving the character of our existing viable neighborhoods.	X		7	
Comments:					
CD-1.2	**Place Types.** We establish Place Types in urban, mixed use, and transit-oriented areas to foster the City's identity as a premier community and require new development within each Place Type to incorporate prescribed urban patterns, forms, and placemaking priorities.				X
Comments:					
CD-1.3	**Existing Neighborhoods.** We require the existing character of viable residential and non-residential neighborhoods be preserved, protected, and enhanced.				X
Comments:					
CD-1.4	**Transportation Corridors.** We will enhance our major transportation corridors within the City through landscape, hardscape, signage and lighting. The extent of enhancement should be appropriate to the use, type, and context of each corridor.	X		7	
Comments:					
CD-1.5	**View Corridors.** We require all major north-south streets be designed and redeveloped to feature views of the San Gabriel Mountains, which are part of the City's visual identity and a key to geographic orientation. Such views should be free of visual clutter, including billboards and may be enhanced by framing with trees.				X
Comments:					

Policy		Fully Complies	Partially Complies	SP Sec. No.	N/A
CD-2 Design Quality					
Goal	**A high level of design quality resulting in neighborhoods, commercial areas, public spaces, parks, and streetscapes that are attractive, safe, functional, human- scale, and distinct.**				
CD-2.1	**Quality Building Design and Architecture.** We encourage all development projects to convey visual interest and character through: 1. Building volume, massing, and height to provide context-appropriate scale and proportion; 2. A true architectural style which is carried out in plan, section, and elevation through all aspects of the building and site design and appropriate for its setting; and 3. Exterior building materials that are articulated, high quality, durable, and appropriate for the architectural style.	X		6 and 8	
Comments:					
CD-2.2	**Neighborhood Design.** We create distinct residential neighborhoods that promote a sense of community and identity by emphasizing access, connectivity, livability, and social interaction through such elements as: 1. A pattern of smaller, walkable blocks that promote activity, safety, and access to nearby amenities and services; 2. Varied parcel sizes and lot configurations to accommodate a diversity of housing types; 3. Traffic calming measures to slow traffic and promote walkability while maintaining acceptable traffic flows and emergency evacuation access; 4. Floor plans that encourage views onto the street and de-emphasize the visual and physical dominance of garages (introducing the front porch as the "outdoor living room"), as appropriate; and 5. Landscaped parkways, with sidewalks separated from the curb and designed to maximize safety, comfort, and aesthetics for all users.	X		6 and 8	
Comments:					
CD-2.3	**Commercial Areas.** We desire commercial areas and centers to be distinctive, pedestrian friendly, functional, and vibrant with a range of businesses, places to gather, and connectivity to the neighborhoods they serve.				X
Comments:					

Policy		Fully Complies	Partially Complies	SP Sec. No.	N/A
CD-2.4	**Urban, Mixed Use, and Transit-oriented Areas.** We establish Place Types to require mixed use, urban, and transit-oriented areas to be designed and developed as pedestrian oriented areas that are integrated with adjacent neighborhoods and promote a vibrant, comfortable, and functional environment, as defined for each Place Type.				X
Comments:					
CD-2.5	**Streetscapes.** We design new and, when necessary, retrofit existing streets to improve walkability, bicycling and transit integration, strengthen connectivity, and enhance community identity through improvements to the public right-of-way such as sidewalks, street trees, parkways, curbs, street lighting and street furniture.	X		6 and 8	
Comments:					
CD-2.6	**Connectivity.** We promote development of local street patterns, multimodal networks, and connected public spaces that create and unify neighborhoods, rather than divide them, and create cohesive and continuous corridors, rather than independent "islands" through the following means: 1. Local street networks that provide access both between subdivisions and within neighborhoods and discourage through traffic; 2. A local street system that is logical and understandable for the user. A grid system is preferred to avoid circuitous and confusing travel paths between internal neighborhood areas and adjacent arterials and to provide adequate emergency and evacuation access; and 3. Pedestrian and bicycle networks that provide convenient access to neighborhoods and nearby destinations, such as schools, parks, other public spaces, commercial areas, and transit stops.	X		6 and 8	
Comments:					
CD-2.7	**Sustainability.** We collaborate with the development community to design and build neighborhoods, streetscapes, sites, outdoor spaces, landscaping, and buildings to reduce energy demand through solar orientation, maximum use of natural daylight, passive solar and natural ventilation, building form, mechanical and structural systems, building materials, and construction techniques.	X		6 and 8	
Comments:					

Policy		Fully Complies	Partially Complies	SP Sec. No.	N/A
CD-2.8	**Safe Design.** We incorporate defensible space design into new and existing developments to ensure the maximum safe travel and visibility on pathways, corridors, and open space and at building entrances and parking areas by avoiding physically and visually isolated spaces, maintaining visibility and accessibility, and using lighting.	X		6 and 8	
Comments:					
CD-2.9	**Landscape Design.** We encourage durable, sustainable, and drought-tolerant landscaping materials and designs that enhance the aesthetics of structures, create and define public and private spaces, and provide shade and environmental benefits.	X		6 and 8	
Comments:					
CD-2.10	**Parking Areas.** We require all development, including single-family residential, to minimize the visual impact of surface, structured, and garage parking areas visible from the public realm in an aesthetically pleasing, safe and environmentally sensitive manner. Examples include: 1. Surface parking: Shade trees, pervious surfaces, urban run-off capture and infiltration, and pedestrian paths to guide users through the parking field. 2. Structured parking: facade articulation, screening, appropriate lighting, and landscaping. 3. Garage parking: providing access to single-family residential garages through alley access, recessing garages from the frontage to emphasize front doors or active living spaces.	X		6 and 8	
Comments:					
CD-2.11	**Entry Statements.** We encourage the inclusion of amenities, signage, and landscaping at the entry to neighborhoods, commercial centers, mixed use areas, industrial developments, and public places that reinforce them as uniquely identifiable places.	X		6 and 8	
Comments:					
CD-2.12	**Site and Building Signage.** We encourage the use of sign programs that utilize complementary materials, colors, and themes. Project signage should be designed to effectively communicate and direct users to various aspects of the development and complement the character of the structures.	X		6 and 8	
Comments:					
CD-2.13	**Entitlement Process.** We work collaboratively with all stakeholders to ensure a high degree of certainty in the efficient review and timely processing of all development plans and permits.				X
Comments:					

Policy		Fully Complies	Partially Complies	SP Sec. No.	N/A
CD-2.14	**Availability of Information.** We provide easy access to information for developers, builders and the public about design quality, construction quality, and sustainable building practices.				X
Comments:					
CD-2.15	**Leverage Professional and Trade Organizations.** We support excellence in design and construction quality through collaboration with trade and professional organizations that provide expertise, resources and programs for developers, builders, and the public.				X
Comments:					
CD-2.16	**Transit Stops.** We require transit stops be conveniently located, well lit, safe, and clearly accessible to pedestrians, bicyclists, and people of all abilities.				X
Comments:					
CD-3 Urban, Mixed Use, and Transit-Oriented Place Types					
Goal	**Vibrant urban environments that are organized around intense buildings, pedestrian and transit areas, public plazas, and linkages between and within developments that are conveniently located, visually appealing and safe during all hours.**				
CD-3.1	**Unique Identity.** We promote development that heightens the unique character and identity of each Place Type by requiring compatible land uses and land planning, site design, and building design that promotes an active public realm.				X
Comments:					
CD-3.2	**Comfortable, Human-Scale Public Realm.** We require that public spaces, including streets, parks, and plazas on both public and private property be designed to maximize safety, comfort and aesthetics and connect to the citywide pedestrian, vehicular, and bicycle networks.				X
Comments:					

Policy		Fully Complies	Partially Complies	SP Sec. No.	N/A
CD-3.3	**Complete and Connected Network.** We require that pedestrian, vehicular, and bicycle circulation on both public and private property be coordinated to provide connections internally and externally to adjacent neighborhoods and properties (existing and planned) through a system of local roads and trails that promote walking and biking to nearby destinations (including existing and planned parks, commercial areas, and transit stops) and are designed to maximize safety, comfort, and aesthetics.	X		6 and 8	
Comments:					
CD-3.4	**Context-Aware and Appropriate Design.** We require appropriate building and site design that complements existing development, respects the intent and identity of the Place Type, and provides appropriate transitions and connections between adjacent uses to ensure compatibility of scale, maintain an appropriate level of privacy for each use, and minimize potential conflicts.	X		6 and 8	
Comments:					
CD-3.5	**Active Frontages.** We create lively pedestrian streetscapes by requiring primary building, business, and residential entrances, outdoor dining, and storefronts be located on ground floors adjacent to sidewalks or public spaces and designed to maximize safety, comfort, aesthetics, and the intended functionality (as defined by the Place Type).	X		6 and 8	
Comments:					
CD-3.6	**Managed Infrastructure.** We collaborate with developers and property owners to facilitate development that realizes the envisioned character and functionality of the Place Type through the use of green and shared infrastructure within each Place Type.	X		6 and 8	
Comments:					
CD-4 Historic Preservation					
Goal	**Historic buildings, streets, landscapes, and neighborhoods, as well as the story of Ontario's people, businesses, and social and community organizations, have been preserved and serve as a focal point for civic pride and identity.**				
CD-4.1	**Cultural Resource Management.** We update and maintain an inventory of historic sites and buildings, professional collections, artifacts, manuscripts, photographs, documents, maps, and other archives.				X
Comments:					

Policy		Fully Complies	Partially Complies	SP Sec. No.	N/A
CD-4.2	**Collaboration with Property Owners and Developers.** We educate and collaborate with property owners and developers to implement strategies and best practices that preserve the character of our historic buildings, streetscapes, and unique neighborhoods.				X
Comments:					
CD-4.3	**Collaboration with Outside Agencies.** We pursue opportunities to team with other agencies, local organizations, and nonprofits in order to preserve and promote Ontario's heritage.				X
Comments:					
CD-4.4	**Incentives.** We use the Mills Act and other federal, state, regional and local programs to assist property owners with the preservation of select properties and structures.				X
Comments:					
CD-4.5	**Adaptive Reuse.** We actively promote and support the adaptive reuse of historic sites and buildings to preserve and maintain their viability.				X
Comments:					
CD-4.6	**Promotion of Public Involvement in Preservation.** We engage in programs to publicize and promote the City's and the public's involvement in preservation efforts.				X
Comments:					
CD-4.7	**Public Outreach.** We provide opportunities for our residents to research and learn about the history of Ontario through the Planning Department, the Ontario Museum of History and Art, and the Robert E. Ellingwood Model Colony History Room.				X
Comments:					
CD-5 Protection of Investment					
Goal	**A sustained level of maintenance and improvement of properties, buildings, and infrastructure that protects the property values and encourages additional public and private investments.**				
CD-5.1	**Maintenance of Buildings and Property.** We require all public and privately-owned buildings and property (including trails and easements) to be properly and consistently maintained.				X
Comments:					

Policy		Fully Complies	Partially Complies	SP Sec. No.	N/A
CD-5.2	**Maintenance of Infrastructure.** We require the continual maintenance of infrastructure.				X
Comments:					
CD-5.3	**Improvements to Property & Infrastructure.** We provide programs to improve property and infrastructure.				X
Comments:					
CD-5.4	**Neighborhood Involvement.** We encourage active community involvement to implement programs aimed at the beautification and improvement of neighborhoods.				X
Comments:					
SOCIAL RESOURCES ELEMENT					
SR-1 Health					
Goal	**Residents have access to information, services and goods that improve their health and wellbeing.**				
SR-1.1	**Partnering for Healthcare.** We work with healthcare providers, and local, regional, state, and federal agencies to attract and retain a diversity of affordable, quality healthcare and facilities for the entire community.				X
Comments:					
SR-1.2	**Nutrition Choices.** We support the promotion of equitable access to affordable healthy food choices in the community, including community gardens, farmers markets, and cooking classes.				X
Comments:					
SR-1.3	**Health Education.** We promote equitable access to health education, including disease prevention, mental health, nutrition, and physical fitness.				X
Comments:					
SR-1.4	**Physical Activity.** We encourage activities and community design that improve the physical fitness of our community members, with an emphasis on the provision of activities and facilities in environmental justice areas.				X
Comments:					

Policy		Fully Complies	Partially Complies	SP Sec. No.	N/A
SR-2 Education					
Goal	**A range of educational and training opportunities for residents and workers of all ages and abilities that improves their life choices and provides a skilled workforce for our businesses.**				
SR-2.1	**Educational Partners.** We partner with educational institutions throughout the region in order to expand the range and quality of educational offerings available to the community.				X
Comments:					
SR-2.2	**Workforce Training.** We will work with industrial organizations, businesses, and educational institutions to create opportunities for workforce training.				X
Comments:					
SR-2.3	**Joint Use of Facilities.** We partner with public and private educational institutions to jointly use facilities for both City and educational purposes.				X
Comments:					
SR-2.4	**Access to Schools.** We work with local and regional partners to improve the safety in and around schools and to improve access for citizens of all ages and abilities to schools and community services, such as after school and other programs.				X
Comments:					
SR-2.5	**School Facilities.** We plan and coordinate with school districts for designing and locating school facilities to meet the City's goals, such as for health, walkability, and safety and to minimize impacts to existing neighborhoods.				X
Comments:					
SR-2.6	**Language.** We promote broad outreach in languages used by the community for proposed projects that could negatively affect environmental justice areas.				X
Comments:					
SR-2.7	**Community Engagement.** We promote targeted outreach and education to historically underrepresented groups to encourage meaningful participation in decision-making process for projects whose outcomes will affect land use in environmental justice areas.				X
Comments:					

Policy		Fully Complies	Partially Complies	SP Sec. No.	N/A
SR-3 Community & Leisure Activities					
Goal	**A range of community and leisure programs and activities provided by public, private, and nonprofit organizations that meet the needs of the community's varied interests, age groups and abilities.**				
SR-3.1	**Partnerships.** We partner with local and regional agencies, nonprofit organizations, and the private sector to provide a comprehensive range of community activities and events to citizens.				X
Comments:					
SR-3.2	**Needs Assessment.** We track the needs and priorities for community services and look for ways to meet demands and avoid duplication of offerings.				X
Comments:					
SR-3.3	**Program Outreach.** We promote information about leisure activities, classes, special events, and other services and activities to our community.				X
Comments:					
SR-3.4	**Community Events.** We plan and actively participate in regularly scheduled community events and seasonal or yearly citywide events.				X
Comments:					
SR-3.5	**Community Activities as Crime Deterrents.** We promote and participate in community activities as part of our crime prevention efforts.				X
Comments:					
SR-4 Library					
Goal	**City libraries that connect community members of all ages and abilities to a broad range of programs, communication, and informational resources.**				
SR-4.1	**Community Needs.** We identify and monitor community needs for library services, technology, and facilities, and tailor them to effectively meet those needs.				X
Comments:					

Policy		Fully Complies	Partially Complies	SP Sec. No.	N/A
SR-4.2	**Interagency Coordination.** We leverage relationships with outside agencies, educational institutions, and neighboring jurisdictions to share library resources to the benefit of Ontario residents.				X
Comments:					
SR-4.3	**Library Outreach.** We outreach to the community to increase the patronage of the library.				X
Comments:					
SR-4.4	**Coordination with Other Community Services.** We coordinate library programs with other recreational and community programs and facilities.				X
Comments:					
SR-4.5	**Focal Points of the Community.** We design and program Ontario's libraries as focal points of community engagement, including public outreach and community events.				X
Comments:					
SR-4.6	**Robert E. Ellingwood Model Colony History Room.** We work with the Ontario Museum of History and Art in order to collect, preserve, and display artifacts and images from Ontario's heritage and connect the City's past to the present through the History Room.				X
Comments:					
SR-5 Entertainment & Culture					
Goal	**Local heritage, entertainment, and cultural experiences that enrich the lives of Ontario's residents, workers, and visitors and serve to attract residents and businesses to the City.**				
SR-5.1	**Provision of Entertainment and Culture.** We support equitable access to a range of entertainment and cultural experiences such as public art, exhibitions, and performances.				X
Comments:					
SR-5.2	**Local Heritage Education.** We partner with educational providers to promote culture and heritage.				X
Comments:					

Policy		Fully Complies	Partially Complies	SP Sec. No.	N/A
SR-5.3	**Public Art.** We encourage public art in buildings, parks, open spaces, and other public and private spaces.				X
Comments:					
SR-5.4	**Private-Public Sector Events.** We partner with private and nonprofit sectors to provide and promote participation in cultural activities including fairs, festivals, and other events geared to neighborhoods, the City as a whole, and the region.				X
Comments:					
SR-5.5	**Promotion of Ontario Artists and Musicians.** We promote awareness of entertainment and culture produced in Ontario.				X
Comments:					

RESOLUTION NO. PC25-050

A RESOLUTION OF THE PLANNING COMMISSION OF THE CITY OF ONTARIO, CALIFORNIA, APPROVING FILE NO. PMTT24-008, A TENTATIVE TRACT MAP TO SUBDIVIDE FOR CONDOMINIUM PURPOSES APPROXIMATELY 10.02 ACRES OF LAND INTO 28 NUMBERED LOTS FOR 161 MULTIPLE-FAMILY UNITS AND 15 LETTERED LOTS FOR PRIVATE STREETS, LANDSCAPE EDGES, AND COMMON OPEN SPACE, LOCATED SOUTH OF CHATHAM STREET, WEST OF CLIFTON AVENUE, EAST OF AMHERST AVENUE, AND NORTH OF EUCALYPTUS AVENUE, WITHIN PLANNING AREA 11 (RD-7 / ROW TOWNHOMES) OF THE ESPERANZA SPECIFIC PLAN, AND MAKING FINDINGS IN SUPPORT THEREOF—APN: 1073-101-050

WHEREAS, GDC Investments 13, LP (Applicant) filed an Application for the approval of a Tentative Tract Map (TTM 20730), File No. PMTT24-008, as described in the title of this Decision (hereinafter referred to as Application or Project); and

WHEREAS, the Application applies to approximately 10.02 acres of land generally located south of Chatham Street, west of Clifton Avenue, east of Amherst Avenue, and north of Eucalyptus Avenue, within Planning Area 11 (RD-7 / Row Townhomes) of the Esperanza Specific Plan, identified as Assessor's Parcel Number 1073-101-050, and presently vacant; and

WHEREAS, the property to the north of the Project site is within the Esperanza Specific Plan, designated Park, and developed with residential uses; the property to the east is within the Esperanza Specific Plan, designated PA-4 (RD-6 / 6-Pack Courtyard), and developed with residential uses; the property to the south is within the Esperanza Specific Plan, designated PA-7 (RD-1 / SFD 50' wide lots), and developed with residential uses; and the property to the west is within the Esperanza Specific Plan, designated PA-10 (RD-3 / SFD 2-Pack), and developed with residential uses; and

WHEREAS, Tentative Tract Map No. 20730 (File No. PMTT24-008) is consistent with the RD-7 (Row Townhome) land use designation and development standards of the Esperanza Specific Plan, including density, setbacks, height, and open space requirements; and

WHEREAS, Tentative Tract Map No. 20730 (File No. PMTT24-008) proposes to subdivide the 10.02-acre site into 28 numbered lots for a total of 161 multiple family units and 15 lettered lots for private streets, landscape edges, and common open space; and

WHEREAS, the Tentative Tract Map is consistent with the land use designation, density, and development standards of the Esperanza Specific Plan; and

WHEREAS, The Ontario Plan (TOP) 2050 Supplemental Environmental Impact Report (SEIR)(SCH No. 2021070364, certified by the City Council on August 16, 2022, hereinafter referred to as Certified SEIR), in which development and use of the Project site was discussed; and

WHEREAS, the Planning Director of the City of Ontario prepared and approved for attachment to the certified Environmental Impact Report, an Addendum to the Certified EIR (hereinafter referred to as EIR Addendum) in accordance with the requirements of the California Environmental Quality Act of 1970, together with State and local guidelines implementing said Act, all as amended to date (collectively referred to as CEQA); and

WHEREAS, the environmental impacts of this Project were thoroughly analyzed in the SEIR Addendum, which concluded that implementation of the Project could result in a number of significant effects on the environment that were previously analyzed in the Certified SEIR, and that the Certified SEIR identified mitigation measures that would reduce each of those significant effects to a less-than-significant level; and

WHEREAS, the City's "Local Guidelines for Implementing the California Environmental Quality Act (CEQA)" provide for the use of a single environmental assessment in situations where the impacts of subsequent projects are adequately analyzed; and

WHEREAS, the Application is a project pursuant to the California Environmental Quality Act — Public Resources Code Section 21000, et seq. — (hereinafter referred to as CEQA) and an SEIR Addendum has been prepared to determine possible environmental impacts; and

WHEREAS, Ontario Development Code Table 2.02-1 (Review Matrix) grants the Planning Commission the responsibility and authority to review and act on the subject Application; and

WHEREAS, the Project has been reviewed for consistency with the Housing Element of the Policy Plan component of TOP 2050, as State Housing Element law (as prescribed in Government Code Sections 65580 through 65589.8) requires that development projects must be consistent with the Housing Element, if upon consideration of all its aspects, it is found to further the purposes, principals, goals, and policies of the Housing Element; and

WHEREAS, the Project is located within the Airport Influence Area of Ontario International Airport, which encompasses lands within parts of San Bernardino, Riverside, and Los Angeles Counties, and is subject to, and must be consistent with, the policies and criteria set forth in the Ontario International Airport Land Use Compatibility Plan (hereinafter referred to as ALUCP), which applies only to jurisdictions within San

Bernardino County, and addresses the noise, safety, airspace protection, and overflight impacts of current and future airport activity; and

WHEREAS, City of Ontario Development Code Division 2.03 (Public Hearings) prescribes the manner in which public notification shall be provided and hearing procedures to be followed, and all such notifications and procedures have been completed; and

WHEREAS, on September 15, 2025, the Development Advisory Board of the City of Ontario conducted a hearing to consider the Addendum and the Project, and concluded said hearing on that date, voting to issue Decision Nos. DAB25-031 AND DAB25-032, respectively, recommending that the Planning Commission approve the Application; and

WHEREAS, as the first action on the Project, on September 23, 2025, the Planning Commission issued a Resolution adopting the SEIR Addendum, finding that the proposed Project introduces no new significant environmental impacts and applying all previously adopted mitigation measures to the Project, which were incorporated by reference; and

WHEREAS, on September 23, 2025, the Planning Commission of the City of Ontario conducted a hearing to consider the Project, and concluded said hearing on that date; and

WHEREAS, all legal prerequisites to the adoption of this Resolution have occurred.

NOW, THEREFORE, IT IS HEREBY FOUND, DETERMINED, AND RESOLVED by the Planning Commission of the City of Ontario, as follows:

SECTION 1: ***Environmental Determination and Findings.*** As the decision-making body for the Project, the Planning Commission has reviewed and considered the information contained in the Addendum, the initial study, and the administrative record for the Project, including all written and oral evidence provided during the comment period. Based upon the facts and information contained in the Addendum, the initial study, and the administrative record, including all written and oral evidence presented to the Planning Commission, the Planning Commission finds as follows:

(1) The environmental impacts of the Project were reviewed in conjunction with an Addendum to TOP 2050 Supplemental Environmental Impact Report (SEIR)(State Clearinghouse No. 2021070364), certified by the Ontario City Council on August 16, 2022, in conjunction with File No. PGPA20-002; and

(2) The SEIR Addendum and administrative record have been completed in compliance with CEQA, the State CEQA Guidelines, and the City of Ontario Local CEQA Guidelines; and

(3) The City's "Local Guidelines for Implementing the California Environmental Quality Act (CEQA)" provide for the use of a single environmental assessment in situations where the impacts of subsequent projects are adequately analyzed. This Application introduces no new significant environmental impacts; and

(4) All previously adopted mitigation measures shall be a condition of Project approval, as they are applicable to the Project, and are incorporated herein by this reference; and

(5) The SEIR Addendum contains a complete and accurate reporting of the environmental impacts associated with the Project, and reflects the independent judgment of the Planning Commission; and

(6) There is no substantial evidence in the administrative record supporting a fair argument that the Project may result in significant environmental impacts.

SECTION 2: ***Subsequent or Supplemental Environmental Review Not Required.*** Based on the SEIR Addendum, all related information presented to the Planning Commission, and the specific findings set forth in Section 1, above, the Planning Commission finds that the preparation of a subsequent or supplemental Certified SEIR is not required for the Project, as the Project:

(1) Does not constitute substantial changes to the Certified SEIR that will require major revisions to the Certified SEIR due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified significant effects; and

(2) Does not constitute substantial changes with respect to the circumstances under which the Certified SEIR was prepared, that will require major revisions to the Certified SEIR due to the involvement of new significant environmental effects or a substantial increase in the severity of the previously identified significant effects; and

(3) Does not contain new information of substantial importance that was not known and could not have been known with the exercise of reasonable diligence at the time the Certified SEIR was certified/adopted, that shows any of the following:

(a) The Project will have one or more significant effects not discussed in the Certified SEIR; or

(b) Significant effects previously examined will be substantially more severe than shown in the Certified SEIR; or

(c) Mitigation measures or alternatives previously found not to be feasible would in fact be feasible and would substantially reduce one or more significant effects of the Project, but the City declined to adopt such measures; or

(d) Mitigation measures or alternatives considerably different from those analyzed in the Certified SEIR would substantially reduce one or more significant effects on the environment, but which the City declined to adopt.

SECTION 3: ***Housing Element Compliance.*** Pursuant to the requirements of California Government Code Chapter 3, Article 10.6, commencing with Section 65580, as the decision-making body for the Project, the Planning Commission finds that based upon the facts and information contained in the Application and supporting documentation, at the time of Project implementation, the Project is consistent with the Housing Element of the Policy Plan (General Plan) component of TOP 2050, as the Project site is not one of the properties in the Housing Element Sites Inventory contained in Tables B-1 and B-2 of the Housing Element Technical Report.

SECTION 4: ***Airport Land Use Compatibility Plan (ALUCP) Compliance.*** The California State Aeronautics Act (Public Utilities Code Section 21670, et seq.) requires that an Airport Land Use Compatibility Plan be prepared for all public use airports in the State; and requires that local land use plans and individual development proposals must be consistent with the policies set forth in the adopted Airport Land Use Compatibility Plan.

(1) On April 19, 2011, the City Council of the City of Ontario approved and adopted the Ontario International Airport Land use Compatibility Plan, establishing the Airport Influence Area for Ontario International Airport, which encompasses lands within parts of San Bernardino, Riverside, and Los Angeles Counties, and limits future land uses and development within the Airport Influence Area, as they relate to noise, safety, airspace protection, and overflight impacts of current and future airport activity. As the decision-making body for the Project, the Planning Commission has reviewed and considered the facts and information contained in the Application and supporting documentation against the ONT ALUCP compatibility factors, including [1] Safety Criteria (ONT ALUCP Table 2-2) and Safety Zones (ONT ALUCP Map 2-2), [2] Noise Criteria (ONT ALUCP Table 2-3) and Noise Impact Zones (ONT ALUCP Map 2-3), [3] Airspace protection Zones (ONT ALUCP Map 2-4), and [4] Overflight Notification Zones (ONT ALUCP Map 2-5). As a result, the Planning Commission therefore finds and determines that the Project, when implemented in conjunction with the conditions of approval, will be consistent with the policies and criteria set forth within the ONT ALUCP; and

SECTION 5: ***Concluding Facts and Reasons.*** Based upon the substantial evidence presented to the Planning Commission during the above-referenced hearing,

and upon the specific findings set forth in the Sections above, the Planning Commission hereby concludes as follows:

(1) ***The proposed Tentative Tract Map is consistent with the goals, policies, plans, and exhibits of the Vision, Policy Plan (General Plan), and City Council Priorities components of The Ontario Plan 2050, and applicable area and specific plans, and planned unit developments.*** The proposed Tentative Tract Map is located within the Medium Density land use district of the Policy Plan Land Use Map, and Planning Area 11 (RD-7 / Row Townhomes) of the Esperanza Specific Plan zoning district. The proposed subdivision is consistent with the goals, policies, plans, and exhibits of the Vision, Policy Plan (General Plan), and City Council Priorities components of TOP, as the project will contribute to providing "a spectrum of housing types and price ranges that match the jobs in the City, and that make it possible for people to live and work in Ontario and maintain a quality of life" (Goal LU-1). Furthermore, the Project will promote the City's policy to "incorporate a variety of land uses and building types in our land use planning efforts that result in a complete community where residents at all stages of life, employers, workers, and visitors have a wide spectrum of choices of where they can live, work, shop, and recreate within Ontario" (Policy LU-1.6 Complete Community).

(2) ***The design or improvement of the proposed Tentative Tract Map is consistent with the goals, policies, plans and exhibits of the Vision, Policy Plan (General Plan), and City Council Priorities components of The Ontario Plan 2050, and applicable specific plans and planned unit developments.*** The proposed Tentative Tract Map is located within the Medium Density Residential land use district of the Policy Plan Land Use Map, and Planning Area 11 (RD-7 / Row Townhomes) of the Esperanza Specific Plan. The proposed design or improvement of the subdivision is consistent with the goals, policies, plans, and exhibits of the Vision, Policy Plan (General Plan), and City Council Priorities components of TOP, as the project will contribute to providing "[a] high level of design quality resulting in neighborhoods, commercial areas, public spaces, parks, and streetscapes that are attractive, safe, functional, human-scale, and distinct" (Goal CD-2). Furthermore, the Project will promote the City's policy to "create distinct residential neighborhoods that promote a sense of community and identity by emphasizing access, connectivity, livability, and social interaction through such elements as:

- A pattern of smaller, walkable blocks that promote activity, safety, and access to nearby amenities and services;
- Varied parcel sizes and lot configurations to accommodate a diversity of housing types;
- Traffic calming measures to slow traffic and promote walkability while maintaining acceptable traffic flows and emergency evacuation access;
- Floor plans that encourage views onto the street and de-emphasize the visual and physical dominance of garages (introducing the front porch as the "outdoor

living room"), as appropriate; and

- Landscaped parkways, with sidewalks separated from the curb and designed to maximize safety, comfort, and aesthetics for all users." (Policy CD-2.2 *Neighborhood Design*).

(3) ***The site is physically suitable for the type of development proposed.*** The project site meets the minimum lot area and dimensions of Planning Area 11 (RD-7 / Row Townhomes) of the Esperanza Specific Plan and is physically suitable for the type of residential development proposed in terms of zoning, land use and development activity proposed, and existing and proposed site conditions.

(4) ***The site is physically suitable for the density/intensity of development proposed.*** The project site is proposed for residential development at 16.7 DUs/acre. The project site meets the minimum lot area and dimensions of the Planning Area 11 (RD-7 / Row Townhomes) of the Esperanza Specific Plan and is physically suitable for this proposed density of development.

(5) ***The design of the subdivision or the proposed improvements thereon, are not likely to cause substantial environmental damage, or substantially and avoidably injure fish or wildlife, or their habitat.*** The Project site is not located in an area that has been identified as containing species identified as a candidate, sensitive, or special status species in local or regional plans, policies or regulations or by the California Department of Fish and Wildlife or the U.S. Fish and Wildlife Service, nor does the site contain any riparian habitat or other sensitive natural community, and no wetland habitat is present on site; therefore, the design of the subdivision, or improvements proposed thereon, are not likely to cause substantial environmental damage, or substantially and avoidably injure fish or wildlife, or their habitat.

(6) ***The design of the subdivision, or the type of improvements thereon, are not likely to cause serious public health problems.*** The design of the proposed subdivision, and the residential improvements existing or proposed on the project site, are not likely to cause serious public health problems, as the project is not anticipated to involve the transport, use, or disposal of hazardous materials during either construction or project implementation, include the use of hazardous materials or volatile fuels, nor are there any known stationary commercial or industrial land uses within close proximity to the subject site that use/store hazardous materials to the extent that they would pose a significant hazard to visitors or occupants to the project site.

(7) ***The design of the subdivision, or the type of improvements thereon, will not conflict with easements acquired by the public at large for access through, or use of property within, the proposed subdivision.*** The proposed subdivision has provided for all necessary public easements and dedications for access through, or use of property within, the proposed subdivision. Furthermore, all such public easements and

dedications have been designed pursuant to: (a) the requirements of the Policy Plan component of TOP 2050 and applicable area plans; (b) applicable specific plans or planned unit developments; (c) applicable provisions of the City of Ontario Development Code; (d) applicable master plans and design guidelines of the City; and (e) applicable Standard Drawings of the City.

SECTION 6: ***Planning Commission Action.*** Based upon the findings and conclusions set forth in the Sections above, the Planning Commission hereby APPROVES the herein described Application, subject to each and every condition set forth in the Department reports attached hereto as "Attachment A," and incorporated herein by this reference.

SECTION 7: ***Indemnification.*** The Applicant shall agree to defend, indemnify and hold harmless, the City of Ontario or its agents, officers, and employees from any claim, action or proceeding against the City of Ontario or its agents, officers or employees to attack, set aside, void, or annul this approval. The City of Ontario shall promptly notify the Applicant of any such claim, action, or proceeding, and the City of Ontario shall cooperate fully in the defense.

SECTION 8: ***Custodian of Records.*** The documents and materials that constitute the record of proceedings on which these findings have been based are located at the City of Ontario City Hall, 303 East B Street, Ontario, California 91764. The custodian for these records is the City Clerk of the City of Ontario.

SECTION 9: ***Certification to Adoption.*** The Secretary shall certify to the adoption of the Resolution.

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The Secretary Pro Tempore for the Planning Commission of the City of Ontario shall certify as to the adoption of this Resolution.

I hereby certify that the foregoing Resolution was duly and regularly introduced, passed and adopted by the Planning Commission of the City of Ontario at a regular meeting thereof held on the 23rd day of September 2025, and the foregoing is a full, true and correct copy of said Resolution, and has not been amended or repealed.

Nicola Ricci
Planning Commission Chairman

ATTEST:

Henry K. Noh
Planning Director and
Secretary to the Planning Commission

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

I, Gwen Berendsen, Secretary Pro Tempore of the Planning Commission of the City of Ontario, DO HEREBY CERTIFY that foregoing Resolution No. PC25-050, was duly passed and adopted by the Planning Commission of the City of Ontario at their regular meeting held on September 23, 2025, by the following roll call vote, to wit:

AYES: Anderson, DeDiemar, Lampkin, Marks, Ricci

NOES: Gage

ABSENT: None

ABSTAIN: None

Gwen Berendsen
Secretary Pro Tempore

ATTACHMENT A:

File No. PMTT24-008 (TTM 20730)
Departmental Conditions of Approval

(Departmental conditions of approval to follow this page)

LAND DEVELOPMENT DIVISION CONDITIONS OF APPROVAL

303 East B Street, Ontario, California 91764 Phone: 909.395.2036 / Fax: 909.395.2420

Date Prepared: 9/1/2025

File No: PMTT24-008 (TTM 20730)

Related Files: PDEV24-017

Project Description: A Tentative Tract Map to subdivide approximately 10.02 acres of land into 28 numbered lots for 161 multiple-family units and 15 lettered lots for private streets, landscape edges, and common open space, located south of Chatham Street, west of Clifton Avenue, east of Amherst Avenue, and north of Eucalyptus Avenue, within Planning Area 11 (RD-7 / Row Townhomes) of the Esperanza Specific Plan; (APN: 1073-101-050).; **submitted by GDC Investments 13.**

Prepared By: Robert Morales, Associate Planner
Phone: 909.395.2432 (direct)
Email: Rmorales@ontarioca.gov

The Planning Department, Land Development Section, conditions of approval applicable to the above-described Project, are listed below. The Project shall comply with each condition of approval listed below:

1.0 Standard Conditions of Approval. The project shall comply with the *Standard Conditions for New Development*, adopted by City Council Resolution No. 2017-027 on April 18, 2017. A copy of the *Standard Conditions for New Development* may be obtained from the Planning Department or City Clerk/Records Management Department.

2.0 Special Conditions of Approval. In addition to the *Standard Conditions for New Development* identified in condition no. 1.0, above, the project shall comply with the following special conditions of approval:

2.1 Time Limits.

(a) Tentative Tract Map approval shall become null and void 2 years following the effective date of application approval, unless the final parcel/tract map has been recorded, or a time extension has been approved by the Planning Commission pursuant to Development Code Section 2.02.025 (Time Limits and Extensions). This Permit does not supersede any individual time limits specified herein for performance of specific conditions or improvements.

(b) Development Plan approval shall become null and void 2 years following the effective date of application approval, unless a building permit is issued and construction is commenced, and diligently pursued toward completion, or a time extension has been approved by the Planning Director. This condition does not supersede any individual time limits specified herein, or any other departmental conditions of approval applicable to the Project, for the performance of specific conditions or improvements.

2.2 Subdivision Map.

(a) The Final Tract Map shall be in conformance with the approved Tentative Tract/Parcel Map on file with the City. Variations from the approved Tentative Tract/Parcel Map may be reviewed and approved by the Planning Department. A substantial variation from the approved Tentative Tract/Parcel Map may require review and approval by the Planning Commission, as determined by the Planning Director.

(b) Tentative Tract Map approval shall be subject to all conditions, requirements and recommendations from all other departments/agencies provided on the attached reports/memorandums.

(c) The subject Tentative Tract Map for condominium purposes shall require the recordation of a condominium plan concurrent with the recordation of the Final Tract/Parcel Map and CC&Rs.

(d) Pursuant to California Government Section 66474.9, the subdivider agrees that it will defend, indemnify, and hold harmless the City of Ontario or its agents, officers and employees from any claim, action or proceeding against the City of Ontario or its agents, officers or employees to attack, set aside, void or annul any approval of the City of Ontario, whether by its City Council, Planning Commission or other authorized board or officer of this subdivision, which action is brought within the time period provided for in Government Code Section 66499.37. The City of Ontario shall promptly notify the subdivider of any such claim, action or proceeding and the City of Ontario shall cooperate fully in the defense.

2.3 General Requirements. The Project shall comply with the following general requirements:

(a) All construction documentation shall be coordinated for consistency, including, but not limited to, architectural, structural, mechanical, electrical, plumbing, landscape and irrigation, grading, utility and street improvement plans. All such plans shall be consistent with the approved entitlement plans on file with the Planning Department.

(b) The project site shall be developed in conformance with the approved plans on file with the City. Any variation from the approved plans must be reviewed and approved by the Planning Department prior to building permit issuance.

(c) The herein-listed conditions of approval from all City departments shall be included in the construction plan set for the project, which shall be maintained on site during project construction.

2.4 Landscaping.

(a) The Project shall provide and continuously maintain landscaping and irrigation systems in compliance with the provisions of Ontario Development Code Division 6.05 (Landscaping).

(b) Comply with the conditions of approval of the Planning Department, Landscape Planning Division.

(c) Landscaping shall not be installed until the Landscape and Irrigation Construction Documentation Plans required by Ontario Development Code Division 6.05 (Landscaping) have been approved by the Landscape Planning Division.

(d) Changes to approved Landscape and Irrigation Construction Documentation Plans, which affect the character or quantity of the plant material or irrigation system design, shall be resubmitted for approval of the revision by the Landscape Planning Division, prior to the commencement of the changes.

2.5 Walls and Fences. All Project walls and fences shall comply with the requirements of Ontario Development Code Division 6.02 (Walls, Fences and Obstructions).

2.6 Parking, Circulation and Access.

(a) The Project shall comply with the applicable off-street parking, loading and lighting requirements of the Esperanza Specific Plan.

(b) All drive approaches shall be provided with an enhanced pavement treatment. The enhanced paving shall extend from the back of the approach apron, into the site, to the first intersecting drive aisle or parking space.

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(c) Areas provided to meet the City's parking requirements, including off-street parking and loading spaces, access drives, and maneuvering areas, shall not be used for the outdoor storage of materials and equipment, nor shall it be used for any other purpose than parking.

(d) The required number of off-street parking spaces and/or loading spaces shall be provided at the time of site and/or building occupancy. All parking and loading spaces shall be maintained in good condition for the duration of the building or use.

(e) Parking spaces specifically designated and conveniently located for use by the physically disabled shall be provided pursuant to current accessibility regulations contained in State law (CCR Title 24, Part 2, Chapters 2B71, and CVC Section 22507.8).

(f) Bicycle parking facilities, including bicycle racks, lockers, and other secure facilities, shall be provided in conjunction with development projects pursuant to current regulations contained in CALGreen (CAC Title 24, Part 11). The final design and placement of bicycle parking facilities shall be subject to Planning Department review and approval.

(g) All off-street parking facilities shall be provided with nighttime security lighting pursuant to Ontario Municipal Code Section 4-11.08 (Special Residential Building Provisions) and Section 4-11.09 (Special Commercial/Industrial Building Provisions), designed to confine emitted light to the parking areas. Parking facilities shall be lit from sunset until sunrise, daily, and shall be operated by a photocell switch.

(h) Unless intended as part of a master lighting program, no operation, activity, or lighting fixture shall create illumination on any adjacent property.

2.7 Mechanical and Rooftop Equipment.

(a) All exterior roof-mounted mechanical, heating and air conditioning equipment, and all appurtenances thereto, shall be completely screened from public view by parapet walls or roof screens that are architecturally treated so as to be consistent with the building architecture.

(b) All ground-mounted utility equipment and structures, such as tanks, transformers, HVAC equipment, and backflow prevention devices, shall be located out of view from a public street, or adequately screened through the use of landscaping and/or decorative low garden walls.

2.8 Security Standards. The Project shall comply with all applicable requirements of Ontario Municipal Code Title 4 (Public Safety), Chapter 11 (Security Standards for Buildings).

2.9 Signs.

(a) All Project signage shall comply with the requirements of Ontario Development Code Division 8.1 (Sign Regulations).

2.10 Sound Attenuation. The Project shall be constructed and operated in a manner so as not to exceed the maximum interior and exterior noise levels set forth in Ontario Municipal Code Title 5 (Public Welfare, Morals, and Conduct), Chapter 29 (Noise).

2.11 Covenants, Conditions and Restrictions (CC&Rs)/Mutual Access and Maintenance Agreements.

(a) CC&Rs shall be prepared for the Project and shall be recorded prior to the issuance of a building permit.

(b) The CC&Rs shall be in a form and contain provisions satisfactory to the City. The articles of incorporation for the property owner's association and the CC&Rs shall be reviewed and approved by the City.

(c) CC&Rs shall ensure reciprocal parking and access between parcels.

(d) CC&Rs shall ensure reciprocal parking and access between parcels, and common maintenance of:

(i) Landscaping and irrigation systems within common areas;

(ii) Landscaping and irrigation systems within parkways adjacent to the project site, including that portion of any public highway right-of-way between the property line or right-of-way boundary line and the curb line and also the area enclosed within the curb lines of a median divider (Ontario Municipal Code Section 7-3.03), pursuant to Ontario Municipal Code Section 5-22-02;

(iii) Shared parking facilities and access drives; and

(iv) Utility and drainage easements.

(e) CC&Rs shall include authorization for the City's local law enforcement officers to enforce City and State traffic and penal codes within the project area.

(f) The CC&Rs shall grant the City of Ontario the right to enforce the CC&R provisions.

(g) A specific methodology/procedure shall be established within the CC&Rs for enforcement of its provisions by the City of Ontario, if adequate maintenance of the development does not occur, such as, but not limited to, provisions that would grant the City the right of access to correct maintenance issues and assess the property owner's association for all costs incurred.

2.12 Disclosure Statements.

(a) A copy of the Public Report from the Department of Real Estate, prepared for the subdivision pursuant to Business and Professions Code Section 11000 et seq., shall be provided to each prospective buyer of the residential units and shall include a statement to the effect that:

(i) This tract is subject to noise from the Ontario International Airport and may be more severely impacted in the future.

(ii) Some of the property adjacent to this tract is zoned for agricultural uses and there could be fly, odor, or related problems due to the proximity of animals.

(iii) The area south of Riverside Drive lies within the San Bernardino County Agricultural Preserve. Dairies currently existing in that area are likely to remain for the foreseeable future.

(iv) This tract is part of a Landscape Maintenance District. The homeowner(s) will be assessed through their property taxes for the continuing maintenance of the district.

2.13 Environmental Requirements.

(a) If human remains are found during project grading/excavation/construction activities, the area shall not be disturbed until any required investigation is completed by the County Coroner and Native American consultation has been completed (if deemed applicable).

(b) If any archeological or paleontological resources are found during project grading/excavation/construction, the area shall not be disturbed until the significance of the resource is determined. If determined to be significant, the resource shall be recovered by a qualified archeologist or paleontologist consistent with current standards and guidelines, or other appropriate measures implemented.

2.14 Indemnification. The applicant shall agree to defend, indemnify and hold harmless, the City of Ontario or its agents, officers, and employees from any claim, action or proceeding against the City of Ontario or its agents, officers or employees to attack, set aside, void or annul any approval of the City of Ontario, whether by its City Council, Planning Commission or other authorized board or officer. The City of Ontario shall promptly notify the applicant of any such claim, action or proceeding, and the City of Ontario shall cooperate fully in the defense.

2.15 Additional Fees.

(a) Within 5 days following final application approval, the Notice of Determination ("NOD") filing fee shall be provided to the Planning Department. The fee shall be paid by check, made payable to the "Clerk of the Board of Supervisors", which shall be forwarded to the San Bernardino County Clerk of the Board of Supervisors, along with all applicable environmental forms/notices, pursuant to the requirements of the California Environmental Quality Act ("CEQA"). Failure to provide said fee within the time specified will result in the extension of the statute of limitations for the filing of a CEQA lawsuit from 30 days to 180 days.

(b) After the Project's entitlement approval, and prior to issuance of final building permits, the Planning Department's Plan Check and Inspection fees shall be paid at the rate established by resolution of the City Council.

2.16 Related Applications. PMTT24-008 approval shall not be final and complete until such time that related File Nos. PGPA24-003, PSPA24-004, have been approved by the City Council and PDEV24-017 has been approved by the Planning Commission.

2.17 Final Occupancy. The Project Architect of record will certify that construction of each building site and the exterior elevations of each structure shall be completed in compliance with the approved plans. Any deviation to approved plans shall require a resubmittal to the Planning Department for review and approval prior to construction. The Occupancy Release Request Form/Architect Certificate of Compliance shall be provided prior to final occupancy. After the receipt of this Certification, the Planning Department will conduct a final site and exterior elevations inspection. The Owner's Representative and Contractor shall be present.

2.18 Additional Requirements.

(a) All applicable conditions of approval of Development Agreement (File No. PDA25-003) shall apply to this tract.

(b) The project is contingent on the City Council approval of File Nos. PGPA24-003 & PSPA24-004.

(c) All parks shall be constructed prior to the final occupancy of the 80th unit.

CITY OF ONTARIO

ENGINEERING DEPARTMENT CONDITIONS OF APPROVAL

(Land Development Division, Environmental Section, Traffic & Transportation Division, Ontario Municipal Utilities Company, Broadband Department, and Financial Services Agency Conditions incorporated)

☒ **DEVELOPMENT PLAN** ☐ OTHER	☐ PARCEL MAP ☒ **TRACT MAP** ☒ **FOR CONDOMINIUM PURPOSES**
PROJECT FILE NO. TM 20730 **RELATED FILE NO(S). PMTT24-008; PDEV24-017**	
☒ **ORIGINAL** ☐ REVISED: __/__/__	

CITY PROJECT ENGINEER & PHONE NO:	**Henry Pham**	**(909) 395-2141**
CITY PROJECT PLANNER & PHONE NO:	**Robert Morales**	**(909) 395-2432**
DAB MEETING DATE:	**September 15th, 2025**	
PROJECT NAME / DESCRIPTION:	**A Tentative Tract Map for condominium purposes to subdivide 13.2 acres of land into 28 numbered lots and 15 lettered lots to develop 161 multi-family dwellings**	
LOCATION:	**North of the intersection of Eucalyptus Ave. and S. Amherst Ave.**	
APPLICANT:	**GDC Investments 13, L.P.**	
REVIEWED BY:	JEFFREY TANG P.E. PRINCIPAL ENGINEER **Raymond Lee, P.E.** **Assistant City Engineer**	9/9/25 **Date**
APPROVED BY:	FOR **Khoi Do, P.E.** **City Engineer**	9-10-25 **Date**

THIS PROJECT SHALL COMPLY WITH THE REQUIREMENTS SET FORTH IN THE GENERAL STANDARD CONDITIONS OF APPROVAL ADOPTED BY THE CITY COUNCIL (RESOLUTION NO. 2017-027) AND THE PROJECT SPECIFIC CONDITIONS OF APPROVAL SPECIFIED HEREIN. ONLY APPLICABLE CONDITIONS OF APPROVAL ARE CHECKED. THE APPLICANT SHALL BE RESPONSIBLE FOR THE COMPLETION OF ALL APPLICABLE CONDITIONS OF APPROVAL PRIOR TO FINAL MAP OR PARCEL MAP APPROVAL, ISSUANCE OF PERMITS AND/OR OCCUPANCY CLEARANCE, AS SPECIFIED IN THIS REPORT.

1. PRIOR TO FINAL MAP OR PARCEL MAP APPROVAL, APPLICANT SHALL:

			Check When Complete
☐	1.01	Dedicate to the City of Ontario, the right-of-way, described below to achieve: _____ feet on _____ Property line corner 'cut-back' required at the intersection of _____ and _____.	☐
☐	1.02	Dedicate to the City of Ontario, the following easement(s): _____ _____	☐
☐	1.03	Restrict vehicular access to the site as follows: _____	☐
☒	**1.04**	**Vacate the following street(s) and/or easement(s):** **A. All interfering on-site easements shall be quitclaimed, vacated, and/or submit non-interference letter from affected owner/utility company.**	☐
☐	1.05	Submit a copy of a recorded private reciprocal use agreement or easement. The agreement or easement shall ensure, at a minimum, common ingress and egress and joint maintenance of all common access areas and drive aisles.	☐
☒	**1.06**	**Provide (original document) Covenants, Conditions and Restrictions (CC&Rs) as applicable to the project and as approved by the City Attorney and the Engineering and Planning Departments, ready for recordation with the County of San Bernardino. The CC&Rs shall provide for, but not be limited to, common ingress and egress, joint maintenance responsibility for all common access improvements, common facilities, parking areas, utilities, median and landscaping improvements and drive approaches, in addition to maintenance requirements established in the Water Quality Management Plan (WQMP), as applicable to the project. The CC&Rs shall also address the maintenance and repair responsibility for public improvements/utilities (sewer, water, storm drain, recycled water, etc.) located within open space/easements. In the event of any maintenance or repair of these facilities, the City shall only restore disturbed areas to current City Standards.**	☐
☒	**1.07**	**For all development occurring south of the Pomona Freeway (60-Freeway) and within the specified boundary limits (per Boundary Map found at *http://tceplumecleanup.com/*), the property developer/owner is made aware of the South Archibald Trichloroethylene (TCE) Plume "Disclosure Letter". Property owner may wish to provide this Letter as part of the Real Estate Transfer Disclosure requirements under California Civil Code Section 1102 et seq. This may include notifications in the Covenants, Conditions and Restrictions (CC&Rs) or other documents related to property transfer and disclosures. Additional information on the plume is available from the Santa Ana Regional Water Quality Control Board at *http://geotracker.waterboards.ca.gov/profile_report?global_id=T10000004658*.**	☐
☐	1.08	File an application for Reapportionment of Assessment, together with payment of a reapportionment processing fee, for each existing assessment district listed below. Contact the Financial Services Department at (909) 395-2124 regarding this requirement. (1) _____ (2) _____	☐

☒ 1.09 **Prepare a fully executed Subdivision Agreement (on City approved format and forms) with accompanying security as required, or complete all public improvements.** ☐

☒ 1.10 **Provide a monument bond (i.e. cash deposit) in an amount calculated by the City's approved cost estimate spreadsheet (available for download on the City's website: www.ontarioca.gov) or as specified in writing by the applicant's Registered Engineer or Licensed Land Surveyor of Record and approved by the City Engineer, whichever is greater.** ☐

☒ 1.11 **Provide a preliminary title report current to within 30 days.** ☐

☒ 1.12 **File an application, together with an initial deposit (if required), to establish a Community Facilities District (CFD) pursuant to the Mello-Roos Community Facilities District Act of 1982. The application and fee shall be submitted a minimum of four (4) months prior to final subdivision map approval, and the CFD shall be established prior to final subdivision map approval or issuance of building permits, whichever occurs first. The CFD shall be established upon the subject property to provide funding for various City services. An annual special tax shall be levied upon each parcel or lot in an amount to be determined. The special tax will be collected along with annual property taxes. The City shall be the sole lead agency in the formation of any CFD. Contact Financial Services Agency at (909) 395-2015 or email CFD@ontarioca.gov to initiate the CFD application process.** ☐

☒ 1.13 **Ontario Ranch Developments:** ☐

☒ 1) Provide evidence of final cancellation of Williamson Act contracts associated with this tract, prior to approval of any final subdivision map. Cancellation of contracts shall have been approved by the City Council.

☒ 2) Provide evidence of sufficient storm water capacity availability equivalents (Certificate of Storm Water Treatment Equivalents).

☒ 3) Provide evidence of sufficient water availability equivalents (Certificate of Net MDD Availability).

☒ 1.14 **Other conditions:** ☐

1. **Developer/applicant shall ensure that the project is developed in accordance with all applicable requirements of Tract Map No. 18380 and the Esperanza Specific Plan.**

2. PRIOR TO ISSUANCE OF ANY PERMITS, APPLICANT SHALL:

A. GENERAL
(Permits includes Grading, Building, Demolition and Encroachment)

☒ 2.01 **Record Tract Map No. 20730 pursuant to the Subdivision Map Act and in accordance with the City of Ontario Municipal Code.** ☐

☒ 2.02 **Submit a PDF of the recorded map to the City Engineer's office.** ☐

☐ 2.03 Note that the subject parcel is a recognized parcel in the City of Ontario per _____. ☐

☐ 2.04 Note that the subject parcel is an 'unrecognized' parcel in the City of Ontario and shall require a Certificate of Compliance to be processed unless a deed is provided confirming the existence of the parcel prior to the date of March 4, 1972. ☐

☐ 2.05 Apply for a: ☐

☐ Certificate of Compliance with a Record of Survey;

☐ Lot Line Adjustment (Record a Conforming Deed with the County of San Bernardino within six months of the recordation of the Lot Line Adjustment to conform the new LLA legal description. Submit a copy of the recorded Conforming Deed to the Engineering Department.);

☐ Make a Dedication of Easement.

☐ 2.06 Provide (original document) Covenants, Conditions and Restrictions (CC&R's), as applicable to the project, and as approved by the City Attorney and the Engineering and Planning Departments, ready for recordation with the County of San Bernardino. The CC&R's shall provide for, but not be limited to, common ingress and egress, joint maintenance of all common access improvements, common facilities, parking areas, utilities and drive approaches in addition to maintenance requirements established in the Water Quality Management Plan (WQMP), as applicable to the project. ☐

☐ 2.07 For all development occurring south of the Pomona Freeway (60-Freeway) and within the specified boundary limits (per Boundary Map found at http://tceplumecleanup.com/), the property developer/owner is made aware of the South Archibald Trichloroethylene (TCE) Plume "Disclosure Letter". Property owner may wish to provide this Letter as part of the Real Estate Transfer Disclosure requirements under California Civil Code Section 1102 et seq. This may include notifications in the Covenants, Conditions and Restrictions (CC&Rs) or other documents related to property transfer and disclosures. Additional information on the plume is available from the Santa Ana Regional Water Quality Control Board at http://geotracker.waterboards.ca.gov/profile_report?global_id=T10000004658. ☐

☒ **2.08 Submit a soils/geology report.** ☐

☐ 2.09 Other Agency Permit/Approval: Submit a copy of the approved permit and/or other form of approval of the project from the following agency or agencies: ☐

- ☐ State of California Department of Transportation (Caltrans)
- ☐ San Bernardino County Road Department (SBCRD)
- ☐ San Bernardino County Flood Control District (SBCFCD)
- ☐ Federal Emergency Management Agency (FEMA)
- ☐ Cucamonga Valley Water District (CVWD) for sewer/water service
- ☐ United States Army Corps of Engineers (USACE)
- ☐ California Department of Fish & Game
- ☐ Inland Empire Utilities Agency (IEUA)
- ☐ Other: _____

☐ 2.10 Dedicate to the City of Ontario the right-of-way described below: ☐

_____ feet on _____

Property line corner 'cut-back' required at the intersection of _____ and _____.

☐ 2.11 Dedicate to the City of Ontario the following easement(s):_____ ☐

_____

☐ 2.12 Vacate the following street(s) and/or easement(s): ☐

A. All interfering on-site easements shall be quitclaimed, vacated, and/or submit non-interference letter from affected owner/utility company.

☐ 2.13 Ontario Ranch Developments: ☐

☐ 1) Submit a copy of the permit from the San Bernardino County Health Department to the

Engineering Department and the Ontario Municipal Utilities Company (OMUC) for the destruction/abandonment of the on-site water well. The well shall be destroyed/abandoned in accordance with the San Bernardino County Health Department guidelines.

☐ 2) Make a formal request to the City of Ontario Engineering Department for the proposed temporary use of an existing agricultural water well for purposes other than agriculture, such as grading, dust control, etc. Upon approval, the Applicant shall enter into an agreement with the City of Ontario and pay any applicable fees as set forth by said agreement.

☐ 3) Design proposed retaining walls to retain up to a maximum of three (3) feet of earth. In no case shall a wall exceed an overall height of nine (9) feet (i.e. maximum 6-foot high wall on top of a maximum 3-foot high retaining wall.

☐ 2.14 Submit a security deposit to the Engineering Department to guarantee construction of the public improvements required herein valued at 100% of the approved construction cost estimate. Security deposit shall be in accordance with the City of Ontario Municipal Code. Security deposit will be eligible for release, in accordance with City procedure, upon completion and acceptance of said public improvements. ☐

☒ **2.15 The applicant/developer shall submit all necessary survey documents prepared by a Licensed Surveyor registered in the State of California detailing all existing survey monuments in and around the project site. These documents are to be reviewed and approved by the City Survey Office.** ☐

☒ **2.16 Pay all Development Impact Fees (DIF) to the Building Department. Storm Drain Development Impact Fee shall be paid to the Building Department. Final fee shall be determined based on the approved site plan and the DIF rate at the time of payment.** ☐

☐ 2.17 Other conditions: _____ ☐

B. PUBLIC IMPROVEMENTS
(See attached Exhibit 'A' for plan check submittal requirements.)

☒ **2.18 Design and construct full public improvements in accordance with the City of Ontario Municipal Code, current City standards and specifications, master plans and the adopted specific plan for the area, if any. These public improvements shall include, but not be limited to, the following (checked boxes):**

Improvement	Amherst Ave.	Chatham St.	S. Clifton St.	Eucalyptus Ave.
Curb and Gutter	☐ New; ___ ft. from C/L ☐ Replace damaged ☐ Remove and replace	☐ New; ___ ft. from C/L ☐ Replace damaged ☐ Remove and replace	☐ New; ___ ft. from C/L ☐ Replace damaged ☐ Remove and replace	☐ New; ___ ft. from C/L ☐ Replace damaged ☐ Remove and replace
AC Pavement	☐ Replacement ☐ Widen ____ additional feet along frontage, including pavm't transitions	☐ Replacement ☐ Widen ____ additional feet along frontage, including pavm't transitions	☐ Replacement ☐ Widen ____ additional feet along frontage, including pavm't transitions	☐ New ☐ Widen ____ additional feet along frontage, including pavm't transitions
PCC Pavement (Truck Route Only)	☐ New ☐ Modify existing	☐ New ☐ Modify existing	☐ New ☐ Modify existing	☐ New ☐ Modify existing
Drive Approach	☐ New ☐ Remove and replace	☐ New ☐ Remove and replace	☐ New ☐ Remove and replace	☐ New ☐ Remove and replace
Sidewalk	☐ New ☐ Remove and replace	☐ New ☐ Remove and replace	☒ **New** ☐ Remove and replace	☐ New ☐ Remove and replace
ADA Access Ramp	☐ New ☐ Remove and replace	☒ **New[1]** ☐ Remove and replace	☐ New ☐ Remove and replace	☐ New ☐ Remove and replace
Parkway	☒ **Trees** ☒ **Landscaping (w/irrigation)**	☒ **Trees** ☒ **Landscaping (w/irrigation)**	☒ **Trees** ☒ **Landscaping (w/irrigation)**	☒ **Trees** ☐ **Landscaping (w/irrigation)**
Raised Landscaped Median	☐ New ☐ Remove and replace	☐ New ☐ Remove and replace	☐ New ☐ Remove and replace	☐ New ☐ Remove and replace
Fire Hydrant	☐ New / Upgrade ☐ Relocation	☐ New / Upgrade ☐ Relocation	☐ New / Upgrade ☐ Relocation	☒ **New** ☐ Relocation

Sewer (see Sec. 2.C)	☒ **Main** ☒ **Lateral**	☐ Main ☐ Lateral	☐ Main ☐ Lateral	☐ Main ☐ Lateral
Water (see Sec. 2.D)	☒ **Main** ☐ Service	☒ **Main** ☒ **Service**	☒ **Main** ☐ Service	☐ Main ☐ Service
Recycled Water (see Sec. 2.E)	☐ Main ☐ Service	☐ Main ☐ Service	☒ **Main** ☒ **Service**	☐ Main ☒ **Service**
Traffic Signal System (see Sec. 2.F)	☐ New ☐ Modify existing	☐ New ☐ Modify existing	☐ New ☐ Modify existing	☐ New ☐ Modify existing
Traffic Signing and Striping (see Sec. 2.F)	☐ New ☐ Modify existing	☒ **New[2]** ☐ Modify existing	☐ New ☐ Modify existing	☐ New ☐ Modify existing
Street Light (see Sec. 2.F)	☐ New / Upgrade ☐ Relocation	☐ New / Upgrade ☐ Relocation	☐ New / Upgrade ☐ Relocation	☐ New / Upgrade ☐ Relocation
Bus Stop Pad or Turn-out (see Sec. 2.F)	☐ New ☐ Modify existing	☐ New ☐ Modify existing	☐ New ☐ Modify existing	☐ New ☐ Modify existing
Storm Drain (see Sec. 2G)	☐ Main ☒ **Lateral**	☐ Main ☐ Lateral	☐ Main ☐ Lateral	☐ Main ☐ Lateral
Fiber Optics (see Sec. 2K)	☐ Conduit / Appurtenances	☒ **Conduit / Appurtenances**	☐ Conduit / Appurtenances	☐ Conduit / Appurtenances
Overhead Utilities	☐ Underground ☐ Relocate	☐ Underground ☐ Relocate	☐ Underground ☐ Relocate	☐ Underground ☐ Relocate
Removal of Improvements	_____ _____ _____	_____ _____ _____	_____ _____ _____	_____ _____ _____
Other Improvements	☒ **Intersection Chokers[3]**	☒ **Intersection Chokers[3]**	☒ **Intersection Chokers[3]**	_____ _____ _____

Improvement	Private Streets[4]
Curb and Gutter	☒ **New** ☐ Replace damaged ☐ Remove and replace
AC Pavement	☒ **New** ☐ Widen ____ additional feet along frontage, including pavm't transitions
PCC Pavement (Truck Route Only)	☐ New ☐ Modify existing
Drive Approach	☐ New ☐ Remove and replace
Sidewalk	☐ New ☐ Remove and replace
ADA Access Ramp	☐ New ☐ Remove and replace
Parkway	☐ Trees ☐ Landscaping (w/irrigation)
Raised Landscaped Median	☐ New ☐ Remove and replace
Fire Hydrant	☐ New / Upgrade ☐ Relocation
Sewer (see Sec. 2.C)	☐ Main ☐ Lateral
Water (see Sec. 2.D)	☐ Main ☐ Service
Recycled Water (see Sec. 2.E)	☐ Main ☐ Service

Traffic Signal System (see Sec. 2.F)	☐ New ☐ Modify existing
Traffic Signing and Striping (see Sec. 2.F)	☐ New ☐ Modify existing
Street Light (see Sec. 2.F)	☐ New / Upgrade ☐ Relocation
Bus Stop Pad or Turn-out (see Sec. 2.F)	☐ New ☐ Modify existing
Storm Drain (see Sec. 2G)	☐ Main ☐ Lateral
Fiber Optics (see Sec. 2K)	☒ **Conduit / Appurtenances**
Overhead Utilities	☐ Underground ☐ Relocate
Removal of Improvements	_____ _____ _____
Other Improvements	_____ _____ _____

Specific notes for improvements listed in item no. 2.18, above:
[1]See Transportation Division Condition of Approval No. 2
[2]See Transportation Division Condition of Approval No. 5
[3]See Transportation Division Condition of Approval No. 3
[4]Tilt-sections with widths varying from 25 ft. to 27 ft.

☐ 2.19 Construct a 2" asphalt concrete (AC) grind and overlay on the existing section of the following street(s): _____ ☐

☒ **2.20 Reconstruction of the full pavement structural section, per City of Ontario Standard Drawing number 1011, may be required based on the existing pavement condition and final street design. Minimum limits of reconstruction shall be along property frontage, from street centerline to curb/gutter.** ☐

☒ **2.21 Depending on site conditions and number of utility service cuts at time of construction, additional pavement restoration may be required.** ☐

☐ 2.22 Make arrangements with the Cucamonga Valley Water District (CVWD) to provide ☐ water service ☐ sewer service to the site. This property is within the area served by the CVWD and Applicant shall provide documentation to the City verifying that all required CVWD fees have been paid. ☐

☐ 2.23 Overhead utilities shall be under-grounded, in accordance with Title 7 of the City's Municipal Code (Ordinance No. 2804 and 2892). Developer may pay in-lieu fee, approximately _____, for undergrounding of utilities in accordance with Section 7-7.302.e of the City's Municipal Code. ☐

☒ **2.24 Other conditions:** ☐
- **Private street improvements shall be designed and constructed per current City Standards. Applicable plan check and inspection fees shall be required.**

C. SEWER

☐ 2.25 An ____inch sewer main is available for connection by this project in _____. ☐

☐ 2.26 Design and construct a sewer main extension. A sewer main is not available for direct connection. The closest main is approximately _____ feet away. ☐

☐ 2.27 Submit documentation that shows expected peak loading values for modeling the impact of the subject project to the existing sewer system. The project site is within a deficient public sewer system area. Applicant shall be responsible for all costs associated with the preparation of the model. Based on the results of the analysis, Applicant may be required to mitigate the project impact to the deficient public sewer system, including, but not limited to, upgrading of existing sewer main(s), construction of new sewer main(s) or diversion of sewer discharge to another sewer. ☐

☒ **2.28 Other conditions:** ☐
- **See attached for Ontario Municipal Utilities Company (OMUC) conditions of approval.**

D. WATER

☐ 2.29 A _____inch water main is available for connection by this project in _____ (Ref: Water Drawing Number: _____) ☐

☐ 2.30 Design and construct a water main extension. A water main is not available for direct connection. The closest main is approximately _____ feet away. ☐

☒ **2.31 Other conditions:** ☐
- **See attached for Ontario Municipal Utilities Company (OMUC) conditions of approval.**

E. RECYCLED WATER

☐ 2.32 An _____inch recycled water main is available for connection by this project in _____. ☐

☒ **2.33 Design and construct an on-site recycled water system for this project. A recycled water main does exist in the vicinity of this project.** ☐

☐ 2.34 Design and construct an on-site recycled water ready system for this project. A recycled water main does not currently exist in the vicinity of this project but is planned for the near future. If Applicant would like to connect to this recycled water main when it becomes available, the cost for the connection shall be borne solely by the Applicant. ☐

☒ **2.35 Submit one (1) electronic copy, in PDF format, of the Supplemental Engineering Report (ER), for the use of recycled water to OMUC's Water Quality Programs at OMUCWQPlanCheck@ontarioca.gov for review and subsequent submittal to the California State Water Board (Division of Drinking Water) for final approval.** ☐

Note: The Division of Drinking Water review and approval process may take up to four (4) months. Contact the OMUC's Water Quality Programs at (909) 395-2678 or email OMUCWQPlanCheck@ontarioca.gov regarding this requirement. *Failure to obtain an approval letter from the Division of Drinking Water authorizing the use of recycled water will delay meter installation and if applicable, occupancy release for new developments.*

☒ **2.36 Submit one (1) electronic copy, in PDF format, of the Landscape Plans (on-site & off-site) to OMUC's Water Quality Programs at OMUCWQPlanCheck@ontarioca.gov for review and approval.**

☒ **2.37 Other conditions:** ☐
- **See attached for Ontario Municipal Utilities Company (OMUC) conditions of approval.**

F. TRAFFIC / TRANSPORTATION

☐ 2.38 Submit a focused traffic impact study, prepared and signed by a Traffic/Civil Engineer registered in the State of California. The study shall address, but not be limited to, the following issues as required by the City Engineer: ☐
1. On-site and off-site circulation
2. Traffic level of service (LOS) at 'build-out' and future years
3. Impact at specific intersections as selected by the City Engineer

☐ 2.39 New traffic signal installations shall be added to Southern California Edison (SCE) customer account number # 2-20-044-3877. ☐

☒ **2.40 Other conditions:** ☐
- **See attached for Transportation Division conditions of approval.**

G. DRAINAGE / HYDROLOGY

☒ **2.41 A 36-inch storm drain main is available to accept flows from this project in Amherst Avenue.** ☐

☒ **2.42 Submit a hydrology study and drainage analysis, prepared and signed by a Civil Engineer registered in the State of California. The study shall be prepared in accordance with the San Bernardino County Hydrology Manual and City of Ontario standards and guidelines. Additional drainage facilities, including, but not limited to, improvements beyond the project frontage, may be required to be designed and constructed, by Applicant, as a result of the findings of this study.** ☐

☐ 2.43 An adequate drainage facility to accept additional runoff from the site does not currently exist downstream of the project. Design and construct a storm water detention facility on the project site. 100-year post-development peak flow shall be attenuated such that it does not exceed 80% of pre-development peak flows, in accordance with the approved hydrology study and improvement plans. ☐

☐ 2.44 Submit a copy of a recorded private drainage easement or drainage acceptance agreement to the Engineering Department for the acceptance of any increase to volume and/or concentration of historical drainage flows onto adjacent property, prior to approval of the grading plan for the project. ☐

☐ 2.45 Comply with the City of Ontario Flood Damage Prevention Ordinance (Ordinance No. 2409). The project site or a portion of the project site is within the Special Flood Hazard Area (SFHA) as indicated on the Flood Insurance Rate Map (FIRM) and is subject to flooding during a 100-year frequency storm. The site plan shall be subject to the provisions of the National Flood Insurance Program. ☐

☐ 2.46 Other conditions: _____ ☐

H. STORM WATER QUALITY / NATIONAL POLLUTANT DISCHARGE AND ELIMINATION SYSTEM (NPDES)

☐ 2.47 401 Water Quality Certification/404 Permit – Submit a copy of any applicable 401 Certification or 404 Permit for the subject project to the City project engineer. Development that will affect any body of surface water (i.e. lake, creek, open drainage channel, etc.) may require a 401 Water Quality Certification from the California Regional Water Quality Control Board, Santa Ana Region (RWQCB) and a 404 Permit from the United States Army Corps of Engineers (USACE). The groups of water bodies classified in these requirements are perennial (flow year round) and ephemeral (flow during rain conditions, only) and include, but are not limited to, direct connections into San Bernardino County Flood Control District (SBCFCD) channels. ☐
If a 401 Certification and/or a 404 Permit are not required, a letter confirming this from Applicant's engineer shall be submitted.
Contact information: USACE (Los Angeles District) (213) 452-3414; RWQCB (951) 782-4130.

☒ 2.48 **Submit a Water Quality Management Plan (WQMP). This plan shall be approved by the Engineering Department prior to approval of any grading plan. The WQMP shall be submitted, utilizing the current San Bernardino County Stormwater Program template, available at: http://www.sbcounty.gov/dpw/land/npdes.asp.** ☐

☐ 2.49 Design and construct a Connector Pipe Trash Screen or equivalent Trash Treatment Control Device, per catch basin located within or accepting flows tributary of a Priority Land Use (PLU) area that meets the Full Capture System definition and specifications, and is on the Certified List of the State Water Resources Control Board. The device shall be adequately sized per catch basin and include a deflector screen with vector control access for abatement application, vertical support bars, and removable component to facilitate maintenance and cleaning. ☐

☒ 2.50 **Other conditions:** ☐

1. **The project applicant shall submit a Certificate of Storm Water Treatment Capcity for the Net Acreage (Including Chatham Street, Clifton Avenue, and Amherst Avenue portions) Availability in Mill Creek Wetland facility (MCW) for water quality compliance.**
2. **Activities resulting in land disturbance of one acre or more is required to obtain coverage under the Construction General Permit (CGP). The owner is the legally responsible person (LRP) of the site and shall have a Stormwater Pollution Prevention Plan (SWPPP) developed and submitted through the SMARTS website at https://smarts.waterboards.ca.gov/smarts/faces/SwSmartsLogin.xhtml**

J. SPECIAL DISTRICTS

☒ 2.51 **File an application, together with an initial deposit (if required), to establish a Community Facilities District (CFD) pursuant to the Mello-Roos Community Facilities District Act of 1982. The application and fee shall be submitted a minimum of four (4) months prior to final subdivision map approval, and the CFD shall be established prior to final subdivision map approval or issuance of building permits, whichever occurs first. The CFD shall be established upon the subject property to provide funding for various City services. An annual special tax shall be levied upon each parcel or lot in an amount to be determined. The special tax will be collected along with annual property taxes. The City shall be the sole lead agency in the formation of any CFD. Contact Financial Services Agency at (909) 395-2015 or email CFD@ontarioca.gov to initiate the CFD application process.** ☐

☐ 2.52 Other conditions: _____ ☐

K. FIBER OPTIC

☒ 2.53 **A fiber optic line is available for connection by this project in Clifton Avenue.** ☐

☒ 2.54 **Design and construct fiber optic system to provide access to the City's conduit and fiber optic system per the City's Fiber Optic Master Plan. Building entrance conduits shall start from the closest OntarioNet hand hole constructed along the project frontage in the ROW and shall terminate in the main telecommunications room for each building. Conduit infrastructure shall interconnect with the primary and/or secondary backbone fiber optic conduit system at the nearest OntarioNet hand hole. Generally located in Clifton Avenue.** ☐

☒ 2.55 **Refer to the City's Fiber Optic Master Plan for design and layout guidelines. Contact the Broadband Operations Department at (909) 395-2000, regarding this requirement.** ☐

3. PRIOR TO ISSUANCE OF A CERTIFICATE OF OCCUPANCY, APPLICANT SHALL:

☒ 3.01 **Set new monuments in place of any monuments that have been damaged or destroyed as a result of construction of the subject project. Monuments shall be set in accordance with City of Ontario standards and to the satisfaction of the City Engineer.** ☐

☒ 3.02 **Complete all requirements for recycled water usage.** ☐

☒ **1) Procure from OMUC a copy of the letter of confirmation from the California State Water Board (Division of Drinking Water) that the Engineering Report (ER) has been reviewed and the subject site is approved for the use of recycled water.**

☒ **2) Obtain clearance from the OMUC confirming completion of recycled water improvements and passing of shutdown tests and cross connection inspection, upon availability/usage of recycled water.**

☒ **3) Complete Site Supervisor training of on-site personnel in the use of recycled water, in accordance with the ER, upon availability/usage of recycled water.**

☒ **3.03 The applicant/developer shall submit all final survey documents prepared by a Licensed Surveyor registered in the State of California detailing all survey monuments that have been preserved, revised, adjusted or set along with any maps, corner records or Records of Survey needed to comply with these Conditions of Approvals and the latest edition of the California Professional Land Survey Act. These documents are to be reviewed and approved by the City Survey Office.** ☐

☐ 3.04 Ontario Ranch Projects: For developments located at an intersection of any two collector or arterial streets, the applicant/developer shall set a monument if one does not already exist at that intersection. Contact the City Survey office for information on reference benchmarks, acceptable methodology and required submittals. ☐

☒ **3.05 Confirm payment of all Development Impact Fees (DIF) to the Building Department.** ☐

☒ **3.06 Submit electronic copies (PDF and Auto CAD format) of all approved improvement plans, studies and reports (i.e. hydrology, traffic, WQMP, etc.).** ☐

4. PRIOR TO FINAL ACCEPTANCE, APPLICANT SHALL:

☒ **4.01 Complete all Conditions of Approval listed under Sections 1-3 above.** ☐

☒ **4.02 Pay all outstanding fees pursuant to the City of Ontario Municipal Code, including but not limited to, plan check fees, inspection fees and Development Impact Fees.** ☐

☒ **4.03 The applicant/developer shall submit a written request for the City's final acceptance of the project addressed to the City Project Engineer. The request shall include a completed Acceptance and Bond Release Checklist, state that all Conditions of Approval have been completed and shall be signed by the applicant/developer. Upon receipt of the request, review of the request shall be a minimum of 10 business days. Conditions of Approval that are deemed incomplete by the City will cause delays in the acceptance process.** ☐

☒ **4.04 Submit record drawings (PDF) for all public improvements identified within Section 2 of these Conditions of Approval.** ☐

EXHIBIT 'A'

ENGINEERING DEPARTMENT
First Plan Check Submittal Checklist

Project Number: PMTT24-008; PDEV24-017, and Tract Map No. 20730

All plan check submittals are to be done digitally through the City Of Ontario Citizen Portal Access. The following items are to be included with the first plan check submittal:

1. ☒ **A copy of this check list**
2. ☒ **Payment of fee for Plan Checking**
3. ☒ **Engineering Cost Estimate (on City form) with engineer's wet signature and stamp.**
4. ☒ **Project Conditions of Approval**
5. ☒ **Potable and Recycled Water demand calculations (include water demand calculations showing low, average and peak water demand in GPM for the proposed development and proposed water meter size).**
6. ☒ **Public Street improvement plan with street cross-sections**
7. ☒ **Public Sewer improvement plan[1]**
8. ☒ **Public Water improvement plan[1] (include water demand calculations showing low, average and peak water demand in GPM for the proposed development and proposed water meter size)**
9. ☒ **Recycled Water improvement plan[1] (include recycled water demand calculations showing low, average and peak water demand in GPM for the proposed development and proposed water meter size and an exhibit showing the limits of areas being irrigated by each recycled water meter)**
10. ☒ **Private Street improvement plan with street cross-sections.**
11. ☒ **Public Storm Drain improvement plan (delta to existing storm drain plan)**
12. ☐ Public Street Light improvement plan
13. ☒ **Signing and Striping improvement plan**
14. ☒ **Fiber Optic plan (include Auto CAD electronic submittal)**
15. ☒ **HOA Landscape improvement plans. Show corner sight line distance per engineering standard drawing 1309.**
16. ☒ **CFD Landscape improvement plans. Show corner sight line distance per engineering standard drawing 1309.**
17. ☒ **Dry Utility plans within public right-of-way (at a minimum the plans must show existing and ultimate right-of-way, curb and gutter, proposed utility location including centerline dimensions, wall to wall clearances between proposed utility and adjacent public line, street work repaired per Standard Drawing No. 1306. Include Auto CAD electronic submittal)**
18. ☐ Traffic Signal improvement plan and One (1) copy of Traffic Signal Specifications with modified Special Provisions. Please contact the Traffic Division at (909) 395-2154 to obtain Traffic Signal Specifications.
19. ☒ **Water Quality Management Plan (WQMP), including one (1) copy of the approved Preliminary WQMP (PWQMP).**
20. ☒ **Hydrology/Drainage study**

21. ☒ **Soils/Geology report**

22. ☒ **Payment for Final Map/Parcel Map processing fee**

23. ☒ **Final Map/Parcel Map**

24. ☒ **Approved Tentative Map**

25. ☒ **Preliminary Title Report (current within 30 days)**

26. ☒ **Traverse Closure Calculations**

27. ☒ **Set of supporting documents and maps (legible copies): referenced improvement plans (full size), referenced record final maps/parcel maps (full size, 18"x26"), Assessor's Parcel map (full size, 11"x17"), recorded documents such as deeds, lot line adjustments, easements, etc.**

28. ☒ **Supplemental Engineering Report, in electronic format (PDF format), for recycled water use only. Must be reviewed and submitted to the Division of Drinking Water by OMUC Water Quality Programs before clearing plan check workflows (includes grading and landscape plan reviews). *Approval letter issued by the Division of Drinking Water must be obtained before meter installation and if applicable, occupancy release.***

29. ☒ **Other:**
[1]If public main line infrastructure is accepted by the time of construction, this project may submit a minor offsite improvement plan for domestic water and recycled water services and for sewer lateral.

CITY OF ONTARIO
MEMORANDUM

ONTARIO MUNICIPAL UTILITIES COMPANY

DATE:	September 4, 2025
TO:	Henry Pham, Engineering Department
CC:	Robert Morales, Planning Department
FROM:	Heather Young, Utilities Engineering Division
	Christy Stevens, Utilities Engineering Division
SUBJECT:	DPR#4 - Utilities Engineering Conditions of Approval (COA)
PROJECT NO.:	TM-20730 (PMTT24-008), PDEV24-017, PGPA24-003, PSPA24-004

BRIEF DESCRIPTION:

TM-20730 (PMTT24-008): *A Tentative Tract Map (TTM 20730) for Common Interest Subdivision purposes, to subdivide 13.2 acres of land into 28 numbered lots and 15 lettered lots, generally located South of Chatham Street, West of Clifton Street, East of Amherst Avenue, and North of Eucalyptus Avenue within the Planning Area 11 of the Esperanza Specific Plan (APN(s): 1073-101-05). Related File(s): PGPA24-003, PSPA24-004, PDEV24-017).*

PDEV24-017: *A Development Plan to construct 161 multiple-family dwellings on approximately 13.2 acres of land generally located South of Chatham Street, West of Clifton Street, East of Amherst Avenue, and North of Eucalyptus Avenue, within Planning Area 11 of the Esperanza Specific Plan (APN(s): 1073-101-050). Related File(s): PGPA24-003, PSPA24-004, PMTT24-008.*

PGPA24-003: *An Amendment to the Land Use Element of the Policy Plan (General Plan) component of The Ontario Plan, changing the land use designation on 13.2 acres of land from PS (Public School) to MDR (Medium Density Residential) generally located South of Chatham Street, West of Clifton Street, East of Amherst Avenue, and North of Eucalyptus Avenue within the Planning Area 11 of the Esperanza Specific Plan and modifying Exhibit LU-03 (Future Buildout Table) to be consistent with this land use designation change (APN(s): 1073-101-050). Related File(s): PSPA24-004, PMTT24-008, PDEV24-017).*

PSPA24-004: *An Amendment to the Esperanza Specific Plan; [1] Modifying the land use designation for Planning Area 11 from Public School to Residential Development 7 (RD-7); [2] Introduce a new Residential Development 7 (RD-7) designation within the Specific Plan; [3] Establish development standards for a new 3-story residential product type within the residential land use designations; [4] Implement various updates to the Specific Plan, including modifications to the land use map, land use tables, development standards, exhibits, and related text, to reflect the proposed land use changes. (APN(s): 1073-101-050). Related File(s): PGPA24-003, PMTT24-008, PDEV24-017.*

OMUC UTILITIES ENGINEERING DIVISION
CONDITIONS OF APPROVAL

CONDITIONS OF APPROVAL: *The Ontario Municipal Utilities Company (OMUC) Utilities Engineering Division recommends this application for approval subject to the Conditions of Approval outlined below and compliance with the City's Design Development Guidelines, Specifications Design Criteria, and City Standards. The Applicant shall be responsible for the compliance with and the completion of all the following applicable Conditions of Approval prior to the following milestones and subject to compliance with City's Design Development Guidelines, Specifications Design Criteria, and City Standards:*

General Conditions:

1. Standard Conditions of Approval: Project shall comply with the requirements set forth in the Amendment to the Standard Conditions of Approval for New Development Projects adopted by the City Council (Resolution No. 2017-027) on April 18, 2017, or as amended or superseded by Council Resolution; as well as project-specific conditions/requirements as outlined below.

Prior to Issuance of Any Permits (Grading, Building, Demolition and Encroachment), unless other timeline milestones are specified by individual conditions below, the Applicant Shall:

General Conditions (Section 2.A, Other conditions): The Applicant shall comply with the following:

2. Inherited Requirements and Conditions of Approval: This project is subject to all the Requirements and Conditions of Approval of related entitlements TM-18380, PDA25-003, and the Esperanza Specific Plan PSP05-002, PSPA24-004 (as amended). For any conflict in Conditions of Approval and requirements, the Conditions of Approval below for this Project will supersede.
3. Final Utilities Systems Map (USM): Submit a Final Utilities Systems Map (USM) as part of the precise grading plan submittal that meets all the City's USM requirements. These requirements include to show and label all existing and proposed utilities (including all appurtenances such as backflow devices, DCDAs, etc.), sizes, points of connection, and any easements. The final utility design shall comply with all Division of Drinking Water (CCR §64572) Separation Requirements. See Utility Systems Map (USM) Requirements document for details.
4. Public Utilities and Public Right-of-Way including Public Utility Easements (PUE): All City of Ontario Public Utilities shall be installed within a Public Right-of-Way (RoW), or within a Public Utility Easements (PUE), or within a combination of RoW and PUE. In this case, Public Utilities is referring to the mains and connected appurtenances of the following City of Ontario/OMUC Utilities: Public Potable Water; Public Recycled Water; and Public Sanitary Sewer. Public Utilities shall be subject to the Minimum RoW/PUE Area Requirements and PUE Restrictions:
    a. Minimum RoW Area Requirements: Public Utilities shall be installed within in existing RoW/PUE in alignments/locations that meet the following minimum RoW/PUE areas surrounding the Public Utilities, and/or additional RoW/PUE shall be dedicated/granted to the City to provide the following minimum RoW/PUE areas surrounding the Public Utilities:
        i. For each main, the RoW/PUE Area shall be a minimum of 20 feet wide, centered on the utility main with a minimum of 10 feet of RoW/PUE on each side of the main and this minimum area shall extend a minimum for 10 feet past the end of a main;
        ii. For each Service/Lateral, the RoW/PUE Area shall be a minimum of 10 feet wide, centered on the service/lateral with a minimum of 5 feet of RoW on each side of each service/lateral;
        iii. For each water meter box, the RoW/PUE Area shall be a minimum of 5 feet behind and 5 feet on each side of a water meter box;
        iv. For each water appurtenances (fire hydrants, blowoffs, airvacs, etc), the RoW/PUE Area shall be a minimum of 5 feet on each side surrounding the water appurtenances (fire hydrants, blowoffs, airvacs, etc);
        v. The RoW/PUE minimum areas for separate Public Utilities may overlap, provide that all minimum separations and PUE Restrictions are met.
    b. PUE Restrictions: The Minimum PUE Area required surrounding Public Utilities shall be subject to the following restrictions:
        i. The Minimum PUE Area required surrounding Public Utilities shall not contain:
            A. Any storm water quality improvements (infiltration, detention, retention, bioswale, etc);
            B. Landscaping with thick or intrusive root structures,
            C. Any trees;
            D. Any private utilities, plumbing lines, private fire system, or irrigation lines; or,
            E. Any permanent structures or overhangs of permanent structures.
        ii. The PUE surface shall be designed to allow vehicle access over and along the full length of the utility main by any City maintenance vehicle.
        iii. Minimum Separations: Within a PUE, all Department of Drinking Water (DDW) Water Main Separations per California Code of Regulations (CCR) §64572 shall be met for all Public Potable Water Mains and Services between: all Public City Utilities; Non-City Utilities; and Private Utilities. Additionally, the following Minimum Separations shall be met:
            A. At minimum there shall be a 4 feet horizontal separation between each utility as measured between the outside walls of the utility pipelines, or in the case of a Joint Utility Trench, between the outside edge of the Joint Utility Trench and the outside wall of the Utility Pipeline. The minimum 4 feet horizontal separation also includes between services and service appurtenances and: other utilities (public or private) and utility appurtenances; any other objects or potentials obstructions (boxes, handholes, vaults, transformers, panels, poles and standards, signs, driveway

approaches and wings/curb returns, trees, controllers, etc.); and any other items, as determined by the Ontario Municipal Utilities Company (OMUC).

B. Public Utility mains shall not be located behind curb or under curb & gutter and shall be located at minimum of 8 feet from curbface. With specific written permission of OMUC Management Staff, in rare circumstances, this 8 feet minimum can be reduced to 5 feet in specific locations where the 8 feet is not feasible, but at all locations the utilities alignments shall be optimized to meet this minimum location, while still maintaining all other minimum separation.

5. Well Abandonment: All existing Ground Water Wells shall be abandoned per County and State requirements prior to grading if they are not authorized to remain in service by the City's Water Resources Section.

6. Septic Tank Abandonment: All existing septic tank(s) on the property shall be abandoned per City, County, and State regulations and standards.

7. Minor Offsite Improvement Plan: Submit a Minor Offsite Improvement Plan for construction or abandonment of any water services and sewer laterals for the Project. The Minor Offsite Improvement Plan shall be included with the first plan check submittal to the Engineering Department.

    a. The abandonment of recycled water main per the Project's conditions below shall be included on the Minor Offsite Improvement Plan.

8. Unused Service Abandonment: All adjacent water services (along with connected appurtenances) and sewer laterals along the frontages of the project site not used to provide service to this Development Project shall be abandoned back to the main in accordance with City Standards and Practices.

Sanitary Sewer Conditions (Section 2.C): The Applicant shall comply with the following:

9. Sanitary Sewer Infrastructure: Sanitary sewer infrastructure in TM-18380 is required to support this development. If the sanitary sewer infrastructure is not completed by TM-18380, this development is subject to the improvements required. The Project is limited to Public Sewer Mains within Public Streets in Publicly Dedicated Right-of-way for Streets and Public Sewer Mains are not allowed within private property or private streets/private drive aisles. The Project is required to install the following Public Sewer Mains and only to the extent necessary to serve the Project:

    a. Install 8-inch sewer main in Amherst Avenue from the Project's point of connection at the intersection of Shelburne Street and extending south to connect to the existing sewer main in Eucalyptus Avenue.

10. Sanitary Sewer Service:

    a. Sewer Lateral: Multifamily attached residential buildings or single-family attached residences: the residences and buildings shall share an onsite private sewer system that discharges wastewater to the Public Sanitary Sewer System through a shared Public Sewer Lateral per Standard #2003. The quantity of Public Sewer Laterals for the Project shall be limited to the minimum necessary to meet all of the conditions of approval and as limited by the City.

        i. Sewer Lateral Connection: The Project shall connect to the 8-inch public sewer main in Amherst Avenue.

        ii. Public Sewer Laterals and Storm Water Quality Improvements: No storm water quality improvements (infiltration, detention, retention, bioswale, etc) shall be installed above or within 5 feet of any Public Sewer Lateral.

        iii. Unused Service Abandonment: The Project shall utilize any unused sewer lateral along the Project's frontages on Amherst Avenue when feasible. Any sewer lateral along the frontages of the project site not used to provide service shall be abandoned back to the main in accordance with City Standards and Practices.

    b. Private Onsite Sewer System and Plumbing: The Onsite Sewer System shall be privately maintained by the property owner. If not under one ownership, the maintenance of the shared onsite private sewer system shall be established through Covenants, Conditions, and Restrictions (CC&Rs). The Private Onsite Sewer System shall meet the following requirements:

        i. Private Onsite Sewer and Storm Water Quality Improvements: No storm water quality improvements (infiltration, detention, retention, bioswale, etc) shall be installed above or within 5 feet of any Private Onsite Sewer pipes.

Potable Water Conditions (Section 2.D): The Applicant shall comply with the following:

11. Potable Water Infrastructure: The Project is limited to Public Potable Water Mains within Public Streets in Publicly Dedicated Right-of-way for Streets and Public Potable Water Mains are not allowed within private property or private streets/private drive aisles. The Project is required to install the following Public Potable Water Mains and only to the extent necessary to serve the Project and achieve required looping:
    a. Install 8-inch potable water main in Clifton Avenue from Eucalyptus Avenue to Chatham Street.
    b. Install 8-inch potable water main in Chatham Street from Clifton Avenue to Amherst Avenue.
    c. Install 8-inch potable water main in Amherst Avenue from Chatham Street to Eucalyptus Avenue.
12. Potable Water Service:
    a. Domestic Service:
        i. Multifamily attached residential buildings or single-family attached residences: the residences shall be sub-metered and share an onsite private domestic water system that connects to the Public Potable Water System through a shared a domestic potable water service and public master meter connected to the Public Potable Water System with onsite private backflow prevention device. Maintenance of the shared onsite private domestic water system shall be established through Covenants, Conditions, and Restrictions (CC&Rs).
    b. Irrigation Service: For landscape irrigation uses that are not served by Recycled Water, the landscape irrigation uses shall have a separate irrigation water service and meter with backflow prevention device connected to the Public Potable Water System separate from the domestic water uses and the onsite plumbing systems shall be also separate from each other.
        i. Community Service District (CFD) Maintained Irrigation Areas: Any irrigated areas that are to be maintained by a Community Service District (CFD) and not by the property owner or owners association require irrigation services and meters separate from those that are maintained by the property owner or owners association.
    c. Backflow Prevention:
        i. A Backflow Prevention Device is required for each Meter connected to the Public Potable Water System that: serves any residential use that is more than one (1) single family residential unit; or, any non-residential use; or, only irrigation use.
        ii. Backflow Prevention Device Location: In order to reduce the risk of contamination to the Public Potable Water System, a Backflow Prevention Device location shall comply with the following requirements:
            1. As measured along the pipe connecting to the Backflow Prevention Device, the backflow concrete pad shall be located a minimum of 3 feet and a maximum of 5 feet from:
                1. The Right-Of-Way line for Publicly Dedicated Streets; or,
                2. The back of the sidewalk or the meter box (where there is no sidewalk), whichever is closer, for mains within PUEs and not within Right-Of-Way for Publicly Dedicated Streets.
            2. Only one single bend of up to 90 degrees maximum is allowed along the pipe to the Backflow and the single bend must be located at one of the following places: either the along the 90-degree riser connecting at the backflow assembly; or, at the end of the 12-inch stub at the back of the meter box.
            3. All the minimum DDW Separations also apply to the pipeline connecting between the Main/Meter-Box to a Backflow Device (or DCDA) and any Backflow Device (or DCDA). This also includes storm water quality improvements (infiltration, detention, retention, bioswale, etc). Also, no public or private non-potable water conveyances (private utilities, plumbing lines, sewer, private fire system, storm drain) shall cross the pipeline connecting between the Main/Meter-Box to a Backflow Device (or DCDA) or under any Backflow Device (or DCDA).
    d. Fire Water Service: For onsite private Fire System uses: Where the domestic water service and meters connected to the Public Potable Water System that serves any use that is more than one (1) single

family detached residential unit, or any non-residential use: if an onsite private fire system is required, then a separate Fire Service with Double Check Detector Assembly (DCDA) per City Standard #4208 connected to the Public Potable Water System is required, to serve the onsite private fire system. The onsite fire system and onsite domestic water plumbing system shall be separate. The DCDA location shall be the same as the Backflow Prevention Device above.

i. In certain residential cases where a separate fire service with DCDA connected to the Public Potable Water System is not required by above the requirement, and approved by the City Fire Department and the City Building Department, then the California Residential Code must be followed for the residential buildings; if the California Residential Code is not followed for the residential buildings; then a separate fire service with DCDA is required.

e. Fire Hydrants: Install public fire hydrants per City Standard along the public potable water mains fronting the Project with adequate spacing and in locations as required by the Fire Department.

Recycled Water Conditions (Section 2.E): The Applicant shall comply with the following:

13. City Ordinance 2689: This development shall comply with City Ordinance 2689 and make use of recycled water for all approved uses, including but not limited to landscape irrigation. Appropriately sized public and private mains shall be installed throughout the Project to meet this requirement, as approved by the City.

14. Recycled Water Infrastructure: Recycled water infrastructure in TM-18380 is required to support this development. If the recycled water infrastructure is not completed by TM-18380, this development is subject to the improvements required. The Project is limited to Public Recycled Water Mains within Public Streets in Publicly Dedicated Right-of-way for Streets and Public Recycled Water Mains are not allowed within private property or private streets/private drive aisles. In order to comply with City Ordinance 2689, the Project is required to install the following Public Recycled Water Mains and only to the extent necessary to serve the Project:

    a. Install 8-inch recycled water main in Clifton Avenue from Eucalyptus Avenue to Chatham Street.

    b. Abandon unused recycled water main and its associated appurtenances in Amherst Avenue from Eucalyptus Avenue to the end of the main approximately at the intersection of Shelburne Street.

15. RW Program Requirements: In order to receive RW service, the applicant shall comply with each of the following:

    a. Prior to Precise Grading Plan Approval and Building Permits Issuance:

        i. Submit one (1) electronic copy, in PDF format, of the Landscape Plans (on-site & off-site) to OMUC's Water Quality Programs at OMUCWQPlanCheck@ontarioca.gov for review and approval.

        ii. Submit one (1) electronic copy, in PDF format, of the Supplemental Engineering Report (ER), for the use of recycled water to OMUC's Water Quality Programs at OMUCWQPlanCheck@ontarioca.gov for review and subsequent submittal to the California State Water Board (Division of Drinking Water) for final approval.

        Note: The Division of Drinking Water review and approval process may take up to four (4) months. Contact the OMUC's Water Quality Programs at (909) 395-2678 or email OMUCWQPlanCheck@ontarioca.gov regarding this requirement. Failure to obtain an approval letter from the Division of Drinking Water authorizing the use of recycled water will delay meter installation and if applicable, occupancy release for new developments.

    b. Prior to Occupancy Release/Finalizing:

        i. Procure from OMUC a copy of the letter of confirmation from the California State Water Board (Division of Drinking Water) that the Engineering Report (ER) has been reviewed and the subject site is approved for the use of recycled water.
        ii. Obtain clearance from the OMUC confirming completion of recycled water improvements and passing of shutdown tests and cross connection inspection, upon availability/usage of recycled water.
        iii. Complete Site Supervisor training of on-site personnel in the use of recycled water, in accordance with the ER, upon availability/usage of recycled water.

16. Recycled Water Service: The Project's recycled water services shall connect to the public recycled water main in Clifton Avenue or Eucalyptus Avenue.

a. Recycled Water Services: In order to comply with City Ordinance 2689:

   i. Private Property Owner Maintained Uses: Each parcel/lot shall have its own separate Recycled Water Service with Meter connected to the Public Recycled Water System to serve the parcel/lot's private property owner-maintained landscape irrigation uses. If Recycled Water is going to be used for uses other than landscape irrigation, then a separate Recycled Water Service with Meter is required to serve the non-landscape irrigation uses.
   ii. Community Service District (CFD) Maintained Irrigation Areas: Any irrigated areas that are to be maintained by a Community Service District (CFD) and not by the property owner or owners association require irrigation services and meters separate from those that are maintained by the property owner or owners association.

b. Unused Service Abandonment: The Project shall utilize any unused recycled water services along the Project's frontages on Clifton Avenue or Eucalyptus Avenue when feasible. Any recycled water services (along with connected appurtenances) along the frontages of the project site not used to provide service shall be abandoned back to the main in accordance with City Standards and Practices.

CITY OF ONTARIO
MEMORANDUM

Development Plan Review

Project: PDEV24-017/PMTT24-008/PSPA24-004/PGPA24-003 (Esperanza Specific Plan)

Date: September 10, 2025

Location: Northeast Corner of Amherst Avenue and Eucalyptus Ave

By: Diego Tapia

The Transportation Division please mends the following to be incorporated into the Project's Conditions-of-Approval:

Conditions:

1. The Applicant/Developer shall comply with the Conditions of Approval issued for TM-20285, TM-20160, TM-1793, Esperanza Specific Plan and related Development Agreements.

2. The Applicant/Developer shall install ADA ramps for pedestrian crossings at the following locations per City of Ontario Standard Drawing No. 1213.

    a. Southwest corner of Chatham Street and Clifton Avenue
    b. Southeast corner of Chatham Street and Amherst Avenue
    c. Northwest corner of Chatham Street and Clifton Avenue

3. The Applicant/Developer shall be responsible to design and construct intersection chokers at the following locations per City of Ontario Standard Drawing No. 1110:

    a. East side of the intersection on Amherst Avenue at tract entrance
    b. Southwest/southeast corners of the intersection on Chatham Street at tract entrance
    c. Northwest and southwest corner of Chatham Street and Clifton Avenue
    d. Top of the T-intersection at Clifton Avenue and Chatham Avenue (similar to the intersection of Sage Paseo and Clifton Avenue)

    This traffic calming measure is being required to reduce speeds on Clifton Avenue.

4. The Applicant/Developer shall be responsible to design and construct street improvements along property frontages of Eucalyptus Avenue, Amherst Avenue, Chatham Street, and Clifton Avenue in accordance with conditions issued by City's Land Development Division. These, and all other street improvements required herein, shall include, but not be limited to, concrete curb and gutter, sidewalk, LED streetlights, signing and striping, and parkway landscaping.

5. The Applicant/Developer shall install a ramp and crosswalk on Chatham Street east of Ventura Avenue and appropriate parking restrictions for sight distance.

6. Existing parking restrictions along Eucalyptus Avenue and Amherst Avenue shall remain in place.

7. All landscaping, block walls, and other obstructions shall be compatible with the stopping sight distance requirements per City of Ontario Standard Drawing No. 1309.

8. The Applicant/Developer's engineer-of-record shall meet with City Engineering staff prior to designing and submitting for plan check the signing and striping design plans to define limits of improvements.

dt;

CITY OF ONTARIO
LANDSCAPE PLANNING DIVISION
303 East "B" Street, Ontario, CA 91764

CONDITIONS OF APPROVAL	
Sign Off	
	02/19/2025
Jamie Richardson, Sr. Landscape Architect	Date

Reviewer's Name:	Phone:
Jamie Richardson, Sr. Landscape Architect	**(909) 395-2615**

D.A.B. File No.:	Case Planner:
PDEV24-017, PMTT24-008, PSPA24-004 & PGPA24-003	Robert Morales

Project Name and Location:

Esperanza PA-11
South of Chatham, West of Clifton Street, East of Amherst Ave, North of Eucalyptus

Applicant/Representative:

Bassenian | Lagoni
2031 Orchard Drive, Suite 100
Newport Beach, CA 92660

☐	**Preliminary Plans (dated 01/28/2025) meet the Standard Conditions for New Development and have been approved considering that the following conditions below be met upon submittal of the landscape construction documents.**
☒	**Preliminary Plans (dated) have not been approved. Corrections noted below are required before Preliminary Landscape Plan approval.**

A RESPONSE SHEET IS REQUIRED WITH RESUBMITTAL OR PLANS WILL BE RETURNED AS INCOMPLETE.
DIGITAL SUBMITTALS MUST BE 10MB OR LESS.

Development Plan and Tract Map

Civil/ Site Plans

1. Sheet C-1.1 Section D-D: Show an 8' decomposed granite multipurpose trail.
2. Before permit issuance, stormwater infiltration devices located in landscape areas shall be reviewed and plans approved by the Landscape Planning Division. Any stormwater devices in parkway areas shall not displace street trees.
3. Show and dimension transformers set back 5' from paving all sides. Coordinate with landscape plans.
4. Show and dimension backflow devices set back 4' from paving on all sides. Locate on level grade. Relocate away from corners.
5. Locate utilities including light standards, fire hydrants, water, drain, and sewer lines to not conflict with required tree locations—coordinate civil plans with landscape plans.
6. Provide a utility clear space 8' wide in parkways and 30' apart for street trees. Move water meters, drain lines, and light standards to the utility minimum spacing and show utility lines at the edges of the parkway, toward the driveway apron, to allow space for street trees.
7. Finished grade shall be no more/no less than 8" from the stucco/plaster face of the wall.
8. Dimension, show and call out for step-outs at parking spaces adjacent to planters; a 12" wide monolithic concrete curb, DG paving or pavers with edging.
9. Show parking lot island tree planters 1 for every ten parking spaces and at each row end.
10. Identify that all landscape areas shall be HOA-maintained landscape.
11. Note and show on plans: all AC units shall be located in residential side yards, opposite the main back yard access path with gate, or a second gate and solid surface path on the opposite side shall be added for access.
12. Add Note to Grading and Landscape Plans: Landscape areas where compaction has occurred due to grading activities and where trees or stormwater infiltration areas are located

shall be loosened by soil fracturing. For trees, a 12'x12'x18" deep area; for stormwater infiltration, the entire area shall be loosened. Add the following information on the plans: The backhoe method of soil fracturing shall be used to break up compaction. A 4" layer of Compost is spread over the soil surface before fracturing is begun. The backhoe shall dig into the soil lifting and then drop the soil immediately back into the hole. The bucket then moves to the adjacent soil and repeats. The Compost falls into the spaces between the soil chunks created. Fracturing shall leave the soil surface quite rough with large soil clods. These must be broken by additional tilling. Tilling in more Compost to the surface after fracturing per the soil report will help create an A horizon soil. Imported or reused Topsoil can be added on top of the fractured soil as needed for grading. The Landscape Architect shall be present during this process and provide certification of the soil fracturing. For additional reference, see Urban Tree Foundation – Planting Soil Specifications.

Landscape Plans

13. Locate light standards, fire hydrants, water, and sewer lines to not conflict with required tree locations. Coordinate civil plans with landscape plans
14. Show all utilities on the landscape plans. Coordinate so utilities are clear of tree locations.
15. Locate trees for shade on in open turf areas, parking lots/end island fingers, seating areas, and paving, screen blank walls and adjacent properties where missing, accent trees to entries and driveways. Locate trees 50% of canopy width from walls, buildings, and existing trees.
16. Show 6' diameter of mulch only at new trees. Detail irrigation dripline outside of mulched root zone.
17. Overhead spray systems shall be designed for plant material less than the height of the spray head.
18. Show minimum on-site tree sizes per the Landscape Development standards; see the Landscape Planning website. 5% 48" box, 10% 36 box, 30% 24" box, 55% 15 gallon. Palms are not considered trees.
19. Show 25% of trees as California native (Platanus racemosa, Quercus agrifolia, Quercus wislizenii, Quercus douglasii, Cercis occidentalis, etc.) in appropriate locations.
20. Landscape construction plans shall meet the requirements of the Landscape Development Guidelines. See https://www.ontarioca.gov/Planning/Landscape
21. Provide phasing map for multi-phase projects.
22. After a project's entitlement approval, the applicant shall pay all applicable fees for landscape plan check and inspections at a rate established by resolution of the City Council.

Specific Plan Amendment

23. Change any "New Model Colony" references to "Ontario Ranch." Page 7.6, 7.15.1 #2. Public Maintenance.
24. Pg. 8.61 & 8.64, All Exhibits: Verify with Engineering if "Pedestrian Entry Portal Gateway" and "Pedestrian Entry Monument" will be permitted within the ROW. Page 8.63, Exhibit 42, Primary Community Entry and Monumentation – Hamner Avenue.

BUILDING DEPARTMENT

CITY OF ONTARIO

303 East B Street, Civic Center, Ontario, CA 91764

Phone (909)395-2023, Fax (909)395-2180

DEVELOPMENT PLAN REVIEW (DPR) COMMENTS

Planning Case File No(s):	PGPA24-003_PSPA24-004_PMTT24-008_PDEV24-017	Submittal No: 1
Case Planner:	Robert Morales	
Applicant:		
APN(s):	*1073-101-050*	
Location:		
Project Description:	*An Amendment to the Land Use Element of the Policy Plan (General Plan) component of The Ontario Plan, changing the land use designation on 13.2 acres of land from PS (Public School) to MDR (Medium Density Residential), An Amendment to the Esperanza Specific Plan, changing the land use designation on 13.2 acres of land from PS (Public School) to MDR (Medium Density Residential), A Tentative Tract Map for Common Interest Subdivision purposes, to subdivide 13.2 acres of land into 28 numbered lots and 15 lettered lots, A Development Plan to construct 161 multiple-family dwellings on approximately 13.2 acres of land generally located South of Chatham Street, West of Clifton Street, East of Amherst Avenue, and North of Eucalyptus Avenue, within Planning Area 11 of the Esperanza Specific Plan (APN(s): 1073-101-050)*	

Reviewed By:	Ganda, S.	Phone: (909)395-2174 E-mail: sganda@ontarioca.gov	Date: 10/7/2024

The following are Standard Building Department Conditions of Approval.
Items with checked boxes are applicable to this Project:

Specific Conditions:

1) -

Specific Comments:
(Note: These comments are NOT Conditions)

1) -

GENERAL CONDITIONS		
☐	1	The address for the project is:
☑	2	Prior to, or at the time of plan check submittal, provide a site plan showing all buildings and the addresses assigned to them as stipulated in (1) above, and a list of these buildings and their assigned addresses on 8-1/2" x 11" paper.
☑	3	Structures must be designed for 110-mph wind exposure C (per City Ordinance).
☑	4	Shall comply with the latest adopted edition of the following codes as applicable: A. California Building Code B. California Residential Code C. California Existing Building Code D. California Electrical Code E. California Mechanical Code F. California Plumbing Code G. California Energy Code. H. California Fire Code I. California Green Building Standards Code.
☑	5	The property owner/business operator shall comply with all applicable City of Ontario Municipal Codes and Ordinances.
☐	6	The requirements of the Department of Environmental Health Services and the Air Quality Management District shall be satisfied prior to the issuance of any permit if hazardous materials are stored and/or used.
☑	7	Pursuant to the California Business and Professions Code Section 6737, most projects are required to be designed by a California Licensed Architect or Engineer. The project owner or developer should review the section of the California Codes and comply with the regulation.
☑	8	All perimeter/boundary walls/fences shall be designed and constructed so that the outer/exterior face of the wall/fence is as close as possible to the lot line. In any case, the outer/exterior face of the wall shall be within two (2) inches of the lot line. Distances greater than two (2) inches may be approved prior to construction by the Building Official on a case-by-case basis for extenuating circumstances.
☐	9	All lot lines, easement lines, etc. shall be located and/or relocated in such a manner as to not cause any existing structure to become nonconforming with the requirements of the latest adopted edition of the Building Code, or any other applicable law, ordinance, or code.
	10	Non-buildable easement(s) needed for this project. Show on plans and provide easement(s) prior to building permits.
☑	11	The Developer/Owner is responsible for the coordination of the final occupancy. The Developer/Owner shall obtain clearances from each reviewing department and division prior to requesting a final building inspection from the Building Department. Each reviewing department shall sign off in the Building Department permit software.
☐	12	All signs shall be Underwriters Laboratories, or equal, approved.
☐	13	Permits are required prior to the removal and/or demolition of structures.
☐	14	In addition to approval from Building Department, approval is required from the County of San Bernardino, Department of Public Health and the California Regional Water Quality Control Board, Santa Ana Region for the Private Sewage Disposal System.
☐	15	The existing private sewage system will have to be modified as required to accommodate the new use. Plans and/or supporting data will have to be submitted to, and approved by, the Building Department regarding the new use and necessary modifications. Additionally, approval from the Regional Water Quality Control Board, Santa Ana Region, is required for the new use.
☐	16	The coach shall bear a State of California, Department of Housing and Community Development (HCD) insignia indicating the occupancy group and design loads that the coach conforms to, and other relevant information regarding exiting, fire safety, electrical, plumbing and mechanical. The foundation system, porch and awning shall comply with plans that bear the HCD "Standard Plan

		Approval" stamp. The coach, foundation system, porch and awning shall comply with the City of Ontario's design loads and site-specific conditions.
☐	17	The conversion of the existing single-family dwelling(s) into a commercial use changes the occupancy group classification, and therefore the existing buildings must be made to comply with the requirements of all applicable codes for the new occupancy classification. Complete plans, calculations and other specifications shall be submitted to the Building Department for review, approval and subsequent permit issuance. The plans, calculations and other specifications shall be prepared by an Architect or Registered Civil/Structural Engineer licensed by the State of California who is qualified to perform said wo
☐	18	The site, or a portion of the site, is in a flood hazard area. Justification that the proposed development does not adversely affect the location or carrying capacity of the floodway, nor does it adversely affect upstream or downstream sites shall be provided to Building Department. Additionally, all provisions must be taken to protect the site from flood damage.
☐	19	All exterior lighting shall be orientated, directed, and/or shielded as much as possible so that direct illumination does not infringe onto adjoining properties
☑	20	Site facilities such as parking open or covered, recreation facilities, and trash dumpster areas, and common use areas shall be accessible per the CBC, Chapter 11.
☑	21	Trash Enclosure shall be covered, and the interior clearances shall be designed to accommodate the following: • 4' min. side access entrance • 3' min. wide clear pathway along rear of enclosure between trash bins and back wall. • Trash bins must be oriented sideways to allow access from the narrow dimension. • Use of curbs or wheel stops shall be provided within the enclosure to maintain access clearances and bin orientations.
☑	22	The applicant/developer shall include the conditions of approval of this resolution on the construction plans.
☑	23	Site development and grading shall be designed to provide access to all entrances and exterior ground floors exits and access to normal paths of travel, and where necessary to provide access. Paths of travel shall incorporate (but not limited to) exterior stairs, landings, walks and sidewalks, pedestrian ramps, curb ramps, warning curbs, detectable warning, signage, gates, lifts and walking surface materials. The accessible route(s) of travel shall be the most practical direct route between accessible building entrances, site facilities, accessible parking, public sidewalks, and the accessible entrance(s) to the site, California Building Code, (CBC) Chapter 11, Sec, 11A and 11B.
☐	24	Commercial/Industrial gated site must have at least one pedestrian emergency gate, 3'-0' x 6'-8" min. gate size, equipped with panel hardware on the inside, and gate must swing out. Pedestrian emergency gates can be installed integrated with vehicular gates.
☑	25	New residential single-family dwelling (SFD's): • The side yard gate must swing out toward the street. • The gas meter shall not obstruct side yard access gates. • Air Conditioning unit located at side yard shall maintain 3' min. clearance from property line wall to AC unit. • Provide a continuous concrete walk between garage side door to driveway or sidewalk.
☑	26	New development projects located in the Ontario Ranch specific plan are required to submit a **methane assessment report**. This report shall be submitted to the Building Department for review and approval at grading plan submittal. Comply with the METHANE ASSESSMENT FOR PROJECTS IN THE ONTARIO RANCH SPECIFIC PLAN guideline. This guideline is available on the Building Department website
☐	27	If hazardous substances are used and/or stored, a technical opinion and report, identifying and developing methods of protection from the hazards presented by the hazardous materials may be required. This report shall be prepared by a qualified person, firm, or corporation and submitted to Building Department. This report shall also explain the proposed facility's intended methods of

		operation and list all of the proposed materials, their quantities, classifications, and the effects of any chemical (material) intermixing in the event of an accident or spill.
☐	28	The property owner/business operator shall provide a grease interceptor at a location where it shall be easily accessible for inspection, cleaning, and removal of accumulated grease. The sizing and installation shall conform to the current California Plumbing Code. The grease interceptor shall be constructed in accordance with plans approved by the Director of Public Works and the Building Official. The property owner/business operator shall contract with a maintenance company for maintenance and cleaning of the grease interceptor.
☑	29	Onsite private sewer, domestic water, and storm drainage systems shall be designed in accordance with the CPC/UPC requirements, including but not limited to, the sizing of pipes. These systems must be reviewed, approved, and inspected by the Building Department. Design standards used by other departments for off-site sewer, water, and storm drainage systems shall not be used for such onsite systems.
☑	30	The design for public domestic water, sewer, and storm drainage on any private streets shall be reviewed and approved by the Engineering Department. Such design need not be submitted to the Building Department for approval.
☐	31	Conditions of approvals shall be reproduced onto the plans submitted for permits.
☑	32	Development Impact fees are due on this project at permit issuance
☑	33	Provide accessible path of travel between buildings.
☑	34	When submitting permit applications for new single-family dwellings master/stock plan in the New Model Colony, a table summarizing lots/tract, models, square footage, and number of plumbing fixtures, electrical, and mechanical shall be included on the plan.
☑	35	When submitting permit applications for production homes, include two sets of site plans showing the setback from property lines and the model number/type.
SITE CONSTRUCTION REQUIREMENTS		
☑	36	All construction sites must be protected by a security fence and screening. The fencing and screening shall always maintained to protect pedestrians
☑	37	Temporary toilet facilities shall be provided for construction workers. The toilet facilities shall be maintained in a sanitary condition. Construction toilet facilities of the non-sewer type shall conform to ANSI ZA.3
☑	38	Construction projects which require temporary electrical power shall obtain an Electrical Permit from Building Department. No temporary electrical power will be granted to a project unless one of the following items is in place and approved by Building Department and the Planning Department. (A) Installation of a construction trailer, or (B) Security fenced area where the electrical power will be located
☑	39	Installation of construction/sales trailers must be located on private property. No trailers can be in the public street right of way.
☑	40	Any temporary building, trailer, commercial coach, etc. installed and/or used in connection with a construction project shall comply with City Code.
☑	41	Prior to issuance of a Building Permit all of the following must be in place: portable toilet with hand wash station, all BMP's, fencing and signage on each adjacent street saying "If there is any dust or debris coming from this site please contact (superintendent number here) or the AQMD if the problem is not being resolved" or something similar to this.
PRIOR TO ISSUANCE OF BUILDING/CONSTRUCTION PERMITS		
☑	42	The following grading items shall be completed and/or submitted – as applicable – prior to the issuance of building permits for this project: A. Precise grading plans shall be approved B. Rough grading completed

		C. Compaction certification completed D. Pad elevation certification completed E. Rough grade inspection signed off by a City's Building
☑	43	Prior to the issuance of a Building Permit, the applicant shall pay all Development Improvement Fees to the City. Copies of receipts shall be provided to the Building Department prior to permit issuance.
☑	44	The Tract or Parcel map shall be recorded prior to the issuance of any permits.
☐	45	The existing parcels shall be combined into a single parcel, or a lot line adjustment shall be done so that the proposed structure(s) does not cross any lot line and complies with all requirements of the California Building Code, prior to any building permits being issued.
☑	46	Fire sprinklers, fire alarm systems and fire hydrant plans shall be submitted for plan review concurrently with building plans and shall be approved prior to permit issuance.
☑	47	Prior to issuance of Building Permits, school fees need to be paid to school district where project is located.

CITY OF ONTARIO
MEMORANDUM

TO: **Robert Morales, Associate Planner**
Planning Department

FROM: **Paul Ehrman, Sr. Deputy Fire Chief/Fire Marshal**
Fire Department

DATE: **September 19, 2024**

SUBJECT: **PDEV24-017 - A Development Plan to construct 161 multiple-family dwellings on approximately 13.2 acres of land generally located South of Chatham Street, West of Clifton Street, East of Amherst Avenue, and North of Eucalyptus Avenue, within Planning Area 11 of the Esperanza Specific Plan (APN(s): 1073-101-050). Related File(s): PGPA24-003, PSPA24-004, PMTT24-008.**

☒ The plan **does** adequately address Fire Department requirements at this time.

☒ Standard Conditions of Approval apply, as stated below.

SITE AND BUILDING FEATURES:

A. 2022 CBC Type of Construction: Type V-B

B. Type of Roof Materials: Ordinary

C. Ground Floor Area(s): Varies

D. Number of Stories: 2 + 3

E. Total Square Footage: Varies, Approx. 1,600 Sq. Ft.

F. 2022 CBC Occupancy Classification(s): R3

CONDITIONS OF APPROVAL:

1.0 GENERAL

☒ 1.1 The following are the Ontario Fire Department ("Fire Department") requirements for this development project, based on the current edition of the California Fire Code (CFC), and the current versions of the Fire Prevention Standards ("Standards.") It is recommended that the applicant or developer transmit a copy of these requirements to the on-site contractor(s) and that all questions or concerns be directed to the Bureau of Fire Prevention, at (909) 395-2029. For copies of Ontario Fire Department Standards please access the City of Ontario web site at www.ontarioca.gov/Fire/Prevention.

☒ 1.2 These Fire Department conditions of approval are to be included on any and all construction drawings.

2.0 FIRE DEPARTMENT ACCESS

☒ 2.1 Fire Department vehicle access roadways shall be provided to within one hundred and fifty feet (150') of all portions of the exterior walls of the first story of any building, unless specifically approved. Roadways shall be paved with an all-weather surface and shall be a minimum of twenty-four (24) ft. wide. See Standard #B-004.

☒ 2.2 In order to allow for adequate turning radius for emergency fire apparatus, all turns shall be designed to meet the minimum twenty-five feet (25') inside and forty-five feet (45') outside turning radius per Standard #B-005.

☒ 2.3 Fire Department access roadways that exceed one hundred and fifty feet (150') in length shall have an approved turn-around per Standard #B-002.

☒ 2.4 Access drive aisles which cross property lines shall be provided with CC&Rs, access easements, or reciprocating agreements, and shall be recorded on the titles of affected properties, and copies of same shall be provided at the time of building plan check.

☒ 2.5 "No Parking-Fire Lane" signs and /or red painted curbs with lettering are required to be installed in interior access roadways, in locations where vehicle parking would obstruct the minimum clear width requirement. Installation shall be per Standard #B-001.

☒ 2.6 Security gates or other barriers on fire access roadways shall be provided with a Knox brand key switch or padlock to allow Fire Department access. See Standards #B-003, B-004 and H-001.

☒ 2.7 Any time PRIOR to on-site combustible construction and/or storage, a minimum twenty-four feet (24') wide circulating all weather access roads shall be provided to within one hundred and fifty feet (150') of all portions of the exterior walls of the first story of any building, unless specifically approved by fire department and other emergency services.

3.0 WATER SUPPLY

☒ 3.1 The required fire flow per Fire Department standards, based on the 2019 California Fire Code, Appendix B, is 1500 gallons per minute (g.p.m.) for 2 hours at a minimum of 20 pounds per square inch (p.s.i.) residual operating pressure.

☒ 3.2 Off-site (public) fire hydrants are required to be installed on all frontage streets, at a maximum spacing of three hundred feet (300') apart, on alternating sides of the street. Streets with a center median shall require public hydrants spaced five hundred feet (500') apart, on the same side of the street.

☒ 3.4 The water supply, including water mains and fire hydrants, shall be tested and approved by the Engineering Department and Fire Department prior to combustible construction to assure availability and reliability for firefighting purposes.

4.0 FIRE PROTECTION SYSTEMS

☒ 4.1 On-site private fire hydrants are required per Standard #D-005, and identified in accordance with Standard #D-002. Installation and locations(s) are subject to the approval of the Fire Department. An application with detailed plans shall be submitted, and a construction permit shall be issued by the Fire Department, prior to any work being done.

☒ 4.2 Underground fire mains which cross property lines shall be provided with CC & R, easements, or reciprocating agreements, and shall be recorded on the titles of affected properties, and copies of same shall be provided at the time of fire department plan check. The shared use of private fire mains or fire pumps is allowable only between immediately adjacent properties and shall not cross any public street.

☒ 4.3 An automatic fire sprinkler system is required. The system design shall be in accordance with National Fire Protection Association (NFPA) Standard 13. All new fire sprinkler systems, except those in single family dwellings, which contain twenty (20) sprinkler heads or more shall be monitored by an approved listed supervising station. An application along with detailed plans shall be submitted, and a construction permit shall be issued by the Fire Department, prior to any work being done.

☒ 4.4 Wood frame buildings that are to be sprinkled shall have these systems in service (but not necessarily finaled) before the building is enclosed.

☒ 4.7 Portable fire extinguishers are required to be installed prior to occupancy per Standard #C-001. Please contact the Fire Prevention Bureau to determine the exact number, type and placement required.

5.0 BUILDING CONSTRUCTION FEATURES

☒ 5.1 The developer/general contractor is to be responsible for reasonable periodic cleanup of the development during construction to avoid hazardous accumulations of combustible trash and debris both on and off the site.

☒ 5.2 Approved numbers or addresses shall be placed on all new and existing buildings in such a position as to be plainly visible and legible from the street or road fronting the property. Multi-tenant or building projects shall have addresses and/or suite numbers provided on the rear of the building. Address numbers shall contrast with their background. See Section 9-1 6.06 of the Ontario Municipal Code and Standards #H-003 and #H-002.

☒ 5.3 Single station smoke alarms and carbon monoxide alarms are required to be installed per the California Building Code and the California Fire Code.

☒ 5.4 Multiple unit building complexes shall have building directories provided at the main entrances. The directories shall be designed to the requirements of the Fire Department, see Section 9-1 6.06 of the Ontario Municipal Code and Standard #H-003.

☒ 5.5 All residential chimneys shall be equipped with an approved spark arrester meeting the requirements of the California Building Code.

☒ 5.6 Knox ® brand key-box(es) shall be installed in location(s) acceptable to the Fire Department. All Knox boxes shall be monitored for tamper by the building fire alarm system. See Standard #H-001 for specific requirements.

CITY OF ONTARIO
MEMORANDUM

FROM: **Heather Lugo, MA, Police Department**

DATE: **September 9, 2025**

SUBJECT: **PDEV24-017 - A Development Plan to construct 161 multiple-family dwellings on approximately 13.2 acres of land generally located South of Chatham Street, West of Clifton Street, East of Amherst Avenue, and North of Eucalyptus Avenue, within Planning Area 11 of the Esperanza Specific Plan (APN(s): 1073-101-050). Related File(s): PGPA24-003, PSPA24-004, PMTT24-008.**

The "Standard Conditions of Approval" contained in Resolution No. 2017-027 apply. The applicant shall read and be thoroughly familiar with these conditions, including, but not limited to, the requirements below.

- Required lighting for all walkways, driveways, doorways, parking lots, hallways and other areas used by the public shall be provided. Lights shall operate via photosensor. Planned landscaping shall not obstruct lighting.
- The Applicant shall comply with construction site security requirements as stated in the Standard Conditions.
- All exterior electrical outlets in common areas shall be secured and locked (if accessible to the public).
- All exterior water spigots / water supply sources in common areas shall be secured and locked (if accessible to the public).
- Trash enclosure (if applicable) shall be fully secured/enclosed by locks, mesh, and screen grate to reduce crime and encampment opportunities for homeless persons.

The Applicant is invited to contact Heather Lugo at (909) 408-1074 with any questions or concerns regarding these conditions.

RESOLUTION NO. PC25-051

A RESOLUTION OF THE PLANNING COMMISSION OF THE CITY OF ONTARIO, CALIFORNIA, APPROVING FILE NO. PDEV24-017, A DEVELOPMENT PLAN TO CONSTRUCT 161 CONDOMINIUM UNITS, ON APPROXIMATELY 10.02 ACRES OF LAND LOCATED SOUTH OF CHATHAM STREET, WEST OF CLIFTON AVENUE, EAST OF AMHERST AVENUE, AND NORTH OF EUCALYPTUS AVENUE, WITHIN PLANNING AREA 11 (RD-7 / ROW TOWNHOMES) OF THE ESPERANZA SPECIFIC PLAN, AND MAKING FINDINGS IN SUPPORT THEREOF—APN: 1073-101-050

WHEREAS, GDC Investments 13, LP (Applicant) filed an Application for the approval of a Development Plan, File No. PDEV24-017, as described in the title of this Decision (hereinafter referred to as Application" or "Project); and

WHEREAS, the Application applies to approximately 10.02 acres of land generally located south of Chatham Street, west of Clifton Avenue, east of Amherst Avenue, and north of Eucalyptus Avenue, within Planning Area 11 (RD-7 / Row Townhomes) of the Esperanza Specific Plan, identified as Assessor's Parcel Number 1073-101-050, and presently vacant; and

WHEREAS, the property to the north of the Project site is within the Esperanza Specific Plan, designated Park, and developed with residential uses; the property to the east is within the Esperanza Specific Plan, designated PA-4 (RD-6 / 6-Pack Courtyard), and developed with residential uses; the property to the south is within the Esperanza Specific Plan, designated PA-7 (RD-1 / SFD 50' wide lots), and developed with residential uses; and the property to the west is within the Esperanza Specific Plan, designated PA-10 (RD-3 / SFD 2-Pack), and developed with residential uses; and

WHEREAS, the Project includes private streets, a recreation area with a pool, common open space, private open space, and landscaping improvements, all consistent with the requirements of the Esperanza Specific Plan; and

WHEREAS, the Project provides a total of 433 vehicle parking spaces, exceeding the 414 spaces required by the Esperanza Specific Plan, through a combination of garage, driveway, uncovered, and parallel spaces; and

WHEREAS, the Project incorporates 2 Transitional architectural styles, Farmhouse and Spanish, applied across the 2- and 3-story buildings, consistent with the architectural standards and objectives of the Esperanza Specific Plan; and

WHEREAS, the Development Plan is consistent with the density, development standards, and design guidelines of the Esperanza Specific Plan; and

WHEREAS, The Ontario Plan (TOP) 2050 Supplemental Environmental Impact Report (SEIR)(SCH No. 2021070364, certified by the City Council on August 16, 2022 (hereinafter referred to as Certified SEIR), in which development and use of the Project site was discussed; and

WHEREAS, the Planning Director of the City of Ontario prepared and approved for attachment to the certified Environmental Impact Report, an Addendum to the Certified SEIR (hereinafter referred to as SEIR Addendum) in accordance with the requirements of the California Environmental Quality Act of 1970, together with State and local guidelines implementing said Act, all as amended to date (collectively referred to as CEQA); and

WHEREAS, the environmental impacts of this Project were thoroughly analyzed in the SEIR Addendum, which concluded that implementation of the Project could result in a number of significant effects on the environment that were previously analyzed in the Certified SEIR, and that the Certified SEIR identified mitigation measures that would reduce each of those significant effects to a less-than-significant level; and

WHEREAS, the City's "Local Guidelines for Implementing the California Environmental Quality Act (CEQA)" provide for the use of a single environmental assessment in situations where the impacts of subsequent projects are adequately analyzed; and

WHEREAS, the Application is a project pursuant to the California Environmental Quality Act — Public Resources Code Section 21000, et seq. — (hereinafter referred to as CEQA) and an SEIR Addendum has been prepared to determine possible environmental impacts; and

WHEREAS, Ontario Development Code Table 2.02-1 (Review Matrix) grants the Planning Commission the responsibility and authority to review and act on the subject Application; and

WHEREAS, the Project has been reviewed for consistency with the Housing Element of the Policy Plan component of TOP 2050, as State Housing Element law (as prescribed in Government Code Sections 65580 through 65589.8) requires that development projects must be consistent with the Housing Element, if upon consideration of all its aspects, it is found to further the purposes, principals, goals, and policies of the Housing Element; and

WHEREAS, the Project is located within the Airport Influence Area of Ontario International Airport, which encompasses lands within parts of San Bernardino, Riverside, and Los Angeles Counties, and is subject to, and must be consistent with, the policies and criteria set forth in the Ontario International Airport Land Use Compatibility Plan

(hereinafter referred to as ALUCP), which applies only to jurisdictions within San Bernardino County, and addresses the noise, safety, airspace protection, and overflight impacts of current and future airport activity; and

WHEREAS, City of Ontario Development Code Division 2.03 (Public Hearings) prescribes the manner in which public notification shall be provided and hearing procedures to be followed, and all such notifications and procedures have been completed; and

WHEREAS, on September 15, 2025, the Development Advisory Board of the City of Ontario conducted a hearing to consider the Addendum and the Project, and concluded said hearing on that date, voting to issue Decision Nos. DAB25-031 and DAB25-033, respectively, recommending that the Planning Commission approve the Application; and

WHEREAS, as the first action on the Project, on September 23, 2025, the Planning Commission issued a Resolution adopting the SEIR Addendum, finding that the proposed Project introduces no new significant environmental impacts and applying all previously adopted mitigation measures to the Project, which were incorporated by reference; and

WHEREAS, on September 23, 2025, the Planning Commission of the City of Ontario conducted a hearing to consider the Project, and concluded said hearing on that date; and

WHEREAS, all legal prerequisites to the adoption of this Resolution have occurred.

NOW, THEREFORE, IT IS HEREBY FOUND, DETERMINED, AND RESOLVED by the Planning Commission of the City of Ontario, as follows:

SECTION 1: ***Environmental Determination and Findings.*** As the decision-making body for the Project, the Planning Commission has reviewed and considered the information contained in the Addendum, the initial study, and the administrative record for the Project, including all written and oral evidence provided during the comment period. Based upon the facts and information contained in the Addendum, the initial study, and the administrative record, including all written and oral evidence presented to the Planning Commission, the Planning Commission finds as follows:

(1) The environmental impacts of the Project were reviewed in conjunction with an Addendum to TOP 2050 Supplemental Environmental Impact Report (SEIR)(State Clearinghouse No. 2021070364), certified by the Ontario City Council on August 16, 2022, in conjunction with File No. PGPA20-002;

(2) The SEIR Addendum and administrative record have been completed in compliance with CEQA, the State CEQA Guidelines, and the City of Ontario Local CEQA Guidelines; and

(3) The City's "Local Guidelines for Implementing the California Environmental Quality Act (CEQA)" provide for the use of a single environmental assessment in situations where the impacts of subsequent projects are adequately analyzed. This Application introduces no new significant environmental impacts; and

(4) All previously adopted mitigation measures shall be a condition of Project approval, as they are applicable to the Project, and are incorporated herein by this reference; and

(5) The SEIR Addendum contains a complete and accurate reporting of the environmental impacts associated with the Project, and reflects the independent judgment of the Planning Commission; and

(6) There is no substantial evidence in the administrative record supporting a fair argument that the Project may result in significant environmental impacts.

SECTION 2: ***Subsequent or Supplemental Environmental Review Not Required.*** Based on the SEIR Addendum, all related information presented to the Planning Commission, and the specific findings set forth in Section 1, above, the Planning Commission finds that the preparation of a subsequent or supplemental Certified EIR is not required for the Project, as the Project:

(1) Does not constitute substantial changes to the Certified EIR that will require major revisions to the Certified SEIR due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified significant effects; and

(2) Does not constitute substantial changes with respect to the circumstances under which the Certified SEIR was prepared, that will require major revisions to the Certified SEIR due to the involvement of new significant environmental effects or a substantial increase in the severity of the previously identified significant effects; and

(3) Does not contain new information of substantial importance that was not known and could not have been known with the exercise of reasonable diligence at the time the Certified SEIR was certified/adopted, that shows any of the following:

(a) The Project will have one or more significant effects not discussed in the Certified SEIR; or

(b) Significant effects previously examined will be substantially more severe than shown in the Certified SEIR; or

(c) Mitigation measures or alternatives previously found not to be feasible would in fact be feasible and would substantially reduce one or more significant effects of the Project, but the City declined to adopt such measures; or

(d) Mitigation measures or alternatives considerably different from those analyzed in the Certified SEIR would substantially reduce one or more significant effects on the environment, but which the City declined to adopt.

SECTION 3: ***Housing Element Compliance.*** Pursuant to the requirements of California Government Code Chapter 3, Article 10.6, commencing with Section 65580, as the decision-making body for the Project, the Planning Commission finds that based upon the facts and information contained in the Application and supporting documentation, at the time of Project implementation, the Project is consistent with the Housing Element of the Policy Plan (General Plan) component of TOP 2050, as the Project site is not one of the properties in the Housing Element Sites Inventory contained in Tables B-1 and B-2 of the Housing Element Technical Report.

SECTION 4: ***Airport Land Use Compatibility Plan (ALUCP) Compliance.*** The California State Aeronautics Act (Public Utilities Code Section 21670, et seq.) requires that an Airport Land Use Compatibility Plan be prepared for all public use airports in the State; and requires that local land use plans and individual development proposals must be consistent with the policies set forth in the adopted Airport Land Use Compatibility Plan.

(1) On April 19, 2011, the City Council of the City of Ontario approved and adopted the Ontario International Airport Land use Compatibility Plan, establishing the Airport Influence Area for Ontario International Airport, which encompasses lands within parts of San Bernardino, Riverside, and Los Angeles Counties, and limits future land uses and development within the Airport Influence Area, as they relate to noise, safety, airspace protection, and overflight impacts of current and future airport activity. As the decision-making body for the Project, the Planning Commission has reviewed and considered the facts and information contained in the Application and supporting documentation against the ONT ALUCP compatibility factors, including [1] Safety Criteria (ONT ALUCP Table 2-2) and Safety Zones (ONT ALUCP Map 2-2), [2] Noise Criteria (ONT ALUCP Table 2-3) and Noise Impact Zones (ONT ALUCP Map 2-3), [3] Airspace protection Zones (ONT ALUCP Map 2-4), and [4] Overflight Notification Zones (ONT ALUCP Map 2-5). As a result, the Planning Commission therefore finds and determines that the Project, when implemented in conjunction with the conditions of approval, will be consistent with the policies and criteria set forth within the ONT ALUCP; and

SECTION 5: ***Concluding Facts and Reasons.*** Based upon the substantial evidence presented to the Planning Commission during the above-referenced hearing, and upon the specific findings set forth in the Sections above, the Planning Commission hereby concludes as follows:

(1) ***The proposed development at the proposed location is consistent with the goals, policies, plans and exhibits of the Vision, Policy Plan (General Plan), and City Council Priorities components of The Ontario Plan 2050.*** The proposed Project is located within the Medium Density Residential land use district of the Policy Plan Land Use Map, and Planning Area 11 (RD-7 / Row Townhomes) of the Esperanza Specific Plan The development standards and conditions under which the proposed Project will be constructed and maintained is consistent with the goals, policies, plans, and exhibits of the Vision, Policy Plan (General Plan), and City Council Priorities components of TOP.

(2) ***The proposed development is compatible with those on adjoining sites in relation to location of buildings, with particular attention to privacy, views, any physical constraint identified on the site and the characteristics of the area in which the site is located.*** The Project has been designed consistent with the requirements of the City of Ontario Development Code and Planning Area 11 (RD-7 / Row Townhomes) of the Esperanza Specific Plan including standards relative to the particular land use proposed residential project, as-well-as building intensity, building and parking setbacks, building height, number of off-street parking and loading spaces, on-site and off-site landscaping, and fences, walls and obstructions.

(3) ***The proposed development will complement and/or improve upon the quality of existing development in the vicinity of the Project and the minimum safeguards necessary to protect the public health, safety and general welfare have been required of the proposed Project.*** The Development Advisory Board has required certain safeguards, and imposed certain conditions of approval, which have been established to ensure that: [i] the purposes of the Esperanza Specific Plan are maintained; [ii] the project will not endanger the public health, safety or general welfare; [iii] the project will not result in any significant environmental impacts; [iv] the project will be in harmony with the area in which it is located; and [v] the project will be in full conformity with the Vision, City Council Priorities and Policy Plan components of TOP, and the Esperanza Specific Plan.

(4) ***The proposed development is consistent with the development standards and design guidelines set forth in the Development Code, or applicable specific plan or planned unit development.*** The proposed Project has been reviewed for consistency with the general development standards and guidelines of the Esperanza Specific Plan that are applicable to the proposed Project, including building intensity, building and parking setbacks, building height, amount of off-street parking and loading spaces, parking lot dimensions, design and landscaping, bicycle parking, on-site

landscaping, and fences and walls, as-well-as those development standards and guidelines specifically related to the particular land use being proposed residential project. As a result of this review, the Planning Commission has determined that the Project, when implemented in conjunction with the conditions of approval, will be consistent with the development standards and guidelines described in the Esperanza Specific Plan.

SECTION 6: ***Planning Commission Action.*** Based upon the findings and conclusions set forth in the Sections above, the Planning Commission hereby APPROVES the herein described Application, subject to each and every condition set forth in the Department reports attached hereto as "Attachment A," and incorporated herein by this reference.

SECTION 7: ***Indemnification.*** The Applicant shall agree to defend, indemnify and hold harmless, the City of Ontario or its agents, officers, and employees from any claim, action or proceeding against the City of Ontario or its agents, officers or employees to attack, set aside, void, or annul this approval. The City of Ontario shall promptly notify the Applicant of any such claim, action, or proceeding, and the City of Ontario shall cooperate fully in the defense.

SECTION 8: ***Custodian of Records.*** The documents and materials that constitute the record of proceedings on which these findings have been based are located at the City of Ontario City Hall, 303 East B Street, Ontario, California 91764. The custodian for these records is the City Clerk of the City of Ontario.

SECTION 9: ***Certification to Adoption.*** The Secretary shall certify to the adoption of the Resolution.

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The Secretary Pro Tempore for the Planning Commission of the City of Ontario shall certify as to the adoption of this Resolution.

I hereby certify that the foregoing Resolution was duly and regularly introduced, passed and adopted by the Planning Commission of the City of Ontario at a regular meeting thereof held on the 23rd day of September 2025, and the foregoing is a full, true and correct copy of said Resolution, and has not been amended or repealed.

Nicola Ricci
Planning Commission Chairman

ATTEST:

Henry K. Noh
Planning Director and
Secretary to the Planning Commission

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

I, Gwen Berendsen, Secretary Pro Tempore of the Planning Commission of the City of Ontario, DO HEREBY CERTIFY that foregoing Resolution No. PC25-051, was duly passed and adopted by the Planning Commission of the City of Ontario at their regular meeting held on September 23, 2025, by the following roll call vote, to wit:

AYES: Anderson, DeDiemar, Lampkin, Marks, Ricci

NOES: None

ABSENT: None

ABSTAIN: Gage

Gwen Berendsen
Secretary Pro Tempore

ATTACHMENT A:

File No. PDEV24-017
Departmental Conditions of Approval

(Departmental conditions of approval to follow this page)

LAND DEVELOPMENT DIVISION CONDITIONS OF APPROVAL

CITY OF ONTARIO PLANNING DEPARTMENT
303 East B Street, Ontario, California 91764 Phone: 909.395.2036 / Fax: 909.395.2420

Date Prepared: 9/1/2025

File No: PDEV24-017

Related Files: PMTT24-008

Project Description: A Development Plan to construct 161 condominium units, on approximately 10.02 acres of land located south of Chatham Street, west of Clifton Avenue, east of Amherst Avenue, and north of Eucalyptus Avenue, within Planning Area 11 (RD-7 / Row Townhomes) of the Esperanza Specific Plan; (APN: 1073-101-050)**; submitted by GDC Investments 13.**

Prepared By: Robert Morales, Associate Planner
Phone: 909.395.2432 (direct)
Email: Rmorales@ontarioca.gov

The Planning Department, Land Development Section, conditions of approval applicable to the above-described Project, are listed below. The Project shall comply with each condition of approval listed below:

1.0 Standard Conditions of Approval. The project shall comply with the *Standard Conditions for New Development*, adopted by City Council Resolution No. 2017-027 on April 18, 2017. A copy of the *Standard Conditions for New Development* may be obtained from the Planning Department or City Clerk/Records Management Department.

2.0 Special Conditions of Approval. In addition to the *Standard Conditions for New Development* identified in condition no. 1.0, above, the project shall comply with the following special conditions of approval:

2.1 Time Limits.

(a) Development Plan approval shall become null and void 2 years following the effective date of application approval, unless a building permit is issued and construction is commenced, and diligently pursued toward completion, or a time extension has been approved by the Planning Director. This condition does not supersede any individual time limits specified herein, or any other departmental conditions of approval applicable to the Project, for the performance of specific conditions or improvements.

2.2 General Requirements. The Project shall comply with the following general requirements:

(a) All construction documentation shall be coordinated for consistency, including, but not limited to, architectural, structural, mechanical, electrical, plumbing, landscape

and irrigation, grading, utility and street improvement plans. All such plans shall be consistent with the approved entitlement plans on file with the Planning Department.

(b) The project site shall be developed in conformance with the approved plans on file with the City. Any variation from the approved plans must be reviewed and approved by the Planning Department prior to building permit issuance.

(c) The herein-listed conditions of approval from all City departments shall be included in the construction plan set for the project, which shall be maintained on site during project construction.

2.3 Landscaping.

(a) The Project shall provide and continuously maintain landscaping and irrigation systems in compliance with the provisions of Ontario Development Code Division 6.05 (Landscaping).

(b) Comply with the conditions of approval of the Planning Department, Landscape Planning Division.

(c) Landscaping shall not be installed until the Landscape and Irrigation Construction Documentation Plans required by Ontario Development Code Division 6.05 (Landscaping) have been approved by the Landscape Planning Division.

(d) Changes to approved Landscape and Irrigation Construction Documentation Plans, which affect the character or quantity of the plant material or irrigation system design, shall be resubmitted for approval of the revision by the Landscape Planning Division, prior to the commencement of the changes.

2.4 Walls and Fences. All Project walls and fences shall comply with the requirements of Ontario Development Code Division 6.02 (Walls, Fences and Obstructions).

2.5 Parking, Circulation and Access.

(a) The Project shall comply with the applicable off-street parking, loading and lighting requirements of the Esperanza Specific Plan.

(b) All drive approaches shall be provided with an enhanced pavement treatment. The enhanced paving shall extend from the back of the approach apron, into the site, to the first intersecting drive aisle or parking space.

(c) Areas provided to meet the City's parking requirements, including off-street parking and loading spaces, access drives, and maneuvering areas, shall not be used for the outdoor storage of materials and equipment, nor shall it be used for any other purpose than parking.

(d) The required number of off-street parking spaces and/or loading spaces shall be provided at the time of site and/or building occupancy. All parking and loading spaces shall be maintained in good condition for the duration of the building or use.

(e) Parking spaces specifically designated and conveniently located for use by the physically disabled shall be provided pursuant to current accessibility regulations contained in State law (CCR Title 24, Part 2, Chapters 2B71, and CVC Section 22507.8).

(f) Bicycle parking facilities, including bicycle racks, lockers, and other secure facilities, shall be provided in conjunction with development projects pursuant to current regulations contained in CALGreen (CAC Title 24, Part 11). The final design and placement of bicycle parking facilities shall be subject to Planning Department review and approval.

(g) All off-street parking facilities shall be provided with nighttime security lighting pursuant to Ontario Municipal Code Section 4-11.08 (Special Residential Building Provisions) and Section 4-11.09 (Special Commercial/Industrial Building Provisions), designed to confine emitted light to the parking areas. Parking facilities shall be lit from sunset until sunrise, daily, and shall be operated by a photocell switch.

(h) Unless intended as part of a master lighting program, no operation, activity, or lighting fixture shall create illumination on any adjacent property.

2.6 Mechanical and Rooftop Equipment.

(a) All exterior roof-mounted mechanical, heating and air conditioning equipment, and all appurtenances thereto, shall be completely screened from public view by parapet walls or roof screens that are architecturally treated so as to be consistent with the building architecture.

(b) All ground-mounted utility equipment and structures, such as tanks, transformers, HVAC equipment, and backflow prevention devices, shall be located out of view from a public street, or adequately screened through the use of landscaping and/or decorative low garden walls.

2.7 Security Standards. The Project shall comply with all applicable requirements of Ontario Municipal Code Title 4 (Public Safety), Chapter 11 (Security Standards for Buildings).

2.8 Signs.

(a) All Project signage shall comply with the requirements of Ontario Development Code Division 8.1 (Sign Regulations).

2.9 Sound Attenuation. The Project shall be constructed and operated in a manner so as not to exceed the maximum interior and exterior noise levels set forth in Ontario Municipal Code Title 5 (Public Welfare, Morals, and Conduct), Chapter 29 (Noise).

2.10 Covenants, Conditions and Restrictions (CC&Rs)/Mutual Access and Maintenance Agreements.

(a) CC&Rs shall be prepared for the Project and shall be recorded prior to the issuance of a building permit.

(b) The CC&Rs shall be in a form and contain provisions satisfactory to the City. The articles of incorporation for the property owner's association and the CC&Rs shall be reviewed and approved by the City.

(c) CC&Rs shall ensure reciprocal parking and access between parcels.

(d) CC&Rs shall ensure reciprocal parking and access between parcels, and common maintenance of:

(i) Landscaping and irrigation systems within common areas;
(ii) Landscaping and irrigation systems within parkways adjacent to the project site, including that portion of any public highway right-of-way between the property line or right-of-way boundary line and the curb line and also the area enclosed within the curb lines of a median divider (Ontario Municipal Code Section 7-3.03), pursuant to Ontario Municipal Code Section 5-22-02;
(iii) Shared parking facilities and access drives; and
(iv) Utility and drainage easements.

(e) CC&Rs shall include authorization for the City's local law enforcement officers to enforce City and State traffic and penal codes within the project area.

(f) The CC&Rs shall grant the City of Ontario the right to enforce the CC&R provisions.

(g) A specific methodology/procedure shall be established within the CC&Rs for enforcement of its provisions by the City of Ontario, if adequate maintenance of the development does not occur, such as, but not limited to, provisions that would grant the City the right of access to correct maintenance issues and assess the property owner's association for all costs incurred.

2.11 Disclosure Statements.

(a) A copy of the Public Report from the Department of Real Estate, prepared for the subdivision pursuant to Business and Professions Code Section 11000 et seq., shall be provided to each prospective buyer of the residential units and shall include a statement to the effect that:

(i) This tract is subject to noise from the Ontario International Airport and may be more severely impacted in the future.
(ii) Some of the property adjacent to this tract is zoned for agricultural uses and there could be fly, odor, or related problems due to the proximity of animals.
(iii) The area south of Riverside Drive lies within the San Bernardino County Agricultural Preserve. Dairies currently existing in that area are likely to remain for the foreseeable future.
(iv) This tract is part of a Landscape Maintenance District. The homeowner(s) will be assessed through their property taxes for the continuing maintenance of the district.

2.12 Environmental Requirements.

(a) If human remains are found during project grading/excavation/construction activities, the area shall not be disturbed until any required investigation is completed by the County Coroner and Native American consultation has been completed (if deemed applicable).

(b) If any archeological or paleontological resources are found during project grading/excavation/construction, the area shall not be disturbed until the significance of the resource is determined. If determined to be significant, the resource shall be recovered by a qualified archeologist or paleontologist consistent with current standards and guidelines, or other appropriate measures implemented.

2.13 Indemnification. The applicant shall agree to defend, indemnify and hold harmless, the City of Ontario or its agents, officers, and employees from any claim, action or proceeding against the City of Ontario or its agents, officers or employees to attack, set aside, void or annul any approval of the City of Ontario, whether by its City Council, Planning Commission or other authorized board or officer. The City of Ontario shall promptly notify the applicant of any such claim, action or proceeding, and the City of Ontario shall cooperate fully in the defense.

2.14 Additional Fees.

(a) Within 5 days following final application approval, the Notice of Determination ("NOD") filing fee shall be provided to the Planning Department. The fee shall be paid by check, made payable to the "Clerk of the Board of Supervisors", which shall be forwarded to the San Bernardino County Clerk of the Board of Supervisors, along with all applicable environmental forms/notices, pursuant to the requirements of the California Environmental Quality Act ("CEQA"). Failure to provide said fee within the time specified will result in the extension of the statute of limitations for the filing of a CEQA lawsuit from 30 days to 180 days.

(b) Within 5 days following final application approval, the Notice of Exemption ("NOE") filing fee shall be provided to the Planning Department. The fee shall be paid by check, made payable to the "Clerk of the Board of Supervisors", which shall be forwarded to the San Bernardino County Clerk of the Board of Supervisors, along with all applicable environmental forms/notices, pursuant to the requirements of the California Environmental Quality Act ("CEQA"). The filing of a NOE is voluntary; however, failure to provide said fee within the time specified will result in the extension of the statute of limitations for the filing of a CEQA lawsuit from 30 days to 180 days.

(c) After the Project's entitlement approval, and prior to issuance of final building permits, the Planning Department's Plan Check and Inspection fees shall be paid at the rate established by resolution of the City Council.

2.15 Related Applications. PDEV24-017 approval shall not be final and complete until such time that related File Nos. PGPA24-003, PSPA24-004, have been approved by the City Council and PMTT24-008 has been approved by the Planning Commission.

2.16 Final Occupancy. The Project Architect of record will certify that construction of each building site and the exterior elevations of each structure shall be completed in compliance with the approved plans. Any deviation to approved plans shall require a resubmittal to the Planning Department for review and approval prior to construction. The Occupancy Release Request Form/Architect Certificate of Compliance shall be provided prior to final occupancy.

After the receipt of this Certification, the Planning Department will conduct a final site and exterior elevations inspection. The Owner's Representative and Contractor shall be present.

2.17 Additional Requirements.

(a) Prior to final inspection, the applicant shall demonstrate that all exterior materials and colors are consistent with the approved architectural elevations, to the satisfaction of the Planning Department.

(i) A physical material sample board showing all proposed exterior finishes (including stucco texture, stone/brick veneers, roof materials, trim, railing, and paint colors) shall be submitted and approved prior to issuance of building permits.

(b) Exterior downspouts shall be located at inside corners of two walls. Roof and balcony drains shall be placed in locations minimally visible from public view and installed to prevent wall stains.

(c) Exterior vents for mechanical systems, including but not limited to water heaters, dryers, kitchen and bathroom exhaust fans, and HVAC equipment, shall not be located on street-facing elevations or primary building facades.

(i) Air conditioning condensers shall not be visible from public rights-of-way or primary pedestrian paths. Condensers shall be fully screened from view using a combination of landscaping, fencing, or decorative garden walls integrated into the site design.

(d) Transitions between stucco and siding materials shall include a decorative cap, sill, or trim detail that projects from the building face to provide a defined separation.

(e) Final design and placement of interior perimeter walls shall be reviewed and approved by the Planning Department during plan check review.

(f) At all key architectural openings, including but not limited to arched entryways and recessed portals, stucco finishes shall be hand-troweled to achieve a smooth plaster surface. All other stucco applications shall utilize a 20/30 sand finish or finer.

CITY OF ONTARIO

ENGINEERING DEPARTMENT CONDITIONS OF APPROVAL

(Land Development Division, Environmental Section, Traffic & Transportation Division, Ontario Municipal Utilities Company, Broadband Department, and Financial Services Agency Conditions incorporated)

☒ **DEVELOPMENT PLAN** ☐ OTHER	☐ PARCEL MAP ☒ **TRACT MAP** ☒ **FOR CONDOMINIUM PURPOSES**
PROJECT FILE NO. TM 20730 **RELATED FILE NO(S). PMTT24-008; PDEV24-017**	
☒ **ORIGINAL** ☐ REVISED: __/__/__	

CITY PROJECT ENGINEER & PHONE NO:	**Henry Pham**	**(909) 395-2141**
CITY PROJECT PLANNER & PHONE NO:	**Robert Morales**	**(909) 395-2432**
DAB MEETING DATE:	**September 15th, 2025**	
PROJECT NAME / DESCRIPTION:	**A Tentative Tract Map for condominium purposes to subdivide 13.2 acres of land into 28 numbered lots and 15 lettered lots to develop 161 multi-family dwellings**	
LOCATION:	**North of the intersection of Eucalyptus Ave. and S. Amherst Ave.**	
APPLICANT:	**GDC Investments 13, L.P.**	
REVIEWED BY:	JEFFREY TANG P.E. PRINCIPAL ENGINEER **Raymond Lee, P.E.** **Assistant City Engineer**	9/9/25 **Date**
APPROVED BY:	FOR **Khoi Do, P.E.** **City Engineer**	9-10-25 **Date**

THIS PROJECT SHALL COMPLY WITH THE REQUIREMENTS SET FORTH IN THE GENERAL STANDARD CONDITIONS OF APPROVAL ADOPTED BY THE CITY COUNCIL (RESOLUTION NO. 2017-027) AND THE PROJECT SPECIFIC CONDITIONS OF APPROVAL SPECIFIED HEREIN. ONLY APPLICABLE CONDITIONS OF APPROVAL ARE CHECKED. THE APPLICANT SHALL BE RESPONSIBLE FOR THE COMPLETION OF ALL APPLICABLE CONDITIONS OF APPROVAL PRIOR TO FINAL MAP OR PARCEL MAP APPROVAL, ISSUANCE OF PERMITS AND/OR OCCUPANCY CLEARANCE, AS SPECIFIED IN THIS REPORT.

1. PRIOR TO FINAL MAP OR PARCEL MAP APPROVAL, APPLICANT SHALL:

Check When Complete

☐ 1.01 Dedicate to the City of Ontario, the right-of-way, described below to achieve: ☐

_____ feet on _____

Property line corner 'cut-back' required at the intersection of _____ and _____.

☐ 1.02 Dedicate to the City of Ontario, the following easement(s): _____ ☐

_____

☐ 1.03 Restrict vehicular access to the site as follows: _____ ☐

☒ **1.04 Vacate the following street(s) and/or easement(s):** ☐

A. All interfering on-site easements shall be quitclaimed, vacated, and/or submit non-interference letter from affected owner/utility company.

☐ 1.05 Submit a copy of a recorded private reciprocal use agreement or easement. The agreement or easement shall ensure, at a minimum, common ingress and egress and joint maintenance of all common access areas and drive aisles. ☐

☒ **1.06 Provide (original document) Covenants, Conditions and Restrictions (CC&Rs) as applicable to the project and as approved by the City Attorney and the Engineering and Planning Departments, ready for recordation with the County of San Bernardino. The CC&Rs shall provide for, but not be limited to, common ingress and egress, joint maintenance responsibility for all common access improvements, common facilities, parking areas, utilities, median and landscaping improvements and drive approaches, in addition to maintenance requirements established in the Water Quality Management Plan (WQMP), as applicable to the project. The CC&Rs shall also address the maintenance and repair responsibility for public improvements/utilities (sewer, water, storm drain, recycled water, etc.) located within open space/easements. In the event of any maintenance or repair of these facilities, the City shall only restore disturbed areas to current City Standards.** ☐

☒ **1.07 For all development occurring south of the Pomona Freeway (60-Freeway) and within the specified boundary limits (per Boundary Map found at *http://tceplumecleanup.com/*), the property developer/owner is made aware of the South Archibald Trichloroethylene (TCE) Plume "Disclosure Letter". Property owner may wish to provide this Letter as part of the Real Estate Transfer Disclosure requirements under California Civil Code Section 1102 et seq. This may include notifications in the Covenants, Conditions and Restrictions (CC&Rs) or other documents related to property transfer and disclosures. Additional information on the plume is available from the Santa Ana Regional Water Quality Control Board at *http://geotracker.waterboards.ca.gov/profile_report?global_id=T10000004658*.** ☐

☐ 1.08 File an application for Reapportionment of Assessment, together with payment of a reapportionment processing fee, for each existing assessment district listed below. Contact the Financial Services Department at (909) 395-2124 regarding this requirement. ☐

(1) _____

(2) _____

☒ 1.09 **Prepare a fully executed Subdivision Agreement (on City approved format and forms) with accompanying security as required, or complete all public improvements.** ☐

☒ 1.10 **Provide a monument bond (i.e. cash deposit) in an amount calculated by the City's approved cost estimate spreadsheet (available for download on the City's website: www.ontarioca.gov) or as specified in writing by the applicant's Registered Engineer or Licensed Land Surveyor of Record and approved by the City Engineer, whichever is greater.** ☐

☒ 1.11 **Provide a preliminary title report current to within 30 days.** ☐

☒ 1.12 **File an application, together with an initial deposit (if required), to establish a Community Facilities District (CFD) pursuant to the Mello-Roos Community Facilities District Act of 1982. The application and fee shall be submitted a minimum of four (4) months prior to final subdivision map approval, and the CFD shall be established prior to final subdivision map approval or issuance of building permits, whichever occurs first. The CFD shall be established upon the subject property to provide funding for various City services. An annual special tax shall be levied upon each parcel or lot in an amount to be determined. The special tax will be collected along with annual property taxes. The City shall be the sole lead agency in the formation of any CFD. Contact Financial Services Agency at (909) 395-2015 or email CFD@ontarioca.gov to initiate the CFD application process.** ☐

☒ 1.13 **Ontario Ranch Developments:** ☐

☒ 1) Provide evidence of final cancellation of Williamson Act contracts associated with this tract, prior to approval of any final subdivision map. Cancellation of contracts shall have been approved by the City Council.

☒ 2) Provide evidence of sufficient storm water capacity availability equivalents (Certificate of Storm Water Treatment Equivalents).

☒ 3) Provide evidence of sufficient water availability equivalents (Certificate of Net MDD Availability).

☒ 1.14 **Other conditions:** ☐

1. **Developer/applicant shall ensure that the project is developed in accordance with all applicable requirements of Tract Map No. 18380 and the Esperanza Specific Plan.**

2. PRIOR TO ISSUANCE OF ANY PERMITS, APPLICANT SHALL:

A. GENERAL
(Permits includes Grading, Building, Demolition and Encroachment)

☒ 2.01 **Record Tract Map No. 20730 pursuant to the Subdivision Map Act and in accordance with the City of Ontario Municipal Code.** ☐

☒ 2.02 **Submit a PDF of the recorded map to the City Engineer's office.** ☐

☐ 2.03 Note that the subject parcel is a recognized parcel in the City of Ontario per _____. ☐

☐ 2.04 Note that the subject parcel is an 'unrecognized' parcel in the City of Ontario and shall require a Certificate of Compliance to be processed unless a deed is provided confirming the existence of the parcel prior to the date of March 4, 1972. ☐

☐ 2.05 Apply for a: ☐

☐ Certificate of Compliance with a Record of Survey;

☐ Lot Line Adjustment (Record a Conforming Deed with the County of San Bernardino within six months of the recordation of the Lot Line Adjustment to conform the new LLA legal description. Submit a copy of the recorded Conforming Deed to the Engineering Department.);

☐ Make a Dedication of Easement.

☐ 2.06 Provide (original document) Covenants, Conditions and Restrictions (CC&R's), as applicable to the project, and as approved by the City Attorney and the Engineering and Planning Departments, ready for recordation with the County of San Bernardino. The CC&R's shall provide for, but not be limited to, common ingress and egress, joint maintenance of all common access improvements, common facilities, parking areas, utilities and drive approaches in addition to maintenance requirements established in the Water Quality Management Plan (WQMP), as applicable to the project. ☐

☐ 2.07 For all development occurring south of the Pomona Freeway (60-Freeway) and within the specified boundary limits (per Boundary Map found at http://tceplumecleanup.com/), the property developer/owner is made aware of the South Archibald Trichloroethylene (TCE) Plume "Disclosure Letter". Property owner may wish to provide this Letter as part of the Real Estate Transfer Disclosure requirements under California Civil Code Section 1102 et seq. This may include notifications in the Covenants, Conditions and Restrictions (CC&Rs) or other documents related to property transfer and disclosures. Additional information on the plume is available from the Santa Ana Regional Water Quality Control Board at http://geotracker.waterboards.ca.gov/profile_report?global_id=T10000004658. ☐

☒ **2.08 Submit a soils/geology report.** ☐

☐ 2.09 Other Agency Permit/Approval: Submit a copy of the approved permit and/or other form of approval of the project from the following agency or agencies: ☐

- ☐ State of California Department of Transportation (Caltrans)
- ☐ San Bernardino County Road Department (SBCRD)
- ☐ San Bernardino County Flood Control District (SBCFCD)
- ☐ Federal Emergency Management Agency (FEMA)
- ☐ Cucamonga Valley Water District (CVWD) for sewer/water service
- ☐ United States Army Corps of Engineers (USACE)
- ☐ California Department of Fish & Game
- ☐ Inland Empire Utilities Agency (IEUA)
- ☐ Other: _____

☐ 2.10 Dedicate to the City of Ontario the right-of-way described below: ☐

_____ feet on _____

Property line corner 'cut-back' required at the intersection of _____ and _____.

☐ 2.11 Dedicate to the City of Ontario the following easement(s):_____ ☐

_____

☐ 2.12 Vacate the following street(s) and/or easement(s): ☐

A. All interfering on-site easements shall be quitclaimed, vacated, and/or submit non-interference letter from affected owner/utility company.

☐ 2.13 Ontario Ranch Developments: ☐

☐ 1) Submit a copy of the permit from the San Bernardino County Health Department to the

Engineering Department and the Ontario Municipal Utilities Company (OMUC) for the destruction/abandonment of the on-site water well. The well shall be destroyed/abandoned in accordance with the San Bernardino County Health Department guidelines.

☐ 2) Make a formal request to the City of Ontario Engineering Department for the proposed temporary use of an existing agricultural water well for purposes other than agriculture, such as grading, dust control, etc. Upon approval, the Applicant shall enter into an agreement with the City of Ontario and pay any applicable fees as set forth by said agreement.

☐ 3) Design proposed retaining walls to retain up to a maximum of three (3) feet of earth. In no case shall a wall exceed an overall height of nine (9) feet (i.e. maximum 6-foot high wall on top of a maximum 3-foot high retaining wall.

☐ 2.14 Submit a security deposit to the Engineering Department to guarantee construction of the public improvements required herein valued at 100% of the approved construction cost estimate. Security deposit shall be in accordance with the City of Ontario Municipal Code. Security deposit will be eligible for release, in accordance with City procedure, upon completion and acceptance of said public improvements. ☐

☒ **2.15 The applicant/developer shall submit all necessary survey documents prepared by a Licensed Surveyor registered in the State of California detailing all existing survey monuments in and around the project site. These documents are to be reviewed and approved by the City Survey Office.** ☐

☒ **2.16 Pay all Development Impact Fees (DIF) to the Building Department. Storm Drain Development Impact Fee shall be paid to the Building Department. Final fee shall be determined based on the approved site plan and the DIF rate at the time of payment.** ☐

☐ 2.17 Other conditions: _____ ☐

B. PUBLIC IMPROVEMENTS
(See attached Exhibit 'A' for plan check submittal requirements.)

☒ **2.18 Design and construct full public improvements in accordance with the City of Ontario Municipal Code, current City standards and specifications, master plans and the adopted specific plan for the area, if any. These public improvements shall include, but not be limited to, the following (checked boxes):**

Improvement	Amherst Ave.	Chatham St.	S. Clifton St.	Eucalyptus Ave.
Curb and Gutter	☐ New; ___ ft. from C/L ☐ Replace damaged ☐ Remove and replace	☐ New; ___ ft. from C/L ☐ Replace damaged ☐ Remove and replace	☐ New; ___ ft. from C/L ☐ Replace damaged ☐ Remove and replace	☐ New; ___ ft. from C/L ☐ Replace damaged ☐ Remove and replace
AC Pavement	☐ Replacement ☐ Widen ____ additional feet along frontage, including pavm't transitions	☐ Replacement ☐ Widen ____ additional feet along frontage, including pavm't transitions	☐ Replacement ☐ Widen ____ additional feet along frontage, including pavm't transitions	☐ New ☐ Widen ____ additional feet along frontage, including pavm't transitions
PCC Pavement (Truck Route Only)	☐ New ☐ Modify existing	☐ New ☐ Modify existing	☐ New ☐ Modify existing	☐ New ☐ Modify existing
Drive Approach	☐ New ☐ Remove and replace	☐ New ☐ Remove and replace	☐ New ☐ Remove and replace	☐ New ☐ Remove and replace
Sidewalk	☐ New ☐ Remove and replace	☐ New ☐ Remove and replace	☒ **New** ☐ Remove and replace	☐ New ☐ Remove and replace
ADA Access Ramp	☐ New ☐ Remove and replace	☒ **New[1]** ☐ Remove and replace	☐ New ☐ Remove and replace	☐ New ☐ Remove and replace
Parkway	☒ **Trees** ☒ **Landscaping (w/irrigation)**	☒ **Trees** ☒ **Landscaping (w/irrigation)**	☒ **Trees** ☒ **Landscaping (w/irrigation)**	☒ **Trees** ☐ **Landscaping (w/irrigation)**
Raised Landscaped Median	☐ New ☐ Remove and replace	☐ New ☐ Remove and replace	☐ New ☐ Remove and replace	☐ New ☐ Remove and replace
Fire Hydrant	☐ New / Upgrade ☐ Relocation	☐ New / Upgrade ☐ Relocation	☐ New / Upgrade ☐ Relocation	☒ **New** ☐ Relocation

Sewer (see Sec. 2.C)	☒ **Main** ☒ **Lateral**	☐ Main ☐ Lateral	☐ Main ☐ Lateral	☐ Main ☐ Lateral
Water (see Sec. 2.D)	☒ **Main** ☐ Service	☒ **Main** ☒ **Service**	☒ **Main** ☐ Service	☐ Main ☐ Service
Recycled Water (see Sec. 2.E)	☐ Main ☐ Service	☐ Main ☐ Service	☒ **Main** ☒ **Service**	☐ Main ☒ **Service**
Traffic Signal System (see Sec. 2.F)	☐ New ☐ Modify existing	☐ New ☐ Modify existing	☐ New ☐ Modify existing	☐ New ☐ Modify existing
Traffic Signing and Striping (see Sec. 2.F)	☐ New ☐ Modify existing	☒ **New[2]** ☐ Modify existing	☐ New ☐ Modify existing	☐ New ☐ Modify existing
Street Light (see Sec. 2.F)	☐ New / Upgrade ☐ Relocation	☐ New / Upgrade ☐ Relocation	☐ New / Upgrade ☐ Relocation	☐ New / Upgrade ☐ Relocation
Bus Stop Pad or Turn-out (see Sec. 2.F)	☐ New ☐ Modify existing	☐ New ☐ Modify existing	☐ New ☐ Modify existing	☐ New ☐ Modify existing
Storm Drain (see Sec. 2G)	☐ Main ☒ **Lateral**	☐ Main ☐ Lateral	☐ Main ☐ Lateral	☐ Main ☐ Lateral
Fiber Optics (see Sec. 2K)	☐ Conduit / Appurtenances	☒ **Conduit / Appurtenances**	☐ Conduit / Appurtenances	☐ Conduit / Appurtenances
Overhead Utilities	☐ Underground ☐ Relocate	☐ Underground ☐ Relocate	☐ Underground ☐ Relocate	☐ Underground ☐ Relocate
Removal of Improvements	_____ _____ _____	_____ _____ _____	_____ _____ _____	_____ _____ _____
Other Improvements	☒ **Intersection Chokers[3]**	☒ **Intersection Chokers[3]**	☒ **Intersection Chokers[3]**	_____ _____ _____

Improvement	Private Streets[4]
Curb and Gutter	☒ **New** ☐ Replace damaged ☐ Remove and replace
AC Pavement	☒ **New** ☐ Widen ____ additional feet along frontage, including pavm't transitions
PCC Pavement (Truck Route Only)	☐ New ☐ Modify existing
Drive Approach	☐ New ☐ Remove and replace
Sidewalk	☐ New ☐ Remove and replace
ADA Access Ramp	☐ New ☐ Remove and replace
Parkway	☐ Trees ☐ Landscaping (w/irrigation)
Raised Landscaped Median	☐ New ☐ Remove and replace
Fire Hydrant	☐ New / Upgrade ☐ Relocation
Sewer (see Sec. 2.C)	☐ Main ☐ Lateral
Water (see Sec. 2.D)	☐ Main ☐ Service
Recycled Water (see Sec. 2.E)	☐ Main ☐ Service

Traffic Signal System (see Sec. 2.F)	☐ New ☐ Modify existing
Traffic Signing and Striping (see Sec. 2.F)	☐ New ☐ Modify existing
Street Light (see Sec. 2.F)	☐ New / Upgrade ☐ Relocation
Bus Stop Pad or Turn-out (see Sec. 2.F)	☐ New ☐ Modify existing
Storm Drain (see Sec. 2G)	☐ Main ☐ Lateral
Fiber Optics (see Sec. 2K)	☒ **Conduit / Appurtenances**
Overhead Utilities	☐ Underground ☐ Relocate
Removal of Improvements	_____ _____ _____
Other Improvements	_____ _____ _____

Specific notes for improvements listed in item no. 2.18, above:
[1]See Transportation Division Condition of Approval No. 2
[2]See Transportation Division Condition of Approval No. 5
[3]See Transportation Division Condition of Approval No. 3
[4]Tilt-sections with widths varying from 25 ft. to 27 ft.

☐ 2.19 Construct a 2" asphalt concrete (AC) grind and overlay on the existing section of the following street(s): _____ ☐

☒ **2.20 Reconstruction of the full pavement structural section, per City of Ontario Standard Drawing number 1011, may be required based on the existing pavement condition and final street design. Minimum limits of reconstruction shall be along property frontage, from street centerline to curb/gutter.** ☐

☒ **2.21 Depending on site conditions and number of utility service cuts at time of construction, additional pavement restoration may be required.** ☐

☐ 2.22 Make arrangements with the Cucamonga Valley Water District (CVWD) to provide ☐ water service ☐ sewer service to the site. This property is within the area served by the CVWD and Applicant shall provide documentation to the City verifying that all required CVWD fees have been paid. ☐

☐ 2.23 Overhead utilities shall be under-grounded, in accordance with Title 7 of the City's Municipal Code (Ordinance No. 2804 and 2892). Developer may pay in-lieu fee, approximately _____, for undergrounding of utilities in accordance with Section 7-7.302.e of the City's Municipal Code. ☐

☒ **2.24 Other conditions:** ☐
- **Private street improvements shall be designed and constructed per current City Standards. Applicable plan check and inspection fees shall be required.**

C. SEWER

☐ 2.25 An ____inch sewer main is available for connection by this project in _____. ☐

☐ 2.26 Design and construct a sewer main extension. A sewer main is not available for direct connection. The closest main is approximately _____ feet away. ☐

☐ 2.27 Submit documentation that shows expected peak loading values for modeling the impact of the subject project to the existing sewer system. The project site is within a deficient public sewer system area. Applicant shall be responsible for all costs associated with the preparation of the model. Based on the results of the analysis, Applicant may be required to mitigate the project impact to the deficient public sewer system, including, but not limited to, upgrading of existing sewer main(s), construction of new sewer main(s) or diversion of sewer discharge to another sewer. ☐

☒ **2.28 Other conditions:** ☐
- **See attached for Ontario Municipal Utilities Company (OMUC) conditions of approval.**

D. WATER

☐ 2.29 A _____inch water main is available for connection by this project in _____ (Ref: Water Drawing Number: _____) ☐

☐ 2.30 Design and construct a water main extension. A water main is not available for direct connection. The closest main is approximately _____ feet away. ☐

☒ **2.31 Other conditions:** ☐
- **See attached for Ontario Municipal Utilities Company (OMUC) conditions of approval.**

E. RECYCLED WATER

☐ 2.32 An _____inch recycled water main is available for connection by this project in _____. ☐

☒ **2.33 Design and construct an on-site recycled water system for this project. A recycled water main does exist in the vicinity of this project.** ☐

☐ 2.34 Design and construct an on-site recycled water ready system for this project. A recycled water main does not currently exist in the vicinity of this project but is planned for the near future. If Applicant would like to connect to this recycled water main when it becomes available, the cost for the connection shall be borne solely by the Applicant. ☐

☒ **2.35 Submit one (1) electronic copy, in PDF format, of the Supplemental Engineering Report (ER), for the use of recycled water to OMUC's Water Quality Programs at OMUCWQPlanCheck@ontarioca.gov for review and subsequent submittal to the California State Water Board (Division of Drinking Water) for final approval.** ☐

Note: The Division of Drinking Water review and approval process may take up to four (4) months. Contact the OMUC's Water Quality Programs at (909) 395-2678 or email OMUCWQPlanCheck@ontarioca.gov regarding this requirement. *Failure to obtain an approval letter from the Division of Drinking Water authorizing the use of recycled water will delay meter installation and if applicable, occupancy release for new developments.*

☒ **2.36 Submit one (1) electronic copy, in PDF format, of the Landscape Plans (on-site & off-site) to OMUC's Water Quality Programs at OMUCWQPlanCheck@ontarioca.gov for review and approval.**

☒ **2.37 Other conditions:** ☐
- **See attached for Ontario Municipal Utilities Company (OMUC) conditions of approval.**

F. TRAFFIC / TRANSPORTATION

☐ 2.38 Submit a focused traffic impact study, prepared and signed by a Traffic/Civil Engineer registered in the State of California. The study shall address, but not be limited to, the following issues as required by the City Engineer: ☐
1. On-site and off-site circulation
2. Traffic level of service (LOS) at 'build-out' and future years
3. Impact at specific intersections as selected by the City Engineer

☐ 2.39 New traffic signal installations shall be added to Southern California Edison (SCE) customer account number # 2-20-044-3877. ☐

☒ **2.40 Other conditions:** ☐
- **See attached for Transportation Division conditions of approval.**

G. DRAINAGE / HYDROLOGY

☒ **2.41 A 36-inch storm drain main is available to accept flows from this project in Amherst Avenue.** ☐

☒ **2.42 Submit a hydrology study and drainage analysis, prepared and signed by a Civil Engineer registered in the State of California. The study shall be prepared in accordance with the San Bernardino County Hydrology Manual and City of Ontario standards and guidelines. Additional drainage facilities, including, but not limited to, improvements beyond the project frontage, may be required to be designed and constructed, by Applicant, as a result of the findings of this study.** ☐

☐ 2.43 An adequate drainage facility to accept additional runoff from the site does not currently exist downstream of the project. Design and construct a storm water detention facility on the project site. 100-year post-development peak flow shall be attenuated such that it does not exceed 80% of pre-development peak flows, in accordance with the approved hydrology study and improvement plans. ☐

☐ 2.44 Submit a copy of a recorded private drainage easement or drainage acceptance agreement to the Engineering Department for the acceptance of any increase to volume and/or concentration of historical drainage flows onto adjacent property, prior to approval of the grading plan for the project. ☐

☐ 2.45 Comply with the City of Ontario Flood Damage Prevention Ordinance (Ordinance No. 2409). The project site or a portion of the project site is within the Special Flood Hazard Area (SFHA) as indicated on the Flood Insurance Rate Map (FIRM) and is subject to flooding during a 100-year frequency storm. The site plan shall be subject to the provisions of the National Flood Insurance Program. ☐

☐ 2.46 Other conditions: _____ ☐

H. STORM WATER QUALITY / NATIONAL POLLUTANT DISCHARGE AND ELIMINATION SYSTEM (NPDES)

☐ 2.47 401 Water Quality Certification/404 Permit – Submit a copy of any applicable 401 Certification or 404 Permit for the subject project to the City project engineer. Development that will affect any body of surface water (i.e. lake, creek, open drainage channel, etc.) may require a 401 Water Quality Certification from the California Regional Water Quality Control Board, Santa Ana Region (RWQCB) and a 404 Permit from the United States Army Corps of Engineers (USACE). The groups of water bodies classified in these requirements are perennial (flow year round) and ephemeral (flow during rain conditions, only) and include, but are not limited to, direct connections into San Bernardino County Flood Control District (SBCFCD) channels. ☐
If a 401 Certification and/or a 404 Permit are not required, a letter confirming this from Applicant's engineer shall be submitted.
Contact information: USACE (Los Angeles District) (213) 452-3414; RWQCB (951) 782-4130.

☒ 2.48 **Submit a Water Quality Management Plan (WQMP). This plan shall be approved by the Engineering Department prior to approval of any grading plan. The WQMP shall be submitted, utilizing the current San Bernardino County Stormwater Program template, available at: http://www.sbcounty.gov/dpw/land/npdes.asp.** ☐

☐ 2.49 Design and construct a Connector Pipe Trash Screen or equivalent Trash Treatment Control Device, per catch basin located within or accepting flows tributary of a Priority Land Use (PLU) area that meets the Full Capture System definition and specifications, and is on the Certified List of the State Water Resources Control Board. The device shall be adequately sized per catch basin and include a deflector screen with vector control access for abatement application, vertical support bars, and removable component to facilitate maintenance and cleaning. ☐

☒ 2.50 **Other conditions:** ☐

1. **The project applicant shall submit a Certificate of Storm Water Treatment Capcity for the Net Acreage (Including Chatham Street, Clifton Avenue, and Amherst Avenue portions) Availability in Mill Creek Wetland facility (MCW) for water quality compliance.**
2. **Activities resulting in land disturbance of one acre or more is required to obtain coverage under the Construction General Permit (CGP). The owner is the legally responsible person (LRP) of the site and shall have a Stormwater Pollution Prevention Plan (SWPPP) developed and submitted through the SMARTS website at https://smarts.waterboards.ca.gov/smarts/faces/SwSmartsLogin.xhtml**

J. SPECIAL DISTRICTS

☒ 2.51 **File an application, together with an initial deposit (if required), to establish a Community Facilities District (CFD) pursuant to the Mello-Roos Community Facilities District Act of 1982. The application and fee shall be submitted a minimum of four (4) months prior to final subdivision map approval, and the CFD shall be established prior to final subdivision map approval or issuance of building permits, whichever occurs first. The CFD shall be established upon the subject property to provide funding for various City services. An annual special tax shall be levied upon each parcel or lot in an amount to be determined. The special tax will be collected along with annual property taxes. The City shall be the sole lead agency in the formation of any CFD. Contact Financial Services Agency at (909) 395-2015 or email CFD@ontarioca.gov to initiate the CFD application process.** ☐

☐ 2.52 Other conditions: _____ ☐

K. FIBER OPTIC

☒ 2.53 **A fiber optic line is available for connection by this project in Clifton Avenue.** ☐

☒ 2.54 **Design and construct fiber optic system to provide access to the City's conduit and fiber optic system per the City's Fiber Optic Master Plan. Building entrance conduits shall start from the closest OntarioNet hand hole constructed along the project frontage in the ROW and shall terminate in the main telecommunications room for each building. Conduit infrastructure shall interconnect with the primary and/or secondary backbone fiber optic conduit system at the nearest OntarioNet hand hole. Generally located in Clifton Avenue.** ☐

☒ 2.55 **Refer to the City's Fiber Optic Master Plan for design and layout guidelines. Contact the Broadband Operations Department at (909) 395-2000, regarding this requirement.** ☐

3. PRIOR TO ISSUANCE OF A CERTIFICATE OF OCCUPANCY, APPLICANT SHALL:

☒ 3.01 **Set new monuments in place of any monuments that have been damaged or destroyed as a result of construction of the subject project. Monuments shall be set in accordance with City of Ontario standards and to the satisfaction of the City Engineer.** ☐

☒ 3.02 **Complete all requirements for recycled water usage.** ☐

☒ **1) Procure from OMUC a copy of the letter of confirmation from the California State Water Board (Division of Drinking Water) that the Engineering Report (ER) has been reviewed and the subject site is approved for the use of recycled water.**

☒ **2) Obtain clearance from the OMUC confirming completion of recycled water improvements and passing of shutdown tests and cross connection inspection, upon availability/usage of recycled water.**

☒ **3) Complete Site Supervisor training of on-site personnel in the use of recycled water, in accordance with the ER, upon availability/usage of recycled water.**

☒ 3.03 **The applicant/developer shall submit all final survey documents prepared by a Licensed Surveyor registered in the State of California detailing all survey monuments that have been preserved, revised, adjusted or set along with any maps, corner records or Records of Survey needed to comply with these Conditions of Approvals and the latest edition of the California Professional Land Survey Act. These documents are to be reviewed and approved by the City Survey Office.** ☐

☐ 3.04 Ontario Ranch Projects: For developments located at an intersection of any two collector or arterial streets, the applicant/developer shall set a monument if one does not already exist at that intersection. Contact the City Survey office for information on reference benchmarks, acceptable methodology and required submittals. ☐

☒ 3.05 **Confirm payment of all Development Impact Fees (DIF) to the Building Department.** ☐

☒ 3.06 **Submit electronic copies (PDF and Auto CAD format) of all approved improvement plans, studies and reports (i.e. hydrology, traffic, WQMP, etc.).** ☐

4. PRIOR TO FINAL ACCEPTANCE, APPLICANT SHALL:

☒ 4.01 **Complete all Conditions of Approval listed under Sections 1-3 above.** ☐

☒ 4.02 **Pay all outstanding fees pursuant to the City of Ontario Municipal Code, including but not limited to, plan check fees, inspection fees and Development Impact Fees.** ☐

☒ 4.03 **The applicant/developer shall submit a written request for the City's final acceptance of the project addressed to the City Project Engineer. The request shall include a completed Acceptance and Bond Release Checklist, state that all Conditions of Approval have been completed and shall be signed by the applicant/developer. Upon receipt of the request, review of the request shall be a minimum of 10 business days. Conditions of Approval that are deemed incomplete by the City will cause delays in the acceptance process.** ☐

☒ 4.04 **Submit record drawings (PDF) for all public improvements identified within Section 2 of these Conditions of Approval.** ☐

EXHIBIT 'A'

ENGINEERING DEPARTMENT
First Plan Check Submittal Checklist

Project Number: PMTT24-008; PDEV24-017, and Tract Map No. 20730

All plan check submittals are to be done digitally through the City Of Ontario Citizen Portal Access. The following items are to be included with the first plan check submittal:

1. ☒ **A copy of this check list**
2. ☒ **Payment of fee for Plan Checking**
3. ☒ **Engineering Cost Estimate (on City form) with engineer's wet signature and stamp.**
4. ☒ **Project Conditions of Approval**
5. ☒ **Potable and Recycled Water demand calculations (include water demand calculations showing low, average and peak water demand in GPM for the proposed development and proposed water meter size).**
6. ☒ **Public Street improvement plan with street cross-sections**
7. ☒ **Public Sewer improvement plan[1]**
8. ☒ **Public Water improvement plan[1] (include water demand calculations showing low, average and peak water demand in GPM for the proposed development and proposed water meter size)**
9. ☒ **Recycled Water improvement plan[1] (include recycled water demand calculations showing low, average and peak water demand in GPM for the proposed development and proposed water meter size and an exhibit showing the limits of areas being irrigated by each recycled water meter)**
10. ☒ **Private Street improvement plan with street cross-sections.**
11. ☒ **Public Storm Drain improvement plan (delta to existing storm drain plan)**
12. ☐ Public Street Light improvement plan
13. ☒ **Signing and Striping improvement plan**
14. ☒ **Fiber Optic plan (include Auto CAD electronic submittal)**
15. ☒ **HOA Landscape improvement plans. Show corner sight line distance per engineering standard drawing 1309.**
16. ☒ **CFD Landscape improvement plans. Show corner sight line distance per engineering standard drawing 1309.**
17. ☒ **Dry Utility plans within public right-of-way (at a minimum the plans must show existing and ultimate right-of-way, curb and gutter, proposed utility location including centerline dimensions, wall to wall clearances between proposed utility and adjacent public line, street work repaired per Standard Drawing No. 1306. Include Auto CAD electronic submittal)**
18. ☐ Traffic Signal improvement plan and One (1) copy of Traffic Signal Specifications with modified Special Provisions. Please contact the Traffic Division at (909) 395-2154 to obtain Traffic Signal Specifications.
19. ☒ **Water Quality Management Plan (WQMP), including one (1) copy of the approved Preliminary WQMP (PWQMP).**
20. ☒ **Hydrology/Drainage study**

21. ☒ **Soils/Geology report**

22. ☒ **Payment for Final Map/Parcel Map processing fee**

23. ☒ **Final Map/Parcel Map**

24. ☒ **Approved Tentative Map**

25. ☒ **Preliminary Title Report (current within 30 days)**

26. ☒ **Traverse Closure Calculations**

27. ☒ **Set of supporting documents and maps (legible copies): referenced improvement plans (full size), referenced record final maps/parcel maps (full size, 18"x26"), Assessor's Parcel map (full size, 11"x17"), recorded documents such as deeds, lot line adjustments, easements, etc.**

28. ☒ **Supplemental Engineering Report, in electronic format (PDF format), for recycled water use only. Must be reviewed and submitted to the Division of Drinking Water by OMUC Water Quality Programs before clearing plan check workflows (includes grading and landscape plan reviews). *Approval letter issued by the Division of Drinking Water must be obtained before meter installation and if applicable, occupancy release.***

29. ☒ **Other:**
[1]If public main line infrastructure is accepted by the time of construction, this project may submit a minor offsite improvement plan for domestic water and recycled water services and for sewer lateral.

CITY OF ONTARIO
MEMORANDUM

ONTARIO MUNICIPAL UTILITIES COMPANY

DATE:	September 4, 2025
TO:	Henry Pham, Engineering Department
CC:	Robert Morales, Planning Department
FROM:	Heather Young, Utilities Engineering Division
	Christy Stevens, Utilities Engineering Division
SUBJECT:	DPR#4 - Utilities Engineering Conditions of Approval (COA)
PROJECT NO.:	TM-20730 (PMTT24-008), PDEV24-017, PGPA24-003, PSPA24-004

BRIEF DESCRIPTION:

TM-20730 (PMTT24-008): *A Tentative Tract Map (TTM 20730) for Common Interest Subdivision purposes, to subdivide 13.2 acres of land into 28 numbered lots and 15 lettered lots, generally located South of Chatham Street, West of Clifton Street, East of Amherst Avenue, and North of Eucalyptus Avenue within the Planning Area 11 of the Esperanza Specific Plan (APN(s): 1073-101-05). Related File(s): PGPA24-003, PSPA24-004, PDEV24-017).*

PDEV24-017: *A Development Plan to construct 161 multiple-family dwellings on approximately 13.2 acres of land generally located South of Chatham Street, West of Clifton Street, East of Amherst Avenue, and North of Eucalyptus Avenue, within Planning Area 11 of the Esperanza Specific Plan (APN(s): 1073-101-050). Related File(s): PGPA24-003, PSPA24-004, PMTT24-008.*

PGPA24-003: *An Amendment to the Land Use Element of the Policy Plan (General Plan) component of The Ontario Plan, changing the land use designation on 13.2 acres of land from PS (Public School) to MDR (Medium Density Residential) generally located South of Chatham Street, West of Clifton Street, East of Amherst Avenue, and North of Eucalyptus Avenue within the Planning Area 11 of the Esperanza Specific Plan and modifying Exhibit LU-03 (Future Buildout Table) to be consistent with this land use designation change (APN(s): 1073-101-050). Related File(s): PSPA24-004, PMTT24-008, PDEV24-017).*

PSPA24-004: *An Amendment to the Esperanza Specific Plan; [1] Modifying the land use designation for Planning Area 11 from Public School to Residential Development 7 (RD-7); [2] Introduce a new Residential Development 7 (RD-7) designation within the Specific Plan; [3] Establish development standards for a new 3-story residential product type within the residential land use designations; [4] Implement various updates to the Specific Plan, including modifications to the land use map, land use tables, development standards, exhibits, and related text, to reflect the proposed land use changes. (APN(s): 1073-101-050). Related File(s): PGPA24-003, PMTT24-008, PDEV24-017.*

OMUC UTILITIES ENGINEERING DIVISION
CONDITIONS OF APPROVAL

CONDITIONS OF APPROVAL: *The Ontario Municipal Utilities Company (OMUC) Utilities Engineering Division recommends this application for approval subject to the Conditions of Approval outlined below and compliance with the City's Design Development Guidelines, Specifications Design Criteria, and City Standards. The Applicant shall be responsible for the compliance with and the completion of all the following applicable Conditions of Approval prior to the following milestones and subject to compliance with City's Design Development Guidelines, Specifications Design Criteria, and City Standards:*

General Conditions:

1. Standard Conditions of Approval: Project shall comply with the requirements set forth in the Amendment to the Standard Conditions of Approval for New Development Projects adopted by the City Council (Resolution No. 2017-027) on April 18, 2017, or as amended or superseded by Council Resolution; as well as project-specific conditions/requirements as outlined below.

Prior to Issuance of Any Permits (Grading, Building, Demolition and Encroachment), unless other timeline milestones are specified by individual conditions below, the Applicant Shall:

General Conditions (Section 2.A, Other conditions): The Applicant shall comply with the following:

2. Inherited Requirements and Conditions of Approval: This project is subject to all the Requirements and Conditions of Approval of related entitlements TM-18380, PDA25-003, and the Esperanza Specific Plan PSP05-002, PSPA24-004 (as amended). For any conflict in Conditions of Approval and requirements, the Conditions of Approval below for this Project will supersede.
3. Final Utilities Systems Map (USM): Submit a Final Utilities Systems Map (USM) as part of the precise grading plan submittal that meets all the City's USM requirements. These requirements include to show and label all existing and proposed utilities (including all appurtenances such as backflow devices, DCDAs, etc.), sizes, points of connection, and any easements. The final utility design shall comply with all Division of Drinking Water (CCR §64572) Separation Requirements. See Utility Systems Map (USM) Requirements document for details.
4. Public Utilities and Public Right-of-Way including Public Utility Easements (PUE): All City of Ontario Public Utilities shall be installed within a Public Right-of-Way (RoW), or within a Public Utility Easements (PUE), or within a combination of RoW and PUE. In this case, Public Utilities is referring to the mains and connected appurtenances of the following City of Ontario/OMUC Utilities: Public Potable Water; Public Recycled Water; and Public Sanitary Sewer. Public Utilities shall be subject to the Minimum RoW/PUE Area Requirements and PUE Restrictions:
    a. Minimum RoW Area Requirements: Public Utilities shall be installed within in existing RoW/PUE in alignments/locations that meet the following minimum RoW/PUE areas surrounding the Public Utilities, and/or additional RoW/PUE shall be dedicated/granted to the City to provide the following minimum RoW/PUE areas surrounding the Public Utilities:
        i. For each main, the RoW/PUE Area shall be a minimum of 20 feet wide, centered on the utility main with a minimum of 10 feet of RoW/PUE on each side of the main and this minimum area shall extend a minimum for 10 feet past the end of a main;
        ii. For each Service/Lateral, the RoW/PUE Area shall be a minimum of 10 feet wide, centered on the service/lateral with a minimum of 5 feet of RoW on each side of each service/lateral;
        iii. For each water meter box, the RoW/PUE Area shall be a minimum of 5 feet behind and 5 feet on each side of a water meter box;
        iv. For each water appurtenances (fire hydrants, blowoffs, airvacs, etc), the RoW/PUE Area shall be a minimum of 5 feet on each side surrounding the water appurtenances (fire hydrants, blowoffs, airvacs, etc);
        v. The RoW/PUE minimum areas for separate Public Utilities may overlap, provide that all minimum separations and PUE Restrictions are met.
    b. PUE Restrictions: The Minimum PUE Area required surrounding Public Utilities shall be subject to the following restrictions:
        i. The Minimum PUE Area required surrounding Public Utilities shall not contain:
            A. Any storm water quality improvements (infiltration, detention, retention, bioswale, etc);
            B. Landscaping with thick or intrusive root structures,
            C. Any trees;
            D. Any private utilities, plumbing lines, private fire system, or irrigation lines; or,
            E. Any permanent structures or overhangs of permanent structures.
        ii. The PUE surface shall be designed to allow vehicle access over and along the full length of the utility main by any City maintenance vehicle.
        iii. Minimum Separations: Within a PUE, all Department of Drinking Water (DDW) Water Main Separations per California Code of Regulations (CCR) §64572 shall be met for all Public Potable Water Mains and Services between: all Public City Utilities; Non-City Utilities; and Private Utilities. Additionally, the following Minimum Separations shall be met:
            A. At minimum there shall be a 4 feet horizontal separation between each utility as measured between the outside walls of the utility pipelines, or in the case of a Joint Utility Trench, between the outside edge of the Joint Utility Trench and the outside wall of the Utility Pipeline. The minimum 4 feet horizontal separation also includes between services and service appurtenances and: other utilities (public or private) and utility appurtenances; any other objects or potentials obstructions (boxes, handholes, vaults, transformers, panels, poles and standards, signs, driveway

approaches and wings/curb returns, trees, controllers, etc.); and any other items, as determined by the Ontario Municipal Utilities Company (OMUC).

B. Public Utility mains shall not be located behind curb or under curb & gutter and shall be located at minimum of 8 feet from curbface. With specific written permission of OMUC Management Staff, in rare circumstances, this 8 feet minimum can be reduced to 5 feet in specific locations where the 8 feet is not feasible, but at all locations the utilities alignments shall be optimized to meet this minimum location, while still maintaining all other minimum separation.

5. Well Abandonment: All existing Ground Water Wells shall be abandoned per County and State requirements prior to grading if they are not authorized to remain in service by the City's Water Resources Section.

6. Septic Tank Abandonment: All existing septic tank(s) on the property shall be abandoned per City, County, and State regulations and standards.

7. Minor Offsite Improvement Plan: Submit a Minor Offsite Improvement Plan for construction or abandonment of any water services and sewer laterals for the Project. The Minor Offsite Improvement Plan shall be included with the first plan check submittal to the Engineering Department.

    a. The abandonment of recycled water main per the Project's conditions below shall be included on the Minor Offsite Improvement Plan.

8. Unused Service Abandonment: All adjacent water services (along with connected appurtenances) and sewer laterals along the frontages of the project site not used to provide service to this Development Project shall be abandoned back to the main in accordance with City Standards and Practices.

Sanitary Sewer Conditions (Section 2.C): The Applicant shall comply with the following:

9. Sanitary Sewer Infrastructure: Sanitary sewer infrastructure in TM-18380 is required to support this development. If the sanitary sewer infrastructure is not completed by TM-18380, this development is subject to the improvements required. The Project is limited to Public Sewer Mains within Public Streets in Publicly Dedicated Right-of-way for Streets and Public Sewer Mains are not allowed within private property or private streets/private drive aisles. The Project is required to install the following Public Sewer Mains and only to the extent necessary to serve the Project:

    a. Install 8-inch sewer main in Amherst Avenue from the Project's point of connection at the intersection of Shelburne Street and extending south to connect to the existing sewer main in Eucalyptus Avenue.

10. Sanitary Sewer Service:

    a. Sewer Lateral: Multifamily attached residential buildings or single-family attached residences: the residences and buildings shall share an onsite private sewer system that discharges wastewater to the Public Sanitary Sewer System through a shared Public Sewer Lateral per Standard #2003. The quantity of Public Sewer Laterals for the Project shall be limited to the minimum necessary to meet all of the conditions of approval and as limited by the City.

        i. Sewer Lateral Connection: The Project shall connect to the 8-inch public sewer main in Amherst Avenue.

        ii. Public Sewer Laterals and Storm Water Quality Improvements: No storm water quality improvements (infiltration, detention, retention, bioswale, etc) shall be installed above or within 5 feet of any Public Sewer Lateral.

        iii. Unused Service Abandonment: The Project shall utilize any unused sewer lateral along the Project's frontages on Amherst Avenue when feasible. Any sewer lateral along the frontages of the project site not used to provide service shall be abandoned back to the main in accordance with City Standards and Practices.

    b. Private Onsite Sewer System and Plumbing: The Onsite Sewer System shall be privately maintained by the property owner. If not under one ownership, the maintenance of the shared onsite private sewer system shall be established through Covenants, Conditions, and Restrictions (CC&Rs). The Private Onsite Sewer System shall meet the following requirements:

        i. Private Onsite Sewer and Storm Water Quality Improvements: No storm water quality improvements (infiltration, detention, retention, bioswale, etc) shall be installed above or within 5 feet of any Private Onsite Sewer pipes.

Potable Water Conditions (Section 2.D): The Applicant shall comply with the following:

11. Potable Water Infrastructure: The Project is limited to Public Potable Water Mains within Public Streets in Publicly Dedicated Right-of-way for Streets and Public Potable Water Mains are not allowed within private property or private streets/private drive aisles. The Project is required to install the following Public Potable Water Mains and only to the extent necessary to serve the Project and achieve required looping:
    a. Install 8-inch potable water main in Clifton Avenue from Eucalyptus Avenue to Chatham Street.
    b. Install 8-inch potable water main in Chatham Street from Clifton Avenue to Amherst Avenue.
    c. Install 8-inch potable water main in Amherst Avenue from Chatham Street to Eucalyptus Avenue.
12. Potable Water Service:
    a. Domestic Service:
        i. Multifamily attached residential buildings or single-family attached residences: the residences shall be sub-metered and share an onsite private domestic water system that connects to the Public Potable Water System through a shared a domestic potable water service and public master meter connected to the Public Potable Water System with onsite private backflow prevention device. Maintenance of the shared onsite private domestic water system shall be established through Covenants, Conditions, and Restrictions (CC&Rs).
    b. Irrigation Service: For landscape irrigation uses that are not served by Recycled Water, the landscape irrigation uses shall have a separate irrigation water service and meter with backflow prevention device connected to the Public Potable Water System separate from the domestic water uses and the onsite plumbing systems shall be also separate from each other.
        i. Community Service District (CFD) Maintained Irrigation Areas: Any irrigated areas that are to be maintained by a Community Service District (CFD) and not by the property owner or owners association require irrigation services and meters separate from those that are maintained by the property owner or owners association.
    c. Backflow Prevention:
        i. A Backflow Prevention Device is required for each Meter connected to the Public Potable Water System that: serves any residential use that is more than one (1) single family residential unit; or, any non-residential use; or, only irrigation use.
        ii. Backflow Prevention Device Location: In order to reduce the risk of contamination to the Public Potable Water System, a Backflow Prevention Device location shall comply with the following requirements:
            1. As measured along the pipe connecting to the Backflow Prevention Device, the backflow concrete pad shall be located a minimum of 3 feet and a maximum of 5 feet from:
                1. The Right-Of-Way line for Publicly Dedicated Streets; or,
                2. The back of the sidewalk or the meter box (where there is no sidewalk), whichever is closer, for mains within PUEs and not within Right-Of-Way for Publicly Dedicated Streets.
            2. Only one single bend of up to 90 degrees maximum is allowed along the pipe to the Backflow and the single bend must be located at one of the following places: either the along the 90-degree riser connecting at the backflow assembly; or, at the end of the 12-inch stub at the back of the meter box.
            3. All the minimum DDW Separations also apply to the pipeline connecting between the Main/Meter-Box to a Backflow Device (or DCDA) and any Backflow Device (or DCDA). This also includes storm water quality improvements (infiltration, detention, retention, bioswale, etc). Also, no public or private non-potable water conveyances (private utilities, plumbing lines, sewer, private fire system, storm drain) shall cross the pipeline connecting between the Main/Meter-Box to a Backflow Device (or DCDA) or under any Backflow Device (or DCDA).
    d. Fire Water Service: For onsite private Fire System uses: Where the domestic water service and meters connected to the Public Potable Water System that serves any use that is more than one (1) single

family detached residential unit, or any non-residential use: if an onsite private fire system is required, then a separate Fire Service with Double Check Detector Assembly (DCDA) per City Standard #4208 connected to the Public Potable Water System is required, to serve the onsite private fire system. The onsite fire system and onsite domestic water plumbing system shall be separate. The DCDA location shall be the same as the Backflow Prevention Device above.

i. In certain residential cases where a separate fire service with DCDA connected to the Public Potable Water System is not required by above the requirement, and approved by the City Fire Department and the City Building Department, then the California Residential Code must be followed for the residential buildings; if the California Residential Code is not followed for the residential buildings; then a separate fire service with DCDA is required.

e. Fire Hydrants: Install public fire hydrants per City Standard along the public potable water mains fronting the Project with adequate spacing and in locations as required by the Fire Department.

Recycled Water Conditions (Section 2.E): The Applicant shall comply with the following:

13. City Ordinance 2689: This development shall comply with City Ordinance 2689 and make use of recycled water for all approved uses, including but not limited to landscape irrigation. Appropriately sized public and private mains shall be installed throughout the Project to meet this requirement, as approved by the City.

14. Recycled Water Infrastructure: Recycled water infrastructure in TM-18380 is required to support this development. If the recycled water infrastructure is not completed by TM-18380, this development is subject to the improvements required. The Project is limited to Public Recycled Water Mains within Public Streets in Publicly Dedicated Right-of-way for Streets and Public Recycled Water Mains are not allowed within private property or private streets/private drive aisles. In order to comply with City Ordinance 2689, the Project is required to install the following Public Recycled Water Mains and only to the extent necessary to serve the Project:

    a. Install 8-inch recycled water main in Clifton Avenue from Eucalyptus Avenue to Chatham Street.

    b. Abandon unused recycled water main and its associated appurtenances in Amherst Avenue from Eucalyptus Avenue to the end of the main approximately at the intersection of Shelburne Street.

15. RW Program Requirements: In order to receive RW service, the applicant shall comply with each of the following:

    a. Prior to Precise Grading Plan Approval and Building Permits Issuance:

        i. Submit one (1) electronic copy, in PDF format, of the Landscape Plans (on-site & off-site) to OMUC's Water Quality Programs at OMUCWQPlanCheck@ontarioca.gov for review and approval.

        ii. Submit one (1) electronic copy, in PDF format, of the Supplemental Engineering Report (ER), for the use of recycled water to OMUC's Water Quality Programs at OMUCWQPlanCheck@ontarioca.gov for review and subsequent submittal to the California State Water Board (Division of Drinking Water) for final approval.

        Note: The Division of Drinking Water review and approval process may take up to four (4) months. Contact the OMUC's Water Quality Programs at (909) 395-2678 or email OMUCWQPlanCheck@ontarioca.gov regarding this requirement. Failure to obtain an approval letter from the Division of Drinking Water authorizing the use of recycled water will delay meter installation and if applicable, occupancy release for new developments.

    b. Prior to Occupancy Release/Finalizing:

        i. Procure from OMUC a copy of the letter of confirmation from the California State Water Board (Division of Drinking Water) that the Engineering Report (ER) has been reviewed and the subject site is approved for the use of recycled water.
        ii. Obtain clearance from the OMUC confirming completion of recycled water improvements and passing of shutdown tests and cross connection inspection, upon availability/usage of recycled water.
        iii. Complete Site Supervisor training of on-site personnel in the use of recycled water, in accordance with the ER, upon availability/usage of recycled water.

16. Recycled Water Service: The Project's recycled water services shall connect to the public recycled water main in Clifton Avenue or Eucalyptus Avenue.

a. Recycled Water Services: In order to comply with City Ordinance 2689:

   i. Private Property Owner Maintained Uses: Each parcel/lot shall have its own separate Recycled Water Service with Meter connected to the Public Recycled Water System to serve the parcel/lot's private property owner-maintained landscape irrigation uses. If Recycled Water is going to be used for uses other than landscape irrigation, then a separate Recycled Water Service with Meter is required to serve the non-landscape irrigation uses.
   ii. Community Service District (CFD) Maintained Irrigation Areas: Any irrigated areas that are to be maintained by a Community Service District (CFD) and not by the property owner or owners association require irrigation services and meters separate from those that are maintained by the property owner or owners association.

b. Unused Service Abandonment: The Project shall utilize any unused recycled water services along the Project's frontages on Clifton Avenue or Eucalyptus Avenue when feasible. Any recycled water services (along with connected appurtenances) along the frontages of the project site not used to provide service shall be abandoned back to the main in accordance with City Standards and Practices.

CITY OF ONTARIO
MEMORANDUM

Development Plan Review

Project: PDEV24-017/PMTT24-008/PSPA24-004/PGPA24-003 (Esperanza Specific Plan)

Date: September 10, 2025

Location: Northeast Corner of Amherst Avenue and Eucalyptus Ave

By: Diego Tapia

The Transportation Division please mends the following to be incorporated into the Project's Conditions-of-Approval:

Conditions:

1. The Applicant/Developer shall comply with the Conditions of Approval issued for TM-20285, TM-20160, TM-1793, Esperanza Specific Plan and related Development Agreements.

2. The Applicant/Developer shall install ADA ramps for pedestrian crossings at the following locations per City of Ontario Standard Drawing No. 1213.

    a. Southwest corner of Chatham Street and Clifton Avenue
    b. Southeast corner of Chatham Street and Amherst Avenue
    c. Northwest corner of Chatham Street and Clifton Avenue

3. The Applicant/Developer shall be responsible to design and construct intersection chokers at the following locations per City of Ontario Standard Drawing No. 1110:

    a. East side of the intersection on Amherst Avenue at tract entrance
    b. Southwest/southeast corners of the intersection on Chatham Street at tract entrance
    c. Northwest and southwest corner of Chatham Street and Clifton Avenue
    d. Top of the T-intersection at Clifton Avenue and Chatham Avenue (similar to the intersection of Sage Paseo and Clifton Avenue)

    This traffic calming measure is being required to reduce speeds on Clifton Avenue.

4. The Applicant/Developer shall be responsible to design and construct street improvements along property frontages of Eucalyptus Avenue, Amherst Avenue, Chatham Street, and Clifton Avenue in accordance with conditions issued by City's Land Development Division. These, and all other street improvements required herein, shall include, but not be limited to, concrete curb and gutter, sidewalk, LED streetlights, signing and striping, and parkway landscaping.

5. The Applicant/Developer shall install a ramp and crosswalk on Chatham Street east of Ventura Avenue and appropriate parking restrictions for sight distance.

6. Existing parking restrictions along Eucalyptus Avenue and Amherst Avenue shall remain in place.

7. All landscaping, block walls, and other obstructions shall be compatible with the stopping sight distance requirements per City of Ontario Standard Drawing No. 1309.

8. The Applicant/Developer's engineer-of-record shall meet with City Engineering staff prior to designing and submitting for plan check the signing and striping design plans to define limits of improvements.

dt;

CITY OF ONTARIO
LANDSCAPE PLANNING DIVISION
303 East "B" Street, Ontario, CA 91764

CONDITIONS OF APPROVAL	
Sign Off	
	02/19/2025
Jamie Richardson, Sr. Landscape Architect	Date

Reviewer's Name:	Phone:
Jamie Richardson, Sr. Landscape Architect	**(909) 395-2615**

D.A.B. File No.:	Case Planner:
PDEV24-017, PMTT24-008, PSPA24-004 & PGPA24-003	Robert Morales

Project Name and Location:

Esperanza PA-11
South of Chatham, West of Clifton Street, East of Amherst Ave, North of Eucalyptus

Applicant/Representative:

Bassenian | Lagoni
2031 Orchard Drive, Suite 100
Newport Beach, CA 92660

☐	**Preliminary Plans (dated 01/28/2025) meet the Standard Conditions for New Development and have been approved considering that the following conditions below be met upon submittal of the landscape construction documents.**
☒	**Preliminary Plans (dated) have not been approved. Corrections noted below are required before Preliminary Landscape Plan approval.**

A RESPONSE SHEET IS REQUIRED WITH RESUBMITTAL OR PLANS WILL BE RETURNED AS INCOMPLETE.
DIGITAL SUBMITTALS MUST BE 10MB OR LESS.

Development Plan and Tract Map

Civil/ Site Plans

1. Sheet C-1.1 Section D-D: Show an 8' decomposed granite multipurpose trail.
2. Before permit issuance, stormwater infiltration devices located in landscape areas shall be reviewed and plans approved by the Landscape Planning Division. Any stormwater devices in parkway areas shall not displace street trees.
3. Show and dimension transformers set back 5' from paving all sides. Coordinate with landscape plans.
4. Show and dimension backflow devices set back 4' from paving on all sides. Locate on level grade. Relocate away from corners.
5. Locate utilities including light standards, fire hydrants, water, drain, and sewer lines to not conflict with required tree locations—coordinate civil plans with landscape plans.
6. Provide a utility clear space 8' wide in parkways and 30' apart for street trees. Move water meters, drain lines, and light standards to the utility minimum spacing and show utility lines at the edges of the parkway, toward the driveway apron, to allow space for street trees.
7. Finished grade shall be no more/no less than 8" from the stucco/plaster face of the wall.
8. Dimension, show and call out for step-outs at parking spaces adjacent to planters; a 12" wide monolithic concrete curb, DG paving or pavers with edging.
9. Show parking lot island tree planters 1 for every ten parking spaces and at each row end.
10. Identify that all landscape areas shall be HOA-maintained landscape.
11. Note and show on plans: all AC units shall be located in residential side yards, opposite the main back yard access path with gate, or a second gate and solid surface path on the opposite side shall be added for access.
12. Add Note to Grading and Landscape Plans: Landscape areas where compaction has occurred due to grading activities and where trees or stormwater infiltration areas are located

shall be loosened by soil fracturing. For trees, a 12'x12'x18" deep area; for stormwater infiltration, the entire area shall be loosened. Add the following information on the plans: The backhoe method of soil fracturing shall be used to break up compaction. A 4" layer of Compost is spread over the soil surface before fracturing is begun. The backhoe shall dig into the soil lifting and then drop the soil immediately back into the hole. The bucket then moves to the adjacent soil and repeats. The Compost falls into the spaces between the soil chunks created. Fracturing shall leave the soil surface quite rough with large soil clods. These must be broken by additional tilling. Tilling in more Compost to the surface after fracturing per the soil report will help create an A horizon soil. Imported or reused Topsoil can be added on top of the fractured soil as needed for grading. The Landscape Architect shall be present during this process and provide certification of the soil fracturing. For additional reference, see Urban Tree Foundation – Planting Soil Specifications.

Landscape Plans

13. Locate light standards, fire hydrants, water, and sewer lines to not conflict with required tree locations. Coordinate civil plans with landscape plans
14. Show all utilities on the landscape plans. Coordinate so utilities are clear of tree locations.
15. Locate trees for shade on in open turf areas, parking lots/end island fingers, seating areas, and paving, screen blank walls and adjacent properties where missing, accent trees to entries and driveways. Locate trees 50% of canopy width from walls, buildings, and existing trees.
16. Show 6' diameter of mulch only at new trees. Detail irrigation dripline outside of mulched root zone.
17. Overhead spray systems shall be designed for plant material less than the height of the spray head.
18. Show minimum on-site tree sizes per the Landscape Development standards; see the Landscape Planning website. 5% 48" box, 10% 36 box, 30% 24" box, 55% 15 gallon. Palms are not considered trees.
19. Show 25% of trees as California native (Platanus racemosa, Quercus agrifolia, Quercus wislizenii, Quercus douglasii, Cercis occidentalis, etc.) in appropriate locations.
20. Landscape construction plans shall meet the requirements of the Landscape Development Guidelines. See https://www.ontarioca.gov/Planning/Landscape
21. Provide phasing map for multi-phase projects.
22. After a project's entitlement approval, the applicant shall pay all applicable fees for landscape plan check and inspections at a rate established by resolution of the City Council.

Specific Plan Amendment

23. Change any "New Model Colony" references to "Ontario Ranch." Page 7.6, 7.15.1 #2. Public Maintenance.
24. Pg. 8.61 & 8.64, All Exhibits: Verify with Engineering if "Pedestrian Entry Portal Gateway" and "Pedestrian Entry Monument" will be permitted within the ROW. Page 8.63, Exhibit 42, Primary Community Entry and Monumentation – Hamner Avenue.

BUILDING DEPARTMENT

CITY OF ONTARIO

303 East B Street, Civic Center, Ontario, CA 91764

Phone (909)395-2023, Fax (909)395-2180

DEVELOPMENT PLAN REVIEW (DPR) COMMENTS

Planning Case File No(s):	PGPA24-003_PSPA24-004_PMTT24-008_PDEV24-017	Submittal No: 1
Case Planner:	Robert Morales	
Applicant:		
APN(s):	*1073-101-050*	
Location:		
Project Description:	*An Amendment to the Land Use Element of the Policy Plan (General Plan) component of The Ontario Plan, changing the land use designation on 13.2 acres of land from PS (Public School) to MDR (Medium Density Residential), An Amendment to the Esperanza Specific Plan, changing the land use designation on 13.2 acres of land from PS (Public School) to MDR (Medium Density Residential), A Tentative Tract Map for Common Interest Subdivision purposes, to subdivide 13.2 acres of land into 28 numbered lots and 15 lettered lots, A Development Plan to construct 161 multiple-family dwellings on approximately 13.2 acres of land generally located South of Chatham Street, West of Clifton Street, East of Amherst Avenue, and North of Eucalyptus Avenue, within Planning Area 11 of the Esperanza Specific Plan (APN(s): 1073-101-050)*	

Reviewed By:	Ganda, S.	Phone: (909)395-2174 E-mail: sganda@ontarioca.gov	Date: 10/7/2024

The following are Standard Building Department Conditions of Approval.
Items with checked boxes are applicable to this Project:

Specific Conditions:

1) -

Specific Comments:
(Note: These comments are NOT Conditions)

1) -

GENERAL CONDITIONS		
☐	1	The address for the project is:
☑	2	Prior to, or at the time of plan check submittal, provide a site plan showing all buildings and the addresses assigned to them as stipulated in (1) above, and a list of these buildings and their assigned addresses on 8-1/2" x 11" paper.
☑	3	Structures must be designed for 110-mph wind exposure C (per City Ordinance).
☑	4	Shall comply with the latest adopted edition of the following codes as applicable: A. California Building Code B. California Residential Code C. California Existing Building Code D. California Electrical Code E. California Mechanical Code F. California Plumbing Code G. California Energy Code. H. California Fire Code I. California Green Building Standards Code.
☑	5	The property owner/business operator shall comply with all applicable City of Ontario Municipal Codes and Ordinances.
☐	6	The requirements of the Department of Environmental Health Services and the Air Quality Management District shall be satisfied prior to the issuance of any permit if hazardous materials are stored and/or used.
☑	7	Pursuant to the California Business and Professions Code Section 6737, most projects are required to be designed by a California Licensed Architect or Engineer. The project owner or developer should review the section of the California Codes and comply with the regulation.
☑	8	All perimeter/boundary walls/fences shall be designed and constructed so that the outer/exterior face of the wall/fence is as close as possible to the lot line. In any case, the outer/exterior face of the wall shall be within two (2) inches of the lot line. Distances greater than two (2) inches may be approved prior to construction by the Building Official on a case-by-case basis for extenuating circumstances.
☐	9	All lot lines, easement lines, etc. shall be located and/or relocated in such a manner as to not cause any existing structure to become nonconforming with the requirements of the latest adopted edition of the Building Code, or any other applicable law, ordinance, or code.
	10	Non-buildable easement(s) needed for this project. Show on plans and provide easement(s) prior to building permits.
☑	11	The Developer/Owner is responsible for the coordination of the final occupancy. The Developer/Owner shall obtain clearances from each reviewing department and division prior to requesting a final building inspection from the Building Department. Each reviewing department shall sign off in the Building Department permit software.
☐	12	All signs shall be Underwriters Laboratories, or equal, approved.
☐	13	Permits are required prior to the removal and/or demolition of structures.
☐	14	In addition to approval from Building Department, approval is required from the County of San Bernardino, Department of Public Health and the California Regional Water Quality Control Board, Santa Ana Region for the Private Sewage Disposal System.
☐	15	The existing private sewage system will have to be modified as required to accommodate the new use. Plans and/or supporting data will have to be submitted to, and approved by, the Building Department regarding the new use and necessary modifications. Additionally, approval from the Regional Water Quality Control Board, Santa Ana Region, is required for the new use.
☐	16	The coach shall bear a State of California, Department of Housing and Community Development (HCD) insignia indicating the occupancy group and design loads that the coach conforms to, and other relevant information regarding exiting, fire safety, electrical, plumbing and mechanical. The foundation system, porch and awning shall comply with plans that bear the HCD "Standard Plan

		Approval" stamp. The coach, foundation system, porch and awning shall comply with the City of Ontario's design loads and site-specific conditions.
☐	17	The conversion of the existing single-family dwelling(s) into a commercial use changes the occupancy group classification, and therefore the existing buildings must be made to comply with the requirements of all applicable codes for the new occupancy classification. Complete plans, calculations and other specifications shall be submitted to the Building Department for review, approval and subsequent permit issuance. The plans, calculations and other specifications shall be prepared by an Architect or Registered Civil/Structural Engineer licensed by the State of California who is qualified to perform said wo
☐	18	The site, or a portion of the site, is in a flood hazard area. Justification that the proposed development does not adversely affect the location or carrying capacity of the floodway, nor does it adversely affect upstream or downstream sites shall be provided to Building Department. Additionally, all provisions must be taken to protect the site from flood damage.
☐	19	All exterior lighting shall be orientated, directed, and/or shielded as much as possible so that direct illumination does not infringe onto adjoining properties
☑	20	Site facilities such as parking open or covered, recreation facilities, and trash dumpster areas, and common use areas shall be accessible per the CBC, Chapter 11.
☑	21	Trash Enclosure shall be covered, and the interior clearances shall be designed to accommodate the following: • 4' min. side access entrance • 3' min. wide clear pathway along rear of enclosure between trash bins and back wall. • Trash bins must be oriented sideways to allow access from the narrow dimension. • Use of curbs or wheel stops shall be provided within the enclosure to maintain access clearances and bin orientations.
☑	22	The applicant/developer shall include the conditions of approval of this resolution on the construction plans.
☑	23	Site development and grading shall be designed to provide access to all entrances and exterior ground floors exits and access to normal paths of travel, and where necessary to provide access. Paths of travel shall incorporate (but not limited to) exterior stairs, landings, walks and sidewalks, pedestrian ramps, curb ramps, warning curbs, detectable warning, signage, gates, lifts and walking surface materials. The accessible route(s) of travel shall be the most practical direct route between accessible building entrances, site facilities, accessible parking, public sidewalks, and the accessible entrance(s) to the site, California Building Code, (CBC) Chapter 11, Sec, 11A and 11B.
☐	24	Commercial/Industrial gated site must have at least one pedestrian emergency gate, 3'-0' x 6'-8" min. gate size, equipped with panel hardware on the inside, and gate must swing out. Pedestrian emergency gates can be installed integrated with vehicular gates.
☑	25	New residential single-family dwelling (SFD's): • The side yard gate must swing out toward the street. • The gas meter shall not obstruct side yard access gates. • Air Conditioning unit located at side yard shall maintain 3' min. clearance from property line wall to AC unit. • Provide a continuous concrete walk between garage side door to driveway or sidewalk.
☑	26	New development projects located in the Ontario Ranch specific plan are required to submit a **methane assessment report**. This report shall be submitted to the Building Department for review and approval at grading plan submittal. Comply with the METHANE ASSESSMENT FOR PROJECTS IN THE ONTARIO RANCH SPECIFIC PLAN guideline. This guideline is available on the Building Department website
☐	27	If hazardous substances are used and/or stored, a technical opinion and report, identifying and developing methods of protection from the hazards presented by the hazardous materials may be required. This report shall be prepared by a qualified person, firm, or corporation and submitted to Building Department. This report shall also explain the proposed facility's intended methods of

		operation and list all of the proposed materials, their quantities, classifications, and the effects of any chemical (material) intermixing in the event of an accident or spill.
☐	28	The property owner/business operator shall provide a grease interceptor at a location where it shall be easily accessible for inspection, cleaning, and removal of accumulated grease. The sizing and installation shall conform to the current California Plumbing Code. The grease interceptor shall be constructed in accordance with plans approved by the Director of Public Works and the Building Official. The property owner/business operator shall contract with a maintenance company for maintenance and cleaning of the grease interceptor.
☑	29	Onsite private sewer, domestic water, and storm drainage systems shall be designed in accordance with the CPC/UPC requirements, including but not limited to, the sizing of pipes. These systems must be reviewed, approved, and inspected by the Building Department. Design standards used by other departments for off-site sewer, water, and storm drainage systems shall not be used for such onsite systems.
☑	30	The design for public domestic water, sewer, and storm drainage on any private streets shall be reviewed and approved by the Engineering Department. Such design need not be submitted to the Building Department for approval.
☐	31	Conditions of approvals shall be reproduced onto the plans submitted for permits.
☑	32	Development Impact fees are due on this project at permit issuance
☑	33	Provide accessible path of travel between buildings.
☑	34	When submitting permit applications for new single-family dwellings master/stock plan in the New Model Colony, a table summarizing lots/tract, models, square footage, and number of plumbing fixtures, electrical, and mechanical shall be included on the plan.
☑	35	When submitting permit applications for production homes, include two sets of site plans showing the setback from property lines and the model number/type.
SITE CONSTRUCTION REQUIREMENTS		
☑	36	All construction sites must be protected by a security fence and screening. The fencing and screening shall always maintained to protect pedestrians
☑	37	Temporary toilet facilities shall be provided for construction workers. The toilet facilities shall be maintained in a sanitary condition. Construction toilet facilities of the non-sewer type shall conform to ANSI ZA.3
☑	38	Construction projects which require temporary electrical power shall obtain an Electrical Permit from Building Department. No temporary electrical power will be granted to a project unless one of the following items is in place and approved by Building Department and the Planning Department. (A) Installation of a construction trailer, or (B) Security fenced area where the electrical power will be located
☑	39	Installation of construction/sales trailers must be located on private property. No trailers can be in the public street right of way.
☑	40	Any temporary building, trailer, commercial coach, etc. installed and/or used in connection with a construction project shall comply with City Code.
☑	41	Prior to issuance of a Building Permit all of the following must be in place: portable toilet with hand wash station, all BMP's, fencing and signage on each adjacent street saying "If there is any dust or debris coming from this site please contact (superintendent number here) or the AQMD if the problem is not being resolved" or something similar to this.
PRIOR TO ISSUANCE OF BUILDING/CONSTRUCTION PERMITS		
☑	42	The following grading items shall be completed and/or submitted – as applicable – prior to the issuance of building permits for this project: A. Precise grading plans shall be approved B. Rough grading completed

		C. Compaction certification completed D. Pad elevation certification completed E. Rough grade inspection signed off by a City's Building
☑	43	Prior to the issuance of a Building Permit, the applicant shall pay all Development Improvement Fees to the City. Copies of receipts shall be provided to the Building Department prior to permit issuance.
☑	44	The Tract or Parcel map shall be recorded prior to the issuance of any permits.
☐	45	The existing parcels shall be combined into a single parcel, or a lot line adjustment shall be done so that the proposed structure(s) does not cross any lot line and complies with all requirements of the California Building Code, prior to any building permits being issued.
☑	46	Fire sprinklers, fire alarm systems and fire hydrant plans shall be submitted for plan review concurrently with building plans and shall be approved prior to permit issuance.
☑	47	Prior to issuance of Building Permits, school fees need to be paid to school district where project is located.

CITY OF ONTARIO
MEMORANDUM

TO: **Robert Morales, Associate Planner**
Planning Department

FROM: **Paul Ehrman, Sr. Deputy Fire Chief/Fire Marshal**
Fire Department

DATE: **September 19, 2024**

SUBJECT: **PDEV24-017 - A Development Plan to construct 161 multiple-family dwellings on approximately 13.2 acres of land generally located South of Chatham Street, West of Clifton Street, East of Amherst Avenue, and North of Eucalyptus Avenue, within Planning Area 11 of the Esperanza Specific Plan (APN(s): 1073-101-050). Related File(s): PGPA24-003, PSPA24-004, PMTT24-008.**

☒ The plan **does** adequately address Fire Department requirements at this time.

☒ Standard Conditions of Approval apply, as stated below.

SITE AND BUILDING FEATURES:

A. 2022 CBC Type of Construction: Type V-B

B. Type of Roof Materials: Ordinary

C. Ground Floor Area(s): Varies

D. Number of Stories: 2 + 3

E. Total Square Footage: Varies, Approx. 1,600 Sq. Ft.

F. 2022 CBC Occupancy Classification(s): R3

CONDITIONS OF APPROVAL:

1.0 GENERAL

☒ 1.1 The following are the Ontario Fire Department ("Fire Department") requirements for this development project, based on the current edition of the California Fire Code (CFC), and the current versions of the Fire Prevention Standards ("Standards.") It is recommended that the applicant or developer transmit a copy of these requirements to the on-site contractor(s) and that all questions or concerns be directed to the Bureau of Fire Prevention, at (909) 395-2029. For copies of Ontario Fire Department Standards please access the City of Ontario web site at www.ontarioca.gov/Fire/Prevention.

☒ 1.2 These Fire Department conditions of approval are to be included on any and all construction drawings.

2.0 FIRE DEPARTMENT ACCESS

☒ 2.1 Fire Department vehicle access roadways shall be provided to within one hundred and fifty feet (150') of all portions of the exterior walls of the first story of any building, unless specifically approved. Roadways shall be paved with an all-weather surface and shall be a minimum of twenty-four (24) ft. wide. See Standard #B-004.

☒ 2.2 In order to allow for adequate turning radius for emergency fire apparatus, all turns shall be designed to meet the minimum twenty-five feet (25') inside and forty-five feet (45') outside turning radius per Standard #B-005.

☒ 2.3 Fire Department access roadways that exceed one hundred and fifty feet (150') in length shall have an approved turn-around per Standard #B-002.

☒ 2.4 Access drive aisles which cross property lines shall be provided with CC&Rs, access easements, or reciprocating agreements, and shall be recorded on the titles of affected properties, and copies of same shall be provided at the time of building plan check.

☒ 2.5 "No Parking-Fire Lane" signs and /or red painted curbs with lettering are required to be installed in interior access roadways, in locations where vehicle parking would obstruct the minimum clear width requirement. Installation shall be per Standard #B-001.

☒ 2.6 Security gates or other barriers on fire access roadways shall be provided with a Knox brand key switch or padlock to allow Fire Department access. See Standards #B-003, B-004 and H-001.

☒ 2.7 Any time PRIOR to on-site combustible construction and/or storage, a minimum twenty-four feet (24') wide circulating all weather access roads shall be provided to within one hundred and fifty feet (150') of all portions of the exterior walls of the first story of any building, unless specifically approved by fire department and other emergency services.

3.0 WATER SUPPLY

☒ 3.1 The required fire flow per Fire Department standards, based on the 2019 California Fire Code, Appendix B, is 1500 gallons per minute (g.p.m.) for 2 hours at a minimum of 20 pounds per square inch (p.s.i.) residual operating pressure.

☒ 3.2 Off-site (public) fire hydrants are required to be installed on all frontage streets, at a maximum spacing of three hundred feet (300') apart, on alternating sides of the street. Streets with a center median shall require public hydrants spaced five hundred feet (500') apart, on the same side of the street.

☒ 3.4 The water supply, including water mains and fire hydrants, shall be tested and approved by the Engineering Department and Fire Department prior to combustible construction to assure availability and reliability for firefighting purposes.

4.0 FIRE PROTECTION SYSTEMS

☒ 4.1 On-site private fire hydrants are required per Standard #D-005, and identified in accordance with Standard #D-002. Installation and locations(s) are subject to the approval of the Fire Department. An application with detailed plans shall be submitted, and a construction permit shall be issued by the Fire Department, prior to any work being done.

☒ 4.2 Underground fire mains which cross property lines shall be provided with CC & R, easements, or reciprocating agreements, and shall be recorded on the titles of affected properties, and copies of same shall be provided at the time of fire department plan check. The shared use of private fire mains or fire pumps is allowable only between immediately adjacent properties and shall not cross any public street.

☒ 4.3 An automatic fire sprinkler system is required. The system design shall be in accordance with National Fire Protection Association (NFPA) Standard 13. All new fire sprinkler systems, except those in single family dwellings, which contain twenty (20) sprinkler heads or more shall be monitored by an approved listed supervising station. An application along with detailed plans shall be submitted, and a construction permit shall be issued by the Fire Department, prior to any work being done.

☒ 4.4 Wood frame buildings that are to be sprinkled shall have these systems in service (but not necessarily finaled) before the building is enclosed.

☒ 4.7 Portable fire extinguishers are required to be installed prior to occupancy per Standard #C-001. Please contact the Fire Prevention Bureau to determine the exact number, type and placement required.

5.0 BUILDING CONSTRUCTION FEATURES

☒ 5.1 The developer/general contractor is to be responsible for reasonable periodic cleanup of the development during construction to avoid hazardous accumulations of combustible trash and debris both on and off the site.

☒ 5.2 Approved numbers or addresses shall be placed on all new and existing buildings in such a position as to be plainly visible and legible from the street or road fronting the property. Multi-tenant or building projects shall have addresses and/or suite numbers provided on the rear of the building. Address numbers shall contrast with their background. See Section 9-1 6.06 of the Ontario Municipal Code and Standards #H-003 and #H-002.

☒ 5.3 Single station smoke alarms and carbon monoxide alarms are required to be installed per the California Building Code and the California Fire Code.

☒ 5.4 Multiple unit building complexes shall have building directories provided at the main entrances. The directories shall be designed to the requirements of the Fire Department, see Section 9-1 6.06 of the Ontario Municipal Code and Standard #H-003.

☒ 5.5 All residential chimneys shall be equipped with an approved spark arrester meeting the requirements of the California Building Code.

☒ 5.6 Knox ® brand key-box(es) shall be installed in location(s) acceptable to the Fire Department. All Knox boxes shall be monitored for tamper by the building fire alarm system. See Standard #H-001 for specific requirements.

CITY OF ONTARIO
MEMORANDUM

FROM: **Heather Lugo, MA, Police Department**

DATE: **September 9, 2025**

SUBJECT: **PDEV24-017 - A Development Plan to construct 161 multiple-family dwellings on approximately 13.2 acres of land generally located South of Chatham Street, West of Clifton Street, East of Amherst Avenue, and North of Eucalyptus Avenue, within Planning Area 11 of the Esperanza Specific Plan (APN(s): 1073-101-050). Related File(s): PGPA24-003, PSPA24-004, PMTT24-008.**

The "Standard Conditions of Approval" contained in Resolution No. 2017-027 apply. The applicant shall read and be thoroughly familiar with these conditions, including, but not limited to, the requirements below.

- Required lighting for all walkways, driveways, doorways, parking lots, hallways and other areas used by the public shall be provided. Lights shall operate via photosensor. Planned landscaping shall not obstruct lighting.
- The Applicant shall comply with construction site security requirements as stated in the Standard Conditions.
- All exterior electrical outlets in common areas shall be secured and locked (if accessible to the public).
- All exterior water spigots / water supply sources in common areas shall be secured and locked (if accessible to the public).
- Trash enclosure (if applicable) shall be fully secured/enclosed by locks, mesh, and screen grate to reduce crime and encampment opportunities for homeless persons.

The Applicant is invited to contact Heather Lugo at (909) 408-1074 with any questions or concerns regarding these conditions.

RESOLUTION NO. _____

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF ONTARIO, CALIFORNIA, APPROVING THE USE OF AN ADDENDUM TO THE ONTARIO PLAN 2050 SUPPLEMENTAL ENVIRONMENTAL IMPACT REPORT, IN ACCORDANCE WITH THE CALIFORNIA ENVIRONMENTAL QUALITY ACT, AS AMENDED, FOR FILE NOS. PGPA24-003 AND PSPA24-004.

WHEREAS, GDC Investments 13, LP (Applicant) filed an Applications for the following: [1] An General Plan Amendment (File No. PGPA24-003) to The Ontario Plan (TOP) 2050 Policy Plan (General Plan) Land Use Map to change the land use designation on approximately 10.02 acres of land, located south of Chatham Street, west of Clifton Avenue, east of Amherst Avenue, and north of Eucalyptus Avenue, from Public School to Medium Density Residential; [2] A Specific Plan Amendment (File No. PSPA24-004) to the Esperanza Specific Plan to revise the specific plan for consistency with TOP Policy Plan (General Plan) Land Use Map. The amendment includes [i] revising the allowed uses within Planning Area 11 from School to RD-7/Row Townhomes; and [ii] modifying the Specific Plan land use map, development standards, exhibits, and text to reflect the proposed land use changes; and

WHEREAS, the City of Ontario certified the Environmental Impact Report prepared for TOP and associated Statement of Overriding Considerations, and issued Resolution No. 2010-003; and

WHEREAS, the City of Ontario adopted the Policy Plan (General Plan) as part of the component framework for TOP on January 27, 2010, and issued Resolution No. 2010-004; and

WHEREAS, the City of Ontario certified the Supplemental Environmental Impact Report (SEIR), for the General Plan Amendment for TOP 2050 Technical Update on August 16, 2022; and

WHEREAS, TOP 2050 Supplemental Environmental Impact Report (SEIR)(State Clearinghouse No. 2021070364) was certified on August 16, 2022 (hereinafter referred to as Certified SEIR), in which development and use of the Project site was discussed; and

WHEREAS, the Planning Director of the City of Ontario has prepared and approved for attachment to the certified Environmental Impact Report, an Addendum to the Certified SEIR (hereinafter referred to as "SEIR Addendum") in accordance with the requirements of the California Environmental Quality Act of 1970, together with State and local guidelines implementing said Act, all as amended to date (collectively referred to as "CEQA"); and

WHEREAS, the SEIR Addendum concluded that implementation of the Project could result in a number of significant effects on the environment that were previously analyzed in the Certified SEIR, and that the Certified SEIR identified mitigation measures that would reduce each of those significant effects to a less-than-significant level; and

WHEREAS, pursuant to State CEQA Guidelines Section 15164(a), a lead agency shall prepare an addendum to a previously certified SEIR if some changes or additions are necessary to a project, but the preparation of a subsequent or supplemental SEIR is not required; and

WHEREAS, the City determined that none of the conditions requiring preparation of a subsequent or supplemental SEIR would occur from the Project, and that preparation of an Addendum to the Certified SEIR was appropriate; and

WHEREAS, on September 23, 2025, the Planning Commission of the City of Ontario conducted a hearing to consider the Addendum and concluded said hearing on that date, voting to issue Resolution No. PC25-047 recommending that the City Council concluded that none of the conditions requiring preparation of a subsequent or supplemental SEIR have occurred, and further recommending that the City Council take actions on the Project in compliance with CEQA and state and local guidelines implementing CEQA; and

WHEREAS, the City of Ontario is the lead agency on the Project, and the City Council is the decision-making authority for the requested approval to construct and otherwise undertake the Project; and

WHEREAS, the City Council has reviewed and considered the SEIR Addendum for the Project, has concluded that none of the conditions requiring preparation of a subsequent or supplemental SEIR have occurred, and intends to take actions on the Project in compliance with CEQA and state and local guidelines implementing CEQA; and

WHEREAS, the SEIR Addendum for the Project are on file in the Planning Department, located at 303 East B Street, Ontario, CA 91764, are available for inspection by any interested person at that location and are, by this reference, incorporated into this Resolution as if fully set forth herein; and

WHEREAS, all legal prerequisites to the adoption of this Resolution have occurred.

NOW, THEREFORE, IT IS HEREBY FOUND, DETERMINED, AND RESOLVED by the City Council of the City of Ontario, as follows:

SECTION 1: ***Environmental Determination and Findings.*** As the decision-making authority for the Project, The City Council has reviewed and considered the information contained in the administrative record for the Project. Based upon the facts and information contained in the administrative record, including all written and oral evidence presented to the City Council, the City Council finds as follows:

(1) The environmental impacts of this Project were reviewed in conjunction with an Addendum to TOP 2050 Supplemental Environmental Impact Report (SEIR)(State Clearinghouse No. 2021070364), certified by the Ontario City Council on August16, 2022, in conjunction with File No. PGPA20-002; and

(2) The SEIR Addendum and administrative record have been completed in compliance with CEQA, the State CEQA Guidelines, and the City of Ontario Local CEQA Guidelines; and

(3) The City's "Guidelines for the Implementation of the California Environmental Quality Act (CEQA)" provide for the use of a single environmental assessment in situations where the impacts of subsequent projects are adequately analyzed. This Application introduces no new significant environmental impacts; and

(4) All previously adopted mitigation measures shall be a condition of project approval, as they are applicable to the Project, and are incorporated herein by this reference; and

(5) The SEIR Addendum contains complete and accurate reporting of the environmental impacts associated with the Project, and reflects the independent judgment of the City Council; and

(6) There is no substantial evidence in the administrative record supporting a fair argument that the project may result in significant environmental impacts.

SECTION 2: ***Additional Environmental Review Not Required.*** Based on the Addendum, all related information presented to the City Council, and the specific findings set forth in Section 1, above, the City Council finds that the preparation of a subsequent or supplemental Environmental Impact Report is not required for the Project, as the Project:

(1) Does not constitute substantial changes to the Certified SEIR that will require major revisions to the Certified SEIR due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified significant effects; and

(2) Does not constitute substantial changes with respect to the circumstances under which the Certified SEIR was prepared, that will require major revisions to the Certified SEIR due to the involvement of new significant environmental effects or a substantial increase in the severity of the previously identified significant effects; and

(3) Does not contain new information of substantial importance that was not known and could not have been known with the exercise of reasonable diligence at the time the Certified SEIR was certified/adopted, that shows any of the following:

(a) The project will have one or more significant effects not discussed in the Certified SEIR; or

(b) Significant effects previously examined will be substantially more severe than shown in the Certified SEIR; or

(c) Mitigation measures or alternatives previously found not to be feasible would in fact be feasible and would substantially reduce one or more significant effects of the Project, but the City declined to adopt such measures; or

(d) Mitigation measures or alternatives considerably different from those analyzed in the Certified SEIR would substantially reduce one or more significant effects on the environment, but which the City declined to adopt.

SECTION 3: ***City Council Action.*** Based upon the findings and conclusions set forth in Sections 1 and 2, above, the City Council hereby finds that based upon the entire record of proceedings before it, and all information received, that there is no substantial evidence that the Project will constitute substantial changes to the Certified SEIR, and does hereby approve the SEIR Addendum, attached hereto as "Attachment A," and incorporated herein by this reference.

SECTION 4: ***Indemnification.*** The Applicant shall agree to defend, indemnify and hold harmless, the City of Ontario or its agents, officers, and employees from any claim, action or proceeding against the City of Ontario or its agents, officers or employees to attack, set aside, void, or annul this approval. The City of Ontario shall promptly notify the applicant of any such claim, action, or proceeding, and the City of Ontario shall cooperate fully in the defense.

SECTION 5: ***Custodian of Records.*** The documents and materials that constitute the record of proceedings on which these findings have been based are located at the City of Ontario City Hall, 303 East "B" Street, Ontario, California 91764. The custodian for these records is the City Clerk of the City of Ontario.

PASSED, APPROVED, AND ADOPTED this 4th day of November 2025.

_____
PAUL S. LEON, MAYOR

ATTEST:

_____
SHEILA MAUTZ, CITY CLERK

APPROVED AS TO FORM:

_____
BEST BEST & KRIEGER LLP
CITY ATTORNEY

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

I, SHEILA MAUTZ, City Clerk of the City of Ontario, DO HEREBY CERTIFY that foregoing Resolution No. 2025- was duly passed and adopted by the City Council of the City of Ontario at their regular meeting held November 4, 2025, by the following roll call vote, to wit:

AYES: COUNCIL MEMBERS:

NOES: COUNCIL MEMBERS:

ABSENT: COUNCIL MEMBERS:

_____
SHEILA MAUTZ, CITY CLERK

(SEAL)

The foregoing is the original of Resolution No. 2025- duly passed and adopted by the Ontario City Council at the regular meeting held November 4, 2025.

_____
SHEILA MAUTZ, CITY CLERK

(SEAL)

ATTACHMENT A:

Addendum to The Ontario Plan 2050 Supplemental Environmental Impact Report (State Clearinghouse No. 2021070364)

(Addendum to follow this page)

Addendum to
The Ontario Plan 2050 Supplemental Environmental Impact Report

(State Clearinghouse No. 2021070364)

for the
Esperanza PA-11 SPA

(File No(s).: PPA24-0139, PGPA24-004, PSPA24-004, PDEV24-017, PMTT24-008, PDA25-003)

Prepared for:

City of Ontario
303 East B Street
Ontario, CA 91764

Prepared by:

T&B Planning, Inc.
3200 El Camino Real, Suite 100
Irvine, CA 92602

May 2025

1. Project Title/File Nos.: Esperanza PA-11 SPA/File Nos.: PPA24-0139, PGPA24-004, PSPA24-004, PDEV24-017, PMTT24-008, PDA25-003

2. Lead Agency: City of Ontario-Planning Department, 303 East B Street, Ontario, CA 91764

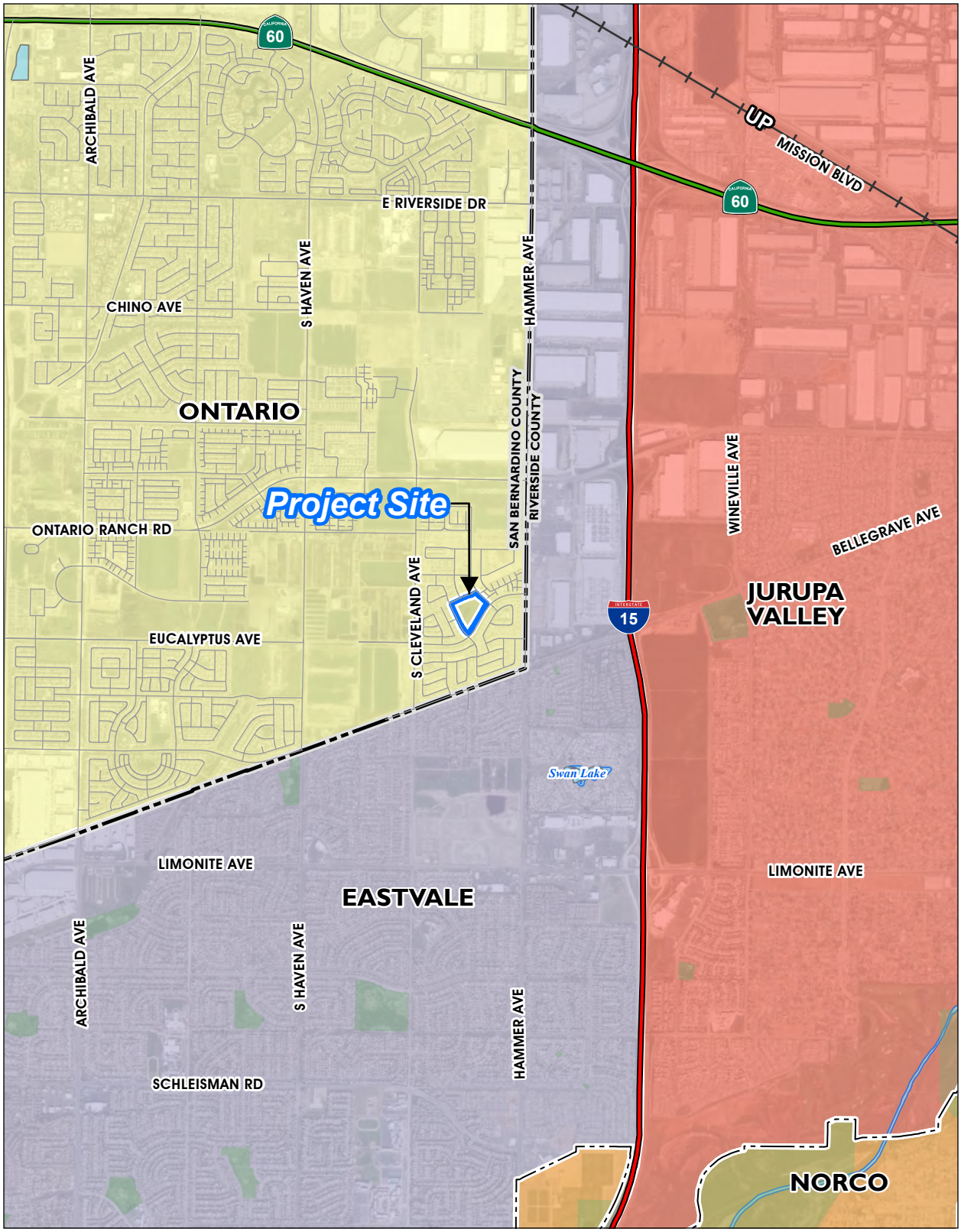
3. Contact Person: Robert Morales, Phone: (909) 395-2432, Email: rmorales@ontarioca.gov

4. Project Sponsor: GDC Investments 14, LP; 12770 El Camino Real, Suite 220, San Diego, CA 92130

5. Project Location: The Project site is located in southwestern San Bernardino County, within the City of Ontario. Ontario is located approximately 40 miles from downtown Los Angeles, 20 miles from downtown San Bernardino, and 30 miles from Orange County. Please refer to Figure 1, *Regional Location Map.* As shown in Figure 2, *Aerial Site Photograph*, the Project site is bound by Eucalyptus Avenue to the south, South Amherst Avenue to the west, Chatham Street to the north, and Clifton Avenue to the east. Regional access is provided via Interstate 15 (I-15) and State Route 60 (SR-60).

6. Policy Plan (General Plan) Designation: Existing - Public School (PS); Proposed – Medium Density Residential (MRD).

7. Zoning Designation: Existing – School under the Ontario Esperanza Specific Plan; Proposed – Planning Area 11 (RD-7 / Row Townhomes of the Esperanza Specific Plan

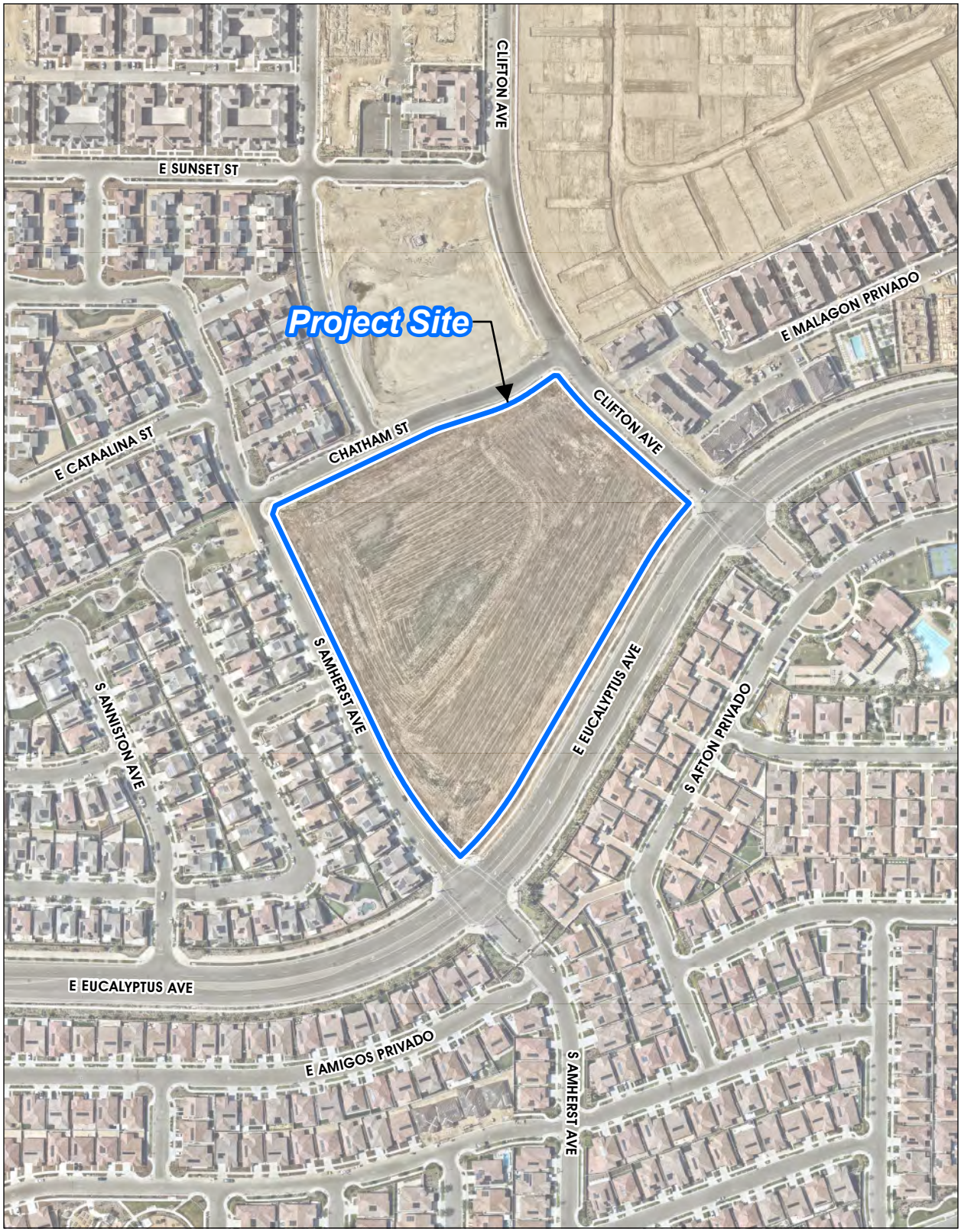


Source(s): ESRI, NearMap Imagery (May 2024), SB County (2024), RCIT (2024)

Figure 1

0 875 1,750 3,500 Feet

Regional Location Map



Source(s): ESRI, NearMap Imagery (May 2024)

Figure 2

0 75 150 300 Feet

Aerial Site Photograph

8. Description of Project: The Project proposed the following entitlements:

    1. A General Plan Amendment (File No. PGPA24-004) to change the land use designation of the Project site from Public School (PS) to Medium Density Residential (MDR).

    2. A Specific Plan Amendment (File No. PSPA24-004) to the Ontario Ezperanza Specific Plan (adopted on February 6, 2007) to change the land use designation of approximately 10.02 net acres of land from School to MDR 25. The amended Specific Plan is presented as Appendix A to this Addendum.

    3. A Development Plan (File No. PDEV24-017) to construct 161 multi-family residential units on approximately 10.02 net acres (APN: 1073-101-05). The Project would also include amenities including a pool/spa, playground, shaded barbecue/picnic area, fitness stations, and open turf areas. Refer to Figure 3, *Site Plan*.

    4. Tentative Parcel Map (File No. PMTT24-008).

    5. Development Agreement (PDA25-003) between the City of Ontario and the Project Applicant pursuant to California Government Code Sections 65864 et seq.

    Building Characteristics and Operations

    The Project proposes a mix of 2-story (69) and 3-story (92) units. Units would range in size from 1,350 to 1,717 square feet. Representative elevations of each building type are presented in Figures 4 and 5. Although color schemes would vary on each of the buildings, the color palette of the Project features neutral building tones, accented with siding, stucco, and wall tile accents. Buildings would range from approximately 28’ to 39’ high.

    Circulation and Parking

    Vehicular access will be provided via a driveway off of Chatham Street and another off Amherst Avenue. The Project also includes a total of 433 parking spaces, comprised of 322 garage spaces, 45 uncovered spaces, 17 driveway spaces, and 49 off-site parallel spaces.

Site Summary:

2- & 3-Story Row Townhomes

Total Homes

2-Story Townhome	: 69
3-Story Townhome	: 92
Total	: 161

Gross Site Area	: ± 10.02 Acres
Gross Density	: ± 16.1 Homes per Acre

Parking Required:

2.5 Spaces / 3BR x 161	: 403
1.0 Guest Space / 6 Units x 161	: 27
Total Required	: 430 (2.67:1)

Parking Provided:

Garage Spaces	: 322
Uncovered Spaces	: 45
Driveway Spaces	: 17
Parallel Spaces (Off-site)	: 49
Total Provided	: 433 (2.69:1)

Open Space:

Private Open Space Required:

150 SF / Unit x 161	: 24,150 SF
Total Required	: 24,150 SF
Provided	: 37,149 SF

Common Open Space Required:

250 SF / Unit x 161	: 40,250 SF
Total Required	: 40,250 SF
Provided	: 58,878 SF

Total Open Space Required	: 64,400 SF
Total Open Space Provided	: 96,027 SF

Private Courtyard Areas

- Unit 1 : 249 SF min.
- Unit 2 : 234 SF min.
- Unit 3 : 191 SF min.
- Unit 4 : 289 SF min.
- Unit 4 ACC : 300 SF min.
- Unit 5 : 221 SF min.
- Unit 6 : 152 SF min.

Source(s): Bassenian Lagoni Architects (01-24-2025)

Figure 3

Not to Scale

Site Plan

Not to Scale

FRONT (TYPICAL PASEO ELEV.)

REAR (TYPICAL INTERNAL LOOP RD. ELEV.)

Source(s): Bassenian Lagoni Architects (01-24-2025)

Figure 4

Not to Scale

Building Elevations – Two Story

FRONT (TYPICAL PASEO ELEV.)

REAR (TYPICAL ALLEY ELEV.)

Source(s): Bassenian Lagoni Architects (01-24-2025)

Figure 5

Not to Scale

Building Elevations – Three Story

Landscaping, Walls, and Lighting

The landscape concept proposes California-friendly plant materials consistent with the Esperanza Specific Plan. As depicted in Figure 6, *Landscape Plan*, a variety of trees, shrubs, accent plants, and ground cover are proposed along the perimeter of the Project site, and throughout the community. A total of 494 trees are proposed on-site. Accent specimen 36" box and 48" box trees would be provided at corners and entries. Consistent with City standards, 25 percent of tree species planted on-site would be California natives.

The Project would construct a 6-foot community theme wall along Eucalyptus Avenue. Corner entry monuments would be implemented at the corners of Eucalyptus Avenue/Amherst Avenue and Eucalyptus Avenue/Clifton Avenue. The Project's primary entry off Chatham Street would be flanked by entry monuments on either side.

Exterior lighting would be installed on-site, as necessary, for safety, security, and wayfinding. Decorative architectural lighting as well as landscape lighting would also be installed to accent building entries as focal points throughout the site. Ornamental landscaping, lighting, walls, and utility infrastructure improvements/connections would be installed per compliance with the City's Municipal Code.

Infrastructure Improvements

Currently, the Project site is fully graded. Adjacent streets have been previously constructed, and no off-site roadways are anticipated as part of the Project. Peripheral improvements such as sidewalk and curb upgrades will be completed as part of the Project. Utility stubs currently exist adjacent to the site.

Water service to the Project site would be provided by the Ontario Municipal Utilities Company (OMUC). The Project on-site water system would connect to existing 8-inch water lines in Amherst Avenue and Chatham Street adjacent to the site. See Figure 7, *Water Plan*.

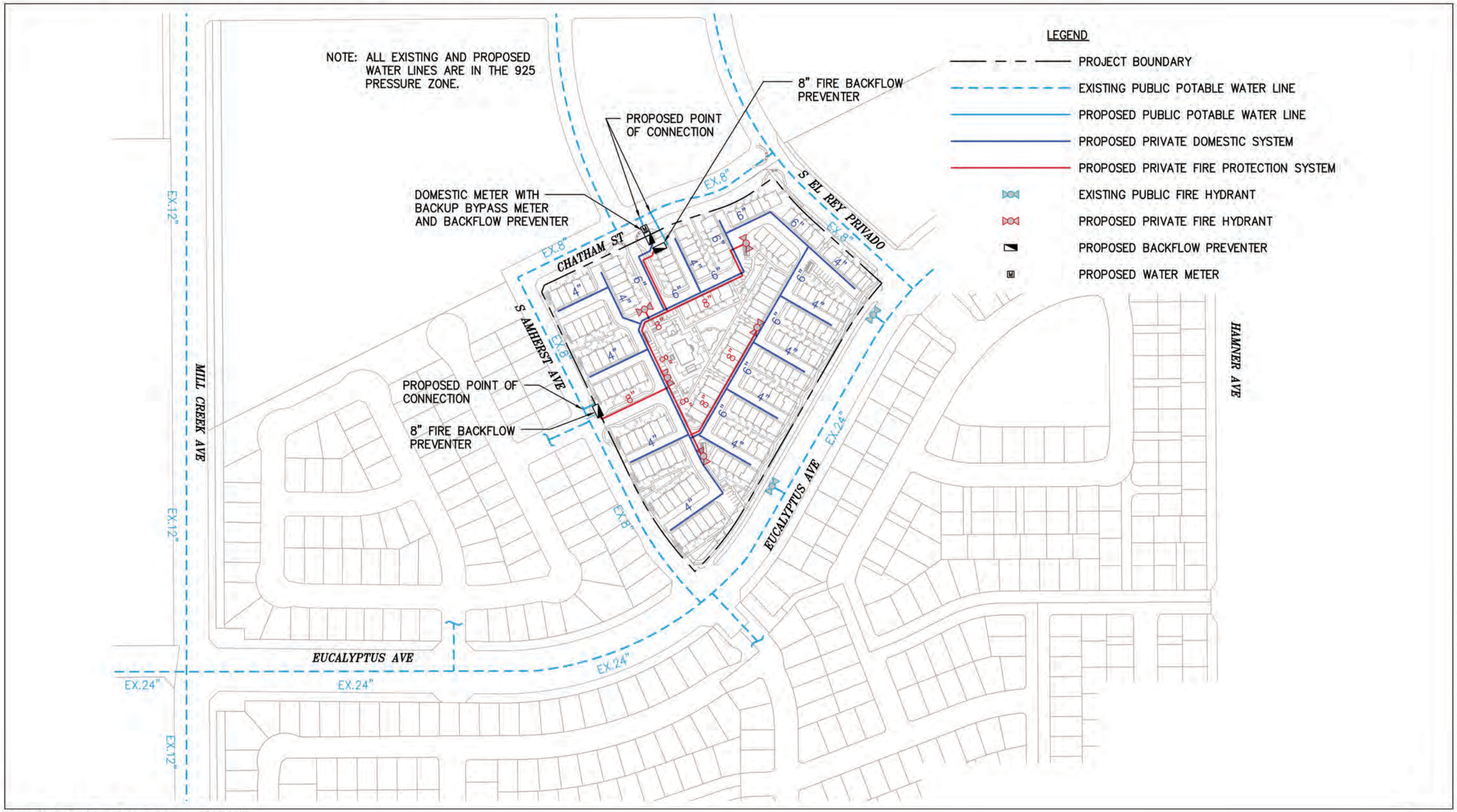
PLANT SCHEDULE OVERALL TREES				
SYMBOL	BOTANICAL / COMMON NAME	SIZE	WUCOLS	QTY
TREES				
	CALLISTEMON CITRINUS BOTTLE BRUSH STANDARD	24" BOX	L	4
	CERCIDIUM X 'DESERT MUSEUM' DESERT MUSEUM PALO VERDE MULTI-TRUNK	36" BOX	L	32
	CERCIS OCCIDENTALIS WESTERN REDBUD STANDARD	15 GAL	M	7
	KOELREUTERIA PANICULATA GOLDEN RAIN TREE STANDARD	36" BOX	M	11
	LAGERSTROEMIA INDICA X FAURIEI 'MUSKOGEE' MUSKOGEE CRAPE MYRTLE STANDARD	24" BOX	M	6
	LAURUS NOBILIS 'SARATOGA' SWEET BAY STANDARD	24" BOX	L	60
	OLEA EUROPAEA 'WILSONII' WILSON FRUITLESS OLIVE STANDARD	16`X16` FIELD GROWN	L	26
	PISTACIA CHINENSIS CHINESE PISTACHE	36" BOX	M	42
	PLATANUS RACEMOSA CALIFORNIA SYCAMORE STANDARD	36" BOX	M	37
	PODOCARPUS GRACILIOR FERN PINE STANDARD	24" BOX	M	16
	PODOCARPUS GRACILIOR FERN PINE STANDARD	48"BOX	M	8
	QUERCUS AGRIFOLIA COAST LIVE OAK STANDARD	36" BOX	L	37
	QUERCUS ILEX HOLLY OAK STANDARD	15 GAL	L	24
	RHAPHIOLEPIS X 'MONTIC' MAJESTIC BEAUTY® INDIAN HAWTHORN STANDARD	24" BOX	M	97
	TRISTANIA CONFERTA BRISBANE BOX STANDARD	36" BOX	M	28
	WASHINGTONIA FILIFERA CALIFORNIA FAN PALM	18` BTH	L	7

Source(s): BMLA, Inc. (01-22-2025)

Figure 6

Not to Scale

Landscape Plan



Source(s): Dexter Wilson Engineering, Inc. (04-17-2025)

Figure 7

Not to Scale

Water Plan

Sanitary sewer service to the Project site would be provided by Inland Empire Utilities Agency (IEUA). Proposed on-site sewer lines would connect to an existing 8-inch line in South Amherst Avenue, adjacent to the site. See Figure 8, *Sewer Plan*.

The Project site currently drains in a southwesterly direction towards the intersection of Eucalyptus Avenue and Amherst Avenue where an on-site detention basin is located. The basin has a 36-inch inlet that joins a public storm drain in Amherst Avenue. The Project would implement an on-site storm drain system that generally maintains the existing drainage pattern and connects to the existing storm drain in Amherst Avenue. The Projects on-site storm drainage system would function as a flow restriction by oversizing the on-site capacity and providing on-site storage to ensure outflow would be consistent with the capacity of the surrounding storm drainage system.

Dry utilities serving the Project area include Southern California Edison, Southern California Gas Company, and various telecommunication providers. The Project would include installation of on-site dry utility infrastructure that is anticipated to connect with the existing infrastructure available in the vicinity. It is noted that the Project would not require natural gas infrastructure or service.

GHG-Reduction Features

The Project includes the following design features aimed at reducing the Project's GHG emissions.

- Building Electrification
  - Electric Space Heater
  - Electric Water Heater
  - Electric Stove
  - Electric Dryer
  - Electric Pool Heater
  - Electric Spa Heater
  - Lack of Natural Gas Infrastructure

Source(s): Dexter Wilson Engineering, Inc. (04-17-2025)

Figure 8

Not to Scale

Sewer Plan

- Vehicle Electrification
  - Installation of Level 2 EV or higher charging stations at a rate of 30% or more of required vehicle spaces.

- Waste Diversion
  - Storage and collection of green waste, organic waste, and recyclables.

- Water Conservation
  - Water efficient showerheads and faucets
  - Outdoor landscaping consists of drought tolerant, low maintenance plants with a drip irrigation or weather-based controller sprinkler system.

Please also refer to Checklist item 8, *Greenhouse Gas Emissions*.

Project Construction Characteristics:

Phased construction is expected to commence in early 2025 and would last through the remainder of the year. Construction activities are as follows:

- Demolition
- Site Preparation & Grading
- Building Construction
- Paving
- Architectural Coating & Landscaping

The site would not require any import/export of soils to accommodate the Project.

9. Project Setting: As shown in previous Figure 2, the Project site is currently vacant, undeveloped property. The site is surrounded by existing and/or approved residential uses, as well as an approved park use. Although sidewalks, curbs, gutters, and streetlights are in place along the site's perimeter, upgrades will occur to better accommodate the Project.

10. Background: On January 27, 2010, the Ontario City Council adopted The Ontario Plan ("TOP"). An Environmental Impact Report ("EIR") was prepared for TOP (State Clearinghouse No. 2008101140) and certified by the City Council on January 27, 2010 (hereinafter referred to as "Certified EIR"), which included Mitigation, Findings and a Statement of Overriding Considerations pursuant to the requirements of the California Environmental Quality Act, commencing with Public Resources Code Section 21000 ("CEQA"). Subsequently, on August 16, 2022, the Ontario City Council adopted The Ontario Plan 2050 ("TOP 2050"), an update to TOP. TOP 2050 serves as the framework for the City's business plan and provides a foundation for the City to operate as a municipal corporation that consists of six (6) distinct components: 1) Vision; 2) Governance Manual; 3) Policy Plan; 4) Council Priorities; 5) Implementation; and 6) Tracking and Feedback. The Policy Plan component of TOP 2050 meets the functional and legal mandate of a General Plan and contains nine elements: Land Use, Housing, Parks and Recreation, Environmental Resources, Community Economics, Safety, Mobility, Community Design and Social Resources.

    A Supplemental Environmental Impact Report ("SEIR") was prepared for TOP 2050 (State Clearinghouse No. 2021070364) and was certified by the City Council on August 16, 2022 (hereinafter referred to as "Certified SEIR"). The Certified SEIR analyzed the direct and physical changes in the environment that would be caused by TOP 2050; focusing on changes to land use associated with the buildout of the proposed land use plan compared to the TOP, and in the Policy Plan and impacts resultant of population and employment growth in the City.

    The Project site was analyzed in the Certified SEIR as a school use.

It is also noted that the Project site is located within the Ezperanza Specific Plan area. As originally envisioned, the 223-acre Specific Plan area included 916 single-family residential dwelling units, 494 cluster/town home dwelling units, a 10-acre elementary school site, and a total of nine acres of park land. The Specific Plan included a caveat that if the Mountain View School District chose not to utilize the school site, up to 46 residential units could be developed in place of the school. An EIR was prepared for the Specific Plan in 2006.

Since the time of the Specific Plan EIR, the School District has decided not to acquire the 10-acre site. As such, the Specific Plan Amendment (SPA) analyzed within this Addendum reflects the use of the previous school site for the development of the residential uses proposed by the Project.

Because of the age of the Specific Plan EIR (2006), this document tiers off the SEIR prepared for TOP 2050 (2022) in an effort to reflect more current environmental conditions and study methodologies. Notwithstanding, the Esperanza Specific Plan EIR included various mitigation measures for the entire Specific Plan area. Some of these mitigation measures remain applicable to the Project considered herein. Appendix B to this Addendum contains a complete listing of all mitigation required within the Esperanza Specific Plan EIR and provides an applicability determination for the Esperanza PA-11 SPA Project. The City would require the implementation of the applicable measures as Conditions of Approval for the Project.

11. CEQA Requirements for an Addendum: If changes to a project or its circumstances occur or new information becomes available after adoption of a previous EIR or negative declaration, the lead agency may: (1) prepare a subsequent EIR if the criteria of State CEQA Guidelines Section 15162(a) are met, (2) prepare a subsequent negative declaration, (3) prepare an addendum, or (4) prepare no further documentation. (State CEQA Guidelines Section 15162(b)). When only minor technical changes or additions to the previous EIR or negative declaration are necessary and none of the conditions described in section 15162 calling for the preparation of a subsequent EIR or negative declaration have occurred, CEQA allows the lead agency to prepare and adopt an addendum. (State CEQA Guidelines Section 15164(b).)

Under Section 15162, a subsequent EIR or negative declaration is required only when:

1) Substantial changes are proposed in the project which will require major revisions of the previous EIR or negative declaration due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified significant effects;

2) Substantial changes occur with respect to the circumstances under which the project is undertaken which will require major revisions of the previous EIR or negative declaration due to the involvement of any new significant environmental effects or a substantial increase in the severity of previously identified significant effects; or

3) New information of substantial importance, which was not known and could not have been known with the exercise of reasonable diligence at the time the previous EIR or negative declaration was adopted, shows any of the following:

    a) The project will have one or more significant effects not discussed in the previous EIR;

    b) Significant effects previously examined will be substantially more severe than shown in the previous EIR;

    c) Mitigation measures or alternatives previously found not to be feasible would in fact be feasible and would substantially reduce one or more significant effects of the project, but the project proponents decline to adopt the mitigation measure or alternative; or

    d) Mitigation measures or alternatives which are considerably different from those analyzed in the previous EIR would substantially reduce one or more significant effects on the environment, but the project proponents decline to adopt the mitigation measure or alternative.

Thus, if the Project does not result in any of the circumstances listed in Section 15162 (i.e., no new or substantially greater significant impacts), the City may properly adopt an addendum to the Certified SEIR.

12. Analysis: According to CEQA Guidelines Section 15164, an Addendum to a previously certified EIR may be used if some changes or additions are necessary, but none of the conditions described in Section 15162 requiring the preparation of a subsequent Negative Declaration or EIR have occurred. The CEQA Guidelines require that a brief explanation be provided to support the findings that no subsequent EIR or Negative Declaration are needed for further discretionary approval. These findings are described below:

    1) *Required Finding: Substantial changes are not proposed for the project that will require major revisions of the previous EIR due to the involvement of new, significant environmental effects or a substantial increase in the severity of previously identified significant effects*.

    Substantial changes are not proposed by the Project and Project implementation will not require revisions to the Certified SEIR due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified significant effects. The Certified SEIR analyzed the direct and physical changes in the environment that would be caused by TOP 2050, focusing on changes to land use associated with the buildout of the proposed land use plan. In addition, all applicable adopted mitigation measures are a condition of Project approval and are incorporated herein by reference. This Addendum provides an analysis of the Project and verification that the Project will not cause environmental impacts such that any of the circumstances identified in State CEQA Guidelines Section 15162 are present.

    2) *Required Finding: Substantial changes have not occurred with respect to the circumstances under which the project is undertaken, that would require major revisions of the previous Environmental Impact Report due to the involvement of new significant*

environmental effects or a substantial increase in the severity of previously identified significant effects.

Substantial changes have not occurred with respect to the circumstances under which the project was undertaken, that would require major revisions to the Certified SEIR due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified significant effects. In addition, all applicable adopted mitigation measures are a condition of Project approval and are incorporated herein by reference. This Addendum provides an analysis of the Project and verification that the Project will not cause environmental impacts such that any of the circumstances identified in State CEQA Guidelines Section 15162 are present.

3) *Required Finding. No new information has been provided that would indicate that the proposed project would result in one or more significant effects not discussed in the previous EIR.*

No new information that was not known and could not have been known with the exercise of reasonable diligence at the time SEIR was certified shows that the proposed Project would result in any new significant effects not previously discussed in the Certified SEIR, that significant effects previously examined will be substantially more severe than shown in the previous EIR, that mitigation measures or alternatives previously found not to be feasible would in fact be feasible and would substantially reduce one or more significant effects on the environment, or that mitigation measures or alternatives that are considerably different from those analyzed in the previous EIR would substantially reduce one or more significant effects on the environment. The Certified SEIR assumed buildout of the site. No proposed changes or revisions to the Certified SEIR are required. In addition, all applicable previously adopted mitigation measures are a condition of Project approval and are incorporated herein by reference. This Addendum provides an analysis of the

Project and verification that the Project will not cause environmental impacts such that any of the circumstances identified in State CEQA Guidelines Section 15162 are present.

13. Conclusion: The Certified SEIR, as certified by City Council on August 16, 2022, was prepared as a Program EIR in accordance with CEQA, the State CEQA Guidelines, and the City's Rules for the Implementation of CEQA and in accordance with Section 15121(a) of the State CEQA Guidelines (California Code of Regulations, Title 14, Division 6, Chapter 3). The Certified SEIR considered the direct physical changes and reasonably foreseeable indirect physical changes in the environment that would be caused by TOP 2050. Consequently, the Certified SEIR focused on impacts from changes to land use associated with buildout of the City's land use plan, and impacts from the resulting population and employment growth in the City. The proposed Project coordinates with the existing uses of the properties and uses within the surrounding areas.

    Accordingly, and based on the findings and information contained in the Certified SEIR, the analysis in this document, and CEQA statute and State CEQA Guidelines, including Sections 15164 and 15162, the Project will not result in any new, increased or substantially different impacts, other than those previously considered and addressed in the Certified SEIR.

14. Surrounding Land Uses:

	Existing Land Use	General Plan Designation	Zoning Designation	Specific Plan Land Use
Site:	Vacant, graded land	Public School (PS)	SP, Specific Plan	School
North:	Vacant, graded land	Low Density Residential (LDR)	SP, Specific Plan	Single Family Detached/Park
South:	Single Family Residential	Low Density Residential (LDR)	SP, Specific Plan	Single Family Detached
East:	Vacant, graded land/ Attached Residential	Medium Density/Low Density Residential (MDR/LDR)	SP, Specific Plan	Single Family Detached
West:	Vacant, graded land/Single Family Residential	Low Density Residential (LDR)	SP, Specific Plan	Single Family Detached

15. Other public agencies whose approval is anticipated include (e.g., permits, financing approval or participation agreement):

- Santa Ana Regional Water Quality Control Board (Issuance of a National Pollutant Discharge Elimination System Permit; Issuance of a Construction General Permit);
- State Water Resources Control Board (Stormwater Pollution Prevention Plan);
- South Coast Air Quality Management District (Issuance of Air Quality permits to construct and operation, if necessary)

16. Have California Native American tribes traditionally and culturally affiliated with the project area requested consultation pursuant to Public Resources Code section 21080.3.1?

☒Yes ☐ No

If “yes”, has consultation begun? ☐ Yes ☐ No ☒ Completed

ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED

The environmental factors checked below would be potentially affected by this project, involving at least one impact that is a "Potentially Significant Impact" as indicated by the checklist on the following pages.

☐ Aesthetics	☐ Agriculture/Forestry Resources	☐ Air Quality
☐ Biological Resources	☐ Cultural Resources	☐ Geology / Soils
☐ Greenhouse Gas Emissions	☐ Hazards & Hazardous Materials	☐ Hydrology/Water Quality
☐ Land Use / Planning	☐ Mineral Resources	☐ Noise
☐ Population / Housing	☐ Public Services	☐ Recreation
☐ Transportation	☐ Utilities / Service Systems	☐ Mandatory Findings of Significance
☐ Tribal Cultural Resources	☐ Wildfire	☐ Energy

DETERMINATION (To be completed by the Lead Agency)

On the basis of this initial evaluation, I find that the proposed project will not require any major revisions of the previously certified SEIR due to the involvement of any new significant environmental effects or a substantial increase in the severity of previously identified significant effects, that the proposed Project does not trigger any of the conditions set forth in State CEQA Guidelines section 15162, and that an addendum to the previously certified SEIR is appropriate pursuant to State CEQA Guidelines section 15164.

Signature:	Date: Click to enter date
Printed Name: Robert Morales	For: City of Ontario

EVALUATION OF ENVIRONMENTAL IMPACTS

Issues	*New Significant Impact or Substantial Increase in Severity of Previously Identified Significant impact*	*Substantial Increase in Severity of Previously Identified Significant impact*	*Changed Circumstan-ces or New Info requiring a subsequent EIR*	*No New Significant Impact or Substantial Increase in Severity of Impacts Previously Analyzed in TOP 2050 SEIR*
1. **AESTHETICS.** Except as provided in Public Resources Code section 21099, would the project:				
a) Have a substantial adverse effect on a scenic vista?	☐	☐	☐	☒
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	☐	☐	☐	☒
c) In non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from publicly accessible vantage point). If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?)	☐	☐	☐	☒
d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	☐	☐	☐	☒
2. **AGRICULTURE AND FOREST RESOURCES.** In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Dept. of Conservation as an optional model to use in assessing impacts on agriculture and farmland. In determining whether impacts to forest resources, including timberland, are significant environmental effects, lead agencies may refer to information compiled by the California Department of Forestry and Fire Protection regarding the state's inventory of forest land,				

Issues	*New Significant Impact or Substantial Increase in Severity of Previously Identified Significant impact*	*Substantial Increase in Severity of Previously Identified Significant impact*	*Changed Circumstan-ces or New Info requiring a subsequent EIR*	*No New Significant Impact or Substantial Increase in Severity of Impacts Previously Analyzed in TOP 2050 SEIR*
including the Forest and Range Assessment Project and the Forest Legacy Assessment project; and forest carbon measurement methodology provided in Forest protocols adopted by the California Air Resources Board. Would the project:				
a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?	☐	☐	☐	☒
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?	☐	☐	☐	☒
c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?	☐	☐	☐	☒
d) Result in the loss of forest land or conversion of forest land to non-forest use?	☐	☐	☐	☒
e) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?	☐	☐	☐	☒
3. **AIR QUALITY.** Where available, the significance criteria established by the applicable air quality management district or air pollution control district may be relied upon to make the following determinations. Would the project:				
a) Conflict with or obstruct implementation of the applicable air quality plan?	☐	☐	☐	☒

Issues	*New Significant Impact or Substantial Increase in Severity of Previously Identified Significant impact*	*Substantial Increase in Severity of Previously Identified Significant impact*	*Changed Circumstan-ces or New Info requiring a subsequent EIR*	*No New Significant Impact or Substantial Increase in Severity of Impacts Previously Analyzed in TOP 2050 SEIR*
b) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard?	☐	☐	☐	☒
c) Expose sensitive receptors to substantial pollutant concentrations?	☐	☐	☐	☒
d) Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?	☐	☐	☐	☒
4. **BIOLOGICAL RESOURCES.** Would the project:				
a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	☐	☐	☐	☒
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	☐	☐	☐	☒
c) Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	☐	☐	☐	☒
d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?	☐	☐	☐	☒
e) Conflict with any local policies or ordinances protecting biological	☐	☐	☐	☒

Issues	*New Significant Impact or Substantial Increase in Severity of Previously Identified Significant impact*	*Substantial Increase in Severity of Previously Identified Significant impact*	*Changed Circumstan-ces or New Info requiring a subsequent EIR*	*No New Significant Impact or Substantial Increase in Severity of Impacts Previously Analyzed in TOP 2050 SEIR*
resources, such as a tree preservation policy or ordinance?				
f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?	☐	☐	☐	☒
5. **CULTURAL RESOURCES.** Would the project:				
a) Cause a substantial adverse change in the significance of a historical resource pursuant to § 15064.5?	☐	☐	☐	☒
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to § 15064.5?	☐	☐	☐	☒
c) Disturb any human remains, including those interred outside of dedicated cemeteries?	☐	☐	☐	☒
6. **ENERGY.** Would the project:				
a) Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?	☐	☐	☐	☒
b) Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?	☐	☐	☐	☒
7. **GEOLOGY AND SOILS.** Would the project:				
a) Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury or death involving:				
i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to	☐	☐	☐	☒

Issues	*New Significant Impact or Substantial Increase in Severity of Previously Identified Significant impact*	*Substantial Increase in Severity of Previously Identified Significant impact*	*Changed Circumstan-ces or New Info requiring a subsequent EIR*	*No New Significant Impact or Substantial Increase in Severity of Impacts Previously Analyzed in TOP 2050 SEIR*
Division of Mines and Geology Special Publication 42.				
ii) Strong seismic ground shaking?	☐	☐	☐	☒
iii) Seismic-related ground failure, including liquefaction?	☐	☐	☐	☒
iv) Landslides?	☐	☐	☐	☒
b) Result in substantial soil erosion or the loss of topsoil?	☐	☐	☐	☒
c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?	☐	☐	☐	☒
d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code, creating substantial direct or indirect risks to life or property?	☐	☐	☐	☒
e) Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?	☐	☐	☐	☒
f) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	☐	☐	☐	☒
8. **GREENHOUSE GAS EMISSIONS.** Would the project:				
a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	☐	☐	☐	☒
b) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emission of greenhouse gases?	☐	☐	☐	☒

Issues	*New Significant Impact or Substantial Increase in Severity of Previously Identified Significant impact*	*Substantial Increase in Severity of Previously Identified Significant impact*	*Changed Circumstan-ces or New Info requiring a subsequent EIR*	*No New Significant Impact or Substantial Increase in Severity of Impacts Previously Analyzed in TOP 2050 SEIR*
9. **HAZARDS AND HAZARDOUS MATERIALS.** Would the project:				
a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	☐	☐	☐	☒
b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?	☐	☐	☐	☒
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	☐	☐	☐	☒
d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?	☐	☐	☐	☒
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area?	☐	☐	☐	☒
f) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	☐	☐	☐	☒
g) Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?	☐	☐	☐	☒
10. **HYDROLOGY AND WATER QUALITY.** Would the project:				

Issues	*New Significant Impact or Substantial Increase in Severity of Previously Identified Significant impact*	*Substantial Increase in Severity of Previously Identified Significant impact*	*Changed Circumstan-ces or New Info requiring a subsequent EIR*	*No New Significant Impact or Substantial Increase in Severity of Impacts Previously Analyzed in TOP 2050 SEIR*
a) Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?	☐	☐	☐	☒
b) Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?	☐	☐	☐	☒
c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:				
i) Result in substantial erosion or siltation on- or off-site;	☐	☐	☐	☒
ii) Substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site;	☐	☐	☐	☒
iii) Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or	☐	☐	☐	☒
d) Impede or redirect flood flows?	☐	☐	☐	☒
e) In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?	☐	☐	☐	☒
f) Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?	☐	☐	☐	☒
11. **LAND USE AND PLANNING.** Would the project:				
a) Physically divide an established community?	☐	☐	☐	☒

Issues	*New Significant Impact or Substantial Increase in Severity of Previously Identified Significant impact*	*Substantial Increase in Severity of Previously Identified Significant impact*	*Changed Circumstan-ces or New Info requiring a subsequent EIR*	*No New Significant Impact or Substantial Increase in Severity of Impacts Previously Analyzed in TOP 2050 SEIR*
b) Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?	☐	☐	☐	☒
12. **MINERAL RESOURCES.** Would the project:				
a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?	☐	☐	☐	☒
b) Result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?	☐	☐	☐	☒
13. **NOISE.** Would the project result in:				
a) Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	☐	☐	☐	☒
b) Generation of excessive groundborne vibration or groundborne noise levels?	☐	☐	☐	☒
c) For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?	☐	☐	☐	☒
14. **POPULATION AND HOUSING.** Would the project:				
a) Induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of road or other	☐	☐	☐	☒

Issues	*New Significant Impact or Substantial Increase in Severity of Previously Identified Significant impact*	*Substantial Increase in Severity of Previously Identified Significant impact*	*Changed Circumstan-ces or New Info requiring a subsequent EIR*	*No New Significant Impact or Substantial Increase in Severity of Impacts Previously Analyzed in TOP 2050 SEIR*
infrastructure)?				
b) Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?	☐	☐	☐	☒
15. **PUBLIC SERVICES.** Would the project:				
a) Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:				
i) Fire protection?	☐	☐	☐	☒
ii) Police protection?	☐	☐	☐	☒
iii) Schools?	☐	☐	☐	☒
iv) Parks?	☐	☐	☐	☒
v) Other public facilities?	☐	☐	☐	☒
16. RECREATION.				
a) Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?	☐	☐	☐	☒
b) Does the project include recreational facilities or require the construction or expansion of recreational facilities which have an adverse physical effect on the environment?	☐	☐	☐	☒
17. **TRANSPORTATION.** Would the project:				
a) Conflict with a program plan, ordinance or	☐	☐	☐	☒

Issues	*New Significant Impact or Substantial Increase in Severity of Previously Identified Significant impact*	*Substantial Increase in Severity of Previously Identified Significant impact*	*Changed Circumstan-ces or New Info requiring a subsequent EIR*	*No New Significant Impact or Substantial Increase in Severity of Impacts Previously Analyzed in TOP 2050 SEIR*
policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?				
b) Conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)?	☐	☐	☐	☒
c) Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	☐	☐	☐	☒
d) Result in inadequate emergency access?	☐	☐	☐	☒
18. **TRIBAL CULTURAL RESOURCES.** Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:				
a) Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k), or	☐	☐	☐	☒
b) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resources Code section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.	☐	☐	☐	☒
19. **UTILITIES AND SERVICE SYSTEMS.** Would the project:				
a) Require or result in the relocation or	☐	☐	☐	☒

Issues	*New Significant Impact or Substantial Increase in Severity of Previously Identified Significant impact*	*Substantial Increase in Severity of Previously Identified Significant impact*	*Changed Circumstan-ces or New Info requiring a subsequent EIR*	*No New Significant Impact or Substantial Increase in Severity of Impacts Previously Analyzed in TOP 2050 SEIR*
construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?				
b) Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?	☐	☐	☐	☒
c) Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?	☐	☐	☐	☒
d) Generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?	☐	☐	☐	☒
e) Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?	☐	☐	☐	☒
20. **WILDFIRE.** If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project:				
a) Substantially impair an adopted emergency response plan or emergency evacuation plan?	☐	☐	☐	☒
b) Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to, pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?	☐	☐	☐	☒
c) Require the installation or maintenance of	☐	☐	☐	☒

Issues	*New Significant Impact or Substantial Increase in Severity of Previously Identified Significant impact*	*Substantial Increase in Severity of Previously Identified Significant impact*	*Changed Circumstan-ces or New Info requiring a subsequent EIR*	*No New Significant Impact or Substantial Increase in Severity of Impacts Previously Analyzed in TOP 2050 SEIR*
associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?				
d) Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?	☐	☐	☐	☒
21. **MANDATORY FINDINGS OF SIGNIFICANCE.** (State CEQA Guidelines section 15065(a).)				
a) Does the project have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?	☐	☐	☐	☒
b) Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current project, and the effects of probable future projects.)	☐	☐	☐	☒
c) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?	☐	☐	☐	☒
Note: Authority cited: Public Resources Code sections 21083, 21083.05, 21083.09. Reference: Gov. Code section 65088.4; Public Resources Code sections 21073, 21074, 21080(c), 21080.1, 21080.3,				

Issues	*New Significant Impact or Substantial Increase in Severity of Previously Identified Significant impact*	*Substantial Increase in Severity of Previously Identified Significant impact*	*Changed Circumstan-ces or New Info requiring a subsequent EIR*	*No New Significant Impact or Substantial Increase in Severity of Impacts Previously Analyzed in TOP 2050 SEIR*
21080.3.1, 21080.3.2, 21082.3, 21083, 21083.3, 21083.5, 21084.2, 21084.3, 21093, 21094, 21095 and 21151; *Sundstrom v. County of Mendocino* (1988) 202 Cal.App.3d 296; *Leonoff v. Monterey County Board of Supervisors* (1990) 222 Cal.App.3d 1337; *Eureka Citizens for Responsible Govt. v. City of Eureka* (2007) 147 Cal.App.4th 357; *Protect the Historic Amador Waterways v. Amador Water Agency* (2004) 116 Cal.App.4th 1099, 1109; *San Franciscans Upholding the Downtown Plan v. City and County of San Francisco* (2002) 102 Cal.App.4th 656.				

EXPLANATION OF ISSUES

1. **AESTHETICS. Would the project:**

a. **Have a substantial adverse effect on a scenic vista?**

Summary of Certified SEIR Finding: The Certified SEIR concluded that increased development under TOP 2050 would occur within the City limits and already urbanized areas of the City. The scale and design of the City under TOP 2050 would not deter views of the San Gabriel Mountains. Therefore, impacts to scenic vistas would be less than significant and would not result in new or a substantial increase in magnitude of impacts compared to the Certified SEIR (Certified SEIR, pp. 5.1-4 – 5.1-10).

Project Impacts: TOP 2050 does not identify scenic vistas within the City. However, the Policy Plan (Policy CD-1.5) requires all major north-south streets be designed and developed to feature views of the San Gabriel Mountains. The Project site is not located along any major north-south streets, as identified in Figure M-01, *Roadway Classifications*, of the City's Mobility Element. The Project would not result in any new, increased or substantially different impacts, other than those previously considered and addressed in the Certified SEIR.

Mitigation:

Certified SEIR Measure(s)	Project Applicability
None.	-

b. **Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings and historic buildings within a state scenic highway?**

Summary of Certified SEIR Finding: The Certified SEIR concluded that there are no State Scenic highways through or in the vicinity of the City. The closest designated State scenic highway is a portion of State Route 142 in Chino Hills, approximately five miles west of the Ontario city limit. Therefore, no impacts to scenic highways would occur and TOP 2050 would not result in new or a substantial increase in

magnitude of impacts compared to the Certified SEIR (Certified SEIR, pp. 5.1-4 – 5.1-10).

Project Impacts: The Project is not located near a scenic highway, nor does the site contain any scenic resources. The Project would not substantially damage scenic resources, including, but not limited to, trees, rock outcroppings and historic buildings within a state scenic highway. The Project would not result in any new, increased or substantially different impacts, other than those previously considered and addressed in the Certified SEIR.

Mitigation:

Certified SEIR Measure(s)	Project Applicability
None.	-

c. **In non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from publicly accessible vantage point). If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?**

Summary of Certified SEIR Finding: The Certified SEIR recognizes that buildout of the City would alter the visual character of the City. The Certified SEIR concludes that compliance with the City Municipal Code and applicable TOP 2050 Policies would ensure that potential aesthetics impacts of development anticipated under TOP 2050 would be less than significant (Certified SEIR, pp. 5.1-4 – 5.1-10).

Project Impacts: Final designs of the Project facilities including, but not limited to, the proposed buildings, landscape/hardscape features, and lighting configurations would be required to conform to the Esperanza Specific Plan Development Regulations and Design Guidelines, and applicable provisions of the City Municipal Code. Final designs of all uses would be subject to City review and approval. As such, the Project would not conflict with applicable zoning or other regulations governing scenic quality. Impacts of the Project in these regards would be less than significant. On this basis, when compared to the Certified SEIR

findings, no new or substantially increased aesthetic impacts would result from the Project.

Mitigation:

Certified SEIR Measure(s)	Project Applicability
None.	-

d. **Create a new source of substantial light or glare that would adversely affect day or nighttime views in the area?**

Summary of Certified SEIR Finding: The Certified SEIR concluded that TOP 2050 would result in additional sources of light and glare; however, adherence to the design standards of the City of Ontario Development Code would ensure that light and glare from new developments would be minimized and that significant impacts would not occur. Therefore, impacts to light and glare would be less than significant, and TOP 2050 would not result in new or a substantial increase in magnitude of impacts compared to the Certified SEIR (Certified SEIR, pp. 5.1-4 – 5.1-10).

Project Impacts: The Project site is surrounded by existing and/or proposed urban uses. Street lighting is currently located along the entire periphery of the site. New lighting will be introduced to the site as part of the Project. Pursuant to the requirements of the City's Municipal Code, Project on-site lighting would be shielded, diffused or indirect, to avoid glare to pedestrians or motorists. In addition, lighting fixtures will be selected and located to confine the area of illumination to within the Project site and minimize light spillage.

Furthermore, consistent with the findings of the Certified SEIR, site lighting plans will be subject to review by the Planning Department and Police Department prior to issuance of building permits (pursuant to the City's Building Security Ordinance). Therefore, implementation of the Project would not result in a significant source of light or glare that would adversely affect daytime or nighttime views. The Project would not result in any new, increased or substantially different impacts, beyond those previously considered and addressed in the Certified SEIR.

Mitigation:

Certified SEIR Measure(s)	Project Applicability
None.	-

2. **AGRICULTURE AND FOREST RESOURCES.** In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model prepared by the California Department of Conservation as an optional model to use in assessing impacts on agriculture and farmland. In determining whether impacts to forest resources, including timberland, are significant environmental effects, lead agencies may refer to information compiled by the California Department of Forestry and Fire Protection regarding the state's inventory of forest land, including the Forest and Range Assessment Project and the Forest Legacy Assessment project; and forest carbon measurement methodology provided in Forest Protocols adopted by the California Air Resources Board. Would the project:

a. **Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?**

Summary of Certified SEIR Finding: Under TOP 2050, the City of Ontario no longer has land designated for agricultural uses. Because TOP 2050 is the baseline for the Certified SEIR, TOP 2050 would not result in the conversion of Prime Farmland, Unique Farmland, and Farmland of Statewide Importance to nonagricultural uses. TOP 2050 would therefore have no impact on land zoned for agricultural purposes (Certified SEIR, p. 5.2-12).

Project Impacts: The Project site is not designated as Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland). According to the California Department of Conservation, the Project site is designated as "Other Land." This designation is used for properties that are not included in any other mapping category. Vacant and non-agricultural land surrounded on all sides by

urban development is commonly mapped as Other Land (DOC, 2022). As such, the Project would not result in any new, increased or substantially different impacts, other than those previously considered and addressed in the Certified SEIR.

Mitigation:

Certified SEIR Measure(s)	Project Applicability
None.	-

b. **Conflict with existing zoning for agricultural use, or a Williamson Act contract?**

Summary of Certified SEIR Finding: The Certified SEIR concluded that implementation of the Land Use Plan would not adversely affect agriculturally zoned properties (Certified SEIR, p. 5.2-12).

Implementation of TOP 2050 would affect all active Williamson Act contracts within the City. The Certified SEIR concluded, however, that impacts to Williamson Act contract properties under TOP 2050 would not be greater than, or different than, would result from TOP 2009. On this basis, the Certified SEIR concluded that TOP 2050 impacts to Williamson Act Contract properties would be less than significant (Certified SEIR, p. 5.2-13).

Project Impacts: The Project site is not zoned for agricultural use. The Project site is zoned Specific Plan and would involve a Specific Plan Amendment to change the land use designation from School to MDR 25. The Project's proposed Specific Plan Amendment would not result in a loss of land zoned for agricultural use. Furthermore, there is no Williamson Act contract in effect on the Project site. Therefore, no impacts to agricultural uses are anticipated, nor will there be any conflict with existing Williamson Act contracts. The Project would not result in any new, increased or substantially different impacts, other than those previously considered and addressed in the Certified SEIR.

Mitigation:

Certified SEIR Measure(s)	Project Applicability
None.	-

c. **Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g)?**

Summary of Certified SEIR Finding: There are no City land uses zoned for forest land, timberland, or timberland zoned Timberland Production. There are no properties in the City considered to be forestland. As such, implementation of TOP 2050 would have no impact on land uses zoned for forest land, timberland, or timberland zoned Timberland Production; nor would TOP 2050 result in the loss or conversion of timberland or forest land to non-forest uses (Certified SEIR, p. 5.2-13).

Project Impacts: The Project site is not zoned for forest land or timberland. As concluded in the Certified SEIR, the City's Zoning Map does not designate any parcels of land in the Project area for forest land, timberland, or timberland zoned Timberland Production. Therefore, implementation of the Project would not conflict with, or cause the rezoning of, forest land or timberland. The Project would not result in any new, increased or substantially different impacts, other than those previously considered and addressed in the Certified SEIR.

Mitigation:

Certified SEIR Measure(s)	Project Applicability
None.	-

d. **Result in the loss of forest land or conversion of forest land to non-forest use?**

Summary of Certified SEIR Finding: There are no City land uses zoned for forest land. There are no properties in the City considered to be forest land. As such,

implementation of TOP 2050 would have no impact on land uses zoned for forest land; nor would TOP 2050 result in the loss or conversion of forest land to non-forest uses (Certified SEIR, p. 5.2-13).

Project Impacts: There is currently no land in the City of Ontario that qualifies as forest land as defined in Public Resources Code section 12220(g). Neither the Policy Plan nor the City's Zoning Code provide designations for forest land. Consequently, the Project would not result in the loss or conversion of forest land. The Project would not result in any new, increased or substantially different impacts, other than those previously considered and addressed in the Certified SEIR.

Mitigation:

Certified SEIR Measure(s)	Project Applicability
None.	-

e. **Involve other changes in the existing environment, which, due to their location or nature, could individually or cumulatively result in loss of Farmland to non-agricultural use or conversion of forest land to non-forest use?**

Summary of Certified SEIR Finding: Under TOP 2050, the City Ontario no longer has land designated for agricultural uses. Because TOP 2050 is the baseline for the Certified SEIR, TOP 2050 would not result in the conversion of Prime Farmland, Unique Farmland, and Farmland of Statewide Importance to nonagricultural uses. TOP 2050 would therefore have no impact on land zoned for agricultural purposes (Certified SEIR, p. 5.2-12).

Project Impacts: As previously mentioned, the Project site does not include Farmland (defined as Prime Farmland, Unique Farmland, or Farmland of Statewide Importance) or forest land and, therefore, the Project would not result in the conversion of Farmland to non-agricultural use or forest land to non-forest use. The Project would not result in any impacts to agricultural and/or forestry resources. The Project would not result in any new, increased or substantially

different impacts, other than those previously considered and addressed in the Certified SEIR.

Mitigation Required:

Certified SEIR Measure(s)	Project Applicability
None.	-

3. **AIR QUALITY.** The analysis in this section is based on the following technical analysis:

- *Esperanza Specific Plan Amendment Air Quality Assessment* (Urban Crossroads, Inc.) March 28, 2025.

This report (Urban Crossroads, 2025a) is provided in its entirety as Appendix C of this Addendum.

a. **Conflict with or obstruct implementation of the applicable air quality plan?**

Summary of Certified SEIR Finding: The Certified EIR evaluated conformance with the South Coast Air Quality Management District (SCAQMD) Air Quality Management Plan (AQMP) based on the following criteria: 1. Whether the project would exceed the assumptions in the AQMP, and 2. Whether the project would result in an increase in the frequency or severity of existing air quality violations, cause, or contribute to new violations, or delay timeline attainment of air quality standards. The Certified SEIR concluded that buildout of TOP 2050 would be consistent with the AQMP under the first criteria. However, air pollutant emissions associated with buildout of TOP 2050 would cumulatively contribute to the nonattainment designations in the South Coast Air Basin (SCAB). Incorporation of Mitigation Measures 3-2 and AQ-1 (see discussion under checklist item b, below) into future development projects for the operation phase would reduce criteria air pollutant emissions associated with buildout of TOP 2050. Additionally, goals and policies in TOP 2050 would promote increased capacity for alternative transportation modes. However, no additional mitigation measures that would reduce impacts below SCAQMD thresholds were identified. Therefore, impacts would remain significant and unavoidable (Certified SEIR, p. 5.3-40).

Project Impacts: The Project site is located within the SCAB. Currently, State, and federal air quality standards are exceeded in most parts of the SCAB. In response, the SCAQMD has adopted a series of Air Quality Management Plans (AQMPs) to meet the State and federal ambient air quality standards. AQMPs are regularly updated to more effectively reduce emissions, accommodate growth, and to minimize any negative fiscal impacts of air pollution control on the economy. In December 2022, the SCAQMD released the Final 2022 AQMP. The 2022 AQMP continues to evaluate current integrated strategies and control measures to meet the California Ambient Air Quality Standards, as well as explore new and innovative methods to reach its goals. Current AQMP consistency criteria include:

Consistency Criterion No. 1: The Project will not result in an increase in the frequency or severity of existing air quality violations or cause or contribute to new violations or delay the timely attainment of air quality standards or the interim emissions reductions specified in the AQMP.

Consistency Criterion No. 2: The Project will not exceed the assumptions in the AQMP based on the years of Project build-out phase.

The 2022 AQMP assumed buildout of the Project site consistent with existing General Plan designations. Although a General Plan Amendment would be required to accommodate the Project, operational-source emissions would not exceed the applicable SCAQMD regional thresholds for emissions of any criteria pollutant (see Table 3-2, presented subsequently). Additionally, the Project would be subject to all applicable mitigation and would be developed consistent with TOP 2050 goals and policies.

The City adopted a Statement of Overriding Considerations in regard to pollutant emissions associated with buildout of TOP 2050. The Project would not result in any new, increased or substantially different impacts, other than those previously considered and addressed in the Certified SEIR.

Mitigation:

Certified SEIR Measure(s)	Project Applicability
None. The Certified SEIR did not propose specific measures under this item, but stated that mitigation measures applied to a development project's construction and operational phases (presented subsequently) would reduce impacts associated with consistency with the SCAQMD.	See measures 3-1, 3-2, and AQ-1, presented subsequently.

b. **Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard?**

Summary of Certified SEIR Finding: The Certified SEIR concluded that buildout of TOP 2050 would generate short-term and long-term air pollutant emissions exceeding SCAQMD regional significance thresholds for VOC, CO, NOx, PM_{10}, and $PM_{2.5}$. These exceedances would cumulatively contribute to the SCAB nonattainment designations for O3, PM_{10} and $PM_{2.5}$. Even with the implementation of mitigation measures, nonattainment air quality impacts resulting from buildout of TOP 2050 would be significant and unavoidable (Certified SEIR, pp. 5.3-54 – 5.3-57).

Project Impacts:

Construction

To analyze the emissions associated with construction, regional Project-generated emissions were developed and compared to applicable SCAQMD thresholds. Table 3-1 presents the regional emissions that can be expected from Project construction.

Table 3-1
Regional Construction Impacts

Source	Emissions (lbs/day)					
	VOC	NO_X	CO	SO_X	PM_{10}	$PM_{2.5}$
Summer						
2026	3.91	34.72	32.28	0.06	23.78	12.01
2027	1.60	11.05	22.06	0.03	2.01	0.73
2028	1.54	10.51	21.48	0.03	1.98	0.69
Winter						
2026	3.47	30.11	29.79	0.06	11.93	5.11
2027	1.57	11.12	20.15	0.03	2.01	0.73
2028	1.51	10.54	19.70	0.03	1.98	0.69
2029	29.05	17.78	32.37	0.05	2.70	1.02
Maximum Daily Emissions	**29.05**	**34.72**	**32.37**	**0.06**	**23.78**	**12.01**
SCAQMD Regional Threshold	75	100	550	150	150	55
Threshold Exceeded?	NO	NO	NO	NO	NO	NO

Source: Urban Crossroads, 2025a

As shown above, regional emissions associated with Project construction would not exceed applicable SCAQMD thresholds, and therefore, would not result in a cumulatively considerable net increase of any criteria pollutant beyond that anticipated and evaluated in the Certified SEIR during construction.

Operations

Operational activities associated with the Project would result in emissions of CO, VOCs, NO_X, SO_X, PM_{10}, and $PM_{2.5}$. Operational-related emissions are expected from the following primary sources: area source emissions, energy source emissions, and mobile source emissions. The Project-related operational air quality impacts derive primarily from vehicle trips generated by buildout associated with the net increase in residential units.

The SCAQMD has developed regional operational significance thresholds for criteria pollutants, as summarized in Table 3-2. The SCAQMD's CEQA Air Quality Significance Thresholds (March 2023) indicate that any projects in the SCAB with

daily emissions that exceed any of the indicated thresholds should be considered as having an individually and cumulatively significant air quality impact.

Table 3-2
SCAQMD Regional Threshold of Significance

Pollutant	Operational Regional Thresholds
NO_X	55 lbs/day
VOC	55 lbs/day
PM_{10}	150 lbs/day
$PM_{2.5}$	55 lbs/day
SO_X	150 lbs/day
CO	550 lbs/day

Source: Urban Crossroads, 2025a

Table 3-3 compares the emissions associated with the proposed Project and the approved school use against the SCAQMD thresholds presented above.

Table 3-3
Operational Emissions Comparison

	Emissions (lbs/day)					
	VOC	NO_X	CO	SO_X	PM_{10}	$PM_{2.5}$
Summer						
Proposed Project	8.44	7.52	53.35	0.14	11.69	3.22
Approved School Use	6.21	5.76	55.04	0.13	11.43	2.99
Net Emissions	**2.24**	**1.76**	**-1.68**	**0.01**	**0.26**	**0.23**
Threshold	55	55	550	150	150	55
Threshold Exceeded?	No	No	No	No	No	No
Winter						
Proposed Project	7.45	7.74	36.28	0.14	11.68	3.22
Approved School Use	5.48	6.15	42.64	0.13	11.42	2.98
Net Emissions	**1.97**	**1.59**	**-6.37**	**0.01**	**0.26**	**0.23**
Threshold	55	55	550	150	150	55
Threshold Exceeded?	No	No	No	No	No	No

Source: Urban Crossroads, 2025a

As shown above, operational-source emissions would not exceed the applicable SCAQMD regional thresholds for emissions of any criteria pollutant. The Project would not result in any new, increased or substantially different impacts, other than those previously considered and addressed in the Certified SEIR.

Mitigation:

Certified SEIR Measure(s)	Project Applicability
MM 3-1 Prior to discretionary approval by the City of Ontario for development projects subject to CEQA (California Environmental Quality Act) review (i.e., nonexempt projects), project applicants shall prepare and submit a technical assessment evaluating potential project construction-related air quality impacts to the City of Ontario Planning Department for review and approval. The evaluation shall be prepared in conformance with South Coast Air Quality Management District (South Coast AQMD) methodology for assessing air quality impacts. If construction-related criteria air pollutants are determined to have the potential to exceed the South Coast AQMD–adopted thresholds of significance, City of Ontario Building Department shall require feasible mitigation measures to reduce air quality emissions. Potential measures shall be incorporated as conditions of approval for a project and may include: • Require fugitive dust control measures that exceed South Coast Air Quality Management District's Rule 403, such as: o Requiring use of nontoxic soil stabilizers to reduce wind erosion. o Applying water every four hours to active soil disturbing activities. o Tarping and/or maintaining a minimum of 24 inches of	**Implemented.** The Project-specific Air Quality Impact Analysis is summarized within this Addendum and provided in its entirety as Appendix C. Project construction would not exceed SCAQMD thresholds; further mitigation is not required.

freeboard on trucks hauling dirt, sand, soil, or other loose materials. • Using construction equipment rated by the United States Environmental Protection Agency as having Tier 4 interim or higher exhaust emission limits. • Ensuring construction equipment is properly serviced and maintained to the manufacturer's standards. • Limiting nonessential idling of construction equipment to no more than five consecutive minutes. • Using Super-Compliant VOC paints for coating of architectural surfaces whenever possible. A list of Super-Compliant architectural coating manufactures can be found on the South Coast Air Quality Management District's website at: http://www.aqmd.gov/prdas/brochures/Super-Compliant_AIM.pdf. These identified measures shall be incorporated into all appropriate construction documents (e.g., construction management plans) submitted to the City and shall be verified by the City's Planning Department.	
MM 3-2 The City of Ontario shall evaluate new development proposals within the City and require all developments to include access or linkages to alternative modes of transportation, such as transit stops, bike paths, and/or pedestrian paths	**Applicable.** Omnitrans Route 87 currently provides transit service to the Project area, with a stop located at the corner of Eucalyptus Avenue and Hamner Avenue, less than 1,000 feet from the Project site. The Project would provide internal driveways and pedestrian paths that connect to the

(e.g. sidewalks).	existing street and sidewalk network surrounding the Project site.
AQ-1 Prior to discretionary approval by the City of Ontario for development projects subject to CEQA (California Environmental Quality Act) review (i.e., nonexempt projects), project applicants shall prepare and submit a technical assessment evaluating potential project operation-phase-related air quality impacts to the City of Ontario Planning Department for review and approval. The evaluation shall be prepared in conformance with South Coast Air Quality Management District (South Coast AQMD) methodology in assessing air quality impacts. If operation-related air pollutants are determined to have the potential to exceed the South Coast AQMD–adopted thresholds of significance, the City of Ontario Planning Department shall require that applicants for new development projects incorporate mitigation measures to reduce air pollutant emissions during operational activities. The identified measures shall be included as part of the conditions of approval. Possible mitigation measures to reduce long-term emissions could include, but are not limited to the following: • For site-specific development that requires refrigerated vehicles, the construction documents shall demonstrate an adequate number of electrical service connections at loading docks for plug-in of the anticipated number of refrigerated trailers to reduce idling time and	**Implemented.** The Project-specific Air Quality Impact Analysis is summarized within this Addendum and provided in its entirety as Appendix C. Project operations would not exceed SCAQMD thresholds; further mitigation is not required.

emissions. • Applicants for manufacturing and light industrial uses shall consider energy storage and combined heat and power in appropriate applications to optimize renewable energy generation systems and avoid peak energy use. • Site-specific developments with truck delivery and loading areas and truck parking spaces shall include signage as a reminder to limit idling of vehicles while parked for loading/unloading in accordance with California Air Resources Board Rule 2845 (13 CCR Chapter 10 sec. 2485). • Provide changing/shower facilities as specified in Section A5.106.4.3 of CALGreen (Nonresidential Voluntary Measures). • Provide bicycle parking facilities per Section A4.106.9 of CALGreen (Residential Voluntary Measures). • Provide preferential parking spaces for low-emitting, fuel-efficient, and carpool/van vehicles per Section A5.106.5.1 of CALGreen (Nonresidential Voluntary Measures). • Provide facilities to support electric charging stations per Section A5.106.5.3 and Section A5.106.8.2 of CALGreen (Nonresidential Voluntary Measures; Residential Voluntary Measures). • Applicant-provided appliances shall be Energy Star–certified	

appliances or appliances of equivalent energy efficiency (e.g., dishwashers, refrigerators, clothes washers, and dryers). Installation of Energy Star–certified or equivalent appliances shall be verified by the City during plan check.	

c. **Expose sensitive receptors to substantial pollutant concentrations?**

Summary of Certified SEIR Finding: The Certified SEIR notes that individual development projects within the City would be required to achieve the incremental risk thresholds established by SCAQMD, and on this basis, potential Toxic Air Contaminant (TAC) impacts from individual developments would be less than significant. TOP 2050 Policy ER4-9, New Localized Air Pollution Sources Near Existing Sensitive Receptors, ensures that mobile sources of TACs not covered under South Coast AQMD permits are considered during subsequent project-level environmental review by the City of Ontario. Other air quality mitigation measures implemented under TOP 2050 would further reduce air pollutant emissions, thereby minimizing effects of pollutants at sensitive receptors.

The Certified SEIR nonetheless concludes that buildout of TOP 2050 would generate TACs that could contribute to elevated levels of TAC pollutants in the air basin. On this basis, the Certified SEIR concluded that TOP 2050 TAC emission impacts at sensitive receptors would be cumulatively significant (Certified SEIR, p. 5.3-57).

Project Impacts:

Construction

To analyze Project impacts to vicinity sensitive receptors, the localized emissions associated with Project construction were developed and compared to applicable SCAQMD thresholds. Peak site preparation and grading activities were used for analysis, since this phase represents the maximum localized emissions that would occur. Table 3-4 presents the localized construction emissions of the Project, along with the applicable thresholds.

Table 3-4
Localized Construction Impacts

	Emissions (lbs/day)			
	NO_X	CO	PM_{10}	$PM_{2.5}$
Site Preparation				
Maximum Daily Emissions	34.61	31.01	7.43	4.31
SCAQMD Threshold	220	1,713	11	7
Threshold Exceeded?	No	No	No	No
Grading				
Maximum Daily Emissions	29.95	28.67	4.05	2.25
SCAQMD Threshold	237	1,873	13	8
Threshold Exceeded?	No	No	No	No

Source: Urban Crossroads, 2025a

As shown above, localized emissions associated with Project construction would not exceed applicable SCAQMD thresholds.

Toxic Air Contaminants

Residential uses proposed by the Project would not result in toxic air contaminants (TACs) during operation. The Certified SEIR, which evaluated regional emissions from mobile sources resulting from implementation of TOP 2050, concluded that the implementation of 2050 would not produce the volume of traffic required to generate a CO hotspot, and CO hotspots impacts would be less than significant. As identified in Checklist item 17, *Traffic*, the proposed Project would generate fewer vehicular trips than anticipated and evaluated in the Certified SEIR. Therefore, the proposed Project would not expose sensitive receptors to substantial localized CO concentrations, consistent with the conclusion of the TOP Final SEIR. Therefore, sensitive receptors would not be exposed to substantial pollutant concentrations as the result of Project operations.

Based on the foregoing, the Project would not expose sensitive receptors near the Project site to significant pollutant concentrations during construction and operation. Therefore, the Project would not result in any new, increased or substantially different impacts, other than those previously considered and addressed in the Certified SEIR.

Mitigation:

Certified SEIR Measure(s)	Project Applicability
None.	-

d. **Result in other emissions (such as those leading to odors adversely affecting a substantial number of people)?**

Summary of Certified SEIR Finding: The Certified SEIR notes that development pursuant to TOP 2050 would be required to comply with SCAQMD Rule 402. SCAQMD Rule 402 acts to generally control and regulate odors and odor sources, thereby minimizing potential effects of construction-source and operational-source odors from other than industrial land uses (Certified SEIR, p. 5.3-46).

The Certified SEIR also acknowledges that certain types of industrial land uses (e.g., compost facilities, landfills, solid-waste transfer stations, fiberglass manufacturing facilities, paint/coating operations, asphalt batch manufacturing plants, chemical manufacturing, and food manufacturing facilities) warrant focused odor impact analyses. The City would require site- and development-specific analyses to ensure that any odors generated by these types of land uses would not adversely affect a substantial number of people (Certified SEIR, p. 5.3-46).

Based on the preceding, the Certified SEIR concluded that the potential for TOP 2050 to create or result in odors that would adversely affect a substantial number of people would be less than significant.

Project Impacts: Land uses generally associated with odor complaints include uses such as agricultural uses, wastewater treatment plants, chemical plants, composting operations, refineries, landfills, and dairies. The Project does not propose land uses typically associated with emitting objectionable odors. Potential odor sources associated with the Project may result from construction equipment exhaust and the application of concrete and architectural coatings during construction activities and the temporary storage of typical solid waste (refuse) associated with the Project's (long-term operational) uses. Standard

construction requirements would minimize odor impacts from construction. The construction odor emissions would be temporary, short-term, and intermittent in nature and would cease upon completion of the respective phase of construction and is thus considered less than significant.

Project-generated refuse would be stored in covered containers and removed at regular intervals in compliance with the City's solid waste regulations. The Project would also be required to comply with SCAQMD Rule 402 to prevent occurrences of public nuisances. Therefore, odors associated with the Project construction and operations would be less than significant. The Project would not result in any new, increased or substantially different impacts, other than those previously considered and addressed in the Certified SEIR.

Mitigation:

Certified SEIR Measure(s)	Project Applicability
None.	-

4. **BIOLOGICAL RESOURCES.** Would the project:

a. **Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?**

Summary of Certified SEIR Finding: The Certified SEIR recognizes that development in accordance with TOP 2050 could impact sensitive species. Projects considered for approval under TOP 2050 would be subject to independent CEQA review to determine whether there is potential habitat on-site for sensitive species. The Certified SEIR did not identify any significant impacts in this regard (Certified SEIR, pp. 5.4-28 – 5.4-34).

Project Impacts: A General Biological Resources Assessment was conducted for the entire Esperanza Specific Plan area, inclusive of the Project site, as part of the Esperanza DEIR. The Assessment concluded that no natural or native plant communities were present within the Specific Plan area, and only a few scattered remnants of native vegetation remained due to long-standing agricultural uses. No special-status plant species were identified within the Specific Plan area, nor were any expected to occur due to the overall absence of suitable habitat.

Several special-status wildlife species were either recorded during the Assessment or had the potential to occur within the Specific Plan area. These species included the loggerhead shrike (*Lanius ludovicianus*), burrowing owl (*Athene cunicularia*), white-tailed kite (*Elanus leucurus*), Northern harrier (*Circus cyaneus*), Ferruginous hawk (*Buteo regalis*), Golden eagle (*Aquila chrysaetos*), California horned lark (*Eremophila alpestfis actia*), and the San Diego black-tailed jackrabbit (*Lepus californicus benettii*). Impacts to these species, and potential foraging/nesting habitat within the Specific Plan area, were reduced to less than significant through the application of mitigation.

All mitigation measures protecting biological resources required of the Esperanza Specific Plan (see Appendix B) would be implemented by the Project, precluding the Project's potential to have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species. The Project would not result in any new, increased or substantially different impacts, other than those previously considered and addressed in the Certified SEIR.

Mitigation:

Certified SEIR Measure(s)	Project Applicability
None.	-

b. **Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?**

c. **Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?**

Summary of Certified SEIR Finding: The Certified SEIR concluded that individual projects subject to CEQA environmental review would be required to determine whether there is potential habitat on-site for sensitive species. The Certified SEIR did not identify any significant impacts in this regard (Certified SEIR, p. 5.4-28).

Project Impacts: The Esperanza Specific Plan DEIR concluded that no riparian or wetlands were located within the Specific Plan area, inclusive of the Project site. The site is surrounded by roadways, including gutters. No drainage courses or streams exist within the Project site. Therefore, the Project would not result in significant impacts to riparian habitat, wetlands, or other sensitive natural communities. The Project would not result in any new, increased or substantially different impacts, other than those previously considered and addressed in the Certified SEIR.

Mitigation:

Certified SEIR Measure(s)	Project Applicability
None.	-

d. **Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?**

Summary of Certified SEIR Finding: The Certified SEIR states that no regional wildlife movement corridors have been identified in the City, and most of the City is ill-suited for the purposes of wildlife movement. Additionally, compliance with existing policies and regulations ensures impacts in this regard would be maintained at levels that would be less than significant (Certified SEIR, p. 5.4-30).

Project Impacts: No wildlife corridors or linkages are located on-site. Further, the site is bounded on all sides by roads and/or urban development, diminishing its potential to function as a wildlife movement corridor. Consistent with the conclusion of the Certified SEIR, the Project would not interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors or impede the use of native wildlife nursery sites. The Project would not result in any new, increased or substantially different impacts, other than those previously considered and addressed in the Certified SEIR.

Mitigation:

Certified SEIR Measure(s)	Project Applicability
None.	-

e. **Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?**

f. **Conflict with the provisions of an adopted Habitat Conservation Plan (HCP), Natural Community Conservation Plan (NCCP), or other approved local, regional, or state habitat conservation plan?**

Summary of Certified SEIR Finding: The Certified SEIR did not identify any conflicts with any local policies or ordinances protecting biological resources, adopted Habitat Conservation Plan, Natural Community Plan, or other approved local, regional, or state habitat conservation plan (Certified SEIR, pp. 5.4-30 – 5.4-31).

Project Impacts: Section 10-2 of the Ontario Municipal Code addresses tree protection, maintenance, and replacement policies for trees within the City's parkways and rights-of-way. Additionally, the City has published landscape guidelines that must be followed when developing new or existing sites. The Project would be implemented consistent with all applicable guidelines in this regard.

The Project site is not part of an adopted HCP, NCCP or other approved habitat conservation plan (CDFW, 2019). As a result, no adverse environmental impacts are anticipated. The Project would not result in any new, increased or substantially different impacts, other than those previously considered and addressed in the Certified SEIR.

Mitigation:

Certified SEIR Measure(s)	Project Applicability
None.	-

5. **CULTURAL RESOURCES.** The analysis in this section is based on the following technical analysis:

    - *Cultural Resources Study for the Eucalyptus and Amherst Avenues Project, City of Ontario, San Bernardino County, California* (BFSA Environmental Services) April 1, 2025.

The report (BFSA, 2025a) is provided in its entirety as Appendix D of this Addendum.

a. **Cause a substantial adverse change in the significance of a historical resource as defined in Section 15064.5?**

Summary of Certified SEIR Finding: Historic resources in the City include historic districts, historic landmarks or points of historical interest, and other buildings, structures, objects, and sites that appear eligible for listing on the National, California, or Local Registers of Historic Places. The Certified SEIR concluded that adoption of TOP 2050 would not itself directly affect any historical structures; however, identified and potential historic structures and sites may be vulnerable as development occurs. Mitigation Measure 5-1 would require historic or potentially historic resources to be evaluated for historic significance through the City's Development Code tier system. Impacts to historical resources would remain significant and unavoidable (Certified SEIR, pp. 5.5-18 – 5.5-23).

Project Impacts: No on-site historical resources were identified as part of the Project-specific Cultural Resources Study. The Cultural Resources Study concluded that no further study or mitigation would be required (BFSAa, 2025). Therefore, the Project would not cause a substantial adverse change in the significance of a historical resource as defined in Section 15064.5, and no impacts would occur. The Project would not result in any new, increased or substantially different impacts, other than those previously considered and addressed in the Certified SEIR.

Mitigation:

Certified SEIR Measure(s)	**Project Applicability**
5-1 Historic or potentially historic resources in the City shall be evaluated for historic significance through the City's tier system prior to the issuance of plan or development approvals. Pursuant to City's Development Code (Chapter 4, Permits, Actions, and Decisions, and Chapter 7, Historic Preservation) mitigation measures for all Tier III Historic Resources shall include the following: a) Each historic resource shall be fully documented and cataloged pursuant to Historic American Building Survey/Historic American Engineering Record (HABS/HAER) standards, to provide a record of the resource, including, but not limited to: [i] the preparation of site plans, floor plans, exterior and interior elevations, and detail drawings of character defining features (such as moldings, stairs, etc.); and [ii]	**Not Applicable.** No historical resources are located on-site, nor would any historic resources be affected by the Project.

photographs of the resource, including the exterior, interior, and interior and exterior character defining features (such as moldings, light fixtures, trim patterns, etc.). b) A mitigation fee established pursuant to Section 7.01.030 (Historic Preservation Mitigation Fee) shall be paid to the City prior to the issuance of a demolition permit for Tier III historic resources. Fees for Tier I and II historic resources shall be determined during the Environmental Impact Report process. The fees established for Tier III will be used as a reference point for establishing fees for Tier I and II historic resources. c) A Certificate of Appropriateness shall not be issued for the demolition of an historic resource, either in whole or in part, until such time that a demolition permit application and a replacement structure has been approved by the City, and appropriate permits have been issued for its construction, unless: [i] a waiver is granted pursuant to Subsection H (Replacement Structure Waiver for Historic Resources Located within Industrial Zoning Districts) of Section 4.02.050; [ii] a deferral of the replacement structure requirement is granted pursuant to Subsection G (Replacement Structure Deferral) of Section 4.02.050; or [iii] demolition is required pursuant to Section	

7.01.050 (Unsafe or Dangerous Conditions) of this Development Code. In an effort to preserve features and artifacts from historic resources, a determination whether items within or on the resource should be salvaged must be made by the Planning Department and may include the local historical society prior to the issuance of the demolition permit. The applicant shall be responsible for the removal, relocation, storage, and donation of such items selected for salvaging. The applicant shall provide an inventory of salvaged items to the Planning Department, and shall include a list of each item name, description, and dimension (as necessary), and the location of each item on a floor plan.	

b. **Cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5?**

Summary of Certified SEIR Finding: Adoption of TOP 2050 would not of itself directly affect archaeological resources. However, buildout of TOP 2050 land use plan would allow development activities and ground disturbance affecting known and potential areas of archaeological sensitivity. These activities could potentially cause the disturbance of archeological resources. Therefore, future development that would be accommodated by TOP 2050 could potentially unearth previously unrecorded resources; see Mitigation Measure 5-2, below. (Certified SEIR, p. 5.5-19).

Project Impacts: No cultural resources were identified within the Project site during the Cultural Resources Study. Further, no natural resources associated with archaeological sites, such as natural water sources or bedrock outcroppings are present within the Project site. Due to the prior ground disturbance and the

absence of identified cultural resources within the Project site vicinity, the potential for any significant resources to be present or impacted by the Project was determined to be minimal. Given that no archaeological sites, features, or artifacts have been identified within or directly adjacent to the Project site, the Cultural Resources Study determined that no potential impacts to cultural resources are anticipated. The Cultural Resources Study concluded that no further archaeological study or mitigation would be required (BFSA, 2025a).

The Project would not result in any new, increased or substantially different impacts, other than those previously considered and addressed in the Certified SEIR.

Mitigation:

Certified SEIR Measure(s)	**Project Applicability**
MM 5-2 In areas of documented or inferred from evident archaeological and/or paleontological resource presence, City staff shall require applicants for development permits to provide studies to document the presence/absence of such resources. On properties where resources are identified, such studies shall provide a detailed mitigation plan, including a monitoring program and recovery and/or in situ preservation plan, based on the recommendations of a qualified cultural preservation expert. The mitigation plan shall include the following requirements: a) Archaeologists and/or paleontologist shall be retained for the project and will be on call during grading and other significant ground-disturbing activities. b) Should any cultural resources be discovered, no further grading shall	**Not Applicable.** No archaeological resources would be affected by the Project. Please refer to Checklist item 7, *Geology and Soils*, for a discussion of Project paleontological resource impacts and mitigation.

occur in the area of the discovery until the Planning Director or designee is satisfied that adequate provisions are in place to protect these resources. c) Unanticipated discoveries shall be evaluated for significance by a San Bernardino County Certified Professional Archaeologist/ Paleontologist. If significance criteria are met, then the project shall be required to perform data recovery, professional identification, radiocarbon dates, and other special studies; submit materials to a museum for permanent curation; and provide a comprehensive final report including a catalog with museum numbers.	

c. **Disturb any human remains, including those interred outside of dedicated cemeteries?**

Summary of Certified SEIR Finding: The Certified SEIR concluded that compliance with existing regulations would ensure that the potential for TOP 2050 to disturb any human remains, including those interred outside of formal cemeteries was less than significant (Certified SEIR, p. 5.5-21).

Project Impacts: The Project would be required to comply with all existing regulations, including the California Public Resources Code Section 5097.98, which would provide protection for any human remains discovered during development activities. On this basis, the potential for the Project to result in disturbance of any human remains, including those interred outside of formal cemeteries would be less than significant. When compared to the Certified SEIR findings, no new or substantially increased impacts related to potential disturbance of human remains would result from the Project.

Mitigation:

Certified SEIR Measure(s)	Project Applicability
None.	-

6. **ENERGY.** Would the project:

a. **Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?**

Summary of Certified SEIR Finding: The Certified SEIR concluded that regulatory compliance under TOP 2050 buildout conditions would promote building energy efficiency and vehicle fuel efficiency and reduce building energy demand and transportation-related fuel usage. Additionally, TOP 2050 includes policies related to land use and transportation planning and design, energy efficiency, public and active transit, and renewable energy generation that would contribute to enhanced building and transportation-related energy efficiencies and thereby reduce demands on nonrenewable sources of energy. Implementation of TOP 2050 Policies, energy efficiency and conservation measures articulated in the Community Climate Action Plan (CCAP), and compliance with regulatory requirements would ensure that energy consumption resulting from TOP 2050 buildout would not be inefficient, wasteful, or unnecessary. On this basis, the potential for TOP 2050 to result in a potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources would be less than significant (Certified SEIR, pp. 5.6-9 – 5.6-12).

Project Impacts: The Project would be implemented consistent with all applicable regulations in this regard, including applicable efficiency/conservation provisions of the CCAP and applicable CCAP updates. Additionally, the Project would adhere to all applicable TOP 2050 policies related to land use and transportation planning and design, energy efficiency, public and active transit, and renewable energy generation that would contribute to enhanced building and transportation-related energy efficiencies and thereby reduce demands on nonrenewable sources of energy. Based on the preceding, the Project would not

result in or cause wasteful, inefficient, and unnecessary consumption of energy. When compared to impacts addressed in the Certified SEIR, no new or substantially increased energy impacts would occur under the Project.

Mitigation:

Certified SEIR Measure(s)	Project Applicability
None.	-

b. **Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?**

Summary of Certified SEIR Finding: The Certified SEIR notes that TOP 2050 would comply with applicable provisions of the California Renewables Portfolio Standard Program (RPS); and current and future iterations of CALGreen. Additionally TOP 2050 includes policies supporting statewide goals to transition the electricity grid to renewable sources. Mandated compliance with the CCAP and its updates would also be required for all new development under TOP 2050. On this basis, the Certified SEIR concluded that the potential for TOP 2050 to conflict with or obstruct a state or local plan for renewable energy or energy efficiency would be less than significant (Certified SEIR, pp. 5.6-13, 5.6-14).

Project Impacts: The Project would be required to comply with incumbent Building Energy Efficiency Standards contained in the California Code of Regulations (CCR), Title 24, Part 6, Energy Efficiency Standards, including applicable CALGreen provisions. CALGreen supports the goals of the State's greenhouse gas reduction and building energy efficiency programs. The Project would also be required to implement applicable energy efficiency/conservation measures of the CCAP and its updates. Based on the preceding, the Project would not conflict with or obstruct a state or local plan for renewable energy or energy efficiency.

Mitigation:

Certified SEIR Measure(s)	Project Applicability
None.	-

7. **GEOLOGY & SOILS.** The following discussions are based primarily on information presented in the following analyses:

- *Geotechnical Evaluation of Mass Graded Site and Grading Plan Review of Proposed 10-Acre "Esperanza Townhomes" Residential Development, Buildings 1 through 28, Tentative Tract No. 20730, located North of Eucalyptus & Amherst Avenues, City of Ontario, County of San Bernardino, California* (LGC Geotechnical, Inc.) April 18, 2025.

- *Paleontological Assessment for the Eucalyptus and Amherst Avenues Project, City Of Ontario, San Bernardino County, California* (BFSA Environmental Services) April 1, 2025.

These reports are presented as Appendix E and F, respectively.

a. **Expose people or structures to potential substantial adverse effects, including the risk of loss, injury or death involving:**

i. **Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.**

Summary of Certified SEIR Finding: The Certified SEIR concluded that the City of Ontario is not within any Alquist-Priolo Earthquake Fault Zone. Therefore, impacts would be less than significant, and TOP 2050 would not result in new or a substantial increase in magnitude of impacts compared to the Certified SEIR (Certified SEIR, pp. 5.7-18 – 5.7-19).

Project Impacts: Ground rupture is the visible offset of the ground surface when an earthquake rupture along a fault affects the Earth's surface. Southern California, including the City of Ontario, is subject to the effects of seismic activity due to the active faults that traverse the area. Active faults are defined as those that have experienced surface displacement within Holocene time (approximately the last 11,000 years) and/or are in a State-designated Alquist-Priolo Earthquake Fault Zone. The Project site is not located with an Alquist-Priolo Earthquake Fault Zone; no known active faults traverse the Project site. The Geotechnical Evaluation concluded that the possibility of damage due to ground rupture is considered low since no active faults are known to cross the site (LGC Geotechnical, 2025). The Project would not result in any new, increased or substantially different impacts, other than those previously considered and addressed in the Certified SEIR.

Mitigation:

Certified SEIR Measure(s)	Project Applicability
None.	-

ii. **Strong seismic ground shaking?**

Summary of Certified SEIR Finding: The Certified SEIR concluded that projects considered for approval under TOP 2050 would be required to comply with seismic safety provisions of the CBC (Title 24, Part 2 of the California Code of Regulations). Such compliance would reduce hazards arising from ground shaking to less than significant. Therefore, impacts would be less than significant, and TOP 2050 would not result in new or a substantial increase in magnitude of impacts compared to the Certified SEIR (Certified SEIR, pp. 5.7-18 – 5.7-19).

Project Impacts: Southern California is a seismically active area and properties in the City of Ontario, including the Project site, are subject to periodic ground shaking and other effects from earthquake activity along nearby regional faults. The Project site is not at an increased risk relative to the surrounding areas.

Ontario Municipal Code Section 1803.2 requires a geotechnical investigation to evaluate soil classification, slope stability, soil strength, position and adequacy of load-bearing soils, the effect of moisture variation on soil-bearing capacity, compressibility, liquefaction, and expansiveness, as necessary, determined by the City building official. To this end, the Geotechnical Evaluation includes site-specific recommendations that would be implemented during grading and earthwork operations at the Project site. The geotechnical recommendations would provide adequate protection for the proposed development to the extent required to reduce seismic risk to an "acceptable level," as defined by the California Code of Regulations.

Additionally, the City requires compliance with the CBC through Title 8, Chapter 1, Section 8-1.01 of the Ontario Municipal Code. The CBC contains provisions for earthquake safety based on factors including occupancy type, the types of soil and rock on-site, and the probable strength of ground motion.

As structures would be designed to meet or exceed CBC standards for earthquake resistance, development of the Project would not create significant impacts related to seismic ground shaking. The Project would not result in any new, increased or substantially different impacts, other than those previously considered and addressed in the Certified SEIR.

Mitigation:

Certified SEIR Measure(s)	Project Applicability
None.	-

iii. **Seismic-related ground failure, including liquefaction?**

Summary of Certified SEIR Finding: The Certified SEIR concluded that there is currently no potential for liquefaction based on groundwater levels throughout the City being greater than 50 feet below ground surface. Therefore, no impact would occur (Certified SEIR, pp. 5.7-18 – 5.7-19).

Project Impacts: Liquefaction occurs when three general conditions coexist: 1) shallow groundwater, 2) low-density non-cohesive (granular) soils and 3) high-

intensity ground motion. Groundwater at the Project site is estimated to be at a depth of approximately 120 to 130 feet below ground surface based on available water well data. As such, the Geotechnical Evaluation concluded that the on-site soils are generally not susceptible to liquefaction due to a lack of groundwater and the relatively dense native soils in the upper 50 feet, and liquefaction potential is considered very low (LGC Geotechnical, 2025).Therefore, consistent with the findings in the Certified SEIR, the Project does not have the potential to expose people or structures to significant seismic-related liquefaction. The Project would not result in any new, increased or substantially different impacts, other than those previously considered and addressed in the Certified SEIR.

Mitigation:

Certified SEIR Measure(s)	**Project Applicability**
None.	-

iv. **Landslides?**

Summary of Certified SEIR Finding: The Certified SEIR did not identify any specific constraints regarding landslides (Certified SEIR, pp. 5.7-20 – 5.7-21).

Project Impacts: The Project site and surrounding area are generally flat with no significant slopes. Additionally, the Esperanza Specific Plan DEIR concluded that no significant landslide risk exists within the Specific Plan area. The Project would not result in any new, increased or substantially different impacts, other than those previously considered and addressed in the Certified SEIR.

Mitigation:

Certified SEIR Measure(s)	**Project Applicability**
None.	-

b. **Result in substantial soil erosion or the loss of topsoil?**

Summary of Certified SEIR Finding: The Certified SEIR concluded that the young alluvial sediment and wind-blown sand underlying the City are generally granular, poorly consolidated, and very susceptible to erosion. However, compliance with the CBC and review of grading plans for individual projects by the City Engineer would ensure no significant impacts would occur. In addition, construction activities on project sites larger than one acre are required to prepare a Stormwater Pollution Prevention Plan (SWPPP) that details best management practices (BMPs) to reduce the potential for erosion during construction activities. Furthermore, TOP 2050 includes policies addressing erosion and loss of topsoil. Therefore, impacts would be less than significant, and TOP 2050 would not result in new or a substantial increase in magnitude of impacts compared to the Certified SEIR (Certified SEIR, pp. 5.7-19 – 5.7-20).

Project Impacts: The State Water Resources Control Board (SWRCB) Order No. 2009-0009-DWQ (General Construction Permit) contains water quality standards and stormwater discharge requirements that apply to construction projects of one acre or more. The General Construction Permit was issued pursuant to the National Pollutant Discharge Elimination System (NPDES) regulations for implementing part of the federal Clean Water Act. The General Construction Permit requires preparation of a SWPPP that identifies the sources of pollution that may affect the quality of stormwater discharges and describes and ensures the implementation of BMPs to reduce the pollutants, including silt and soil, in construction stormwater discharges.

The Project would be required to comply with the NPDES permit by preparing and implementing a SWPPP specifying BMPs for minimizing pollution of stormwater with soil and sediment during Project construction.

Implementation of site-specific BMPs, as well as mandatory compliance with the recommendations set forth in the Geotechnical Evaluation, would reduce, prevent, or minimize soil erosion from Project-related demolition, site preparation and grading, and construction activities. The Project would not result in any new, increased or substantially different impacts, other than those previously considered and addressed in the Certified SEIR.

Mitigation:

Certified SEIR Measure(s)	Project Applicability
None.	-

c. **Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?**

Summary of Certified SEIR Finding: The Certified SEIR concluded that the thick alluvial deposits comprising the Chino Subbasin may be susceptible to compaction, with resulting subsidence at the surface, in the event of rapid groundwater withdrawal. Projects considered for approval under TOP 2050 could expose structures or persons to potentially significant hazards from ground subsidence. However, compliance with the CBC and review of grading plans for individual projects by the City Engineer would ensure no significant impacts would occur.

Additionally, the young sediments underlying the City are generally dry and loose in the upper few feet, and therefore are susceptible to compression. Much of the Ontario Ranch has been intensively farmed and is especially susceptible to compression. Developments approved pursuant to TOP 2050 could expose persons or structures to potentially significant hazards from compressible soils. However, compliance with the CBC and review of grading plans for individual projects by the City Engineer would ensure no significant impacts would occur. Therefore, impacts would be less than significant, and TOP 2050 would not result in new or a substantial increase in magnitude of impacts compared to the Certified SEIR. (Certified SEIR, pp. 5.7-20 – 5.7-21).

Project Impacts: The Project Geotechnical Evaluation provides recommendations that would ensure the Project would not be adversely affected by any unstable soils that may be encountered during the course of Project development. The Evaluation concludes that the Project is feasible from a geotechnical standpoint, provided the recommendations are undertaken (LGC Geotechnical, 2025). Additionally, the City requires compliance with the CBC through Title 8, Chapter

1, Section 8-1.01 of the Ontario Municipal Code. Mandatory compliance with the recommendations of the Geotechnical Evaluation and CBC requirements, as well as review of grading plans by the City Engineer would reduce, prevent, or minimize unstable soil conditions that may be present at the site. The Project would not result in any new, increased or substantially different impacts, other than those previously considered and addressed in the Certified SEIR.

Mitigation:

Certified SEIR Measure(s)	Project Applicability
None.	-

d. **Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?**

Summary of Certified SEIR Finding: The Certified SEIR concluded that expansive soils are likely in the southern parts of the City, where there are silts, sandy silts, and silty clays. Projects in the southern part of the City under TOP 2050 could expose persons or structures to potentially significant hazards from expansive soils. However, compliance with the CBC and review of grading plans for individual projects by the City Engineer would ensure no significant impacts would occur. Therefore, impacts related to expansive soils would be less than significant and TOP 2050 would not result in new or a substantial increase in magnitude of impacts compared to the Certified SEIR (Certified SEIR, p. 5.7-21).

Project Impacts: Expansive soils are defined as soils possessing clay particles that react to moisture changes by shrinking or swelling. Based on the results of the expansion index testing presented in the Project Geotechnical Evaluation, on-site soils are anticipated to have a “very low” expansion potential (LGC Geotechnical, 2025). As such, the Project would not result in any new, increased or substantially different impacts, other than those previously considered and addressed in the Certified SEIR.

Mitigation:

Certified SEIR Measure(s)	Project Applicability
None.	-

e. **Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?**

Summary of Certified SEIR Finding: Wastewater generated by new development pursuant to buildout of TOP 2050 would be conveyed to and treated at wastewater treatment facilities owned and operated by the Inland Empire Utilities Agency (Regional Plant No. 1 in the City of Ontario and Regional Plant No. 5 in the City of Chino).

The use of septic tanks for new development would be restricted to areas not "in practical proximity existing sewer mains . . ." (Certified SEIR, p. 5.7-22).

Based on the preceding, the Certified SEIR concluded that TOP 2050 would not result in adverse impacts related to use of septic tanks or alternative wastewater disposal systems and ability of soils to accept these systems.

Project Impacts: No septic tanks will be used as part of the proposed Project. The Project would connect to the existing wastewater disposal system. Accordingly, no impact would occur. The Project would not result in any new, increased or substantially different impacts, other than those previously considered and addressed in the Certified SEIR.

Mitigation:

Certified SEIR Measure(s)	Project Applicability
None.	-

f. **Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?**

Summary of Certified SEIR Finding: The Certified SEIR concluded that the City is underlain by deposits of Quaternary and upper-Pleistocene sediments deposited during Pliocene and early Pleistocene time. Quaternary Older Alluvial sediments may contain significant, nonrenewable, paleontological resources and are therefore considered to have high sensitivity. Older Pleistocene alluvial sediments can yield fossil remains, often found at depths of 10 feet or more below existing ground surface. As a result, the possibility of finding additional paleontological resources within City boundaries is moderate to high at depths of 10 feet or more below ground surface. Therefore, future development that would be accommodated by TOP 2050 could potentially unearth previously unrecorded resources. Mitigation Measure 5-2 requires that in the event of an unanticipated discovery of paleontological resources during grading and excavation of the site, a qualified paleontologist would assess the find and develop a course of action to preserve the find. With application of mitigation, the Certified SEIR concluded that TOP 2050 impacts to paleontological resources would be less than significant (Certified SEIR, pp. 5.7-22 – 5.7-25).

Project Impacts: The Paleontological Assessment identified potentially fossiliferous late Pleistocene alluvial wash or fan deposits at a depth below the Project site. The occurrence of terrestrial vertebrate fossils at shallow depths from Pleistocene alluvial fan sediments across the Inland Empire is well documented. Due to the high paleontological sensitivity rating typically assigned to Pleistocene alluvial fan sediments, the Paleontological Assessment concluded that paleontological monitoring should be implemented during mass grading and excavation activities in undisturbed Pleistocene alluvial fan sediments, as required by Mitigation Measure 7-1, below.

With the incorporation of Mitigation Measure 7-1, the Project would not result in any new, increased or substantially different impacts, other than those previously considered and addressed in the Certified SEIR.

Mitigation:

Certified SEIR Measure(s)	Project Applicability
MM 5-2 In areas of documented or inferred from evident archaeological and/or paleontological resource presence, City staff shall require applicants for development permits to provide studies to document the presence/absence of such resources. On properties where resources are identified, such studies shall provide a detailed mitigation plan, including a monitoring program and recovery and/or in situ preservation plan, based on the recommendations of a qualified cultural preservation expert. The mitigation plan shall include the following requirements: a) Archaeologists and/or paleontologist shall be retained for the project and will be on call during grading and other significant ground-disturbing activities. b) Should any cultural resources be discovered, no further grading shall occur in the area of the discovery until the Planning Director or designee is satisfied that adequate provisions are in place to protect these resources. c) Unanticipated discoveries shall be evaluated for significance by a San Bernardino County Certified Professional Archaeologist/ Paleontologist. If significance criteria are met, then the project shall be required to perform data recovery, professional identification, radiocarbon dates, and other special studies; submit materials to a museum	Pursuant to Certified SEIR MM 5-2, and consistent with the recommendations of the Project-specific Paleontological Resources Assessment, the following Project-specific mitigation is required (and negates the applicability of MM 5-2): **7-1** A Paleontological Resources Impact Mitigation Program (PRIMP) shall be prepared, in accordance with TOP Certified SEIR MM 5-2. The PRIMP shall be approved by the City Planning Department prior to the issuance of a grading permit. Additionally, full-time paleontological monitoring starting at a depth of four feet below the surface during earth disturbance activities shall be conducted. A proposed paleontological monitoring plan is presented within the report titled *Paleontological Assessment for the Eucalyptus and Amherst Avenues Project, City Of Ontario, San Bernardino County, California* (BFSA Environmental Services) April 1, 2025.

for permanent curation; and provide a comprehensive final report including a catalog with museum numbers.	

8. **GREENHOUSE GAS EMISSIONS.** Would the project:

Information presented within the section is summarized from:

- *Esperanza Specific Plan Amendment Greenhouse Gas Assessment* (Urban Crossroads, Inc.) March 28, 2025.

The Project-specific Greenhouse Gas Assessment (Urban Crossroads, 2025b) is presented in its entirety as Appendix G to this Addendum.

a. **Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?**

b. **Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?**

Summary of Certified SEIR Finding: The Certified SEIR substantiates that TOP 2050 would yield a net decrease in GHG emissions when compared to the previous General Plan (TOP 2009) GHG emissions forecasts. Further, under TOP 2050 and the Community Climate Action Plan (CCAP), the City would achieve State emissions reductions targets and would progress toward attainment of the State's carbon neutrality goals. On this basis, the Certified SEIR concluded that the potential for TOP 2050 to generate greenhouse gas emissions, either directly or indirectly, that may have an adverse impact on the environment would be less than significant (Certified SEIR, pp. 5.8-25, 5.8-26).

Project Impacts: The Project's annual GHG emissions are summarized in Table 8-1, *Project GHG Emissions*.

Table 8-1
Project GHG Emissions

Source	Emissions (lbs/day)				
	CO_2	CH_4	N_2O	Refrigerants	Total CO_2e
Annual construction-related emissions amortized over 30 years	50.28	1.79E-03	1.40E-03	2.30E-02	50.77
Mobile Source	1,800.46	0.07	0.08	2.09	1,828.80
Area Source	41.21	0.00	0.00	0.00	41.26
Energy Source	260.76	0.02	0.00	0.00	261.84
Water Source	10.91	0.22	0.01	0.00	17.97
Waste Source	10.62	1.06	0.00	0.00	37.17
Refrigerants Source	0.00	0.00	0.00	0.18	0.18
Total CO_2e (All Sources)	**2,238.00**				

Source: Urban Crossroads, 2025b

As shown in Table 8-1, the Project will result in total GHG emissions of approximately 2,238.00 MTCO_2e/yr.

There are currently no published Statewide thresholds of significance for measuring the impact of GHG emissions generated by a proposed project. CEQA Guidelines § 15064.7(b) indicates "each public agency is encouraged to develop and publish thresholds of significance that the agency uses in the determination of the significance of environmental effects." To this end, the City's 2022 CCAP contains guidance on the City of Ontario's GHG Inventory reduction goals, policies, guidelines, and implementation programs.

The CCAP contains Screening Tables which assign points for each option incorporated into a project as mitigation or a project design feature. The point values correspond to the minimum emissions reduction expected from each feature. The menu of features allows flexibility and options for how development projects can implement the GHG reduction measures. Projects that achieve at least 100 points per applicable Screening Table will be consistent with the reduction quantities consistent with the CCAP. Consistent with CEQA Guidelines, such projects would be determined to have a less than significant individual and cumulative impact for GHG emissions.

As presented previously in the Project Description (and required by the Project-specific Greenhouse Gas Assessment), the Project includes certain design features aimed at reducing GHG emissions. Table 8-2 lists the Project features along with the assigned points from the Ontario CCAP.

Table 8-2
Project Design GHG-Reduction Features

Feature	CCAP Points
Building Electrification	
Electric Space Heater	6
Electric Water Heater	8
Electric Stove	5
Electric Dryer	1
Electric Pool Heater	1
Electric Spa Heater	1
Lack of Natural Gas Infrastructure	10
Vehicle Electrification	
Installation of Level 2 EV or higher charging stations at a rate of 30% or more of required vehicle spaces.	30
Waste Diversion	
Storage and collection of green waste, organic waste, and recyclables.	33
Water Conservation	
Water efficient showerheads and faucets	1
Outdoor landscaping consists of drought tolerant, low maintenance plants with a drip irrigation or weather-based controller sprinkler system.	4
Total Points	***100***

Source: City of Ontario; Project plans.

As demonstrated above, the Project would achieve the required points for consistency with the reduction quantities presented in the CCAP. As such, the Project would have a less than significant individual and cumulative impact for GHG emissions. The Project would not result in any new, increased or substantially different impacts, other than those previously considered and addressed in the Certified SEIR.

Mitigation:

Certified SEIR Measure(s)	Project Applicability
None.	-

9. **HAZARDS & HAZARDOUS MATERIALS.**

Project site information presented in the following discussions is summarized from:

- *Phase I Environmental Site Assessment Report, 10.02 Acre Site at Northeast Corner of Amherst and Eucalyptus Avenues, Ontario, California 91761* (SCS Engineers) March 14, 2025.

The Phase I Environmental Site Assessment (ESA) is provided as Addendum Appendix H.

a. **Create a significant hazard to the public or the environment through the routine transport, use or disposal of hazardous materials?**

b. **Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?**

Summary of Certified SEIR Finding: The Certified SEIR determined that buildout in accordance with TOP 2050 would involve the transport, use, and/or disposal of hazardous materials. However, federal and State regulations, City ordinances, and TOP 2050 Policies would appropriately control handling of hazardous substances to reduce potential releases; exposure; and risks of transporting, storing, treating, and disposing of hazardous materials and wastes. On this basis, the Certified SEIR concluded that the potential for TOP 2050 to result in adverse impacts related to transport, use, and/or disposal of hazardous materials; creation of significant hazards, or result in hazardous emissions affecting schools, would be less than significant (Certified SEIR, pp. 5.1-4 – 5.1-10).

Project Impacts:

Historical Uses of the Project Site

According to the Phase I ESA prepared for the Project site, the site was historically used for agricultural purposes from approximately 1902 through 2012. Around 2016, grading activities were first visible on the eastern portion of the site, associated with activities on the adjoining site to the east. Following 2016, much more extensive grading occurred and in 2020, hundreds of soil stockpiles were placed on the central and northern portions of the site. The appearance of the stockpiles coincided with the grading and paving of the adjoining streets, it is likely that the soil was from sites with similar history (undeveloped and/or agricultural land). Further grading occurred in 2021, which likely resulted in the export or blending of that that stockpiled soil.

Current Conditions

The site is currently a vacant, undeveloped lot. A chain-link fence surrounds the site with gate access in the northeastern corner. The site is covered in low, grassy vegetation and bare soil, with small amounts of wind-blown trash observed on the outer edges of the Property (against the fence).

Regulatory database information did not identify known or suspected contamination sites in the area surrounding the Project site. No evidence of hazardous materials was noted on-site; and the Phase I determined that it was unlikely the site had been affected by activities or releases of hazardous substances from surrounding properties.

The Phase I concluded that no recognized environmental conditions, controlled recognized environmental conditions, or significant data gaps in connection with the site exist, and no further investigation is warranted (SCS, 2025).

Project Construction

During the normal course of construction and operation activities, there would be limited transport of potentially hazardous materials (e.g., gasoline, diesel fuel, paints, solvents, fertilizer, etc.) to and from the Project site. However, as presented within the Certified SEIR, the Project would be required to comply with all City and County Hazardous Materials Management Plans and regulations addressing transport, use, storage and disposal of these materials. The Project does not propose or require uses or activities that would result in atypical transportation, use, storage, or disposal of hazardous or potentially hazardous materials not addressed under current regulations and policies.

Project Operation

The Project would not result in or cause exposure(s) to hazards or potentially hazardous conditions. That is, uses proposed by the Project are not considered hazardous. Nor does the Project propose or require facilities or operations involving inherent substantial hazards.

Consistent with the findings of the Certified SEIR, with mandatory compliance City and County Hazardous Materials regulations, potential hazardous materials impacts associated with the Project is not expected to pose a significant hazard to the public or environment through the routine transport, use, or disposal of hazardous materials, nor would the Project increase the potential for accident operations which could result in the release of hazardous materials into the environment. The Project would not result in any new, increased or substantially different impacts, other than those previously considered and addressed in the Certified SEIR.

Mitigation:

Certified SEIR Measure(s)	Project Applicability
None.	-

c. **Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances or waste within one-quarter mile of an existing or proposed school?**

Summary of Certified SEIR Finding: The Certified SEIR determined that buildout in accordance with TOP 2050 would involve the transport, use, and/or disposal of hazardous materials. However, federal and state regulations, City ordinances, and TOP 2050 Policies would appropriately control handling of hazardous substances to reduce potential releases; exposure; and risks of transporting, storing, treating, and disposing of hazardous materials and wastes. On this basis, the Certified SEIR concluded that the potential for TOP 2050 to result in adverse impacts related to transport, use, and/or disposal of hazardous materials; creation of significant hazards, or result in hazardous emissions affecting schools, would be less-than-significant (Certified SEIR, pp. 5.1-4 – 5.1-10).

Project Impacts: The Project site is not located within one quarter mile of an existing or proposed school. The closest school to the Project site is Colony High School, located approximately 1.5 miles to the north. The Project does not propose or require uses that would handle hazardous or acutely hazardous materials, substances, or waste. Implementation of the Project would not have the potential to emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one quarter mile of an existing or proposed school. The Project would not result in any new, increased or substantially different impacts, other than those previously considered and addressed in the Certified SEIR.

Mitigation:

Certified SEIR Measure(s)	Project Applicability
None.	-

d. **Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?**

Summary of Certified SEIR Finding: Development in accordance with TOP 2050 would involve redevelopment and reuse of some sites listed as hazardous materials sites on environmental databases. The environmental databases document the presence of hazardous materials on those sites, but do not document hazardous releases. Redevelopment of the affected sites could potentially expose future residents and workers to hazards from known hazardous materials releases on and near the sites. Should environmental database listed sites be proposed for development, site assessments for hazardous materials and remediation of hazardous materials releases would be required in accordance with TOP 2050 Policies, federal, state, and local regulations. On this basis, the Certified SEIR concluded that the potential for development pursuant to TOP 2050 to be located on hazardous materials sites, and thereby create adverse hazard impacts affecting the public or environment would be less than significant (Certified SEIR, pp. 5.9-38, 5.9-39).

Project Impacts: A records review conducted as part of the Phase I Environmental Site Assessment did not identify the site as a hazardous material site pursuant to Government Code Section 65962.5. Additionally, no adjacent sites were identified as potentially affecting the Project site (SCS, 2025). Therefore, the Project would not create a hazard to the public or the environment and no impact is anticipated. When compared to the Certified SEIR findings, no new or substantially increased impacts related to development affecting Government Code Section 65962.5-listed sites would result from the Project.

Mitigation:

Certified SEIR Measure(s)	Project Applicability
None.	-

e. **For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area?**

Summary of Certified SEIR Finding: Ontario International Airport (ONT), as well as a small portion of the Chino Airport property, is located within the City of Ontario. The Certified SEIR determined that TOP 2050 Policies and established processes for consistency reviews of new development with the appropriate Airport Land Use Compatibility Plan (ALUCP) would be sufficient to prevent significant impacts (Certified SEIR, p. 5.8-27).

Project Impacts: The Project site is located approximately four miles south of the Ontario International Airport (ONT). The ONT Airport Land Use Compatibility Plan (ALUCP) was adopted by Ontario City Council on April 19, 2011 (amended 2018) to promote compatibility between the airport and the land uses that surround it. The Project site is located within the area subject to provisions of The ONT ALUCP, which defines the ONT Airport Influence Area (AIA) as an area in which current and future airport-related noise, overflight, safety, and airspace protection factors may significantly affect land uses or necessitate restriction on those uses. The Project site is located outside the ONT safety zones (see: TOP 2050 Policy Plan Figure LU-06, *Airport Safety Zones & Influence Areas*). As with the development anticipated under TOP 2050, and evaluated in the Certified SEIR, the Project would comply with all requirements set forth within the ALUCP. Based on the preceding, the potential for the Project to result in airport-related safety hazard impacts would be less than significant.

The Project site is located approximately 2.5 miles east of the Chino Airport (CNO). The Project site is located outside the CNO airport influence area and airport safety zones. At this distance, airport hazards from CNO would be less than significant.

The Project would not result in a safety hazard for people residing or working in the Project area. The Project would not result in any new, increased or substantially different impacts, other than those previously considered and addressed in the Certified SEIR.

Mitigation:

Certified SEIR Measure(s)	Project Applicability
None.	-

f. **Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?**

Summary of Certified SEIR Finding: In 2018, the City of Ontario prepared a Local Hazard Mitigation Plan (LHMP) to identify the City's hazards, review and assess past disaster occurrences, estimate the probability of future occurrences, and set goals to reduce or eliminate long-term risk to people and property from natural and man-made hazards. Wildfire hazard is rated the highest risk of the 23 hazards evaluated, followed by flooding. Under the LHMP, interstate highways would serve as major emergency response and evacuation routes. TOP 2050 Policies and local roadways are designed and constructed so as to facilitate access under normal and emergency conditions.

A review of emergency access is included as part of the standard City's Design Review process. Additionally, the Ontario Fire Department reviews development applications to ensure that adequate emergency accessibility is provided based on local and state guidance.

Based on the preceding, the Certified SEIR concluded that buildout of the City in accordance with TOP 2050 would not impair implementation of, or physically interfere with, an adopted emergency response plan or emergency evacuation plan. Impacts in these regards would be less than significant (Certified SEIR, p. 5.9-41).

Project Impacts: The Project does not propose or require permanent alteration of vehicle circulation routes, and would not interfere with any identified emergency response or emergency evacuation plan. Standard City design review processes include coordination with fire and police departments during pre-construction review of plans to ensure that potential interference with emergency response plans and evacuation plans are avoided. Based on the preceding, the Project

would not impair implementation of, or physically interfere with, an adopted emergency response plan or emergency evacuation plan. Impacts in these regards would be less than significant. The Project would not result in any new, increased or substantially different impacts, other than those previously considered and addressed in the Certified SEIR.

Mitigation:

Certified SEIR Measure(s)	Project Applicability
None.	-

g. **Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?**

Summary of Certified SEIR Finding: The Certified SEIR identifies available resources addressing wildland fires and associated potential impacts. These resources include: CAL FIRE 2019 Strategic Fire Plan for California, the California Fire Code, County of San Bernardino Multi-jurisdiction Hazard Management Plan, the Ontario LHMP, and fire services from the Ontario Fire Department. The Certified SEIR determined that adherence to existing regulations and review of building plans by the Ontario Fire Department, development and infrastructure associated with TOP 2050 would not exacerbate risk or result in post-wildfire hazards. No significant impacts were identified (Certified SEIR, p. 5.9-41).

Project Impacts: The Project site is located in an urbanized area, and no wildlands are located in the vicinity of the site. Fire protection services are provided by the Ontario Fire Department. Pre-construction coordination with Ontario Fire Department staff and adherence to local fire department regulations during construction and operation of the Project would be required. As such, no new or substantially increased impacts related to wildland fire impacts would result from the Project. The Project would not result in any new, increased or substantially different impacts, other than those previously considered and addressed in the Certified SEIR.

Mitigation:

Certified SEIR Measure(s)	Project Applicability
None.	-

10. **HYDROLOGY & WATER QUALITY**. Would the project:

Project-specific information presented in the following discussions is primarily based on information contained within the following documents:

- *Drainage Study for Tract No. 20730 Esperanza – PA 11, Eucalyptus Avenue & Amherst Avenue, Ontario, CA* (Walden & Associates) March 2025.

- *Preliminary Water Quality Management Plan (PWQMP),* March 12, 2025.

These reports are presented as Appendices I1 and I2 to this Addendum.

a. **Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?**

Summary of Certified SEIR Finding: The Certified SEIR recognizes that buildout of the City pursuant to TOP 2050 would increase concentrations of pollutants during construction and post-construction activities. To address potential water quality impacts resulting from project construction and operations, projects are required to comply with provisions of the City's National Pollutant Discharge Elimination System (NPDES) permit. NPDES permit requirements include, but are not limited to, mandated preparation of a Stormwater Pollution Prevention Plan (SWPPP) and Water Quality Management Plan (WQMP). Mandated SWPPPs and WQMPs are required to develop and implement Best Management Practices (BMPs) to reduce construction-source and operational-source stormwater pollutant discharges. Based on compliance with the City NPDES Permit and implementation of required SWPPPs and WQMPs, the Certified SEIR did not identify any significant water quality impacts (Certified SEIR, p. 5.10-21).

Project Impacts: Consistent with City requirements, a Preliminary WQMP has been prepared for the Project. The WQMP identifies the Source Control and Treatment Control BMPs to be implemented by the Project, including:

Source Control BMPs

- Minimize non-stormwater site runoff through efficient irrigation system design and controllers.
- Minimize trash and debris in storm runoff through a regular parking lot, storage yard and roadway sweeping program.
- Provide solid roofs over all trash enclosures.
- Site Owner(s)/Property Manager/HOA or POA will be familiar with the Project WQMP and stormwater BMPs.
- Owner or HOA or POA to provide education/training of site occupants and employees on stormwater BMPs.
- Install stormwater placards/stenciled messages with a "No Dumping" message on all on-site/off-site storm drain inlets.

Treatment Control BMPs

- Proprietary Filter Inserts for on-site storm drain inlets or retention basin/trench overflow drains

City review and approval of the WQMP and SWPPP documents is required prior to issuance of grading permits. As determined by the Certified SEIR, implementation of an approved SWPPP and WQMP would reduce the potential for the development under the Project to violate water quality standards or otherwise adversely affect water quality to levels that would be less than significant.

Based on the preceding, the Project's potential to violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality is considered less than significant. When compared to the Certified SEIR findings, no new or substantially increased water quality impacts would result from the Project.

Mitigation:

Certified SEIR Measure(s)	Project Applicability
None.	-

b. **Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?**

Summary of Certified SEIR Finding: As discussed in the Certified SEIR, "[a]pproximately 46 percent of the City's water supply is groundwater pumped by the City from the Chino Groundwater Basin; groundwater pumping is managed by OMUC so that domestic demands do not exceed the safe yield for the basin, consistent with the Chino Basin Watermaster's Optimum Basin Management Program, commonly called the 'OBMP Peace Agreement'" (Certified SEIR, p. 5.10-22). The Certified SEIR notes further "the Chino Groundwater Basin is adjudicated and is considered by DWR to be a very low priority groundwater basin. Each water purveyor has an allotted amount of water that can be pumped from the basin so that the safe yield is not exceeded. The City has access to additional water supplies that can accommodate the proposed increase in growth with buildout of [TOP 2050] and would not interfere with sustainable management of the groundwater basin" (Certified SEIR, p. 5.10-22).

The Certified SEIR recognizes that development pursuant to TOP 2050 would increase the amount of impervious surface within the City. However, groundwater recharge efforts would not be hindered. To these ends, all development projects within the City would be required to prepare project-specific hydrology studies, implement low impact development BMPs and comply with NPDES regulations supporting TOP 2050 Policies promoting infiltration of runoff and groundwater recharge.

Based on the preceding, TOP 2050 would not result in substantial adverse impacts affecting groundwater supplies, groundwater recharge, or groundwater sustainability (Certified SEIR, p. 5.10-23).

Project Impacts: Direct additions to or withdrawals of groundwater are not proposed or required by the Project. Construction proposed by the Project would not involve massive substructures at depths that would significantly impair or alter the direction or rate of flow of groundwater. The Project does not propose or require uses or facilities that would affect designated groundwater recharge areas. The Project has prepared a Drainage Study and Preliminary WQMP, and would comply with NPDES regulations supporting TOP 2050 Policies promoting groundwater recharge.

Based on the preceding, the Project would not result in substantial adverse impacts affecting groundwater supplies, groundwater recharge, or groundwater sustainability. When compared to the Certified SEIR findings, no new or substantially increased water quality impacts would result from the Project.

Mitigation:

Certified SEIR Measure(s)	Project Applicability
None.	-

c. **Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would?**

i. **Result in substantial erosion or siltation on- or off-site;**

Summary of Certified SEIR Finding: Consistent with NPDES requirements, runoff quantities would not be permitted to substantially increase as a result of a development under TOP 2050. In this regard, projects would be required to prepare project-specific hydrology studies. Further, existing City policies encourage the use of low impact development strategies to intercept runoff, reduce stormwater discharge rates, increase infiltration and ultimately reduce discharge volumes to traditional storm drain systems.

The Certified SEIR notes that while the amount of impervious surfaces would be increased under TOP 2050 (and thus surface water flows into drainage systems),

compliance with existing City and County requirements would ensure significant impacts related to alteration of drainage patterns do not occur. Additionally, City policies and regulations act to minimize or avoid development or other actions that would potentially result in impedance or redirection of flood flows (Certified SEIR, pp. 5.10-23 – 5.10-27).

Project Impacts: The Project site currently drains in a southwesterly direction towards the intersection of Eucalyptus Avenue and Amherst Avenue where an onsite detention basin is located. The basin has a 36-inch inlet that joins a public storm drain in Amherst Avenue. The Project would implement an on-site storm drain system that generally maintains the existing drainage pattern and connects to the existing storm drain in Amherst Avenue.

Additionally, compliance with construction-related BMPs and the SWPPP would control and minimize erosion and siltation, resulting in a less than significant impact. The Project would not result in any new, increased or substantially different impacts, other than those previously considered and addressed in the Certified SEIR.

Mitigation:

Certified SEIR Measure(s)	Project Applicability
None.	-

ii. **Substantially increase the rate or amount of surface runoff in a manner which would result in flooding on or off-site;**

Summary of Certified SEIR Finding: The Certified SEIR concluded that future development would increase the amount of impermeable surfaces in the City, which could result in future on- and off-site flooding. The City's standard conditions of approval for new development also require the preparation of hydrology studies and drainage analyses that document the peak runoff rates from the developed site and evaluate the capacity of the storm drain system to accept these flow rates. Additionally, TOP 2050 policies would direct the City to incorporate strategies to capture, slow, or treat run-off and to reduce the flooding

potential down-gradient of new development. These policies would reduce the potential for on- and off-site flooding during the operational phase of future development projects. Therefore, impacts would be less than significant and TOP 2050 would not result in new or a substantial increase in magnitude of impacts compared to the Certified SEIR (Certified SEIR pp. 5.10-23 – 5.10-26).

Project Impacts: Based on the capacity of the surrounding storm drain system, the maximum permitted outflow from the developed site is 15.64 cubic feet per second (cfs). The Project-specific Drainage Study documents the post-development peak runoff rates and verifies that the Projects on-site storm drainage system would function as a flow restriction by oversizing the on-site system capacity and providing on-site storage. Outflow would be released from the site at no more than 15.64 cfs at any time. As such, runoff from the Project site would not have an adverse effect to the existing storm drain system downstream. The Project would not substantially increase the rate or amount of surface runoff in a manner which would result in flooding on or off-site. The Project would not result in any new, increased or substantially different impacts, other than those previously considered and addressed in the Certified SEIR.

Mitigation:

Certified SEIR Measure(s)	Project Applicability
None.	-

iii. **Create or contribute runoff water which would exceed the capacity or existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff;**

Summary of Certified SEIR Finding: The Certified SEIR concluded that projects considered for approval under TOP 2050 would be required to prepare project-specific hydrology and hydraulic studies as required by the City. In compliance with the MS4 Permit and San Bernardino County Stormwater Program, new development projects would also be mandated to install stormwater treatment BMPs that retain the 2-year, 24-hour rainfall event. Because new development in the City would be required to prepare a hydrology study and drainage analysis

in accordance with the San Bernardino County Hydrology Manual, no significant impacts would occur. Therefore, TOP 2050 would not result in new or a substantial increase in magnitude of impacts compared to the Certified SEIR (Certified SEIR pp. 5.10-23 – 5.10-26).

Project Impacts: As stated above, the proposed on-site storm drainage system would function as a flow restriction by oversizing the on-site system capacity and providing on-site storage. Outflow would be released from the site consistent with the capacity of the surrounding storm drain system.

Accordingly, the Project would not create or contribute runoff that would exceed the capacity of any existing stormwater drainage system. Consistent with the finding of the Certified SEIR, stormwater generated by the Project will be discharged in compliance with the Statewide NPDES General Construction Activities Stormwater Permit and San Bernardino County MS4 permit requirements.

The Project would not result in any new, increased or substantially different impacts, other than those previously considered and addressed in the Certified SEIR.

Mitigation:

Certified SEIR Measure(s)	Project Applicability
None.	-

iv. **Impede or redirect flood flows?**

Summary of Certified SEIR Finding: The Certified SEIR concluded that only small portions of the City adjacent to flood control channels, detention basins, and creeks are in the 100-year floodplain. The western portion of Ontario Ranch is labeled Zone D, undetermined flood hazard, and no hazard analysis has been completed for this area. TOP 2050 includes policies to reduce impacts of potential development within 100-year flood zones. Additionally, Chapter 13 of the Ontario Municipal Code requires that a development permit be obtained prior to development in a special flood hazard area to ensure that the site is reasonably safe from flooding and flood hazards. With implementation of existing policies, the

potential for the project to impede or redirect flood flows is considered less than significant. Therefore, TOP 2050 would not result in new or a substantial increase in magnitude of impacts compared to the Certified SEIR (Certified SEIR pp. 5.10-23 – 5.10-26).

Project Impacts: According to the Federal Emergency Management Agency (FEMA) flood map No. 06071C9375J, the Project site is located within Zone X, an area of minimal flood hazard (FEMA, 2024). Additionally, as shown in Figure 5.10-2 of the Certified SEIR, the Project site is not located within an identified flood hazard zone. Therefore, the Project would not impede or redirect flood flows and no impact would occur. The Project would not result in any new, increased or substantially different impacts, other than those previously considered and addressed in the Certified SEIR.

Mitigation:

Certified SEIR Measure(s)	Project Applicability
None.	-

d. **In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?**

Summary of Certified SEIR Finding: As discussed in the Certified SEIR, "there are no large bodies of water that would result in a seiche during seismic activity. Additionally, the reservoirs/aboveground water tanks within the City are enclosed, thereby minimizing the possibility of a seiche. The [City] is inland and approximately 30 miles from the ocean and is not at risk of flooding due to tsunamis.

The western and southern portions of the City are in the dam inundation zone of San Antonio Dam. The probability of dam failure is very low, and Ontario has never been impacted by a major dam failure. In addition, dam owners are required to maintain emergency action plans that include procedures for damage assessment and emergency warnings. Because the likelihood of catastrophic failure of the San Antonio Dam is very low and the City has emergency action

plan (EAP) notification procedures, impacts of release of pollutants due to dam inundation are considered less than significant.

Based on the preceding, the Certified SEIR concluded that TOP 2050 would not result in adverse impacts related to flood hazard, tsunami, or seiche zones, risk release of pollutants due to inundation (Certified SEIR, pp. 5.10-26, 5.10-27).

Project Impacts: Conditions at the Project site with regard flood hazard impacts, tsunami hazard impacts, or seiche hazard impacts have not changed since preparation of the Certified SEIR – the site remains unaffected by substantial potential flood hazards, tsunami hazards, or seiche hazards. The potential for the Project to result in release of pollutants due to an inundation event would be less than significant. The Project would not result in any new, increased or substantially different impacts, other than those previously considered and addressed in the Certified SEIR.

Mitigation:

Certified SEIR Measure(s)	Project Applicability
None.	-

e. **Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?**

Summary of Certified SEIR Finding: As discussed in the Certified SEIR, "[p]rojects approved under TOP 2050 would be required to comply with the Santa Ana River Basin Plan and to control pollutants in discharges of stormwater from post-construction activities under NPDES Permit No. CAS618036 through preparation of a WQMP identifying BMPs for prevention of stormwater pollution during the post-construction phase, including site-design, source-control, and/or treatment BMPs. Therefore, [TOP 2050] would not obstruct or conflict with the RWQCB's Basin Plan or any groundwater management plan, and impacts would be less than significant" (Certified SEIR, p. 5.10-27).

Project Impacts: Project-related construction and operational activities would be required to comply with the Santa Ana RWQCB's Santa Ana River Basin Water Quality Control Plan by preparing and adhering to an SWPPP and WQMP.

The Project site is located within the Chino Groundwater Basin. Upon development, the Project site will be connected to the City's public water supply and there will be no on-site wells for use of groundwater. The City manages both the potable and non-potable supplies to ensure withdrawals from the Chino Groundwater Basin do not exceed the safe yield for the Basin, as per the Chino Basin Watermaster's Optimum Basin Management Program (OBMP). Therefore, the Project would not obstruct or conflict with the OBMP. The Project would not result in any new, increased or substantially different impacts, other than those previously considered and addressed in the Certified SEIR.

Mitigation:

Certified SEIR Measure(s)	Project Applicability
None.	-

11. **LAND USE & PLANNING.** Would the project:

a. **Physically divide an established community?**

Summary of Certified SEIR Finding: The Certified SEIR concluded that the changes in land use that would occur upon the implementation of TOP 2050 Land Use Plan would not result in the physical division of an established community. The Land Use Element of TOP 2050 contains policies and programs that encourage the preservation or enhancement of the existing, primarily residential community through infill development, open space opportunities, and development of compatible uses that would reduce the amount of conflict between contradicting land uses and enhance the existing character of Ontario. TOP 2050 would avoid conflicting land uses and would not divide an established community (Certified SEIR, p. 5.11-6).

Project Impacts: The Project site is currently vacant; No established community is located within the site. The Esperanza Specific Plan assumed the site would be developed with residential uses, should the Mountain View School District choose not to acquire the site. The site is surrounded by existing/proposed residential development, and the Project represents the logical continuation of such uses. The Project would not otherwise result in potential division of an established community. The Project would have no impacts in this regard.

Mitigation:

Certified SEIR Measure(s)	Project Applicability
None.	-

b. **Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?**

Summary of Certified SEIR Finding: The Certified SEIR concluded that implementation of TOP 2050 would not result in significant land use impacts (Certified SEIR, p. 5.11-11).

Project Impacts: The Project site is designated for School use by the TOP 2050 and the Esperanza Specific Plan. To accommodate the proposed uses, the Project would require a General Plan Amendment and Specific Plan Amendment to redesignate the site as Medium Density Residential (MDR). The Project would be implemented consistent with all Design Guidelines and Development Regulations presented in the Esperanza Specific Plan for MDR uses. The Project would not result in any new, increased or substantially different impacts, other than those previously considered and addressed in the Certified SEIR.

Mitigation:

Certified SEIR Measure(s)	Project Applicability
None.	-

12. **MINERAL RESOURCES.** Would the project:

a. **Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?**

b. **Result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?**

Summary of Certified SEIR Finding: The Certified SEIR concluded that implementation of TOP 2050 would have a less than significant potential to result in the loss of a known mineral resource of value to the region or the state; or result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan (Certified SEIR, p. 5.12-6).

Project Impacts: Underlying conditions at the subject site have not changed since preparation of the Certified SEIR or the Esperanza Specific Plan DEIR. The Project site is located within a mostly developed area surrounded by urban land uses. As shown in Figure 5.12-1 of the Ontario Plan 2050 Draft SEIR, the Project site is designated as MRZ-3. The Certified SEIR states, "[d]evelopment in an MRZ-3 area would not result in significant impacts because mineral resources of statewide or local importance are not identified on the California Geological Survey's P-C maps." Additionally, the Esperanza Specific Plan DEIR concluded that buildout of the Specific Plan area would not result in significant impacts to mineral resources. The Project would not result in any new, increased or substantially different impacts, other than those previously considered and addressed in the Certified SEIR.

Mitigation:

Certified SEIR Measure(s)	Project Applicability
None.	-

13. **NOISE.**

The information presented within this section is summarized from:

- *Esperanza Specific Plan Amendment Noise Impact Analysis, City of Ontario* (Urban Crossroads, Inc.) April 24, 2025.

The Noise Impact Analysis (Urban Crossroads, 2025c) is presented in its entirety as Appendix J to this Addendum.

a. **Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?**

Summary of Certified SEIR Finding: The Certified SEIR determined that new development implemented pursuant to TOP 2050 would result in temporary noise increases at sensitive receptors during construction activities (Certified SEIR, p. 5.13-28). Certified SEIR Mitigation Measure 12-4, below, would reduce construction noise but would not avoid this impact or reduce the impact to levels that would be less than significant. No other significant impacts in this regard were identified.

Project Impacts:

Noise Standards

Noise impacts would be considered significant if any of the following criteria shown in Table 13-1 were exceeded.

Table 13-1
Significance Criteria Summary

Analysis	Receiving Land Use	Condition(s)	Significance Criteria	
			Daytime	Nighttime
Off-Site Traffic	All	If ambient is < 60 dBA CNEL	≥ 5 dBA CNEL Project increase	
		If ambient is 60 - 64 dBA CNEL	≥ 3 dBA CNEL Project increase	
		If ambient is >= 65 dBA CNEL	≥ 1.5 dBA CNEL Project increase	
On-Site Traffic	All	See Exhibit 3-A of the Noise Impact Analysis.		
Operational	Noise-Sensitive	Exterior Noise Level Standards	65 dBA L_{eq}	45 dBA L_{eq}
		if ambient is < 60 dBA L_{eq}	≥ 5 dBA L_{eq} Project increase	
		if ambient is 60 - 65 dBA L_{eq}	≥ 3 dBA L_{eq} Project increase	
		if ambient is > 65 dBA L_{eq}	≥ 1.5 dBA L_{eq} Project increase	
Construction	Noise-Sensitive	Noise Level Threshold	80 dBA L_{eq}	
		Vibration Level Threshold	0.3 PPV (in/sec)	

Source: Urban Crossroads, 2025c

Sensitive Receivers

The following receiver locations, shown at Noise Impact Analysis Exhibit 9-A, Receiver Locations, were identified as representative noise impact analysis locations.

R1: Location R1 represents the future residential area east of Clifton Avenue, approximately 83 feet east of the Project site. Receptor R1 is placed at the nearest potential location for future housing facing the Project site.

R2: Location R2 represents the future residential area northeast of the intersection of Clifton Avenue and Chatham Street, approximately 92 feet northeast of the Project site. Receptor R2 is placed at the nearest potential location for future housing facing the Project site.

R3: Location R3 represents the future park north of Chatham Street, approximately 75 feet north of the Project site. Receptor R3 is placed at the nearest potential location within the park use facing the Project site.

R4: Location R4 represents an existing residence at 4508 S. Amherst Avenue, approximately 130 feet west of the Project site. Receptor R4 is placed at the private outdoor living areas (backyards) facing the Project site.

R5: Location R5 represents the existing residence at 4095 E. Amigos Privado, approximately 202 feet south of the Project site. Receptor R5 is placed at the private outdoor living areas (backyards) facing the Project site.

R6: Location R6 represents the existing residence at 4556 S. Afton Privado, approximately 142 feet southeast of the Project site. Receptor R6 is placed at the private outdoor living areas (backyards) facing the Project site.

Construction-Source Noise Impacts

In the evaluation of construction-source noise impacts, the Noise Impact Analysis employs empirical reference noise measurements obtained from similar construction activities. Based on the reference construction noise levels, maximum received noise levels attributable to the Project construction activities were calculated and are summarized at Table 13-2. Compliance with applicable significance thresholds is also presented.

Table 13-2
Construction Noise Level Compliance

Location	Highest Construction Noise Levels	Threshold	Threshold Exceeded
R1	67.6	80	No
R2	66.1	80	No
R3	66.6	80	No
R4	63.3	80	No
R5	59.5	80	No
R6	64.3	80	No

Source: Urban Crossroads, 2025c

As shown at Table 13-2, received construction-source noise levels would not exceed the applicable threshold and would therefore be less than significant.

Operational-Source Noise Impacts

The Project is considered a noise-sensitive receiving land use and is not expected to include any specific type of operational noise levels beyond those typically associated with residential land uses in the Project study area. Additionally, Section 21085 of the California Public Resources Code states in part, "...for residential projects, the effects of noise generated by project occupants and their guests on human beings is not a significant effect on the environment." A review of the legislative record indicates the author's intent for Section 21085 was to "remove the potential for litigants to challenge residential development based on the speculation that the new residents will create unwanted noises. It would also reestablish existing precedent that minor and intermittent noise nuisances, such as from unamplified human voices, be addressed through local nuisance ordinances and not via CEQA. Consequently, activities solely associated with occupants and quests, such as the swimming pool/spa activities, dog park activities, and outdoor activities in common spaces, are not considered part of this operational noise analysis for CEQA."

Based on the intent of the author of Section 21085, the operational noise sources are limited to the mechanical and non-verbal noise sources that occur on-site, including air conditioning units, trash enclosure activity, and parking lot movements. The Noise Impact Analysis employs empirical reference noise measurements obtained from similar operational activities. Based on the reference noise levels, maximum received noise levels attributable to the Project operational activities were calculated and are summarized at Table 13-3. Compliance with applicable significance thresholds is also presented.

Table 13-3
Operational Noise Level Compliance

Location	Project Operational Noise Levels (dBA Leq)		Noise Level Standard (dBA Leq)		Noise Level Exceeded?	
	Daytime	Nighttime	Daytime	Nighttime	Daytime	Nighttime
R1	46.4	44.1	65	45	No	No
R2	38.3	36.0	65	45	No	No
R3	40.3	37.8	65	45	No	No
R4	43.8	41.3	65	45	No	No
R5	39.4	36.8	65	45	No	No
R6	38.4	35.8	65	45	No	No

Source: Urban Crossroads, 2025c

As shown above, the operational noise levels associated with the Project will satisfy the City of Ontario 65 dBA Leq daytime and 45 dBA Leq nighttime exterior noise level standards at all the nearest receiver locations. Therefore, the operational noise impacts are considered less than significant at the nearest noise-sensitive receiver locations.

To describe the Project operational noise level increases, the Project operational noise levels are combined with the existing ambient noise level measurements for the nearest receiver locations potentially impacted by Project operational noise sources. Noise levels that would be experienced at receiver locations when Project-source noise is added to the daytime and nighttime ambient conditions are presented in Tables 13-4 and 13-5, respectively.

Table 13-4
Daytime Project Operational Noise Level Increases

Location	Total Operational Noise Level	Ambient	Combined	Project Increase	Increase Criteria	Exceeded?
R1	46.4	67.9	67.9	0.0	1.5	No
R2	38.3	45.1	45.9	0.8	5.0	No
R3	40.3	47.4	48.2	0.8	5.0	No
R4	43.8	53.2	53.7	0.5	5.0	No
R5	39.4	60.3	60.3	0.0	3.0	No
R6	38.4	66.0	66.0	0.0	1.5	No

Source: Urban Crossroads, 2025c

Table 13-5
Nighttime Project Operational Noise Level Increases

Location	Total Operational Noise Level	Ambient	Combined	Project Increase	Increase Criteria	Exceeded?
R1	44.1	55.3	55.6	0.3	5.0	No
R2	36.0	36.9	39.5	2.6	5.0	No
R3	37.8	34.9	39.6	4.7	5.0	No
R4	41.3	53.3	53.6	0.3	5.0	No
R5	36.8	53.4	53.5	0.1	5.0	No
R6	35.8	45.2	45.7	0.5	5.0	No

Source: Urban Crossroads, 2025c

Vehicular-Source Noise Impacts

Off-Site Traffic Noise

Based on the Project trip generation analysis, the Project's traffic volumes would not result in an increase on vicinity roadways greater than those assumed under TOP 2050 or analyzed within the Esperanza Specific Plan DEIR. As such, off-site traffic noise impacts would be less than significant.

On-Site Traffic Noise

An on-site noise impact analysis has been completed to determine the noise exposure levels resulting from adjacent transportation noise sources in the Project study area and identify potential noise attenuation measures that would achieve acceptable Project exterior and interior noise levels.

The on-site exterior traffic noise analysis indicates that all buildings would experience exterior noise levels ranging from 59.3 to 64.4 CNEL. Based on the City of Ontario Land Use Compatibility for Community Noise Exposure (Noise Impact Analysis Exhibit 3-A), the Project land uses would be considered clearly acceptable to normally acceptable with exterior noise levels of less than 65 dBA CNEL.

To ensure that the interior noise levels comply with the interior noise level standards, future exterior noise levels were calculated at the first, second, and

third floor building façade/balcony locations. The interior noise level is the difference between the predicted exterior noise level at the building facade and the noise reduction of the structure. Typical building construction will provide a noise reduction of approximately 12 dBA with "windows open" and a minimum 25 dBA noise reduction with "windows closed." With standard construction, the following interior noise levels are expected:

- First Floor: 33.9 to 39.4 dBA CNEL
- Second Floor: 38.5 to 40.5 dBA CNEL
- Third Floor: 35.4 to 40.3 dBA CNEL

Based on the preceding, on-site interior traffic noise levels will not exceed the City of Ontario 45 dBA CNEL interior noise level standard for residential development.

Summary

As demonstrated in the preceding analysis, Project construction-source, operational-source, and/or vehicular-source noise would not result in the generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the Project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies.

Mitigation:

Certified SEIR Measure(s)	**Project Applicability**
MM 12-4 Construction activities associated with new development that occurs near sensitive receptors shall be evaluated for potential noise impacts. Construction contractors shall implement the following measures for construction activities in the City of Ontario. Construction plans submitted to the City shall identify these measures on demolition, grading, and construction plans. The City of Ontario Planning and Building	**Applicable.** Project construction noise has been evaluated consistent with MM 12-4; No significant impacts have been identified. Regardless, the construction requirements listed within MM 12-4 shall be implemented during construction of the Project.

Departments shall verify that grading, demolition, and/or construction plans submitted include these notations prior to issuance of demolition, grading, and/or building permits. • Construction activity is limited to the hours between 7:00 am and 6:00 pm Monday through Friday and 9:00 am to 6:00 pm Saturdays and Sundays, as prescribed in Municipal Code Section 5-29.09. • During the entire active construction period, equipment and trucks used for project construction shall use the best-available noise control techniques wherever feasible (e.g., improved mufflers, equipment re-design, use of intake silencers, ducts, engine enclosures, and acoustically attenuating shields or shrouds). • Impact tools (e.g., jack hammers and hoe rams) shall be hydraulically or electrically powered wherever possible. Where the use of pneumatic tools is unavoidable, an exhaust muffler on the compressed air exhaust shall be used along with external noise jackets on the tools. • Stationary equipment such as generators and air compressors shall be located as far as feasible from nearby noise-sensitive uses. • Stockpiling shall be located as far as feasible from nearby noise-sensitive receptors. • Construction traffic shall be limited, to the extent feasible, to approved	

haul routes established by the City's Engineering Department. • At least 10 days prior to the start of construction activities, a sign shall be posted at the entrance(s) to the job site, clearly visible to the public, that includes permitted construction days and hours as well as the telephone numbers of the City's and contractor's authorized representatives that are assigned to respond in the event of a noise or vibration complaint. If the authorized contractor's representative receives a complaint, he/she shall investigate, take appropriate corrective action, and report the action to the City. • Signs shall be posted at the job site entrance(s), within the on-site construction zones, and along queueing lanes (if any) to reinforce the prohibition of unnecessary engine idling. All other equipment shall be turned off if not in use for more than 5 minutes. • During the entire active construction period and to the extent feasible, the use of noise producing signals, including horns, whistles, alarms, and bells, shall be for safety warning purposes only. The construction manager shall use smart back-up alarms, which automatically adjust the alarm level based on the background noise level or switch off back-up alarms and replace with human spotters in compliance with all safety requirements and laws. Erect temporary noise barriers (at least	

as high as the exhaust of equipment and breaking line-of-sight between noise sources and sensitive receptors), as necessary and feasible, to maintain construction noise levels at or below the performance standard of 80 dBA Leq. Barriers shall be constructed with a solid material that has a density of at least 1.5 pounds per square foot with no gaps from the ground to the top of the barrier and may be lined on the construction side with an acoustical blanket, curtain, or equivalent absorptive material.	

b. **Generation of excessive groundborne vibration or groundborne noise levels?**

Summary of Certified SEIR Finding: The Certified SEIR determined that mobile-source and stationary/area-source vibration impacts associated with buildout of TOP 2050 would be less-than-significant. However, construction activities associated with buildout of the individual land uses could expose sensitive uses to strong levels of groundborne vibration. The Certified SEIR concluded even with the implementation of Mitigation Measure 12-2, construction-source groundborne vibration impacts would be significant and unavoidable (Certified SEIR, pp. 5.13-38 – 5.13-41).

Project Impacts: Using reference vibration levels and methods defined by the FTA, Table 13-6 presents the expected Project-related vibration levels at the nearby receiver locations.

Table 13-6
Project Construction Vibration Levels

Location	Distance	Small Bulldozer	Jackhammer	Loaded Trucks	Large Bulldozer	Highest Vibration Level	Thresholds PPV (in/sec)	Thresholds Exceeded
R1	82'	0.00	0.01	0.01	0.01	0.01	0.30	No
R2	92'	0.00	0.00	0.01	0.01	0.01	0.30	No
R3	75'	0.00	0.01	0.01	0.02	0.02	0.30	No
R4	130'	0.00	0.00	0.01	0.01	0.01	0.30	No
R5	202'	0.00	0.00	0.00	0.00	0.00	0.30	No
R6	142'	0.00	0.00	0.01	0.01	0.01	0.30	No

Source: Urban Crossroads, 2025c

As shown above, at distances ranging from 75 to 202 feet from Project construction activities, construction vibration velocity levels are estimated to range from less than 0.01 to 0.02 in/sec PPV. Based on the Caltrans maximum acceptable continuous vibration threshold of 0.30 PPV (in/sec), the typical Project construction vibration levels will fall below applicable thresholds at all the receiver locations. Moreover, the vibration levels at the sensitive receiver locations are unlikely to be sustained during the entire construction period but will occur rather only during the times that heavy construction equipment is operating adjacent to the Project site perimeter.

Based on the preceding, the Project would not result in any new or increased groundborne vibration or groundborne noise impacts than those previously considered and addressed in the Certified SEIR.

Mitigation:

Certified SEIR Measure(s)	Project Applicability
12-2 Prior to issuance of a building permit, individual projects that involve vibration-intensive construction activities, such as pile drivers, jack hammers, and vibratory rollers near sensitive receptors shall be evaluated for potential vibration impacts. For construction within 135 feet of fragile structures, such as historical resources,	**Implemented.** The Project has been evaluated consistent with Certified SEIR Measure 12-2. No further mitigation is necessary.

within 100 feet of nonengineered timber and masonry buildings (e.g., most residential buildings), or within 75 feet of engineered concrete and masonry (no plaster); or a vibratory roller within 25 feet of any structure, the project applicant shall prepare a noise and vibration analysis to assess and mitigate potential noise and vibration impacts related to these activities. This noise and vibration analysis shall be conducted by a qualified and experienced acoustical consultant or engineer. The vibration levels shall not exceed Federal Transit Administration (FTA) architectural damage thresholds (e.g., 0.12 inches per second [in/sec] peak particle velocity [PPV] for fragile or historical resources, 0.2 in/sec PPV for nonengineered timber and masonry buildings, and 0.3 in/sec PPV for engineered concrete and masonry). If vibration levels would exceed this threshold, alternative uses shall be used, such as drilling piles as opposed to pile driving and static rollers as opposed to vibratory rollers. If necessary, construction vibration monitoring shall be conducted to ensure vibration thresholds are not exceeded.	

c. **For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?**

Summary of Certified SEIR Finding: The Certified SEIR concluded that Chino Airport does not significantly affect sensitive receptors within the City of Ontario. However, sensitive land uses within the 65 dBA CNEL noise contour of the Ontario International Airport would be exposed to substantial levels of airport-related

noise. Even with the implementation of Mitigation Measure 12-1, airport-related noise was deemed a significant and unavoidable impact of TOP 2050 (Certified SEIR, pp. 5.13-38 – 5.13-41).

Project Impacts: The Project site is located approximately four miles south of the Ontario International Airport (ONT). The Ontario International Airport Land Use Compatibility Plan was adopted by Ontario City Council on April 19, 2011 (amended 2018) to promote compatibility between the airport and the land uses that surround it. The Project site is located within the ONT airport influence area, but is not located within a designated noise impact zone. The Project would therefore not be exposed to excessive airport/airfield-source noise levels associated with ONT operations.

The Project site is located approximately 2.5 miles east of the Chino Airport (CNO). The Project site is not located within a designated CNO noise impact zone. At this distance, airport noise level impacts would be less than significant.

The Project would not otherwise be exposed to potentially adverse airport/airfield-source noise levels, nor does the Project propose or require uses that would contribute to or exacerbate airport-source noise impacts. Based on the preceding, the Project would not be adversely affected by airport/airfield noise, nor would the Project contribute to or result in adverse airport/airfield noise impacts. When compared to the Certified SEIR findings, no new or substantially increased airport/airfield noise impacts would result from the Project.

Mitigation:

Certified SEIR Measure(s)	**Project Applicability**
12-1 Prior to the issuance of building permits for any project that involves a noise-sensitive use within the 65 dBA CNEL contour of the Ontario International Airport, the project property owner/developers shall retain an acoustical engineer to conduct an acoustic analysis and identify, where	**Not Applicable.** The Project site is not located within a designated airport noise impact zone. As such, Certified SEIR Measure 12-1 is not applicable to the Project.

appropriate, site design features and/or required building acoustical improvements (e.g., sound transmission class rated windows, doors, and attic baffling), to ensure compliance with the City's Noise Compatibility Criteria and the California State Building Code and California Noise Insulation Standards (Titles 24 and 21 of the California Code of Regulations).	

14. **POPULATION & HOUSING.** Would the project:

a. **Induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of road or other infrastructure)?**

Summary of Certified SEIR Finding: The Certified SEIR concluded that implementation of TOP 2050 accommodates population growth through land use designations, goals, and policies that provide a vision and guide growth in the City. TOP 2050 would increase population, dwelling units, and nonresidential buildings but would result in a small decrease in employment. Although the increase in population, housing, and employment under TOP 2050 would exceed SCAG's regional forecasts for the City of Ontario, TOP 2050 would improve the job-housing balance. Consequently, impacts would be less than significant, and TOP 2050 would not result in new or a substantial increase in magnitude of impacts compared to the Certified SEIR (Certified SEIR, pp. 5.14-9 – 5.14-12).

Project Impacts: The Project would result in the development of 161 residential units. The Esperanza Specific Plan noted that 46 residential units could be developed within the Project site, should the school not be developed. This means that the Project would result in 115 residential units not originally anticipated by the Specific Plan.

According to the SCAG's Connect SoCal 2024, housing production within the region has historically lagged behind the growing population. While housing unit production has increased since 2000, the region still has a backlog of unmet

housing needs from previous decades. (SCAG, 2024) As further detailed in the Certified SEIR, the City of Ontario has an imbalanced jobs-housing ratio of 2.3 (ideal range is 1.3 to 1.7). The population in Ontario is expected to increase from 172,200 in 2020 to 269,100 persons, a difference of 96,900 persons (a 56.3 percent increase) between 2016 and 2045. The number of housing units in the City are forecast to increase from 48,269 to 78,174, a difference of 29,906 (a 62 percent increase) between 2016 and 2045.

The addition of the 161 residential units proposed by the Project in a jobs-rich region such as Ontario would not induce substantial unplanned population growth in the area. The Project would not result in any new, increased or substantially different impacts, other than those previously considered and addressed in the Certified SEIR.

Mitigation:

Certified SEIR Measure(s)	Project Applicability
None.	-

b. **Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?**

Summary of Certified SEIR Finding: The Certified SEIR concluded that land use changes under TOP 2050 would increase opportunities for housing in the City. The TOP 2050 Land Use Plan would provide land use designations for a variety of housing types and provide for additional residential opportunities throughout Ontario. TOP 2050 includes policies supporting an increase in the provision of housing and diversity of housing opportunities in the City. Therefore, impacts would be less than significant and would not result in new or a substantial increase in magnitude of impacts compared to the Certified SEIR (Certified SEIR, pp. 5.14-9 – 5.14-12).

Project Impacts: The Project site does not contain any housing and there are no people living at the Project site that would be displaced by the Project. Therefore, no impacts are anticipated. The Project would not result in any new, increased or

substantially different impacts, other than those previously considered and addressed in the Certified SEIR.

Mitigation:

Certified SEIR Measure(s)	Project Applicability
None.	-

15. **PUBLIC SERVICES**. Would the project:

a. **Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:**

i. **Fire protection?**

Summary of Certified SEIR Finding The Certified SEIR concluded that existing Ontario Fire Department facilities would not be adequate to meet increased demands from the implementation of TOP 2050. While the construction of future facilities could result in potential environmental impacts, future environmental review would occur once specific locations have been determined. Without a definitive location for the development of future facilities, the analysis of potential impacts is too speculative to conduct. Future projects would be reviewed by the City and the Ontario Fire Department on an individual basis and would be required to comply with requirements in effect at the time building permits are issued, including the payment of Development Impact Fees that contribute to funding for additional staffing, facilities, and equipment. Therefore, impacts to fire protection services would be less than significant (Certified SEIR, pp. 5.15-3 5.15-5).

Project Impacts: The Project does not propose or require construction or modification of fire protection facilities. The Project site is not designated or

proposed as the location for new or modified fire protection facilities. Incremental fire protection service demands generated by the Project are offset through the payment of Development Impact Fees. A portion of the City's Development Impact Fees are allocated for fire protection services. The Project Applicant would pay incumbent City Development Impact Fees at issuance of building permit(s).

To the satisfaction of the Ontario Fire Department, the Project would comply with City and Fire Department fire prevention and suppression requirements, including building/site design requirements, fire flow adequacy, and provisions for emergency access, thereby reducing potential increased demands for fire protection services.

Based on the preceding, the potential for the Project to result in substantial adverse physical impacts associated with the provision of the new or physically altered fire protection facilities is considered less than significant. The Project would not result in any new, increased or substantially different impacts, other than those previously considered and addressed in the Certified SEIR.

Mitigation:

Certified SEIR Measure(s)	Project Applicability
None.	-

ii. **Police protection?**

Summary of Certified SEIR Finding: The Certified SEIR concluded that the Ontario Police Department has enough staffing to meet current demands, but would require additional staffing as population increases to accommodate buildout of TOP 2050. While the construction of future facilities could result in potential environmental impacts, future environmental review would occur once specific locations have been determined. Without a definitive location for the development of future facilities, the analysis of potential impacts is too speculative to conduct. Future development would also be subject to development impact fees which pay for police services. Therefore, impacts to police protection services would be less than significant (Certified SEIR pp. 5.15-6 – 5.15-7).

Project Impacts: The Project does not propose or require construction or modification of police protection facilities. The Project site is not designated or proposed as the location for new or modified police protection facilities. Incremental police protection service demands generated by the Project are offset through the payment of Development Impact Fees. A portion of the City's Development Impact Fees are allocated for police protection services. The Project Applicant would pay incumbent City Development Impact Fees at issuance of building permit(s).

Additionally, the Project site plan concept and proposed building designs would be reviewed by the Ontario Police Department to ensure incorporation of appropriate safety and security elements. Such design features would include secure building designs, defensible spaces, and area and facility security lighting. These design features would act to reduce Project demands for police protection services.

Based on the preceding, the potential for the Project to result in substantial adverse physical impacts associated with the provision of the new or physically altered police protection facilities is considered less than significant. The Project would not result in any new, increased or substantially different impacts, other than those previously considered and addressed in the Certified SEIR.

Mitigation:

Certified SEIR Measure(s)	Project Applicability
None.	-

iii. **Schools?**

Summary of Certified SEIR Finding: The Certified SEIR concluded that although the increased demand on school facilities would have the potential to impact one or more of the school districts that serve Ontario, payment of impact fees in compliance with SB 50 would reduce the impacts to an acceptable level. Therefore, impacts to school services would be less than significant and implementation of TOP 2050 would not result in new or a substantial increase in magnitude of impacts compared to the Certified SEIR (Certified SEIR, p. 5.15-14)

Project Impacts: The Project would develop 161 residential units that could result in populations of resident school-aged children. As determined by the Certified SEIR, Project incremental impacts to school services would be offset through payment of school impact fees. The Project Applicant would pay incumbent school impact fees at issuance of building permit(s). Payment of school impact fees would reduce the Project's potential impacts to school services to levels that would be less than significant.

The Project would not result in any new, increased or substantially different impacts, other than those previously considered and addressed in the Certified SEIR.

Mitigation:

Certified SEIR Measure(s)	Project Applicability
None.	-

iv. **Parks?**

Summary of Certified SEIR Finding: Park service was discussed under the Recreation section of the Certified SEIR. The Certified SEIR concluded that impacts to recreation would be less than significant, and implementation of TOP 2050 would not result in new or a substantial increase in magnitude of impacts compared to the Certified SEIR (Certified SEIR, pp. 5.16-12 – 5.16-14). Details of the summary findings are discussed below in Section 16, *Recreation*.

Project Impacts: As discussed in Section 16, *Recreation*, the Project proposes residential uses that could increase the use of neighborhood and regional parks or other recreational facilities. As presented within the Certified SEIR, the Project would be required to provide sufficient public parkland or pay in-lieu fees. Additionally, the development would provide on-site recreational amenities to serve future residents, including a pool/spa, playground, shaded barbeque/picnic area, fitness stations, and open turf areas. As such, the Project would not result in any new, increased or substantially different impacts, other than those previously considered and addressed in the Certified SEIR.

Mitigation:

Certified SEIR Measure(s)	Project Applicability
None.	-

v. **Other public facilities?**

Summary of Certified SEIR Finding: The Certified SEIR concluded that implementation of TOP 2050 would not result in potentially significant other public services impacts (Certified SEIR, pp. 5.15-17 – 5.15-18)

Project Impacts: Development of the Project would require established public agency oversight including, but not limited to, various plan check and permitting actions by the City. Impacts of the Project would fall within routine tasks of these agencies/departments and are paid for via plan check and inspection fees. Impacts of the Project would not be of such magnitude that new or physically altered facilities would be required. There are no known or probable other public facilities that would be substantially affected by the Project. Based on the preceding, the potential for the Project to result in substantial adverse physical impacts associated with the provision of the new or physically altered other public facilities is considered less than significant. The Project would not result in any new, increased or substantially different impacts, other than those previously considered and addressed in the Certified SEIR.

Mitigation:

Certified SEIR Measure(s)	Project Applicability
None.	-

RECREATION. Would the project:

b. **Increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?**

Summary of Certified SEIR Finding: The Certified SEIR concluded that future growth in the City in accordance with buildout of TOP 2050 would increase the demand for parks and increase existing park usage. The Certified SEIR determined that because new development would be required to provide sufficient public parkland or pay in-lieu fees, impacts to recreational facilities would be less than significant (Certified SEIR, pp. 5.16-12 – 5.16-14).

Project Impacts: The Project proposes residential uses that could increase the use of neighborhood and regional parks or other recreational facilities. As presented within the Certified SEIR, the Project would be required to provide sufficient public parkland or pay in-lieu fees. Additionally, the development would provide on-site recreational amenities to serve future residents, including a pool/spa, playground, shaded barbeque/picnic area, fitness stations, and open turf areas. In total, these active common open space amenities would encompass 60,950 sf (1.40 acre). As such, the Project would not result in any new, increased or substantially different impacts, other than those previously considered and addressed in the Certified SEIR.
Mitigation:

Certified SEIR Measure(s)	Project Applicability
None.	-

c. **Does the project include recreational facilities or require the construction or expansion of recreational facilities that have an adverse physical effect on the environment?**

Summary of Certified SEIR Finding: The Certified SEIR concluded that TOP 2050 includes planned park facilities; however, it is speculative to determine the location of proposed park facilities in the City and impacts arising from development of individual park projects. Existing federal, State, and local regulations as well as goals, policies, and actions in TOP 2050 would mitigate potential adverse impacts to the environment that may result from buildout of TOP 2050, including expansion of parks, recreational facilities, and multiuse trails. Furthermore, subsequent environmental review would be required for development of park projects under the TOP 2050 Land Use Plan. Therefore,

impacts would be less than significant (Certified SEIR, pp. 5.16-12 – 5.16-14).

Project Impacts: As mentioned above, the Project would include recreational amenities to serve future residents, including a pool/spa, playground, shaded barbeque/picnic area, fitness stations, and open turf areas. These amenities are part of the Project; the disturbance footprint, construction techniques, and associated impacts have been accounted for within this Addendum (and associated technical analyses). Potential impacts addressed within this Addendum are substantiated to be less than significant, or less than significant as mitigated. As such, implementation of the Project would not result in any adverse physical effects on the environment due to the construction of recreational facilities. The Project would not result in any new, increased or substantially different impacts, other than those previously considered and addressed in the Certified SEIR.

Mitigation:

Certified SEIR Measure(s)	Project Applicability
None.	-

16. **TRANSPORTATION/TRAFFIC.**

Project-specific information presented under this topic is summarized from:

- *Esperanza Specific Plan Trip Generation Assessment* (Urban Crossroads, Inc.) May 29, 2024.

- *PA-11 of the Esperanza Specific Plan Vehicle Miles Traveled (VMT) Analysis* (Urban Crossroads, Inc.) May 29, 2024.

The Project's Trip Generation Assessment (Urban Crossroads, 2024d) and VMT Analysis (Urban Crossroads, 2024e) are presented as Addendum Appendices K1 and K2, respectively.

a. **Conflict with a program, plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities?**

Summary of Certified SEIR Finding: TOP 2050 includes policies to encourage and provide access to the regional transit network, to enhance connectivity to the City's nonmotorized transportation network, and proposes the changes to the Mobility Element that have the potential to affect infrastructure projects identified in the Regional Transportation Plan. As such, Certified SEIR Section 5.17, Transportation, concluded that implementation of TOP 2050 would not conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities (Certified SEIR, pp. 5.17-18 – 5.17-23).

Project Impacts:

Project Trip Generation

Trip generation represents the amount of traffic that is attracted to and produced by a development project. The Project's Trip Generation Assessment compared the trips anticipated from the proposed Project with those of the approved elementary school use, as shown in Table17-1.

Table 17-1
Trip Generation Comparison

Use	AM Peak Hour			PM Peak Hour			Daily
	In	Out	Total	In	Out	Total	
Elementary School	169	140	309	96	110	206	949
Multifamily Residential	27	81	108	72	53	125	944
Net Change	-142	-59	-201	-24	-57	-81	-5

Source: Urban Crossroads, 2024d

As shown, the Project is anticipated to generate a net reduction of 5 two-way trips per day with a reduction of 201 AM peak hour trips and 81 fewer PM peak hour trips as compared to the approved elementary school use.

Alternative Transportation

The Project does not propose elements or aspects that would conflict with adopted alternative transportation policies. Transit services are currently provided to the City and the Project vicinity by Omnitrans, with a stop located at the corner of Eucalyptus Avenue and Hamner Avenue, less than 1,000 feet from the Project site. The Project would provide internal driveways and pedestrian paths that connect to the existing street and sidewalk network surrounding the Project site.

Transit agencies routinely review and adjust their ridership schedules to accommodate shifts in demand for services. As part of the City's standard development review processes, the need for transit-related facilities, bicycle, and pedestrian access would be coordinated between the City and the Applicant.

The Project would not interfere with the City Multipurpose Trails and Bikeway Corridor Plan. The Project would provide internal and perimeter pedestrian and bicycle amenities consistent with provisions of Esperanza Specific Plan and City Conditions of Approval.

Goals and Policies

Applicable goals and policies addressing the circulation system are established under TOP 2050. Project consistency with applicable provisions of TOP 2050 is summarized in Table 5 of the VMT Analysis provided as Addendum Appendix K2. As presented therein, no conflicts would occur.

Conclusion

Based on the preceding, the potential for the Project to conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities would be less than significant. The Project would not result in any new, increased or substantially different impacts, other than those previously considered and addressed in the Certified SEIR.

Mitigation:

Certified SEIR Measure(s)	Project Applicability
None.	-

b. **Conflict or be inconsistent with CEQA Guidelines Section 15064.3, subdivision (b)?**

Summary of Certified SEIR Finding: The Certified SEIR concluded that there is a net increase in citywide Boundary VMT primarily due to the increase in population accommodated by TOP 2050. Mitigation Measure T-1 would reduce potential impacts for future development projects to the extent feasible. Future development projects consistent with TOP 2050 would need to consider transportation demand management (TDM) measures consistent with those identified in the Mobility Element. TDM techniques include incentives to use transit; incentives to form carpools rather than drive alone; and making home, work, and shopping closer together to shorten travel distances. Because the VMT impact is citywide, mitigation measures to reduce VMT would need to focus on changing or improving the citywide travel patterns, transportation network, or infrastructure. Given the uncertainty of the effectiveness of implementing these types of mitigation measures at a citywide level and of their effectiveness at reducing citywide VMT, VMT impacts would remain significant and unavoidable (Certified SEIR, p. 5.17-34).

Project Impacts: The City of Ontario developed and adopted their own VMT methodologies and thresholds (Resolution No. 2020-071) (City Guidelines) in June 2020. Projects that do not result in significant VMT impacts per City Guidelines would not conflict or be inconsistent with CEQA Guidelines Section 15064.3, subdivision (b).

Project-generated VMT has been estimated using the Origin/Destination Method and Boundary Method, consistent with City Guidelines, VMT has been presented as total VMT and total VMT per Service Population (i.e., population and employees). Total VMT encompasses all VMT generated in the City of Ontario or by the Project on a typical weekday, while total VMT per Service Population (SP)

is an efficiency metric representing VMT generated on a typical weekday per person who resides and/or works in the City or who resides within the Project.

The City of Ontario has adopted the following thresholds of significance related to VMT for land use projects:

- A significant impact would occur if the project VMT per SP exceeds the Citywide average VMP per SP under General Plan Buildout Conditions.

- A significant impact would occur if the project caused total daily VMT per SP within the City to be higher than the no project scenario under cumulative conditions.

The City of Ontario's average VMT per SP under General Plan Buildout conditions was calculated using the TOP General Plan Buildout (2050) model, and is presented in Table 17-2.

Table 17-2
TOP 2050 Buildout
Citywide VMT Per Service Population

Service Population	707,369
VMT	19,506,377
VMT per SP	27.6

Source: Urban Crossroads, 2024e

VMT impacts of the Project employing the Origin/Destination VMT Methodology are presented at Table 17-3.

Table 17-3
Project VMT Impacts
Origin/Destination VMT Methodology

	Baseline	General Plan Buildout Year (2050)
Service Population	564	564
OD VMT	12,582	13,364
OD VMT/SP	22.3	23.7

Table 17-3
Project VMT Impacts
Origin/Destination VMT Methodology

	Baseline	General Plan Buildout Year (2050)
City Threshold	27.6	27.6
Threshold Exceeded	No	No

Source: Urban Crossroads, 2024e

VMT impacts of the Project employing the Boundary Method are presented at Table 17-4.

Table 17-4
Project VMT Impacts
Boundary VMT Methodology

	City Boundary		10-Mile Boundary	
	No Project	With Project	No Project	With Project
Service Population	706,494	707,058	2,579,062	2,579,626
Boundary VMT	9,602,250	9,598,040	41,605,554	41,614,834
VMT per SP	13.6	13.6	16.1	16.1
Change in VMT	0.0		0.0	
Threshold Exceeded	No		No	

Source: Urban Crossroads, 2024e

Based on the preceding, the following findings are made:

- Project-generated VMT per SP was found to be below the City's adopted impact threshold of Citywide average VMT per SP under General Plan Buildout Conditions and is considered less than significant.

- Total daily VMT per SP within the City is forecast to remain unchanged with the addition of the proposed Project and is considered less than significant.

Based on the preceding discussion, no new significant, substantially increased, or substantially different VMT impacts would occur as a result of the Project. No changed or new information has been identified to indicate that any potential VMT impacts resulting from the Project would be different from those that would result under the Certified SEIR.

Mitigation:

Certified SEIR Measure(s)	**Project Applicability**
T-1 Prior to approval of discretionary projects subject to VMT reduction analysis, applicants shall demonstrate compliance with the City's VMT Guidelines for CEQA assessment of VMT impacts. For projects with VMT per Service Population exceeding the County's significance threshold, a mitigation plan shall be developed and implemented. Mitigation should consist of Transportation Demand Management (TDM) measures analyzed under a VMT-reduction methodology consistent with the California Air Pollution Control Officers Association's (CAPCOA) Final Handbook for Analyzing Greenhouse Gas Emission Reductions, Assessing Climate Vulnerabilities, and Advancing Health and Equity (2021) and approved by the City of Ontario (if applicable). Examples of measures include but are not limited to: • Pedestrian Network Improvements: constructing new sidewalks and/or improving damaged or substandard sidewalks that connect to a larger pedestrian network. • Construct or Improve Bike Facilities: constructing new or enhancing a single existing Class	**Implemented.** The Project's VMT Analysis (Addendum Appendix K2) fulfills Certified SEIR Mitigation Measure T-1.

I, II or IV bike facility that connects to a larger bike network. • Construct or Improve Bike Boulevards: implementing a Class III bike boulevard on a local or collector street that is one travel lane in each direction, has a design speed of 25 mph or less and a design volume of 5,000 ADT or less. • Expand Bikeway Networks: constructing a network of interconnected new Class I, II, or IV bike facilities. • Provide End of Trip Bicycle Facilities: constructing facilities that support cyclists such as bike parking, lockers, and showers. • Implement Transit-Supportive Roadway Treatments: funding infrastructure improvements such as traffic signal modifications and roadway signing and striping that are dedicated to improving transit travel times and reliability. • Transit Passes: proving discounted or free transit fare to a specific geographic area, population group, or to the general public. • Vanpool Program: providing groups of 5 to 15 people with direct shuttle service between their workplace and residence. • Carshare Program (conventional or EV): providing access to a shared fleet of on-demand vehicles for short-term use/rental. Best practice is to discount carshare membership and provide priority parking for	

carshare vehicles to encourage use of the service. • Bikeshare Program (conventional or EV): providing access to a shared fleet of on-demand bicycles for short-term use/rental. Best practice is to discount bikeshare membership and dedicate bikeshare parking to encourage use of the service. • Rideshare Program: providing access to and encouraging the use of a ridesharing platform or service. This could be an app, website, or other service that provides ride-matching coordination services. • Community-Based Travel Planning (CBTP): CBTP is a residential based approach to outreach, performed by trained advisors, that provides households within a targeted geographic area with customized information, incentives, and support to encourage the use of transportation alternatives in place of single occupancy vehicles. Commute Trip Reduction (CTR) Program: CTR programs can be mandatory or voluntary, and involve providing information, coordination, services, infrastructure, and/or incentives for alternative modes such as ridesharing, vanpool, transit passes, and cycling.	

c. **Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?**

d. **Result in inadequate emergency access?**

Summary of Certified SEIR Finding: The Certified SEIR concluded that buildout of the City pursuant to TOP 2050 would result in changes to the circulation network. Such changes would however be implemented consistent with City roadway classification and roadway design standards, acting to preclude potential design hazards. Additionally, City Design Review processes ensure that adequate emergency access is provided for all new development projects. On this basis, there would be no impacts related to hazardous design features, or emergency access provisions (Certified SEIR, pp. 5.17-25, 5.17-26).

Project Impacts: The Project does not propose elements or aspects that would substantially increase transportation/traffic hazards. Moreover, all improvements under the Project would be designed and implemented consistent with City traffic engineering and safety standards, thereby minimizing the potential to result in or cause hazardous traffic/transportation conditions.

The Project would generate urban traffic comparable to and compatible with the vehicle mix and vehicle categories present within the area roadway system. Residential uses proposed by the Project would therefore not cause or result in incompatible vehicle movements or traffic that would substantively increase hazards. Further, based on the projected trip generation under the Project, no new or different traffic hazards would occur when compared to the Certified SEIR.

All Project plans would be reviewed and approved by the Ontario Fire Department to ensure design standards related to adequate emergency access are met. Based on the preceding, the potential for the Project to substantially increase hazards due to a geometric design feature, incompatible uses, or inadequate emergency access is considered less than significant. The Project would not result in any new, increased or substantially different impacts, other than those previously considered and addressed in the Certified SEIR.

Mitigation:

Certified SEIR Measure(s)	Project Applicability
None.	-

17. **TRIBAL CULTURAL RESOURCES.** Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:

a. **Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k)?**

b. **A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision(c) of Public Resources Code section 5024.1. In applying the criteria set forth in subdivision(c) of Public Resources Code section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.**

Summary of Certified SEIR Finding: The Certified SEIR concluded that grading and construction activities in undeveloped areas or redevelopment that requires deeper soil excavation than in the past have the potential to disturb tribal cultural resources. With the implementation of mitigation, the Certified SEIR concluded that impacts to prehistoric archeological resources, including tribal cultural resources, would be less than significant (Certified SEIR, pp. 5.18-8 – 5.18-11).

Project Impacts: No resources that are eligible for listing in the California Register of Historical Resources or in a local register of historical resources as defined by Public Resources Code Section 5020.1(k) were identified as part of the Cultural Resources Study conducted for the Project site. Implementation of the Project would not result in a substantial adverse change in the significance of a listed historical resource.

Senate Bill 18 (SB 18) requires local (city and county) governments to consult with California Native American tribes to aid in the protection of traditional tribal cultural places ("cultural places") through local land use planning. The consultation and notice requirements apply to adoption and amendment of both general plans (defined in Government Code Section 65300 et seq.) and specific plans (defined in Government Code 65450 et seq.), and not the CEQA process. To this end, outreach letters were sent to 21 individuals representing local Native American tribal groups to elicit information on Native American cultural resources that may be in the vicinity of the Project site. In response, the Gabrieleno Band of Mission Indians – Kizh Nation (Kizh Nation) requested consultation with the City.

Similar to the findings of the Certified SEIR, the Kizh Nation has requested mitigation measures be implemented to preclude impacts in this regard. Specifically, the Tribe has proposed Measures 18-1 through 18-3, which require Native American monitoring of ground-disturbing activities, as well as protocol for the treatment and disposition of tribal cultural resources should they be discovered during Project development. These Tribe-specific measures shall replace Certified SEIR Measures 5-4, TCR-1, and TCR-2.

As a result, consistent with the findings of the Certified SEIR, mitigation would preclude potential impacts to tribal cultural resources as defined in Public Resources Code 5024.1(c). Therefore, the Project would not result in any new, increased or substantially different impacts, other than those previously considered and addressed in the Certified SEIR.

Mitigation:

Certified SEIR Measure(s)	**Project Applicability**
MM 5-3 Upon receipt of an application for a proposed project subject to CEQA and within the City's jurisdiction, the City's representative shall consult with the relevant tribe(s)' representative(s) to determine if the proposed project is within a culturally sensitive area to the tribe. If sufficient	**Implemented.** The City has consulted with the responding Tribe. Additionally, a Project-specific Cultural Resources Assessment has been prepared and the results incorporated herein.

evidence is provided to reasonably ascertain that the site is within a tribal culturally sensitive area, an archaeologist shall prepare then a cultural resources assessment. The findings of the cultural resources assessment shall be incorporated into the CEQA documentation. A copy of the report shall be forwarded to the tribe(s). If mitigation is recommended in the CEQA document, the procedure described in Mitigation Measure 5-4 shall be followed.	
MM 5-4 Prior to the issuance of grading permits for a proposed project for which the CEQA document defines cultural resource mitigation for potential tribal resources, the project applicant shall contact the designated tribe(s) to notify them of the grading, excavation, and monitoring program. The applicant shall coordinate with the City of Ontario and the tribal representative(s) to develop mitigation measures that address the designation, responsibilities, and participation of tribal monitors during grading, excavation, and ground-disturbing activities; scheduling; terms of compensation; and treatment and final disposition of any cultural resources, sacred sites, and human remains discovered on the site. The City of Ontario shall be the final arbiter of the conditions for projects within the City's jurisdiction.	**Revised.** At the request of the Kizh Nation (the consulting Tribe), Measures 5-4 and TCR-1 are replaced with Measure 18-1. **18-1: Retain a Native American Monitor Prior to Commencement of Ground-Disturbing Activities** A. The Project Applicant shall retain a Native American Monitor from or approved by the Gabrieleño Band of Mission Indians – Kizh Nation. The monitor shall be retained prior to the commencement of any "ground-disturbing activity" for the subject Project at all Project locations (i.e., both on-site and any off-site locations that are included in the Project description/definition and/or required in connection with the Project, such as public improvement work). "Ground-disturbing activity" shall include, but is not limited to, demolition, pavement removal, potholing, auguring, grubbing, tree removal, boring, grading, excavation, drilling, and trenching. B. A copy of the executed monitoring agreement shall be submitted to the Lead Agency prior to the earlier of the

	commencement of any ground-disturbing activity, or the issuance of any permit necessary to commence a ground-disturbing activity. C. The monitor will complete daily monitoring logs that will provide descriptions of the relevant ground-disturbing activities, the type of construction activities performed, locations of ground-disturbing activities, soil types, cultural-related materials, and any other facts, conditions, materials, or discoveries of significance to the Tribe. Monitor logs will identify and describe any discovered TCRs, including but not limited to, Native American cultural and historical artifacts, remains, places of significance, etc. (collectively, tribal cultural resources, or "TCR"), as well as any discovered Native American (ancestral) human remains and burial goods. Copies of monitor logs will be provided to the Project Applicant/ Lead Agency upon written request to the Tribe. D. On-site tribal monitoring shall conclude upon the latter of the following: (1) written confirmation to the Kizh from a designated point of contact for the Project Applicant/Lead Agency that all ground-disturbing activities and phases that may involve ground-disturbing activities on the Project site or in connection with the Project are complete; or (2) a determination and written notification by the Kizh to the Project Applicant/Lead Agency that no future, planned construction activity and/or development/ construction phase at the Project site possesses the potential to impact Kizh

	TCRs.
TCR-1 Tribal Cultural Resources Monitoring. The project archaeologist, in consultation with interested tribes, the developer, and the City of Ontario, shall develop an archaeological monitoring plan (AMP) to address the details, timing, and responsibility of archaeological and cultural activities that will occur on the project site. Details in the AMP shall include: 1. Project-related ground disturbance (including, but not limited to, brush clearing, grading, trenching, etc.) and development scheduling; 2. The development of a rotating or simultaneous schedule in coordination with the developer and the project archeologist for designated Native American Tribal Monitors from the consulting tribes during grading, excavation and ground disturbing activities on the site: including the scheduling, safety requirements, duties, scope of work, and Native American Tribal Monitors' authority to stop and redirect grading activities in coordination with all project archaeologists (if the tribes cannot come to an agreement on the rotating or simultaneous schedule of tribal monitoring, the Native American Heritage Commission shall designate the schedule for the on-site Native American Tribal Monitor for the proposed project); 3. The protocols and stipulations	See Measure 18-1, above.

that the developer, City, Tribes, and project archaeologist will follow in the event of inadvertent cultural resources discoveries, including any newly discovered cultural resource deposits that shall be subject to a cultural resource's evaluation. At least 30 days prior to application for a grading permit and before any brush clearance, grading, excavation, and/or ground disturbing activities on the site, the developer shall retain a tribal cultural monitor to monitor all ground-disturbing activities in an effort to identify any unknown archaeological resources. Pursuant to the AMP, a tribal monitor from the consulting tribe shall be present during the initial grading activities. If tribal resources are found during grubbing activities, the tribal monitoring shall be present during site grading activities.	
TCR-2 Treatment and Disposition of Cultural Resources. In the event that Native American cultural resources are inadvertently discovered during the course of any ground-disturbing activities, including but not limited to brush clearance, grading, trenching, etc., for the proposed project, the following procedures will be carried out for treatment and disposition of the discoveries: 1. Temporary Curation and Storage: During the course of construction, all discovered resources shall be temporarily curated in a secure location on-site or at the offices of the	**Revised.** At the request of the Kizh Nation (the consulting Tribe), Measure TCR-2 is replaced with Measures 18-2 and 18-3. **18-2: Unanticipated Discovery of Tribal Cultural Resource Objects (Non-Funerary/Non-Ceremonial)** A. Upon discovery of any TCRs, all construction activities in the immediate vicinity of the discovery shall cease (i.e., not less than the surrounding 50 feet) and shall not resume until the discovered TCR has been fully assessed by the Kizh monitor and/or Kizh archaeologist. The Kizh will recover and retain all discovered TCRs

project archaeologist. The removal of any artifacts from the project site will need to be thoroughly inventoried with tribal monitor oversight of the process; 2. Treatment and Final Disposition: The landowner(s) shall relinquish ownership of all cultural resources, including sacred items, burial goods, and all archaeological artifacts and nonhuman remains as part of the required mitigation for impacts to cultural resources. The applicant shall relinquish the artifacts through one or more of the following methods and provide the City of Ontario with evidence of same: a. Accommodate the process for on-site reburial of the discovered items with the consulting Native American tribes or bands. This shall include measures and provisions to protect the future reburial area from any future impacts. Reburial shall not occur until all cataloging, basic analysis, other analyses as recommended by the project archaeologist and approved by consulting tribes, and basic recordation have been completed; all documentation should be at a level of standard professional practice to allow the writing of a report of professional quality;	in the form and/or manner the Tribe deems appropriate, in the Tribe's sole discretion, and for any purpose the Tribe deems appropriate, including for educational, cultural, and/or historic purposes. **18-3: Unanticipated Discovery of Human Remains and Associated Funerary or Ceremonial Objects** A. Native American human remains are defined in PRC 5097.98(d)(1) as an inhumation or cremation, and in any state of decomposition or skeletal completeness. Funerary objects, called associated grave goods in Public Resources Code Section 5097.98, are also to be treated according to this statute. B. If Native American human remains and/or grave goods are discovered or recognized on the Project site, then Public Resource Code 5097.9 as well as Health and Safety Code Section 7050.5 shall be followed. C. Human remains and grave/burial goods shall be treated alike per California Public Resources Code Section 5097.98(d)(1) and (2). D. Preservation in place (i.e., avoidance) is the preferred manner of treatment for discovered human remains and/or burial goods. E. Any discovery of human remains/burial goods shall be kept confidential to prevent further disturbance.

b. A curation agreement with an appropriate qualified repository in San Bernardino County that meets federal standards per 36 CFR Part 79, and therefore the resource would be professionally curated and made available to other archaeologists/ researchers for further study. The collections and associated records shall be transferred, including title, to an appropriate curation facility in San Bernardino County, to be accompanied by payment of the fees necessary for permanent curation; c. For purposes of conflict resolution, if more than one Native American tribe or band is involved with the project and cannot come to an agreement as to the disposition of cultural materials, materials shall be curated at the San Bernardino County Museum by default; At the completion of grading, excavation, and ground-disturbing activities on the site, a Phase IV Monitoring Report shall be submitted to the City documenting monitoring activities conducted by the project archaeologist and Native Tribal Monitors within 60 days of completion of grading. This report shall document the impacts to the known resources on the property; describe how each mitigation measure was fulfilled;	

document the type of cultural resources recovered and the disposition of such resources; provide evidence of the required cultural sensitivity training for the construction staff held during the required pregrade meeting; and, in a confidential appendix, include the daily/weekly monitoring notes from the archaeologist. All reports produced will be submitted to the City, County Museum, and consulting tribes.	

18. **UTILITIES AND SERVICE SYSTEMS.**

Information presented within the following discussions was obtained from the following Project-specific analyses:

- *Water System Analysis For The Esperanza PA 11 Project in Ontario Ranch in the City of Ontario* (Dexter Wilson Engineering, Inc.) April 17, 2025.

- *Sewer System Analysis for the Esperanza PA 11 Project in Ontario Ranch in the City Of Ontario* (Dexter Wilson Engineering, Inc.) April 17, 2025.

These reports are provided as Appendices L and M, respectively, to this Addendum.

a. **Require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?**

Summary of Certified SEIR Finding: The Certified SEIR concluded that, although buildout of TOP 2050 would generate additional wastewater, it would be adequately treated in accordance with Regional Water Quality Control Board and California Department of Public Health requirements. City sanitary sewer

systems, and stormwater management would be expanded to accommodate growth associated with the buildout of TOP 2050.

Other utilities systems would be extended and improved consistent with purveyor master plans and as warranted by market conditions. Compliance with regulatory requirements and standard conditions of approval acts to reduce impacts on utilities systems generally, improve system efficiencies, and reduce system maintenance requirements. Collectively, this diminishes the requirement to construct new systems or replace existing systems.

Construction of utilities systems serving the City under TOP 2050 buildout conditions would not result in substantially different impacts than would result from development of TOP 2050 land uses generally.

The Certified SEIR concluded that with implementation of regulatory requirements and standard conditions of approval, the potential for TOP 2050 to require or result in the relocation or construction of new or expanded utilities systems, the construction or relocation of which would result in adverse environmental impacts would be less than significant (Certified SEIR, p. 5.19-11).

Project Impacts:

Water and Wastewater

The Project would include the installation of water and wastewater lines within the Project site. The Project on-site water system would connect to two existing 8-inch water lines in Amherst Avenue and Chatham Street, adjacent to the site. The Water System Analysis concluded that the existing and proposed water infrastructure has adequate capacity to serve the Project and necessary fire flow.

The proposed on-site sewer collection system would connect to an existing 8-inch line located in south Amherst Avenue, adjacent to the site. The Sewer System Analysis concluded that all existing and proposed sewer lines have adequate capacity to convey peak flows from existing development plus the proposed Project while maintaining City criteria.

Although the Project would result in new water and wastewater line connections, these connections would occur on-site and would be part of the Project's construction phase, which is evaluated throughout this Addendum. The construction of the Project's water and wastewater lines necessary to serve the Project would not result in any significant physical effects on the environment that are not already identified and disclosed as part of this Addendum. The Project would not result in any new, increased or substantially different impacts, other than those previously considered and addressed in the Certified SEIR.

Stormwater Drainage

The Project site currently drains in a southwesterly direction towards the intersection of Eucalyptus Avenue and Amherst Avenue where an on-site detention basin is located. The basin has a 36-inch inlet that joins a public storm drain in Amherst Avenue. The Project would implement an on-site storm drain system that generally maintains the existing drainage pattern and connects to the existing storm drain in Amherst Avenue. The Projects on-site storm drainage system would function as a flow restriction by oversizing the on-site capacity and providing on-site storage to ensure outflow would be consistent with the capacity of the surrounding storm drainage system. As such, the Project would not require relocation or construction of new or expanded storm water drainage infrastructure which could cause significant environmental effects. The Project would not result in any new, increased or substantially different impacts, other than those previously considered and addressed in the Certified SEIR.

Dry Utilities

Dry utilities serving the Project area include Southern California Edison, Southern California Gas Company (although natural gas service is not required for the Project), and various telecommunication providers. The Project would include installation of on-site dry utility infrastructure that is anticipated to connect with the existing infrastructure available in the vicinity.

Connection is inherent to the Project's construction phase and has been evaluated throughout this Addendum. The Project would not result in any new,

increased or substantially different impacts, other than those previously considered and addressed in the Certified SEIR.

Mitigation:

Certified SEIR Measure(s)	Project Applicability
None.	-

b. **Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?**

Summary of Certified SEIR Finding: The City of Ontario 2020 Urban Water Management Plan (UWMP) substantiates that there would be sufficient and reliable water supplies available to the City through 2045. The Certified SEIR concludes that buildout of the City under TOP 2050 would incrementally increase water demands. However, water demands of the City would remain below 2020 UWMP water demand projections. On this basis, there would be sufficient water supplies available to the City under TOP 2050 buildout conditions. The potential for there to be insufficient water supplies available to serve the City and reasonably foreseeable future development during normal, dry and multiple dry years is therefore considered less than significant (Certified SEIR, pp. 5.19-30, 5.19-31).

Project Impacts: Ontario Municipal Utilities Company (OMUC) is responsible for supplying potable water to the Project site. The UWMP includes an analysis of water supply reliability projected through 2045 under normal years, single dry year, and multiple dry years. As stated above, the City is anticipated to have adequate water supplies to meet all its demands from the implementation of TOP 2050 at buildout until the year 2045 under a normal year, single dry year, and multiple dry years.

Based on the Water System Analysis calculations, the water demand of the proposed residential uses can be compared to that of the approved school use, as shown in Table 19-1.

Table 19-1
Water Demand Comparison

Use	Size	Demand Factor	Total Demand
Approved Elementary School	10.02 acres	3,500 gpd/acre[1]	35,070 gpd
Multifamily Residential	161 units	323 gpd/du[2]	52,003 gpd

[1] City of Ontario Water Master Plan, Table 4-8
[2] Dexter Wilson, 2025a

As shown above, the Project would result in an increased water demand of 16,933 gpd.

The Water Supply Assessment (WSA) prepared for the New Model Colony (NMC) determined that water demand for the NMC, as a whole, would be approximately 10.2 mgd. The City's projected 2025 water demand is 100.9 mgd, and the 2025 supply is projected at 166.1 mgd (Esperanza SP DEIR, p.III-12-14).

Based on the City's surplus water supply, as determined by the WSA for the NMC, sufficient water supply exists to accommodate the Project-related increase. As such, the Project would not result in any new, increased or substantially different impacts, other than those previously considered and addressed in the Certified SEIR.

Mitigation:

Certified SEIR Measure(s)	Project Applicability
None.	-

c. **Result in a determination by the wastewater treatment provider that serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?**

Summary of Certified SEIR Finding: The Certified SEIR recognizes that buildout of the City under TOP 2050 would result in increased wastewater treatment demands. However, existing wastewater treatment plants have excess capacity sufficient to meet these increased demands. Planned wastewater treatment

plant expansion would provide additional capacity available to serve the City under TOP 2050 buildout conditions. Treated wastewater meets or exceeds RWQCB and NPDES standards and requirements. On this basis, the Certified SEIR concluded that the potential for buildout of City under TOP 2050 to result in or cause insufficient or inadequate wastewater treatment would be less than significant.

Project Impacts: Based on the Sewer System Analysis prepared for the Project, Table 19-2 presents a comparison of the wastewater generation associated with the approved elementary school and the Project.

Table 19-2
Wastewater Generation Comparison

Use	Size	Generation Factor[1]	Total Generation
Approved Elementary School	10.02 acres	2,000 gpd/acre[1]	20,000 gpd
Multifamily Residential	161 units	174 gpd/du[2]	28,014 gpd

[1] Esperanza Specific Plan DEIR, Table III-12-A

[2] Dexter Wilson, 2025b

As shown above, the Project would result in a wastewater generation increase of 8,014 gpd when compared to the approved school use.

Wastewater from the site would be treated at IEUA Regional Water Recycling Plant No. 5 (RP-5) located in Chino. RP-5 currently treats about 9 million gallons per day (mgd), with a total treatment capacity of 16.3 mgd. RP-5 is currently undergoing an expansion which will increase capacity to 22.5 mgd. Ultimately, RP-5 will treat 30 mgd with a peak flow of 60 mgd. (IEUA, 2024)

The Project increase represents approximately 0.05 percent of RP-5's current treatment capacity. Given the existing freeboard, in addition to the ongoing expansion of RP-5, the IEUA's existing wastewater treatment facilities are anticipated to have adequate capacity to serve the Project's demand in addition to its existing commitments. Therefore, the Project would not result in any new, increased or substantially different impacts, other than those previously considered and addressed in the Certified SEIR.

Mitigation:

Certified SEIR Measure(s)	Project Applicability
None.	-

d. **Generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?**

e. **Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?**

Summary of Certified SEIR Finding: The Certified SEIR concluded that buildout of TOP 2050 would be served by landfills with sufficient permitted capacities to accommodate all solid waste disposal needs. Additionally, no conflicts with federal, State, and local management and reduction statutes and regulations related to solid waste were identified. The Certified SEIR determined that impacts related to solid waste would be less than significant (Certified SEIR, p. 5.17-31).

Project Impacts: Using a solid waste generation factor from CalRecycle, the operational solid waste anticipated from the proposed Project can be compared to that of the approved school use, as evaluated in the Esperanza Specific Plan DEIR (p. III-12-16). This comparison is presented in Table 19-3.

Table 19-3
Solid Waste Generation Comparison

Use	Size	Disposal Factor	Tons/Year
Approved Elementary School	65,000 sq. ft.	0.0013 tons/sq. ft./year[1]	84.5
Multifamily Residential	161 units	4 lbs./dwelling unit/day[2]	117.5

[1]https://www.ontarioca.gov/sites/default/files/Ontario-Files/Planning/Reports/environmental-reports/esperanza_potentially_significant_environmental_effects_deir.pdf
[2]https://www2.calrecycle.ca.gov/wastecharacterization/general/rates

As shown above, the Project represents an increase in solid waste generation for the site. According to the Certified SEIR, solid waste collected from the City of Ontario is taken to either the Badlands Sanitary Landfill in Moreno Valley or the El

Sobrante Sanitary Landfill in Corona. Table 19-4 presents the disposal overview of both landfills.

Table 19-4
Landfill Overview

	Badlands Sanitary Landfill	El Sobrante Sanitary Landfill
Max Permitted Throughput (tons/day)	4,800	16,054
2020 Average Daily Disposal (tons/day)	2,813	10,995
Excess Daily Capacity (tons/day)	1,987	5,059
Remaining Capacity (cubic yards)	15,748,799	143,977,170
Estimated Closing Date	2073	2051

Source: TOP 2050 Certified SEIR

Solid waste generation anticipated by the Project represents approximately 0.065 percent (0.32 ton/day) of the current daily maximum throughput for the Badlands Landfill and 0.002 percent of the current daily maximum throughput for the El Sobrante Landfill. Given the excess daily capacity, solid waste generated by the proposed uses can be accommodated by either of these existing landfill facilities.

Additionally, the Project would comply with applicable solid waste management and reduction statutes and regulations (summarized below), acting to reduce solid waste management impacts of the Project.

- *City of Ontario Construction & Demolition Recycling Plan (CDRP)*
  Pursuant to Ontario Municipal Ordinance (OMC) Sec. 6-3.602 Construction & Demolition Recycling Plan and the 2016 California Green Building Standards Code (CALGreen), all building and demolition permit applicants are required to prepare and submit a Construction & Demolition Recycling Plan (CDRP) and a CDRP Summary Report. OMC Sec. 6-3.602 and CALGreen require all construction and qualifying renovation and demolition projects to divert at least 65% of all generated waste materials. The City oversees compliance with OMC Sec. 6-3.602 and CALGreen construction waste diversion mandates.

- *AB 939 - California Integrated Waste Management Act of 1989*
  Solid waste management is guided by the California Integrated Waste Management Act of 1989 (AB 939), which emphasizes resource conservation through reduction, recycling, and reuse of solid waste. AB 939 requires that localities conduct a Solid Waste Generation Study (SWGS) and develop a Source Reduction Recycling Element (SRRE), providing for a minimum 50 percent reduction in waste sent to landfills. Diversion rates are calculated and tracked by the California Integrated Waste Management Board (Board). Alternatively, the Board can determine that a jurisdiction's "good faith efforts" to implement comprehensive diversion programs have satisfied the requirement even if diversion levels are below 50 percent.

  To reduce waste disposal, AB 939 requires every California city and county to divert 50 percent of its waste from landfills. Residential, commercial and governmental waste recycling programs in support of the SRRE have been implemented by the City. The City is currently meeting or exceeding all AB 939 solid waste diversion targets.

- *AB 341 - Commercial Recycling*
  Assembly Bill 341 mandates recycling for businesses producing four or more cubic yards of solid waste per week, and multifamily dwellings of five units or more. Under the law, business must separate recyclables from trash and then either subscribe to City of Ontario recycling services, self-haul their recyclables, or contract with a permitted private recycler.

- *SB 1383 - Organic Waste Management Requirements*
  SB 1383 establishes targets to achieve a 50 percent reduction in the level of the Statewide disposal of organic waste from the 2014 level by 2020 and a 75 percent reduction by 2025. The law grants CalRecycle the regulatory authority required to achieve the organic waste disposal reduction targets and establishes an additional target that not less than 20 percent of currently disposed edible food is recovered for human consumption by 2025.

The City is currently developing programs and strategies to address the requirements of SB 1383, the Project would be required to ultimately abide by those requirements.

As stated in the Certified SEIR, impacts to solid waste services and facilities from new development are further addressed through the payment of development impact fees as outlined in the City of Ontario Development Impact Fee Calculation and Nexus Fee Schedules. With the payment of required development impact fees and compliance with existing solid waste regulations, the Project would not result in any new or substantially increased solid waste impacts not previously identified within the Certified SEIR.

Based on the preceding, the Project would not generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals would be less than significant. Additionally, the Project would comply with applicable solid waste management and reduction statutes and regulations. On this basis, the Project would result in less than significant solid waste management impacts. The Project would not result in solid waste management impacts substantially greater than solid waste management impacts considered and addressed in the Certified SEIR.

Mitigation:

Certified SEIR Measure(s)	Project Applicability
None.	-

19. **WILDFIRE.** If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project:

a. **Substantially impair an adopted emergency response plan or emergency evacuation plan?**

b. **Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to, pollutant concentrations from a**

wildfire or the uncontrolled spread of a wildfire?

c. **Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?**

d. **Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?**

Summary of Certified SEIR Finding: As discussed in the Certified SEIR, CAL FIRE has determined that the City contains no areas subject to very high wildfire risk. The City recognizes that even though fuel loading is light in Ontario and fire risk comes primarily from urban fires, not wildfires, there is some risk related to wildfires. There are many resources available to address wildland fires should they arise - CAL FIRE's 2019 Strategic Fire Plan for California, the CFC, County of San Bernardino MJHMP, City of Ontario LHMP, and fire services from the City of Ontario Fire Department. With adherence to these building practices, development and infrastructure associated with TOP 2050 would not exacerbate risk or result in post-wildfire hazards (e.g., landslides, mudflows, and flooding). In addition, TOP 2050 incorporates policies to prevent wildfire hazards and support the community during wildfire events (Certified SEIR, pp. 5.20-15, 5.20-16). On this basis, the Certified SEIR concluded that potential wildfire impacts resulting from TOP 2050 would be less than significant.

Project Impacts: Development of the site has been anticipated under TOP 2050. By extension, potential wildfire impacts affecting the Project site are reflected in the assessment of wildfire impacts affecting the City under TOP 2050, as considered and addressed in the Certified SEIR. Per CAL FIRE, *Fire Hazard Severity Zone Maps*, the City and the Project site are not located within or near a state responsibility area, or within an area classified as a very high fire hazard severity zone.

Fire protection services for the Project site and vicinity are currently provided by the Ontario Fire Department. Adherence to Fire Department building and site

design requirements, and compliance with codified fire protection and prevention measures during construction and operation of the Project are required. On this basis, when compared to the Certified SEIR findings, no new or substantially increased wildfire impacts would result from the Project.
Mitigation:

Certified SEIR Measure(s)	Project Applicability
None.	-

20. **MANDATORY FINDINGS OF SIGNIFICANCE.**

a. **Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat or a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?**

b. **Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current project, and the effects of probable future projects.)**

c. **Does the project have environmental effects that will cause substantial adverse effects on human beings, either directly or indirectly?**

Project Impacts: This Addendum defines, describes, compares, and contrasts potential environmental impacts of the Project in the context of the environmental impacts assessed in the Certified SEIR. In so doing, this Addendum substantiates consistency with applicable CEQA Guidelines provisions addressing preparation of an Addendum to a previously-Certified SEIR.

As supported by the discussions presented herein, the Project would not result in or cause any new significant impacts, substantively increased impacts, or

substantively different environmental impacts than those previously considered and addressed in the Certified SEIR. Analysis beyond that presented in this Addendum is not required or warranted.

EARLIER ANALYSES

(Earlier analyses may be used where, pursuant to the tiering, program EIR, or other CEQA process, one or more effects have been adequately analyzed in an earlier EIR or Negative Declaration. Section 15063(c)(3)(D)):

1) Earlier Analyses Used. Identify earlier analyses used and state where they are available for review.

a) The Ontario Plan Final Environmental Impact Report

b) The Ontario Plan/Policy Plan

c) City of Ontario Zoning

d) Esperanza Specific Plan Draft Environmental Impact Report

All documents listed above are on file with the City of Ontario Planning Department, 303 East "B" Street, Ontario, California 91764, (909) 395-2036.

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Urban Crossroads, 2025c. Urban Crossroads, Inc. April 24, 2025. *Esperanza Specific Plan Amendment Noise Impact Analysis, City of Ontario*.

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Urban Crossroads, 2024e. Urban Crossroads, Inc. May 29, 2024. *Esperanza Specific Plan Vehicle Miles Traveled (VMT) Analysis.*

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WQMP, 2025. March 12, 2025. *Preliminary Water Quality Management Plan (PWQMP)*.

Esperanza PA-11 SPA/File Nos.: PPA24-0139, PGPA24-004, PSPA24-004, PDEV24-017, PMTT24-008, PDA25-003

Mitigation Monitoring and Reporting Program

Impact Heading	Mitigation Measure	Responsible Party/Monitoring Party	Implementation Stage	Compliance Date and Signature
Air Quality				
The Ontario Plan 2050 Supplemental EIR Mitigation Measures				
Air Quality	**MM 3-1** Prior to discretionary approval by the City of Ontario for development projects subject to CEQA (California Environmental Quality Act) review (i.e., nonexempt projects), project applicants shall prepare and submit a technical assessment evaluating potential project construction-related air quality impacts to the City of Ontario Planning Department for review and approval. The evaluation shall be prepared in conformance with South Coast Air Quality Management District (South Coast AQMD) methodology for assessing air quality impacts. If construction-related criteria air pollutants are determined to have the potential to exceed the South Coast AQMD–adopted thresholds of significance, City of Ontario Building Department shall require feasible mitigation measures to reduce air quality emissions. Potential measures shall be incorporated as conditions of approval for a project and may include: • Require fugitive dust control measures that exceed South Coast Air Quality Management District's Rule 403, such as: o Requiring use of nontoxic soil stabilizers to reduce wind erosion. o Applying water every four hours to active soil disturbing activities. o Tarping and/or maintaining a minimum of 24 inches of freeboard on trucks hauling dirt, sand, soil, or other loose materials. • Using construction equipment rated by the United States Environmental Protection Agency as having Tier 4 interim or higher exhaust emission limits. • Ensuring construction equipment is properly serviced and maintained to the manufacturer's standards. • Limiting nonessential idling of construction equipment to no more than five consecutive minutes. • Using Super-Compliant VOC paints for coating of architectural surfaces whenever possible. A list of Super-Compliant architectural coating manufactures can be found on the South Coast Air Quality Management District's website at: http://www.aqmd.gov/prdas/brochures/Super-Compliant_AIM.pdf.	Project Applicant/ City Planning Department and Building Department	n/a	This measure has been implemented as part of the Addendum. The Project-specific Air Quality Impact Analysis is provided in its entirety as Addendum Appendix C. Project construction would not exceed SCAQMD thresholds; further mitigation is not required.

Impact Heading	Mitigation Measure	Responsible Party/Monitoring Party	Implementation Stage	Compliance Date and Signature
	These identified measures shall be incorporated into all appropriate construction documents (e.g., construction management plans) submitted to the City and shall be verified by the City's Planning Department.			
	MM 3-2 The City of Ontario shall evaluate new development proposals within the City and require all developments to include access or linkages to alternative modes of transportation, such as transit stops, bike paths, and/or pedestrian paths (e.g. sidewalks).	Project Applicant/City Planning Department	Prior to discretionary approval	
	MM AQ-1 Prior to discretionary approval by the City of Ontario for development projects subject to CEQA (California Environmental Quality Act) review (i.e., nonexempt projects), project applicants shall prepare and submit a technical assessment evaluating potential project operation-phase-related air quality impacts to the City of Ontario Planning Department for review and approval. The evaluation shall be prepared in conformance with South Coast Air Quality Management District (South Coast AQMD) methodology in assessing air quality impacts. If operation-related air pollutants are determined to have the potential to exceed the South Coast AQMD–adopted thresholds of significance, the City of Ontario Planning Department shall require that applicants for new development projects incorporate mitigation measures to reduce air pollutant emissions during operational activities. The identified measures shall be included as part of the conditions of approval. Possible mitigation measures to reduce long-term emissions could include, but are not limited to the following: • For site-specific development that requires refrigerated vehicles, the construction documents shall demonstrate an adequate number of electrical service connections at loading docks for plug-in of the anticipated number of refrigerated trailers to reduce idling time and emissions. • Applicants for manufacturing and light industrial uses shall consider energy storage and combined heat and power in appropriate applications to optimize renewable energy generation systems and avoid peak energy use. • Site-specific developments with truck delivery and loading areas and truck parking spaces shall include signage as a reminder to limit idling of vehicles while parked for loading/unloading in accordance with California Air Resources Board Rule 2845 (13 CCR Chapter 10 sec. 2485).	Project Applicant/ City Planning Department	n/a	This measure has been implemented as part of the Addendum. The Project-specific Air Quality Impact Analysis is provided in its entirety as Addendum Appendix C. Project operations would not exceed SCAQMD thresholds; further mitigation is not required.

Impact Heading	Mitigation Measure	Responsible Party/Monitoring Party	Implementation Stage	Compliance Date and Signature
	• Provide changing/shower facilities as specified in Section A5.106.4.3 of CALGreen (Nonresidential Voluntary Measures). • Provide bicycle parking facilities per Section A4.106.9 of CALGreen (Residential Voluntary Measures). • Provide preferential parking spaces for low-emitting, fuel-efficient, and carpool/van vehicles per Section A5.106.5.1 of CALGreen (Nonresidential Voluntary Measures). • Provide facilities to support electric charging stations per Section A5.106.5.3 and Section A5.106.8.2 of CALGreen (Nonresidential Voluntary Measures; Residential Voluntary Measures). • Applicant-provided appliances shall be Energy Star–certified appliances or appliances of equivalent energy efficiency (e.g., dishwashers, refrigerators, clothes washers, and dryers). Installation of Energy Star–certified or equivalent appliances shall be verified by the City during plan check.			
Biological Resources				
Esperanza Specific Plan EIR Mitigation Measures				
Biological Resources	**MM BIO-1** There is a possibility of owl colonization within the project site prior to site grading. To ensure that no direct loss of individuals occurs, mitigation will be carried prior to initiation of on-site grading activities for each development phase. A pre-construction survey for resident burrowing owls shall be conducted by a qualified biologist. The survey shall be conducted 30 days prior to construction activities. If ground-disturbing activities are delayed or suspended for more than 30 days after the preconstruction survey, the site shall be resurveyed for owls. If owls are determined to be present within the construction footprint, they shall be captured and relocated. If non-breeding owls must be moved away from the disturbance area, passive relocation techniques will be used. The pre-construction survey and any relocation activity shall be conducted in accordance with the CDFG Report on Burrowing Owl Mitigation, 1995. According to CDFG guidelines, mitigation actions will be conducted from September 1 to January 31, which is prior to the nesting season. However, burrowing owl nesting activity is variable, and as such the time frame will be adjusted accordingly. Should eggs or fledglings be discovered in any owl burrow, the burrow cannot be disturbed (pursuant to CDFG guidelines) until	Project Applicant and Biologist/City Planning Department	Prior to ground-disturbing activities	

Impact Heading	Mitigation Measure	Responsible Party/Monitoring Party	Implementation Stage	Compliance Date and Signature
	the young have hatched and fledged (matured to a stage that they can leave the nest on their own). Occupied burrows shall not be disturbed during the nesting season (February 1 through August 31) unless a qualified biologist approved by the Department of Fish and Game verifies through non-invasive methods that either: a) the adult birds have not begun egg-laying and incubation; or b) the juveniles from the occupied burrows are foraging independently and are capable of independent survival. If a biologist is unable to verify one of the above conditions, then no disturbance shall occur within 300 feet of the burrowing owl's nest during the breeding season to avoid abandonment of the young. Passive relocation can be used to exclude owls from their burrows (outside the breeding season or once the young are able to leave the nest and fly) by installing one-way doors in burrow entrances. These one-way doors allow the owl to exit the burrow, but not enter it. These doors should be left in place 48 hours to ensure owls have left the burrow. Artificial burrows should be provided nearby. The project area should be monitored daily for one week to confirm owl use of burrows before excavating burrows in the impact area. Burrows should be excavated using hand tools and refilled to prevent reoccupation. Sections of flexible pipe should be inserted into the tunnels during excavation to maintain an escape route for any animals inside the burrow.			
	MM BIO-2 The project proponent shall be required to pay City of Ontario open space mitigation fees. Fees collected will be used "to acquire and restore mitigation lands to offset impacts to species now living in the New Model Community and impacts to existing open space", according to the City of Ontario Development Impacts Fee Calculation Report and the Settlement and general Release Agreement.	Project Proponent/City Planning Department	Prior to discretionary approval	
Cultural Resources				
Esperanza Specific Plan EIR Mitigation Measures				
Cultural Resources	**MM CUL-1** Should any cultural and/or archaeological resources be accidentally discovered during construction, construction activities shall be moved to other parts of the project site and a qualified archaeologist shall be contacted to determine the significance of these resources. If the find is determined to be a historical or unique archaeological resource, as defined in Section 15064.5 of the CEQA Guidelines, then procedures outlined in Section 15064.5 of the CEQA Guidelines shall be followed. Additionally, Ontario's Local CEQA Guidelines provide that curation may be an	Project Developer or Contractor, Project Archaeologist/City Planning Department	During construction activities	

Impact Heading	Mitigation Measure	Responsible Party/Monitoring Party	Implementation Stage	Compliance Date and Signature
	appropriate mitigation measure for an artifact that must be removed during project excavation or testing. (Local CEQA Guidelines, Section 5.13.)			
	MM CUL-2 If human remains are uncovered at any time, all activities in the area of the find shall be halted by the developer or its contractor and the County Coroner shall be notified immediately pursuant to CA Health & Safety Code Section 7050.5 and CA PRC Section 5097.98. If the Coroner determines that the remains are of Native American origin, the Coroner shall proceed as directed in Section 15064.5(e) of the CEQA Guidelines.	Project Developer or Contractor/City Planning Department or County Coroner	If human remains are uncovered	
Geology and Soils				
Project-Specific Mitigation Measure				
Geology and Soils	**MM 7-1** A Paleontological Resources Impact Mitigation Program (PRIMP) shall be prepared, in accordance with TOP Certified SEIR MM 5-2. The PRIMP shall be approved by the City Planning Department prior to the issuance of a grading permit. Additionally, full-time paleontological monitoring starting at a depth of four feet below the surface during earth disturbance activities shall be conducted. A proposed paleontological monitoring plan is presented within the report titled *Paleontological Assessment for the Eucalyptus and Amherst Avenues Project, City Of Ontario, San Bernardino County, California* (BFSA Environmental Services) April 1, 2025.	Project Applicant, Project Paleontologist/City Planning Department	Prior to issuance of grading permit	
Esperanza Specific Plan EIR Mitigation Measure				
Geology and Soils	**MM Geo-1** To address potential wind erosion effects, prior to construction, all grading and other construction activities will apply for and adhere to the permit given by the City of Ontario and enforced by the Building Official found in Title 6, Chapter 12, sections 6-12.01 – 6-12.07. The permit lasts for one (1) year, therefore, all construction lasting for a period of more than one calendar year from the date of issue will reapply for the permit and pay the current annual fee. At a minimum, the permit prohibits the disturbance of the surface or subsurface of more than one (1) acre of land without meeting permit requirements which can include such things as the application of soil stabilizers and limitations on grading activities during wind events.	Project Applicant/City Building Department	Prior to construction activities	
Noise				
The Ontario Plan 2050 Supplemental EIR Mitigation Measures				
Noise	**MM 12-4** Construction activities associated with new development that occurs near sensitive receptors shall be evaluated for potential noise impacts. Construction contractors shall implement the following measures for construction activities in the City of Ontario. Construction plans submitted to the City shall identify these measures on demolition, grading, and construction plans. The City of Ontario Planning and Building	Project Contractor/City Planning and Building Department	During construction activities	Project construction noise has been evaluated consistent with MM 12-4; No

Impact Heading	Mitigation Measure	Responsible Party/Monitoring Party	Implementation Stage	Compliance Date and Signature
	Departments shall verify that grading, demolition, and/or construction plans submitted include these notations prior to issuance of demolition, grading, and/or building permits. • Construction activity is limited to the hours between 7:00 am and 6:00 pm Monday through Friday and 9:00 am to 6:00 pm Saturdays and Sundays, as prescribed in Municipal Code Section 5-29.09. • During the entire active construction period, equipment and trucks used for project construction shall use the best-available noise control techniques wherever feasible (e.g., improved mufflers, equipment re-design, use of intake silencers, ducts, engine enclosures, and acoustically attenuating shields or shrouds). • Impact tools (e.g., jack hammers and hoe rams) shall be hydraulically or electrically powered wherever possible. Where the use of pneumatic tools is unavoidable, an exhaust muffler on the compressed air exhaust shall be used along with external noise jackets on the tools. • Stationary equipment such as generators and air compressors shall be located as far as feasible from nearby noise-sensitive uses. • Stockpiling shall be located as far as feasible from nearby noise-sensitive receptors. • Construction traffic shall be limited, to the extent feasible, to approved haul routes established by the City's Engineering Department. • At least 10 days prior to the start of construction activities, a sign shall be posted at the entrance(s) to the job site, clearly visible to the public, that includes permitted construction days and hours as well as the telephone numbers of the City's and contractor's authorized representatives that are assigned to respond in the event of a noise or vibration complaint. If the authorized contractor's representative receives a complaint, he/she shall investigate, take appropriate corrective action, and report the action to the City. • Signs shall be posted at the job site entrance(s), within the on-site construction zones, and along queueing lanes (if any) to reinforce the prohibition of unnecessary engine idling. All other equipment shall be turned off if not in use for more than 5 minutes.			significant impacts have been identified. Regardless, the construction requirements listed within MM 12-4 shall be implemented during construction of the Project.

Impact Heading	Mitigation Measure	Responsible Party/Monitoring Party	Implementation Stage	Compliance Date and Signature
	• During the entire active construction period and to the extent feasible, the use of noise producing signals, including horns, whistles, alarms, and bells, shall be for safety warning purposes only. The construction manager shall use smart back-up alarms, which automatically adjust the alarm level based on the background noise level or switch off back-up alarms and replace with human spotters in compliance with all safety requirements and laws. Erect temporary noise barriers (at least as high as the exhaust of equipment and breaking line-of-sight between noise sources and sensitive receptors), as necessary and feasible, to maintain construction noise levels at or below the performance standard of 80 dBA Leq. Barriers shall be constructed with a solid material that has a density of at least 1.5 pounds per square foot with no gaps from the ground to the top of the barrier and may be lined on the construction side with an acoustical blanket, curtain, or equivalent absorptive material.			
	MM 12-2 Prior to issuance of a building permit, individual projects that involve vibration-intensive construction activities, such as pile drivers, jack hammers, and vibratory rollers near sensitive receptors shall be evaluated for potential vibration impacts. For construction within 135 feet of fragile structures, such as historical resources, within 100 feet of nonengineered timber and masonry buildings (e.g., most residential buildings), or within 75 feet of engineered concrete and masonry (no plaster); or a vibratory roller within 25 feet of any structure, the project applicant shall prepare a noise and vibration analysis to assess and mitigate potential noise and vibration impacts related to these activities. This noise and vibration analysis shall be conducted by a qualified and experienced acoustical consultant or engineer. The vibration levels shall not exceed Federal Transit Administration (FTA) architectural damage thresholds (e.g., 0.12 inches per second [in/sec] peak particle velocity [PPV] for fragile or historical resources, 0.2 in/sec PPV for nonengineered timber and masonry buildings, and 0.3 in/sec PPV for engineered concrete and masonry). If vibration levels would exceed this threshold, alternative uses shall be used, such as drilling piles as opposed to pile driving and static rollers as opposed to vibratory rollers. If necessary, construction vibration monitoring shall be conducted to ensure vibration thresholds are not exceeded.	Project Applicant and Project Acoustical Consultant/City Planning Department	n/a	This measure has been implemented as part of the Addendum; No significant impacts have been identified. No further mitigation is necessary.
Esperanza Specific Plan EIR Mitigation Measures				
Noise	**MM Noi-1** The construction activities of the proposed project shall comply with the City of Ontario Noise Ordinance that prohibits construction activities on Sundays, federal holidays, and other days between the hours of 7:00 p.m. and 7:00 a.m.	Project Applicant and Project Contractor/City Planning Department	During construction activities	

Impact Heading	Mitigation Measure	Responsible Party/Monitoring Party	Implementation Stage	Compliance Date and Signature
	MM Noi-2 Construction staging areas shall not be located within 150 feet of existing sensitive receptors and construction equipment shall be fitted with properly operating and maintained mufflers.	Project Applicant and Project Contractor/City Planning Department	During construction activities	
	MM Noi-6 Architectural plans shall be submitted to the City of Ontario for an acoustical plan check prior to the issuance of building permits to assure that second story windows are upgraded for sound reduction and proper ventilation systems are incorporated. Plans shall include a final acoustical report to be reviewed and approved by the Planning Department prior to building permit issuance to ensure that City standards are maintained (45 dB CNEL interior and 65 dB CNEL exterior).	Project Applicant and Project Acoustical Consultant/City Planning Department	Prior to issuance of building permit	
Public Services				
Esperanza Specific Plan EIR				
Public Services	**MM Serv 2** To reduce fire hazards, adequate fire hydrant locations and water main sizes shall meet standards established by the City of Ontario Fire Department and reviewed and implemented by the Engineering Department.	Project Applicant/City Fire Department and Engineering Department	Prior to discretionary approval	
	MM Serv 3 To reduce fire hazards, adequate fire flow pressure shall be provided for residential areas and non-residential projects in accordance with currently adopted City standards.	Project Applicant/City Engineering Department	Prior to discretionary approval	
	MM Serv 4 To reduce fire hazards, adequate water supply shall be provided as approved by the Fire Department prior to the framing stages of construction.	Project Applicant/City Fire Department	Prior to the framing stages of construction	
	MM Serv 5 To reduce fire hazards, houses located on cul-de-sacs longer than 300 feet shall be constructed with residential fire sprinklers.	Project Applicant/City Engineering Department	Prior to discretionary approval	
	MM Serv 6 To reduce fire hazards, access roadways designed in accordance with Fire Department standards to within 150' of all structures, shall be provided prior to the framing stages of construction. This access is to be maintained in an unobstructed manner throughout construction.	Project Applicant/City Fire Department	Prior to the framing stages of construction	

Impact Heading	Mitigation Measure	Responsible Party/Monitoring Party	Implementation Stage	Compliance Date and Signature
	MM Serv 7 To mitigate for potential impacts to library, police, and fire departments, the developer shall pay library, police, and fire service development impacts fees.	Project Developer/City Planning Department	Prior to issuance of building permit	
	MM Serv 9 The developer shall pay school fees or otherwise meet project obligations to schools, as approved by Mountain View School and Chaffey Joint Union High School Districts.	Project Developer/City Planning Department	Prior to issuance of building permit	
	MM Serv 10 To adequately address the need for recreation within the City, park development impact fees, Quimby fees, and/or developed parkland shall be provided to the City commensurate with the requirements of the General Plan equivalent to 24 acres total. The park fees shall be paid on a pro-rata share as building permits are issued in accordance with the negotiated DIF agreement. (Note: parkland shall be provided to the City commensurate with the requirements of the General Plan equivalent to 25 acres, if 46 additional homes are built in lieu of the school.)	Project Developer/City Planning Department	Prior to issuance of building permit	
Transportation				
The Ontario Plan 2050 Supplemental EIR Mitigation Measures				
Transportation	**MM T-1** Prior to approval of discretionary projects subject to VMT reduction analysis, applicants shall demonstrate compliance with the City's VMT Guidelines for CEQA assessment of VMT impacts. For projects with VMT per Service Population exceeding the County's significance threshold, a mitigation plan shall be developed and implemented. Mitigation should consist of Transportation Demand Management (TDM) measures analyzed under a VMT-reduction methodology consistent with the California Air Pollution Control Officers Association's (CAPCOA) Final Handbook for Analyzing Greenhouse Gas Emission Reductions, Assessing Climate Vulnerabilities, and Advancing Health and Equity (2021) and approved by the City of Ontario (if applicable). Examples of measures include but are not limited to: • Pedestrian Network Improvements: constructing new sidewalks and/or improving damaged or substandard sidewalks that connect to a larger pedestrian network. • Construct or Improve Bike Facilities: constructing new or enhancing a single existing Class I, II or IV bike facility that connects to a larger bike network. • Construct or Improve Bike Boulevards: implementing a Class III bike boulevard on a local or collector street that is one travel lane in each	Project Applicant/City Planning Department	n/a	This measure has been implemented as part of the Addendum. The Project's VMT Analysis (Addendum Appendix K2) fulfills Certified SEIR Mitigation Measure T-1.

Impact Heading	Mitigation Measure	Responsible Party/Monitoring Party	Implementation Stage	Compliance Date and Signature
	direction, has a design speed of 25 mph or less and a design volume of 5,000 ADT or less. • Expand Bikeway Networks: constructing a network of interconnected new Class I, II, or IV bike facilities. • Provide End of Trip Bicycle Facilities: constructing facilities that support cyclists such as bike parking, lockers, and showers. • Implement Transit-Supportive Roadway Treatments: funding infrastructure improvements such as traffic signal modifications and roadway signing and striping that are dedicated to improving transit travel times and reliability. • Transit Passes: proving discounted or free transit fare to a specific geographic area, population group, or to the general public. • Vanpool Program: providing groups of 5 to 15 people with direct shuttle service between their workplace and residence. • Carshare Program (conventional or EV): providing access to a shared fleet of on-demand vehicles for short-term use/rental. Best practice is to discount carshare membership and provide priority parking for carshare vehicles to encourage use of the service. • Bikeshare Program (conventional or EV): providing access to a shared fleet of on-demand bicycles for short-term use/rental. Best practice is to discount bikeshare membership and dedicate bikeshare parking to encourage use of the service. • Rideshare Program: providing access to and encouraging the use of a ridesharing platform or service. This could be an app, website, or other service that provides ride-matching coordination services. • Community-Based Travel Planning (CBTP): CBTP is a residential based approach to outreach, performed by trained advisors, that provides households within a targeted geographic area with customized information, incentives, and support to encourage the use of transportation alternatives in place of single occupancy vehicles.			

Impact Heading	Mitigation Measure	Responsible Party/Monitoring Party	Implementation Stage	Compliance Date and Signature
	• Commute Trip Reduction (CTR) Program: CTR programs can be mandatory or voluntary, and involve providing information, coordination, services, infrastructure, and/or incentives for alternative modes such as ridesharing, vanpool, transit passes, and cycling.			
Esperanza Specific Plan EIR Mitigation Measures				
Transportation	**MM Trans 1** Install traffic signal at the intersection of Mill Creek Avenue/Merrill Avenue with the following geometrics: Northbound: One left-turn lane. One shared through and right-turn lane. Southbound: One left-turn lane. One shared through and right-turn lane. Eastbound: One left-turn lane. One shared through and right-turn lane. (These developments to be constructed by development located west of the Specific Plan.) Westbound: One left-turn lane. One shared through and right-turn lane.	Project Developer/City Planning Department	Prior to issuance of building permit	
	MM Trans 2 Install traffic signal at the intersection of Project Street (W)/Merrill Avenue with the following geometrics: Northbound: One shared left, through and right-turn lane. Southbound: One shared left, through and right-turn lane. Eastbound: One left-turn lane. One shared through and right-turn lane. Westbound: One left-turn lane. One shared through and right-turn lane.	Project Developer/City Planning Department	Prior to issuance of building permit	
	MM Trans 3 Install traffic signal at the intersection of Project Street (E)/Merrill Avenue with the following geometrics: Northbound: One shared left, through and right-turn lane. Southbound: One shared left, through and right-turn lane. Eastbound: One left-turn lane. One through lane. One shared through and right-turn lane. Westbound: One left-turn lane. One through lane. One shared through and right-turn lane.	Project Developer/City Planning Department	Prior to issuance of building permit	
	MM Trans 4 Install traffic signal at the intersection of Milliken/Hamner Avenue/Merrill Avenue with the following geometrics: Northbound: One left-turn lane. Two through lanes. One shared through and right-turn lane. Southbound: One left-turn lane. Three through lanes. One right-turn lane. Eastbound: Two left-turn lanes. One shared through and right-turn lane. Westbound: (This leg of the intersection to be constructed by development in Riverside County.) One left-turn lane. One shared through and right-turn lane.	Project Developer/City Planning Department	Prior to issuance of building permit	

Impact Heading	Mitigation Measure	Responsible Party/Monitoring Party	Implementation Stage	Compliance Date and Signature
	MM Trans 5 Install traffic signal at the intersection of Mill Creek Avenue/Bellegrave Avenue with the following geometrics (Note: Riverside County encroachment permits required for some improvements.): Northbound: One shared left, through and right-turn lane. Southbound: One shared left, through and right-turn lane. Eastbound: One left-turn lane. One shared through and right-turn lane. Westbound: Two left-turn lanes. One shared through and right-turn lane.	Project Developer/City Planning Department	Prior to issuance of building permit	
	MM Trans 6 Modify the intersection of Milliken/Hamner Avenue/Bellegrave Avenue to include the following geometrics (Note: Riverside County encroachment permits required for some improvements.): Northbound: One left-turn lane. Two through lanes. One shared through and right-turn lane. Southbound: Two left-turn lanes. Two through lanes. One shared through and right-turn lane. Eastbound: One left-turn lane. Two through lanes. One right-turn lane. Westbound: Two left-turn lanes. Two through lanes. One right-turn lane.	Project Developer/City Planning Department	Prior to issuance of building permit	
	MM Trans 7 Sight distance at the project entrance roadways should be reviewed with respect to the City of Ontario Standard Drawing for Sight Distance in effect at the time of preparation of final grading, landscape and street improvement plans.	Project Applicant/City Planning Department	Prior to approval of final grading, landscape, and street improvement plans	
	MM Trans 8 Signing/striping should be implemented in conjunction with detailed construction plans for the project site.	Project Applicant/City Planning Department	Prior to approval of construction plans	
	MM Trans 9 Intersection, median opening and traffic signal spacing shall be in accordance with the City of Ontario New Model Colony Access Guidelines.	Project Applicant/City Planning Department	Prior to approval of street improvement plans	
	MM Trans 10 Construction of full width of internal roadways and part width of the following roadways shall comply with City of Ontario Standards:	Project Developer/City Planning Department	Prior to issuance of building permit	

Impact Heading	Mitigation Measure	Responsible Party/Monitoring Party	Implementation Stage	Compliance Date and Signature
	• Construct partial width improvements on the easterly side of Mill Creek Avenue at its ultimate cross-section as a collector street (88' right-of-way) adjacent to project boundary line. • Construct partial width improvements on the westerly of Milliken/Hamner Avenue at its ultimate cross-section as a divided arterial parkway 1 (140' or more right-of-way) adjacent to project boundary line. • Construct partial width improvements on the northerly side of Bellegrave Avenue at its ultimate cross-section as a standard arterial (100' right-of-way) adjacent to project boundary line.			
	MM Trans 13 The project will participate in the cost of off-site improvements through fairshare payment of the Development Impact fee as established by the City of Ontario. These fees should be collected and utilized by the City to construct the improvements necessary to maintain the required level of service.	Project Developer/City Planning Department	Potential fairshare fees to be collected prior to issuance of building permit	
	MM Trans 14 Reconfigure Milliken Avenue/SR 60 WB Ramps to include the following geometrics: Northbound: Two left turn lanes and two through lanes. Southbound: Two through lanes and one right-turn lane. Eastbound: NA Westbound: One left-turn lane. One shared left and through lane. One right-turn lane.	Project Developer/City Planning Department	Potential fairshare fees to be collected prior to issuance of building permit	
	MM Trans 15 Reconfigure Milliken Avenue/SR 60 EB Ramps to include the following geometrics: Northbound: Three through lanes. One right-turn lane. Southbound: One left turn lane. Three through lanes. Eastbound: One shared left and through lane. One through lane. Two right-turn lanes. Westbound: NA	Project Developer/City Planning Department	Potential fairshare fees to be collected prior to issuance of building permit	
	MM Trans 16 Reconfigure Milliken/Hamner Avenue/Riverside Avenue intersection to include the following geometrics: Northbound: One left-turn lane. Three through lanes. One shared right-turn and through lane. Southbound: Two left-turn lanes. Four through lanes. One right-turn lane. Eastbound: Two left-turn lanes. Two through lanes. One shared through and right-turn lane. Westbound: One left-turn lane. Two through lanes. One right-turn lane.	Project Developer/City Planning Department	Potential fairshare fees to be collected prior to issuance of building permit	

Impact Heading	Mitigation Measure	Responsible Party/Monitoring Party	Implementation Stage	Compliance Date and Signature
	MM Trans 17 Reconfigure Milliken/Hamner Avenue/Chino Avenue intersection to include the following geometrics: Northbound: Two left-turn lanes. Two through lanes. One shared right-turn and through lane. Southbound: One left-turn lane. Two through lanes. One shared through and right-turn lane. Eastbound: One left-turn lane. One through lane. One shared through and right-turn lane. Westbound: One left-turn lane. One through lane. One shared through and right-turn lane.	Project Developer/City Planning Department	Potential fairshare fees to be collected prior to issuance of building permit	
	MM Trans 18 Install traffic signal at the intersection of Archibald Avenue/Schaefer Avenue and configure with the following geometrics: Northbound: One left-turn lane. Two through lanes. One shared through and right-turn lane. Southbound: One left-turn lane. Two through lanes. One shared through and right-turn lane. Eastbound: One shared through and left-turn lane. One through lane. One shared through and right-turn lane. Westbound: One shared through and left-turn lane. One through lane. One shared through and right-turn lane.	Project Developer/City Planning Department	Potential fairshare fees to be collected prior to issuance of building permit	
	MM Trans 19 Reconfigure Archibald Avenue/Edison Avenue intersection to include the following geometrics: Northbound: Two left-turn lanes. Four through lanes. One right-turn lane. Southbound: Two left-turn lanes. Four through lanes. One right-turn lane. Eastbound: Two left-turn lanes. Three through lanes. Two shared right-turn/shared lanes. Westbound: Two left-turn lanes. Three through lanes. One right-turn lane.	Project Developer/City Planning Department	Potential fairshare fees to be collected prior to issuance of building permit	
	MM Trans 20 Install traffic signal at the intersection of Schaefer Avenue/Edison Avenue and reconfigure with the following geometrics: Northbound: NA Southbound: One shared left and right-turn lane. Eastbound: One left-turn lane. One through lane. Westbound: One through lane. One shared through and right-turn lane.	Project Developer/City Planning Department	Potential fairshare fees to be collected prior to issuance of building permit	

Impact Heading	Mitigation Measure	Responsible Party/Monitoring Party	Implementation Stage	Compliance Date and Signature
	MM Trans 21 Install traffic signal at the intersection of Haven Avenue/Edison Avenue and reconfigure with the following geometrics: Northbound: One left-turn lane. One through lane. One shared through and right-turn lane. Southbound: One left-turn lane. One through lane. One right-turn lane. Eastbound: Two left-turn lanes. One through lane. One shared through and right-turn lane. Westbound: One left-turn lane. One through lane. One shared through and right-turn lane.	Project Developer/City Planning Department	Potential fairshare fees to be collected prior to issuance of building permit	
	MM Trans 22 Install traffic signal at the intersection of Archibald Avenue/Merrill Avenue and reconfigure with the following geometrics: Northbound: One left-turn lane. Three through lanes. One shared through and right-turn lane. Southbound: Two left-turn lanes. Three through lanes. One shared through and right-turn lane. Eastbound: One left-turn lane. One through lane. One shared through and right-turn lane. Westbound: Two left-turn lanes. One through lane. One shared through and right-turn lane.	Project Developer/City Planning Department	Potential fairshare fees to be collected prior to issuance of building permit	
	MM Trans 23 Install traffic signal at the intersection of Haven Avenue/Merrill Avenue and reconfigure with the following geometrics: Northbound: One left-turn lane. One through lane. One shared through and right-turn lane. Southbound: One left-turn lane. One through lane. One shared through and right-turn lane. Eastbound: One left-turn lane. Two through lanes. One shared through and right-turn lane. Westbound: One left-turn lane. Two through lanes. One shared through and right-turn lane.	Project Developer/City Planning Department	Potential fairshare fees to be collected prior to issuance of building permit	
	MM Trans 24 Install traffic signal at the intersection of Mill Creek (Cleveland) Avenue/Merrill Avenue and reconfigure with the following geometrics: Northbound: One left-turn lane. One through lane. One shared through and right-turn lane. Southbound: One left-turn lane. One through lane. One shared through and right-turn lane.	Project Developer/City Planning Department	Potential fairshare fees to be collected prior to issuance of building permit	

Impact Heading	Mitigation Measure	Responsible Party/Monitoring Party	Implementation Stage	Compliance Date and Signature
	Eastbound: One left-turn lane. One through lane. One shared through and right-turn lane. Westbound: One left-turn lane. One through lane. One shared through and right-turn lane.			
	MM Trans 25 Install traffic signal at the intersection of Project Street West/Merrill Avenue and reconfigure with the following geometrics: Northbound: One shared through and left-turn lane. One through lane. One shared through and right-turn lane. Southbound: One shared through and left-turn lane. One through lane. One shared through and right-turn lane. Eastbound: One left-turn lane. One through lane. One shared through and right-turn lane. Westbound: One left-turn lane. One through lane. One shared through and right-turn lane	Project Developer/City Planning Department	Potential fairshare fees to be collected prior to issuance of building permit	
	MM Trans 26 Install traffic signal at the intersection of Project Street East/Merrill Avenue and reconfigure with the following geometrics: Northbound: One shared through and left-turn lane. One through lane. One shared through and right-turn lane. Southbound: One left-turn lane. One through lane. One shared through and right-turn lane. Eastbound: One left-turn lane. One through lane. One shared through and right-turn lane. Westbound: One left-turn lane. One through lane. One shared through and right-turn lane.	Project Developer/City Planning Department	Potential fairshare fees to be collected prior to issuance of building permit	
	MM Trans 27 Install traffic signal at the intersection of Milliken/Hamner Avenue/Merrill Avenue and reconfigure with the following geometrics: Northbound: One left-turn lane. Three through lanes. One shared through and right-turn lane. Southbound: One left-turn lane. Three through lanes. One right-turn lane. Eastbound: Two left-turn lanes. One through lane. One shared through and right-turn lane. Westbound: One left-turn lane. One through lane. One shared through and right-turn lane.	Project Developer/City Planning Department	Potential fairshare fees to be collected prior to issuance of building permit	

Impact Heading	Mitigation Measure	Responsible Party/Monitoring Party	Implementation Stage	Compliance Date and Signature
	MM Trans 28 Install traffic signal at the intersection of Mill Creek (Cleveland) Avenue/Bellegrave Avenue and reconfigure with the following geometrics: Northbound: One shared left-turn lane. One through lane. One shared through and right-turn lane. Southbound: One shared through and left-turn lane. One through lane. One shared through and right-turn lane. Eastbound: One left-turn lane. One through lane. One shared through and right-turn lane. Westbound: Two left-turn lanes. One through lane. One shared through and right-turn lane.	Project Developer/City Planning Department	Potential fairshare fees to be collected prior to issuance of building permit	
	MM Trans 29 Reconfigure Milliken/Hamner Avenue/Bellegrave Avenue intersection to include the following geometrics: Northbound: One left-turn lane. Three through lanes. One shared through and right-turn lane. Southbound: Two left-turn lanes. Three through lanes. One shared through and right-turn lane. Eastbound: One left-turn lane. Two through lanes. One right-turn lane. Westbound: Two left-turn lanes. Two through lanes. One right-turn lane.	Project Developer/City Planning Department	Potential fairshare fees to be collected prior to issuance of building permit	
	MM Trans 30 Reconfigure Hamner Avenue/Limonite Avenue intersection to include the following geometrics: Northbound: Two left-turn lanes. Three through lanes. One right-turn lane. Southbound: Two left-turn lanes. Three through lanes. One right-turn lane. Eastbound: Two left-turn lanes. Three through lanes. One right-turn lane. Westbound: Two left-turn lanes. Three through lanes. One right-turn lane.	Project Developer/City Planning Department	Potential fairshare fees to be collected prior to issuance of building permit	
	MM Trans 31 Reconfigure I-15/Limonite SB Ramps to include the following geometrics: Northbound: NA Southbound: One left-turn lane. One shared left, through, and right-turn lane. One right-turn lane. Eastbound: Three through lanes. One right-turn lane. Westbound: Three through lanes. One free-right-turn lane.	Project Developer/City Planning Department	Potential fairshare fees to be collected prior to issuance of building permit	
	MM Trans 32 Reconfigure I-15/Limonite NB Ramps to include the following geometrics: Northbound: One left-turn lane. One shared left, through, and right-turn lane. One right-turn lane. Southbound: NA.	Project Developer/City Planning Department	Potential fairshare fees to be collected prior to	

Impact Heading	Mitigation Measure	Responsible Party/Monitoring Party	Implementation Stage	Compliance Date and Signature
	Eastbound: Three through lanes. One free right-turn lane. Westbound: Three through lanes. One right-turn lane.		issuance of building permit	
Tribal Cultural Resources				
The Ontario Plan 2050 Supplemental EIR Mitigation Measures				
Tribal Cultural Resources	**MM 5-3** Upon receipt of an application for a proposed project subject to CEQA and within the City's jurisdiction, the City's representative shall consult with the relevant tribe(s)' representative(s) to determine if the proposed project is within a culturally sensitive area to the tribe. If sufficient evidence is provided to reasonably ascertain that the site is within a tribal culturally sensitive area, an archaeologist shall prepare then a cultural resources assessment. The findings of the cultural resources assessment shall be incorporated into the CEQA documentation. A copy of the report shall be forwarded to the tribe(s). If mitigation is recommended in the CEQA document, the procedure described in Mitigation Measure 5-4 shall be followed.	Project Applicant and Project Archaeologist/City Planning Department	n/a	This measure has been implemented as part of the Addendum. The City has consulted with the responding Tribe. Additionally, a Project-specific Cultural Resources Assessment has been prepared and the results incorporated within the Addendum.
Project-Specific Mitigation Measures				
Tribal Cultural Resources	**MM 18-1** Retain a Native American Monitor Prior to Commencement of Ground-Disturbing Activities A. The Project Applicant shall retain a Native American Monitor from or approved by the Gabrieleño Band of Mission Indians – Kizh Nation. The monitor shall be retained prior to the commencement of any "ground-disturbing activity" for the subject Project at all Project locations (i.e., both on-site and any off-site locations that are included in the Project description/definition and/or required in connection with the Project, such as public improvement work). "Ground-disturbing activity" shall include, but is not limited to, demolition, pavement removal, potholing, auguring, grubbing, tree removal, boring, grading, excavation, drilling, and trenching. B. A copy of the executed monitoring agreement shall be submitted to the Lead Agency prior to the earlier of the commencement of any ground-disturbing activity, or the issuance of any permit necessary to commence a ground-disturbing activity.	Project Applicant/Native American Monitor	Prior to ground-disturbing activities	

Impact Heading	Mitigation Measure	Responsible Party/Monitoring Party	Implementation Stage	Compliance Date and Signature
	C. The monitor will complete daily monitoring logs that will provide descriptions of the relevant ground-disturbing activities, the type of construction activities performed, locations of ground-disturbing activities, soil types, cultural-related materials, and any other facts, conditions, materials, or discoveries of significance to the Tribe. Monitor logs will identify and describe any discovered TCRs, including but not limited to, Native American cultural and historical artifacts, remains, places of significance, etc. (collectively, tribal cultural resources, or "TCR"), as well as any discovered Native American (ancestral) human remains and burial goods. Copies of monitor logs will be provided to the Project Applicant/ Lead Agency upon written request to the Tribe. D. On-site tribal monitoring shall conclude upon the latter of the following: (1) written confirmation to the Kizh from a designated point of contact for the Project Applicant/Lead Agency that all ground-disturbing activities and phases that may involve ground-disturbing activities on the Project site or in connection with the Project are complete; or (2) a determination and written notification by the Kizh to the Project Applicant/Lead Agency that no future, planned construction activity and/or development/ construction phase at the Project site possesses the potential to impact Kizh TCRs.			
	MM 18-2 Unanticipated Discovery of Tribal Cultural Resource Objects (Non-Funerary/Non-Ceremonial) A. A. Upon discovery of any TCRs, all construction activities in the immediate vicinity of the discovery shall cease (i.e., not less than the surrounding 50 feet) and shall not resume until the discovered TCR has been fully assessed by the Kizh monitor and/or Kizh archaeologist. The Kizh will recover and retain all discovered TCRs in the form and/or manner the Tribe deems appropriate, in the Tribe's sole discretion, and for any purpose the Tribe deems appropriate, including for educational, cultural, and/or historic purposes.	Project Archaeologist/Native American Monitor	Upon discovery of any Tribal Cultural Resources	
	MM 18-3 Unanticipated Discovery of Human Remains and Associated Funerary or Ceremonial Objects A. Native American human remains are defined in PRC 5097.98(d)(1) as an inhumation or cremation, and in any state of decomposition or skeletal completeness. Funerary objects, called associated grave goods in Public Resources Code Section 5097.98, are also to be treated according to this statute. B. If Native American human remains and/or grave goods are discovered or recognized on the Project site, then Public Resource Code 5097.9 as well as Health and Safety Code Section 7050.5 shall be followed.	Project Archaeologist/Native American Monitor	Upon discovery of any Human Remains and Associated Funerary or Ceremonial Objects	

Impact Heading	Mitigation Measure	Responsible Party/Monitoring Party	Implementation Stage	Compliance Date and Signature
	C. Human remains and grave/burial goods shall be treated alike per California Public Resources Code Section 5097.98(d)(1) and (2). D. Preservation in place (i.e., avoidance) is the preferred manner of treatment for discovered human remains and/or burial goods. E. Any discovery of human remains/burial goods shall be kept confidential to prevent further disturbance.			
Utilities and Service Systems				
Esperanza Specific Plan EIR				
Utilities and Service Systems	**MM Util 1** To provide adequate water and sewer service, all water and sewer pipelines within and adjacent to the project boundaries, as required and conditioned to serve the associated Tentative Tract Maps, shall be constructed by the developer based on the NMC Infrastructure Master Plans phased by tract and to the satisfaction of the City.	Project Developer/City Planning Department	Prior to approval of Tentative Tract Map	
	MM Util 2 To ensure that adequate sewer facilities are in place to serve the proposed project, the Archibald trunk sewer line off-site connection to the IEUA Kimbal Avenue interceptor shall be completed by IEUA and operational prior to the City of Ontario's issuance of the first certificates of occupancy. The applicant shall participate on a fair share basis in the development of the necessary sewer facilities.	Project Developer/City Planning Department	Prior to issuance of first certificate of occupancy	
	MM Util 3 To ensure adequate water service to the project, off-site water lines, tanks, interconnectors and other facilities required in the Water Master Plan for the Francis loop to provide water to the site shall be constructed by the City and be in place and operational prior to the City of Ontario's issuance of the first certificate of occupancy. The applicant shall participate on a fair share basis in the development of these off-site facilities.	Project Developer/City Planning Department	Prior to issuance of first certificate of occupancy	
	MM Util 4 To mitigate for possible conflicts with existing utilities, prior to obtaining grading permit(s), the project proponent shall coordinate with the applicable natural gas, electrical, and telephone utility providers for the project site to ensure that all existing underground and overhead lines are not damaged during project construction.	Project Developer/City Planning Department	Prior to issuance of grading permit	
	MM Util 5 To reduce the quantity of energy used and to conserve water resources, the project developer and City of Ontario should work to include sustainable systems for use of water and energy within the project design. One source of assistance in this regard is Southern California Gas Company Commercial/ Industrial Support Center at 1-800-GAS-2000, which should be contacted at the time of development of the commercial center located within the project.	Project Developer/City Planning Department	Prior to issuance of building permit	

ONTARIO ESPERANZA
SPECIFIC PLAN

City of Ontario
303 East 'B' Street
Ontario, California 91764

Armada LLC
430 Thirty Second Street
Suite 200
Newport Beach, California 92663

February 6, 2007

ADOPTION

ESPERANZA
FILE NUMBER: PSP05-002
City Council Ordinance Number: 2852 *Adopted February 6, 2007*

AMENDMENTS

FILE NUMBER: PSPA14-001 *Adopted June 16, 2014*
Zoning Administrator Decision Number: ZA 14-001

FILE NUMBER: PSPA18-007 *Adopted April 22, 2019*
Zoning Administrator Decision Number: ZA 19-008

FILE NUMBER: PSPA19-0033 *Adopted October 20, 2020*
City Council Resolution Number: R2020-17676

FILE NUMBER: PSPA19-005 *Adopted August 12, 2022*
Zoning Administrator Decision Number ZA22-014

ONTARIO ESPERANZA SPECIFIC PLAN

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Section 9. General Plan Consistency

The Ontario Plan 2050
Specific Plan Policy Matrix 9.3

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Section 1. Executive Summary

The Esperanza Specific Plan is a proposal for the development of approximately 223 acres located within the City of Ontario ~~New Model Colony (NMC)~~ Ontario Ranch. The master plan for Esperanza will provide for development of a distinctive residential planned community offering a variety of housing types within walking distance to parks and private recreational amenities. The regional context and local setting of the Esperanza Specific Plan are illustrated in Exhibit 1, "Regional Location Map" and Exhibit 2, "Vicinity Map."

The Esperanza Specific Plan comprises all of Planning Subarea 25 as depicted on the City of Ontario ~~New Model Colony (NMC)~~ Ontario Ranch General Plan Land Use Map. The Esperanza Specific Plan reflects the current Land Use Plan in The Ontario Plan (General Plan). It encompasses the eastern edge of The Ontario Ranch Master Planned Community. The Specific Plan is bounded by Bellegrave Avenue to the south, ~~Milliken~~ Hamner Avenue to the east, and Mill Creek Avenue to the west. Old Edison Road abuts the Specific Plan area on the north. Approximately 174.10 net acres of Esperanza are proposed for residential uses along with 9.89 net acres of park uses.

The Esperanza Specific Plan establishes the regulations and guidelines which will govern development of the master planned community within the Ontario Ranch General Plan. The development plan as illustrated in Exhibit 3 "Land Use Plan," is consistent with the goals and policies of the ~~NMC~~ Ontario Ranch General Plan combining livable residential neighborhoods served by public and recreational facilities as well as active open space offering opportunities for social interaction among residents.

Pedestrian accessibility is provided throughout Esperanza, through a system of sidewalks separated from the street by landscaped parkways and landscaped buffer areas. Bicycle mobility is provided within the community through a system of on-street bicycle trails.

~~The NMC~~ The Ontario Ranch General Plan, adopted by the City of Ontario, designates The Esperanza Specific Plan for development of up to 1,456 residential dwelling units, however, ~~46~~ 161 residential dwelling units will be developed within the Specific Plan area originally anticipated to be a 10.02 acre school site within Esperanza. On ~~XX-XX-2020~~ 10-20-2020, a request to increase PA4 to 14DU/AC was approved in order to accommodate a more efficient, economical sized design, and more appropriate product type. The increase allows for the development of up to ~~1,640~~ 1,652 units.

Governing Documents

Development of Esperanza will be governed by the following:

- The City of Ontario ~~NMC~~ Ontario Ranch General Plan, as amended, which establishes policies governing land use, circulation, housing, conservation and open space, noise, safety, and public facilities within the Esperanza Specific Plan area.
- The Esperanza Specific Plan which includes a Land Use Plan, Infrastructure Plan, Design Guidelines, and Development Regulations. Where the Esperanza Specific Plan is silent, the City of Ontario Development Code shall govern.
- The City of Ontario Subdivision Ordinance regulating the subdivision of land within the Esperanza Specific Plan area.
- A development agreement to include methods for financing, acquisition, and construction of infrastructure, acquisition and development of parks and schools, as well as the provision for housing opportunities consistent with the regional housing needs assessment.
- Covenants, Conditions, and Restrictions (CC&R's) to be established by the developers of Esperanza as a means of ensuring and enforcing quality design and development of the master planned community.

Specific Plan Components

The Esperanza Specific Plan is organized into the following sections in addition to Section 1, Executive Summary.

Section 2
Introduction

The Introduction serves to acquaint the reader with:

- Community vision and objectives,
- The project setting,
- A general description of the project proposal,
- The goals and policies of the Esperanza Specific Plan,
- The entitlements to accompany the Esperanza Specific Plan; and
- The relationship of the Esperanza Specific Plan to the City of Ontario ~~NMC~~ Ontario Ranch General Plan, and the City of Ontario Development Code.

Section 3
Existing Conditions

The physical setting for Esperanza is described in this section outlining the existing physical conditions on and around the Specific Plan area.

Section 4
Land Use

The Land Use Section describes residential planning areas and residential types, allocations of residential dwelling units per planning area as well as the system of parks and public facilities planned within the community.

Section 5
Infrastructure and Services

This section provides information on circulation improvements, planned backbone water, sewer, and storm drain systems, the grading concept for the development of the project, and a discussion of public utilities and services to serve the Specific Plan.

Section 6
Development Regulations

Development Regulations established in this section will govern the permitted uses and the standards regulating the development of various residential types within the Esperanza Specific Plan area. The relationship of the Esperanza Specific Plan development regulations to the City of Ontario Development Code is also provided. The policies and procedures for the City's review and approval of specific development proposals within Esperanza are presented in this section as well as the methods and procedures for interpreting and amending the Esperanza Specific Plan as necessary.

Section 7
Implementation

The policies and procedures for the City's review and approval of specific development proposals, within Esperanza, are presented in this section. This section provides the methods and procedures for interpreting and amending the Esperanza Specific Plan as necessary. A summary of project financing and project maintenance responsibilities for new development within the Specific Plan area is provided in this section.

Section 8
Design Guidelines

The Esperanza Design Guidelines are intended to direct the site planning, landscaping, and architectural quality of the development. Streetscapes, entries, edge treatments, walls and fencing, lighting, signage, and architectural design are some of the features to be addressed in the Design Guidelines.

Exhibit 1
Regional Location Map

Section 9
General Plan Consistency

This section includes the City of Ontario General Plan consistency matrix describing the relationship of the Esperanza Specific Plan to each policy of the ~~NMC~~ Ontario Ranch General Plan.

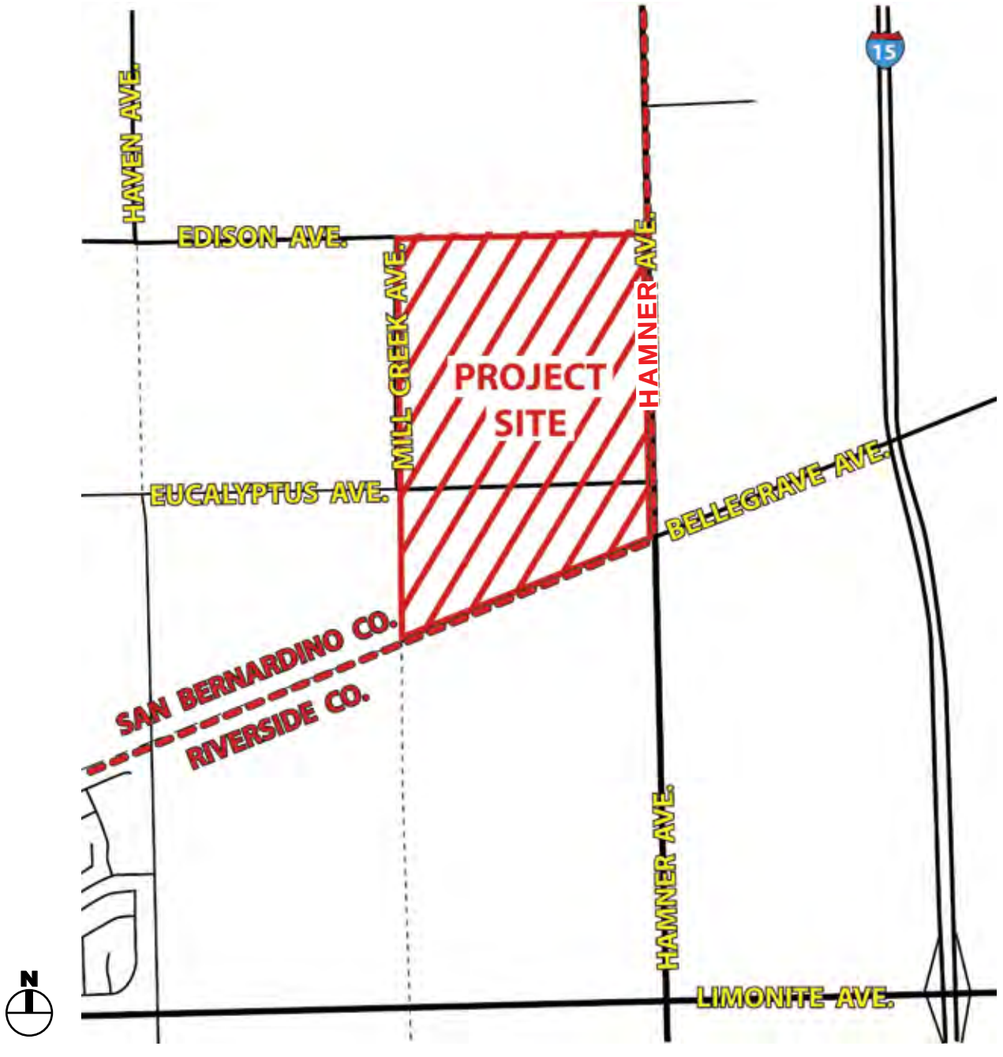


Exhibit 2
Vicinity Map

Exhibit 3
Land Use Plan

LAND USE	UNITS	GROSS ACRES	UNITS/ GROSS ACRES	NET ACRES	UNITS/ NET ACRES
Residential Uses					
PA-1 (RD-7/ Row Townhomes, RD-8/ Motorcourt Townhomes)	319 DU	29.35 AC	10.87 DU/AC	28.97 AC	11.01 DU/AC
PA-2 (RD-4/ SFD Cottages, RD-6/ 6-Pack Courtyard)	113 DU	22.84 AC	4.95 DU/AC	17.36 AC	6.51 DU/AC
PA-3 (RD-7 & RD-8/ Row Townhomes)	156 DU	11.40 AC	13.68 DU/AC	11.10 AC	14.05 DU/AC
PA-4 (RD-6/ 6-Pack Courtyard, 8-Pack Courtyard, Row Townhomes)	303 DU	27.41 AC	11.05 DU/AC	19.30 AC	15.70 DU/AC
PA-5 (RD-5/ 4-Pack Courtyard)	157 DU	23.78 AC	6.60 DU/AC	17.64 AC	8.90 DU/AC
PA-6 (RD-4/ SFD Cottages)	78 DU	13.64 AC	5.72 DU/AC	10.00 AC	7.80 DU/AC
PA-7 (RD-1/ SFD 50' wide lots)	76 DU	14.36 AC	5.29 DU/AC	12.56 AC	6.05 DU/AC
PA-8 (RD-2/ SFD 55' wide lots)	107 DU	23.72 AC	4.51 DU/AC	19.26 AC	5.56 DU/AC
PA-9 (RD-1/ SFD 50' x 80')	82 DU	17.75 AC	4.62 DU/AC	13.27 AC	6.18 DU/AC
PA-10 (RD-3/ SFD 2-Pack)	100 DU	19.92 AC	5.02 DU/AC	14.62 AC	6.84 DU/AC
PA-11 (RD-7/ Row Townhomes)	161 DU	13.10 AC	12.29 DU/AC	10.02 AC	16.07 DU/AC
Park 1		5.75*AC			
Residential land Use Total	**1,652 DU**	**223.00 AC**	**7.41 DU/AC**	**174.10 AC**	**9.49 DU/AC**
Parks				9.89 AC	
Neighborhood Edge Buffers				6.62 AC	
Roadways				28.25 AC	
SCE Easements and Well Sites				4.14 AC	
PROJECT TOTAL	**1,652 DU**	**223.00 AC**		**223.00 AC**	

NOTES:

1. *Gross residential acres do not include the 13.10 gross acres for a school site.*
2. *Net residential acres are gross acres less parks, neighborhood edge buffers, roadways, and easements and net area for school site.*

** PA-2 includes 3.45 AC of Park 1*

Exhibit 3 (cont.)
Land Use Table

Section 2. Introduction

The Esperanza Specific Plan (Specific Plan) includes 223 acres of land designated for residential uses as part of the Ontario Ranch area within the City of Ontario. Esperanza, at build out will be a residential master planned community within the City of Ontario with a traditional neighborhood design similar to that found in older established communities.

2.1 Community Vision and Objectives

The community vision for the Esperanza Specific Plan is implemented through the application of key design objectives guiding the development of the Specific Plan as discussed below.

Objective: Create a Livable Environment

The Esperanza Specific Plan combines residential, recreation and public facilities designed to create a livable community and includes features such as:

- A design which allows for alternative modes of travel such as biking and walking.
- Opportunities for informal neighborhood interaction.
- Diverse architectural design of a high quality.
- Connectivity among neighborhoods.
- Diversity and choice of housing types and opportunities to address a variety of lifestyles and economic segments of the marketplace.
- Residential neighborhoods developed at a human scale oriented to pedestrian activities with connectivity among residential neighborhoods, parks, and schools.
- A simple and well-designed street system providing street separated sidewalks and active and passive recreational opportunities allowing residents to experience increased outdoor living opportunities.
- A variety of housing types incorporated into the land use plan addressing lifestyle considerations of singles, families, and empty nesters.
- Residential neighborhoods designed around a network of centrally located parks, promoting outdoor activity and casual social interaction among neighbors.

Objective: Plan for a Circulation System Serving Motorists, Bicyclists and Pedestrians

The circulation plan for the Esperanza Specific Plan provides a comprehensive system of arterial, collector, and local streets accommodating bicycle and pedestrian travel as well as the safe and efficient movement of automobiles within the Specific Plan area:

- Street design includes landscaped buffer areas and pedestrian walkways, separated from the street, to create an intimate environment promoting social interaction.
- Internal project streets are designed to slow vehicular traffic through the use of traffic calming devices such as a roundabout at "A" Street adjacent to the neighborhood park, landscaped areas adjacent to local streets, and narrowed intersections to influence a driver's peripheral vision and encourage drivers to proceed more slowly.
- A system of bikeways is integrated into the design of the community to encourage bicycle travel as an alternative to the automobile.

Objective: Provide for Adequate Public Community Facilities

The Esperanza Specific Plan provides for the development of needed public facilities to serve the community as follows:

- New water, sewer, and storm drain facilities to serve the Specific Plan area.
- New planned bike paths connecting to the City of Ontario bikeway master plan bike paths.

Objective: Provision of New Parks and Open Space

New public park and open space amenities are provided to enhance outdoor recreational opportunities to residents of Esperanza and the surrounding community.

- Provision of approximately 9.89 acres of public parks, distributed throughout the community, will offer active and passive recreational opportunities within walking distance of all residential areas.
- Approximately 4.4 acres adjacent to Mill Creek Avenue, including a Southern California Edison Easement, will be landscaped for use as linear open space.
- Approximately 6.62 acres of landscaped open space to include pedestrian trails adjacent to public arterial and collector streets will be provided.
- A bicycle/pedestrian trail system will be developed within the street system of the Specific Plan area connecting the residential areas of the Specific Plan to parks and points surrounding the community providing accessibility to bicyclists and pedestrians throughout the community.

Objective: Promote Exceptional Architecture and Site Planning

Diverse and varied architecture combined with comprehensive site planning within the Esperanza Specific Plan will produce neighborhoods that have aesthetic and functional harmony, preserve residents privacy, and encourage neighborhood interaction.

- Streets will be linked together in a manner, which is pedestrian friendly, but also auto-accessible connecting homes with other neighborhoods, open space, public facilities, and recreational areas for residents to either walk, bike, or drive to.
- A variety of housing types, including attached and detached single family homes, will be provided within the Specific Plan area, all of which are located close to parks and open space.
- Residential planning areas include a variety of housing types oriented toward the street adding interest and encouraging neighborhood interaction along the street.
- Residential neighborhoods are designed with houses addressing the street by:
  - Designing homes to a more human level with porches, stoops, and walkways creating opportunities for neighborly interaction.
  - Homes fronting the street with garages accessed from rear alleys.
  - Minimizing views of garage doors through setback requirements, location, design elements, and landscaping.
  - Incorporating varied architectural styles and elements within each neighborhood.

2.2 SPECIFIC PLAN PURPOSE

The City of Ontario will adopt the Esperanza Specific Plan by ordinance thereby establishing the land use plan, development standards, infrastructure requirements, and implementation requirements for the Specific Plan area. The Esperanza Specific Plan establishes the type and distribution of residential land uses, defines the development regulations and design guidelines for residential land use, establishes appropriate locations for development of public parks, and describes the infrastructure requirements and the level of improvements necessary to support development of the Specific Plan area. The Esperanza Specific Plan establishes the procedures and requirements to approve new development within the Specific Plan area and identifies, where applicable, City of Ontario Development Code requirements.

2.3 SPECIFIC PLAN PROPOSAL

2.3.1 Project Summary

The Esperanza Land Use Plan is described below and in the Specific Plan "Statistical Summary," Table 1.

2.3.1.1 Residential Uses

Esperanza will provide for development of a variety of residential housing types oriented toward open space amenities and designed to promote walkability and interaction among residents. Residential development within the approximately 223 acre Specific Plan area will contain up to ~~1,594~~ 1,652 residential dwelling units, providing a mix of single family detached and single family attached housing types as described below. In the event Planning Area 11, reserved as for a 10.02 acre school site, is not purchased by the Mountain View School District Planning Area 11 may revert to a residential zoning district for development of up to ~~46~~ 161 additional dwelling units subject to approval by the City of a Specific Plan Amendment.

2.3.1.2.2 Residential Detached

Esperanza offers six different types of single family detached residential products for development within the Specific Plan area.

- SFD Conventional – Conventional single family detached residential units are proposed on lots ranging from 3,900 square feet to 4,900 square feet in size. Vehicular access is provided from interior streets and garages are set back from the front of the residence emphasizing the architectural elements forming the streetscene. These residential types will be developed at density levels between 5.56 to 6.18 dwelling units per net acre.
- SFD Cottage – Alley served single family detached residential dwelling units will be developed in two planning areas designed with an architectural orientation to the street by locating garages to the rear of residential units. Alley loaded residential areas will be developed at an average density of 7.89 dwelling units per net acre with a minimum lot size of 2,400 square feet.
- SFD 2 Pack – Residential single family detached development on minimum lots of 3,400 square feet in size will be developed in a 2 Pack configuration. Residential 2 Pack housing will be developed at a density of 6.84 dwelling units per net acre. Garages within this housing type are alternately placed to the rear of the lot or placed a significant distance from the street maintaining an architecture forward streetscene.

- SFD Courtyard – Two types of single family detached courtyard housing types are planned for Esperanza. Courtyard single family residential consisting of four units per courtyard will be developed at approximately 8.9 dwelling units per net acre. This type of housing will be developed around a 1 acre public park and will be served by public streets with private drive aisles accessing residential units developed around a common motorcourt. Courtyard single family residential courts of six units per courtyard will be developed at approximately 7.48 dwelling units per net acre. This type of courtyard housing will be developed around private streets and parks with private drive aisles serving residential units developed around a common motorcourt. The courtyard design planned for both housing types places garages in alternating side on and street facing conditions either minimizing or eliminating visibility of garages from the street.

2.3.1.3 Residential Attached

Two types of single family attached residential development products are planned within Esperanza. Alley loaded row townhomes designed around a private common green will be developed at approximately 14.05 dwelling units per net acre within PA 3 and at approximately 16.07 dwelling units per net acre in PA 11. Single family attached motorcourt townhomes will be developed at approximately 13.76 dwelling units per net acre. The motorcourt townhome residential housing type will be served by private streets with drive aisles providing access to a motorcourt serving 10 to 12 residential dwelling units. Both the alley loaded row townhome and the motorcourt townhome residential housing types are designed with garages located to the rear or turned to side on to the street preserving an architecturally interesting streetscene.

2.3.1.4 Parks, Trails, and Open Space

A centrally located 5.36 acre neighborhood park is planned to serve the Specific Plan area providing opportunities for informal active recreation such as soccer and baseball. Four additional parks ranging in size from .84 to 1.39 acres are provided offering opportunities for active and passive recreation and informal gathering among neighbors. Approximately 6.62 acres of the Specific Plan area will be developed as enhanced landscaped parkways along major streets serving the community. These enhanced parkways will include pedestrian walkways providing connectivity to and from the Specific Plan area and to the pedestrian network to be developed within the community, connecting all residential neighborhoods to parks. Within the townhome residential areas, private open space as well as private active recreation centers, including swimming pools and spas, will be provided.

2.4 AUTHORITY AND REQUIREMENTS

2.4.1 Authority

State of California Government Code, Title 7, Division 1, Chapter 3, Article 8, Section 65450-57 grants authority to cities to adopt Specific Plans for purposes of implementing the goals and policies of their General Plans. The Government Code specifies that Specific Plans may be adopted either by resolution or by ordinance and that the Specific Plan is required to be consistent with the General Plan. The City of Ontario will adopt the Esperanza Specific Plan by ordinance thereby establishing the zoning regulations for development of the Specific Plan area. The requirements of the Esperanza Specific Plan shall take precedence over the City of Ontario Development Code. In instances where the Esperanza Specific Plan is silent, the City of Ontario Development Code shall prevail.

LAND USE	ACRES
Residential Detached	**Residential Acres are Net [1]**
• RD 1 - 50 foot wide lots/PA-7 and PA-9	25.83 AC
• RD 2 – Typical 55 foot wide lots/ PA-8	19.26 AC
• RD 3 – 2 Pack lots/PA-10	14.62 AC
• RD 4 – Cottages 2,640 sf lots/PA-2 and PA-6	27.36 AC
• RD 5 – 4 Pack Courtyard/ PA-5	17.64 AC
• RD 6 – 6 Pack Courtyard & Rowtown/ PA-2 and PA-4	19.30 AC
Residential Attached	
• RD 7 – Row Townhomes/ PA-1, PA-3 and PA-11	30.67 AC
• RD 8 – Motorcourt Townhomes / PA-1 and PA-3	19.42 AC
Subtotal Residential:	**174.10 AC**
Other	
Neighborhood Park	5.36 AC
Pocket Parks	4.53 AC
Neighborhood Edge Buffers	6.62 AC
Roadways [2]	28.25 AC
SCE Easements and Well Sites	4.14 AC
Subtotal Other:	**48.90 AC**
PROJECT TOTAL	**223.00 AC**

NOTES:

1. *Net acres excludes all streets and uses listed as "Other Uses" but includes interior local streets and drive aisles.*
2. *Includes all Master Plan Streets, Street 'A' and Local Streets serving the Neighborhood Park and School Site.*

TABLE 1

Specific Plan Statistical Summary

2.4.2 Requirements of the Specific Plan

California Government Code Section 65451 sets forth the minimum requirements and review procedures for Specific Plans as follows.

A Specific Plan shall include a text and a diagram or diagrams, which specify all of the following in detail:

1. The distribution, location, and extent of the uses of land, including open space, within the area covered by the plan;
2. The proposed distribution, location, and extent and intensity of major components of public and private transportation, sewage, water, drainage, solid waste disposal, energy, and other essential facilities proposed to be located within the area covered by the plan and needed to support the land uses described in the plan;
3. Standards and criteria by which improvements will proceed, and standards for the conservation, development, and utilization of natural resources, where applicable;
4. A program of implementation measures including regulations, programs, public works projects and the financing measures necessary to carry out paragraphs 1, 2, and 3 above.
5. A statement of the relationship of the Specific Plan to the General Plan.

The Esperanza Specific Plan meets the requirements of the State of California Government Code.

2.5 DEVELOPMENT APPROVAL COMPONENTS

The components of the development approval process for Esperanza are discussed below.

2.5.1 Specific Plan

The Esperanza Specific Plan, when adopted, provides the zoning for the Specific Plan area. It serves as a "blueprint" for development by establishing the distribution of land use and criteria for development as set forth herein. The Esperanza Specific Plan also serves as the legal document to implement the City's General Plan.

2.5.2 Development Agreement

Unless done in a coordinated manner and with adequate fiscal planning, development projects within the ~~NMC~~ Ontario Ranch are likely to present a challenge in their implementation because of the lack of existing public facilities including street, sewerage, transportation, drinking water, school and utility facilities. California law has established a mechanism for ensuring the adequate provision of such facilities while at the same time providing assurances to applicants that, upon approval of the project, the applicants can proceed with their projects. Approval of this Specific Plan without a development agreement may result in a waste of resources, escalate the cost of housing to the consumer, and discourage investment in and commitment to comprehensive planning as envisioned by the City, which seeks to make maximum efficient utilization of resources at the least economic cost to the public.

Therefore, a statutory development agreement, authorized pursuant to California Government Code sections 65864 et seq., shall be required as part of the approval of this Specific Plan. For the above-mentioned reasons, the development agreement for this Specific Plan shall include, among other things, methods for financing acquisition and construction of infrastructure, acquisition and development of adequate levels of parkland, and schools, as well as the provision of adequate housing opportunities for various segments of the community consistent with the regional housing needs assessment. Such development agreement shall have been fully approved before the issuance of the first building permit for this project.

2.5.3 Subdivision Maps

A tentative tract map(s) will be approved by the City of Ontario for the Specific Plan area indicating the approximate location of lot lines, streets, and proposed grading. Following approval by the City of the tentative tract map(s), a final map(s) will be prepared. The final map(s) becomes a legal document that is recorded and defines legal parcels and lots that can be sold for development.

2.5.4 Development Plan Review

All development proposals for individual Planning Areas within the Specific Plan will be subject to the Development Plan Review process pursuant to Article 8 of the City's Development Code.

2.6 CEQA COMPLIANCE

A Project Environmental Impact Report (EIR) prepared by the City of Ontario for the Esperanza Specific Plan, in accordance with the California Environmental Quality Act (CEQA), addresses impacts associated with the Specific Plan and subdivision map(s). The EIR recommends mitigation measures to reduce impacts of the project to a less than significant level. The EIR has been prepared as a basis for the environmental review for all subsequent discretionary and ministerial actions.

2.7 RELATIONSHIP TO GENERAL PLAN AND ZONING

The City of Ontario ~~NMC~~ Ontario Ranch General Plan designates the Specific Plan area for development of the following land uses:

Land Use Designation	Approximate Acres (Gross)
Residential – Low Density (4.6 d.u. per gross acre)	95.1 AC
Residential – Medium Density (12.0 d.u. per gross acre)	114.8 AC
Residential – High Density (18.0 d.u. per gross acre)	13.1 AC
Total	**223 AC**

The General Plan establishes a target development capacity of ~~1,456~~ 1,652 residential dwelling units as further described below:

Single Family	878 dwelling units
Multi-Family	774 dwelling units
Total	**1,652 dwelling units**

The table below provides a summary of how the Esperanza Specific Plan land use plan implements the General Plan target development capacity.

GENERAL PLAN TARGET DEVELOPMENT CAPACITY			
Land Use	**Target DUs**	**Gross Acres**	**Gross Density**
Residential Medium Density	1,535 DU	127.9 AC	12.0 DU/AC
Residential Low Density	285 DU	95.1 AC	3.0 DU/AC
Total	**1,820 DU**	**223.0 AC**	8.2 **DU/AC**
ESPERANZA SPECIFIC PLAN LAND USE DISTRIBUTION			
Land Use	**Target DUs**	**Gross Acres**	**Gross Density**
Residential Medium Density	1,209 DU	127.9 AC	9.5 DU/AC
Residential Low Density	443 DU	95.1 AC	4.7 DU/AC
Total	**1,652 DU**	**223.0 AC**	7.4 **DU/AC**

The General Plan allows for development of multi-family residential units as small lot, single family detached units with a variety of parcel sizes and product types on property designated for multi-family uses, including "Residential-Medium" and "Residential-High" density housing.

The City of Ontario has pre-zoned the Specific Plan area as SP/AG (Specific Plan AG preserve). The zoning designation of "SP" requires the Specific Plan area to implement the objectives of the ~~NMC~~ Ontario Ranch General Plan land uses.

The Esperanza Specific Plan is designed to meet the requirements of the State of California Government Code and the City of Ontario ~~NMC~~ Ontario Ranch General Plan. The City of Ontario will adopt the Esperanza Specific Plan by ordinance, thereby establishing the zoning regulations for the development of the Specific Plan area. The requirements of the Specific Plan shall take precedence over the City of Ontario Development Code. In instances where the Specific Plan is silent, the City of Ontario Development Code shall prevail.

Section 3. Existing Conditions

This section describes the existing physical conditions within and surrounding the Esperanza Specific Plan area.

3.1 Property Ownerships

The Specific Plan area is comprised of approximately 223 gross acres. Richland Communities owns approximately 85 gross acres and RCCD Development owns the remaining 138 acres of the Specific Plan Area. Exhibit 4, "Existing Property Ownerships and Williamson Act Contract Status" illustrates the property ownerships within the Esperanza Specific Plan boundary.

3.2 Williamson Act Contracts

Exhibit 4, "Existing Property Ownerships and Williamson Act Contract Status" illustrates the status of Williamson Act Contracts within the Esperanza Specific Plan boundary.

3.3 Existing Improvements

The Specific Plan area historically has been used for agricultural purposes, primarily dairy and crop farming, and is currently in development as illustrated on Exhibit 5, "Existing and Surrounding Land Uses." Existing improvements within northern and eastern portions of the Specific Plan area controlled by RCCD Development, are currently in development. All dairy related structures in this area have been demolished and removed. Existing agricultural related facilities such as modular structures and feedlots located within the properties owned by Richland Communities have also been demolished and removed in preparation for development.

3.4 Surrounding Land Use Characteristics

Land uses adjacent to the Specific Plan area include:

North	Future Planned Residential Community and Mixed Use Development
West	Rural Residential and Dairy Operations
South	Planned Residential Communities
East	Commercial, Industreial, and Vacant Land

The City of Ontario ~~NMC~~ Ontario Ranch General Plan designates the undeveloped areas located directly to the west of the Specific Plan area as "LMDR - Low Medium Density Residential" and "MDR - Medium Density Residential". The undeveloped areas located to the north of the Specific Plan are designated as "MDR - Medium Density Residential" and "MU - Mixed Use". Land adjacent to the Specific Plan area to the east is located within Riverside County and is developed as a mixed use/retail center. Land south of the Specific Plan area is also located in Riverside County and developed with single family and low density residential land uses. Exhibit 6, "Land Use Designations" illustrates the proposed land uses adjacent to the Specific Plan area within the ~~NMC~~ Ontario Ranch and the County of Riverside.

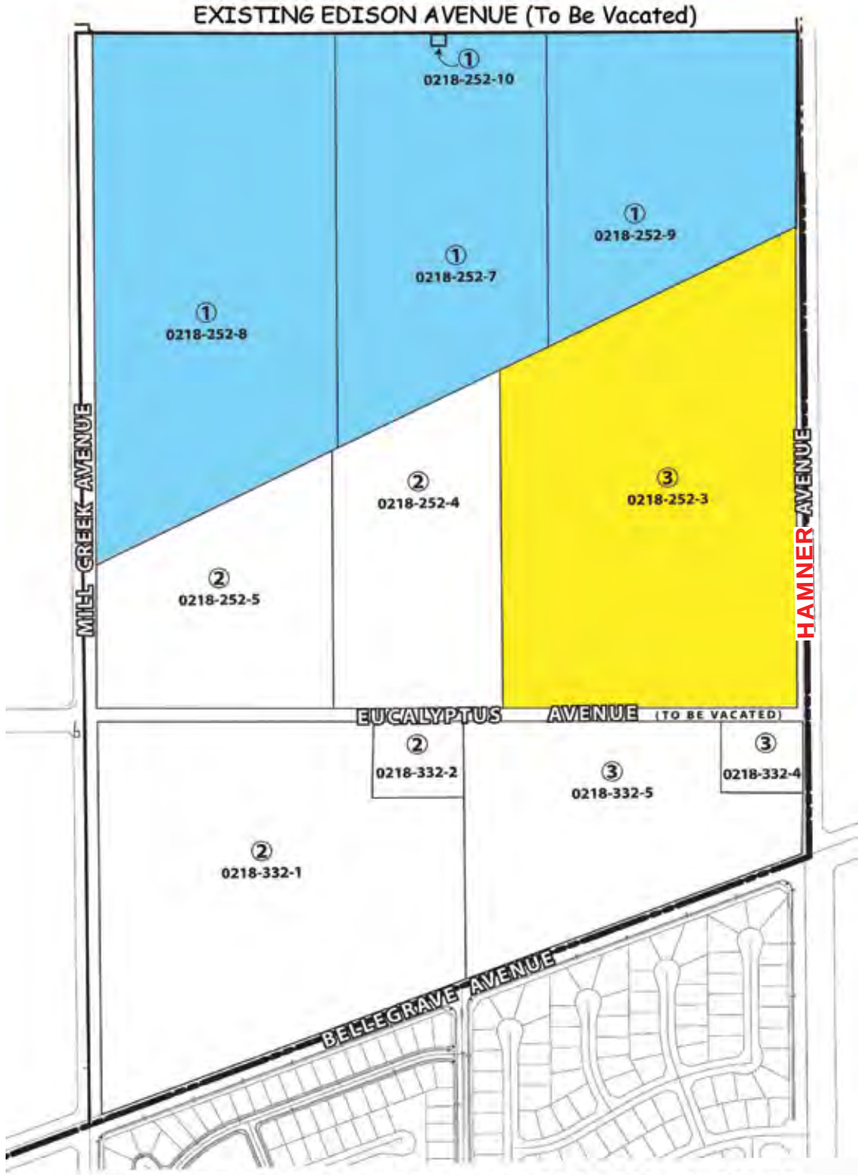


EXHIBIT 4

Existing Property Ownerships and Williamson Act Contract Status

EXHIBIT 5

Existing and Surrounding Land Uses

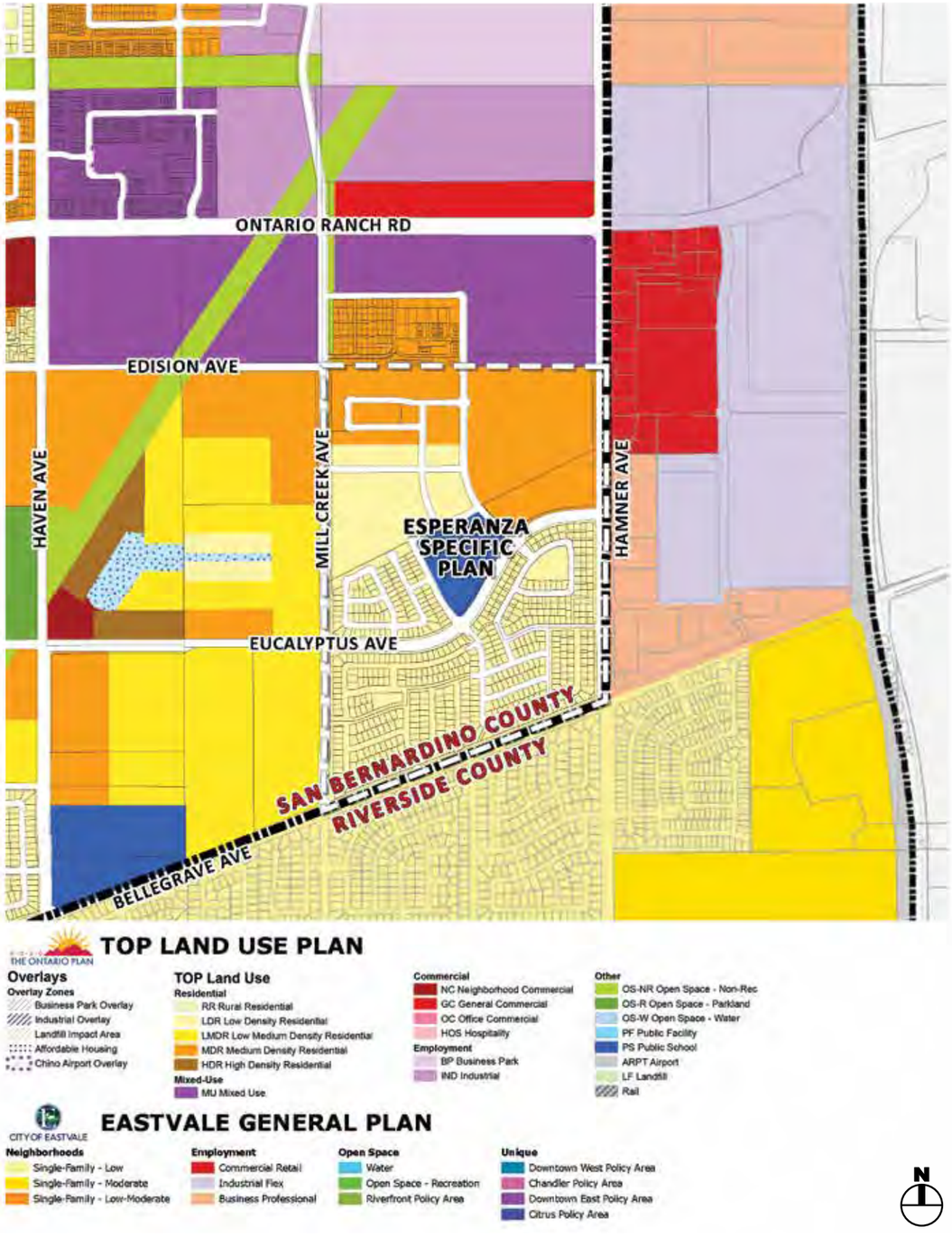


Exhibit 6
Land Use Designations

3.5 Topography

The Specific Plan area is relatively flat and generally slopes from the northeast to southwest as illustrated on Exhibit 7, "Existing Site Topography and Well Locations." The site falls at an average slope of approximately two percent (2%). There is an existing earthen drainage interceptor ditch paralleling the southerly boundary of the site and an existing drainage basin located in the southwest corner of the Specific Plan area.

3.6 Existing Circulation and Access

Interstate 15 (I-15) is located one-half mile east of the Specific Plan area. Access to I-15 is located approximately 1.5 miles southeast of the Specific Plan area, via Hamner and Limonite Avenues. The Specific Plan area is approximately 1.8 miles south of State Route 60.

Bellegrave Avenue, designated as a "Standard Arterial" in the City of Ontario's ~~NMC~~ Ontario Ranch General Plan, borders the Specific Plan on the south. The south half of Bellegrave Avenue within Riverside County has been improved with 55 feet of paving and a 21-foot parkway as part of the residential development to the south. ~~Milliken~~ Hamner Avenue, designated as a "Divided Arterial Parkway 1-1" borders the Specific Plan area on the east. ~~Milliken~~ Hamner Avenue is partially improved with two lanes for traffic and 38 feet of paving. Mill Creek Avenue, designated as a "Collector" street, borders the Specific Plan area to the west. Mill Creek Avenue is partially improved, north of Eucalyptus Avenue with two lanes for traffic and 20 feet of paving. Existing Edison Avenue borders the Specific Plan to the north and is partially improved with two lanes for traffic and 20 feet of paving. Existing Eucalyptus Avenue bisects the Specific Plan area and is partially improved with two lanes for traffic and 20 feet of paving.

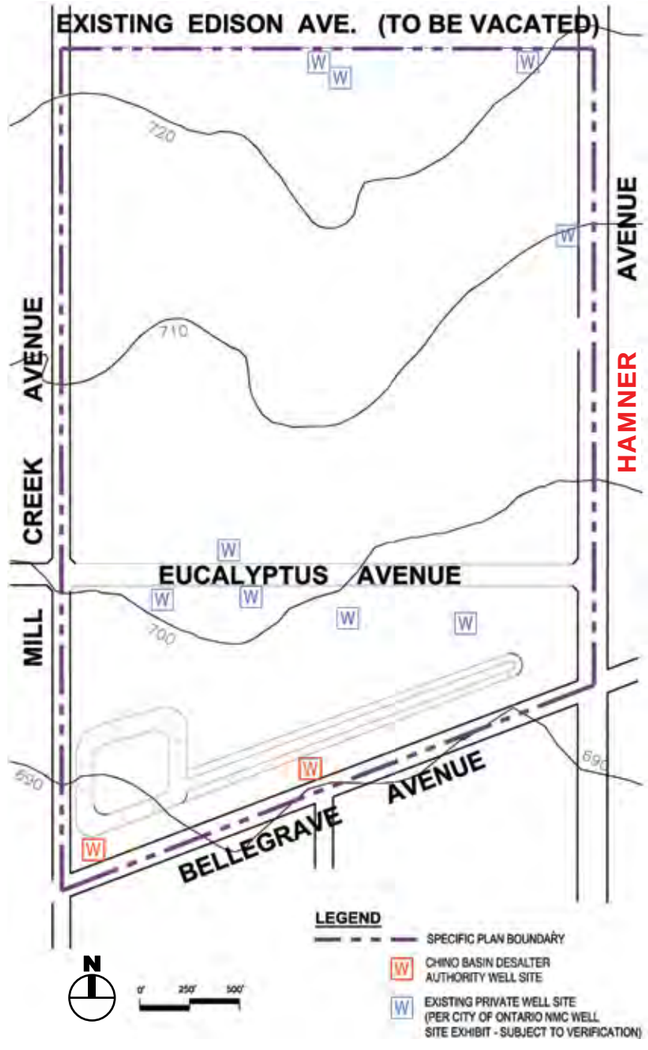


Exhibit 7
Existing Site Topography and Well Locations

3.7 EXISTING INFRASTRUCTURE / UTILITIES / PUBLIC SERVICES

3.7.1 Water

The Specific Plan area is located within the 925' Zone. The City of Ontario does not have water facilities in the vicinity of the project. The nearest City of Ontario water mains are in Riverside Drive, approximately 1.5 miles north of the Specific Plan area. These existing water mains have not been sized to serve development in the 925' Zone. On site residential use on the site are served by private wells. Existing well locations within the Specific Plan area are illustrated on Exhibit 7, "Existing Site Topography and Well Locations." A well use/destruction plan and schedule for all existing private or agricultural wells shall be submitted prior to issuance of permits for any construction activity. If a private well is actively used for water supply, the developer shall submit a plan to abandon the well and connect residential users to the City's domestic water system and agricultural users to the City's recycled water system when available. Well destruction requires permitting from the County Health Department. A copy of the permit and Well Completion Report DWR form 188 shall be provided to the City's Development Engineering Department and the Utilities Engineering Department prior to issuance of grading and/or building permits. If the developer proposes temporary use of an existing agricultural well for purposes other than agriculture, such as grading or dust control during project construction, the developer shall make a formal request to the City of Ontario for such use prior to issuance of permits for the construction activity. Upon approval, the developer shall enter into an agreement with the City of Ontario and pay any applicable fees as set forth by the agreement.

An existing 16" high-pressure water main is located along the east side of ~~Milliken~~ Hamner Avenue, adjacent to the Specific Plan area, in the County of Riverside, and is owned by Jurupa Community Services District, (JCSD). JCSD also owns a 30" water main in Bellegrave Avenue east of ~~Milliken~~ Hamner Avenue and a 30" water main in Hamner Avenue south of Bellegrave Avenue which provides water to the existing residential areas on the south side of Bellegrave Avenue.

3.7.2 Sewer

The City of Ontario does not have sewer facilities in the vicinity of the Specific Plan area. Existing on site residences utilize private septic systems. Prior to grading operations, existing septic tanks and subsurface disposal fields will need to be abandoned in accordance with Department of Health Services requirements. An existing 42" Santa Ana Regional Interceptor (SARI) sewer main extends southerly in Hamner Avenue south of Bellegrave Avenue. The SARI line is primarily available for industrial wastewater, which is conveyed to Orange County for treatment and disposal. JCSD is currently utilizing the SARI line for the disposal of residential wastewater, and has excess capacity for this purpose.

3.7.3 Drainage

The County Line Channel is located within Bellegrave Avenue. The channel is a City of Ontario Master Plan facility intended to carry urban runoff from those properties tributary to the north, to the Cucamonga Creek Channel. With the exception of the County Line Channel, the existing storm drain system throughout the Specific Plan area, is generally unimproved and consists primarily of open earthen swales along area roadways and the earthen drainage interceptor ditch paralleling the southerly boundary of the Specific Plan area which outlets into the existing drainage basin located at the southwest corner of the site. The drainage basin outlets into an existing Riverside County storm drain line in Mill Creek Avenue, formerly known as Cleveland Avenue. The on site basin and the connection to the Riverside County storm drain line are interim improvements. Upon development of the Specific Plan area the basin will be eliminated and the storm flows from the Specific Plan area will be tributary to the County Line Channel.

3.7.4 Recycled Water

The Specific Plan area is located within the 930 Zone. The City of Ontario does not have recycled water facilities in the vicinity of the project. As a part of the development of the Specific Plan area, the construction of new recycled water system facilities will be required by the developer consistent with the City's approved Recycled Water Master Plan.

3.7.5 Electricity

The Esperanza Specific Plan is located within the service territory of Southern California Edison Company.

3.7.6 Natural Gas

The Southern California Gas Company provides natural gas service within the Specific Plan area. Facilities in this area include an existing 6-inch main on ~~Milliken~~ Hamner Avenue; an existing 2-inch main on Eucalyptus Avenue; and an existing 2inch main on Cleveland Avenue (future Mill Creek Avenue).

3.7.7 Communication Systems

Verizon provides telephone service within the Specific Plan area.

3.7.8 Solid Waste

The City of Ontario Public Works Agency currently, by request, provides solid waste collection and disposal to the ~~NMC~~ Ontario Ranch.

3.8 HYDROLOGY

Since most of the Specific Plan area has been in agricultural use, only a limited portion of the Specific Plan area is now covered with impervious surfaces. Normal rainfall to the area is able to percolate through on-site soils and does not result in high volumes of surface runoff as is typically associated with urban use. During periods of heavy rainfall, when ground surfaces are saturated, surface runoff is collected in the existing storm drains, culverts, and retention basins located within the Specific Plan area.

With the exception of major regional flood control channels such as the Cucamonga Creek Channel, intended primarily to carry urban runoff, the existing storm drain system throughout the Specific Plan area is generally unimproved and consists primarily of open earthen swales along area roadways or curbed roadway surfaces.

Ground waters within the ~~NMC~~ Ontario Ranch; as a whole, contain high concentrations of salt, attributable to historic agricultural activities such as dairy farming. The high organic content of on-site soils has contributed incrementally to the degradation of surface and groundwater quality. Removal of the organic materials, which constitute by-products of those dairy operations, and compliance with National Pollution Discharge Elimination System (NPDES) and other storm water permit requirements, will beneficially impact regional water quality.

3.9 GEOLOGY AND SOILS

The City of Ontario ~~NMC~~ Ontario Ranch General Plan EIR identifies the Specific Plan area as underlain by Pleistocene age (older than 12,000 years) and Holocene age (less than 12,000 years old) alluvial deposits. The youngest surficial deposit is eolian sands (Qhs), comprising wind-blown sands having fine- to medium-sized grains.

These loose sands form sheets and low-dune deposits that have been stabilized by vegetation. These deposits are exposed in the eastern portion of the ~~NMC~~ Ontario Ranch area and extend westward to an area defined generally by a diagonal line extending from Harrison Avenue, within Riverside County, on the south to Vineyard Avenue on the north.

It is expected that most of these materials will be uncemented and subject to consolidation when saturated under structural loads. Erosion potential is considered high. Foundation and backfill suitability should be satisfactory with proper over-excavation, mixing with a finer-grained binder material, and compaction.

The Specific Plan area contains delhi series soils, as mapped by the United States Department of Agriculture, Soil Conservation Service in 1971 and 1980. Delhi series soils have been used for agriculture, primarily for grapes and citrus, since the 1800's. As part of the EIR prepared for the Esperanza Specific Plan additional geologic and soils information for the Specific Plan area will be provided.

3.10 Seismicity

The City of Ontario ~~NMC~~ Ontario Ranch General Plan EIR identified numerous earthquake faults within a 50-mile radius of the Specific Plan area. Major mapped faults include, but are not limited to, the Chino, Whittier and North Elsinore, and Cucamonga Faults. For the "maximum probable earthquake" (MPE), defined as the 100-year event normally considered in the design of noncritical structures, the values range from about 0.13 to 0.20 g (i.e., the unit force of gravity). In the design of certain critical or important facilities such as hospitals and dams, the "maximum credible earthquake" (MCE) event is considered. For the three faults, the MCE should yield an estimated peak horizontal acceleration in the range of 0.33 to 0.52 g.

A zone of concentrated, relatively low-magnitude seismicity extends to the southwest from the San Jacinto fault zone (Rialto-Colton branch) along what is referred to an "inferred fault near Fontana." Where the "inferred fault" (Fontana trend) stops, this zone of micro-seismicity continues in a southwesterly to westerly direction terminating in the Sphere of Influence area. It is expected that the MPE for this fault structure could produce horizontal accelerations in the range of 0.3 to 0.5g. More distant faults are capable of larger earthquakes with a higher probability of occurrence. The San Andreas fault is expected to generate a MCE event every 150 to 200 years, yielding a peak horizontal ground acceleration of approximately 0.21 to 0.26 g in the ~~NMC~~ Ontario Ranch.

In accordance with the "Uniform Building Code" (UBC), the Esperanza Specific Plan area is located within Seismic Zone No. 4. UBC procedures have been designed to ensure that all subsequent development occurs in a safe manner relative to those known hazards. As part of the EIR prepared for the Esperanza Specific Plan, additional seismicity analysis will be prepared.

3.11 Vegetation

The Specific Plan area has been extensively used for agricultural operations including dairy use. Those areas not in active agricultural production are occupied by rural residential housing. The natural vegetation and soils conditions that once occurred throughout the Specific Plan area have been significantly altered through agricultural uses, leaving little or no native vegetation. As part of the EIR prepared for the Esperanza Specific Plan, additional vegetation analysis will be prepared.

Section 4. Land Use

4.1 Introduction

The Esperanza Specific Plan offers a variety of residential housing types within a community designed around a system of parks located within easy walking distance from each residential Planning Area. Pedestrian and bicycle connectivity is provided through a system of street separated walkways and on-street bicycle trails linking each residential Planning Area and connecting to parks located within Esperanza.

Residential development, comprised of approximately ~~164.08~~ 174.10 net acres, is designed to address a variety of lifestyles, such as singles, families, executives and "empty nesters." Single family detached housing types will include conventional detached homes on lots varying between 3,900 and 4,900 square feet in size, homes designed in a 2-Pack configuration, alley loaded cottage homes, and two types of courtyard homes. Attached housing will include row townhomes and motorcourt townhomes designed around a common motorcourt.

Parks comprise approximately 9.89 net acres of Esperanza and are distributed throughout the community offering recreational opportunities within close proximity to each residential neighborhood.

The Land Use Plan shown in Exhibit 8, "Land Use Plan" depicts the proposed land uses for Esperanza. The "Land Use Summary," Table 2, provides a tabulation of land uses by acreage and residential density.

4.2 Residential Use

The Esperanza Specific Plan permits the development of up to ~~1,594~~ 1,652 residential dwelling units providing single-family detached homes and single family attached homes. Residential land use areas are contained within 11 distinctive Planning Areas linked by a network of street separated sidewalks and on-street bicycle paths connecting all the Planning Areas to a centrally located park.

4.2.1 Variety of Housing Types

Esperanza provides a mix of housing types to address a variety of lifestyle choices and economic segments. Single family detached and single family attached residential products, with a variety of architectural styles, will be offered within Esperanza. Altogether, a total of ~~1,594~~ 1,652 residential dwelling units will be developed at an overall average density of ~~7.65~~ 7.41 dwelling units per gross acre.

4.2.1.1 Single Family Detached – RD-1 (50' wide lots)

The Esperanza Specific Plan allows for the development of approximately 158 conventional single-family detached dwelling units at an average density of approximately 6.12 dwelling units per net acre. The RD-1 neighborhoods will be designed with access to homes from the local street with an emphasis on architectural orientation toward the street. Garage configurations will include shallow recessed garages, mid or deep recessed garages, split garages, and tandem garages, to highlight the home's architecture and create a more attractive streetscene. RD-1 homes are located within Planning Areas 7 and 9.

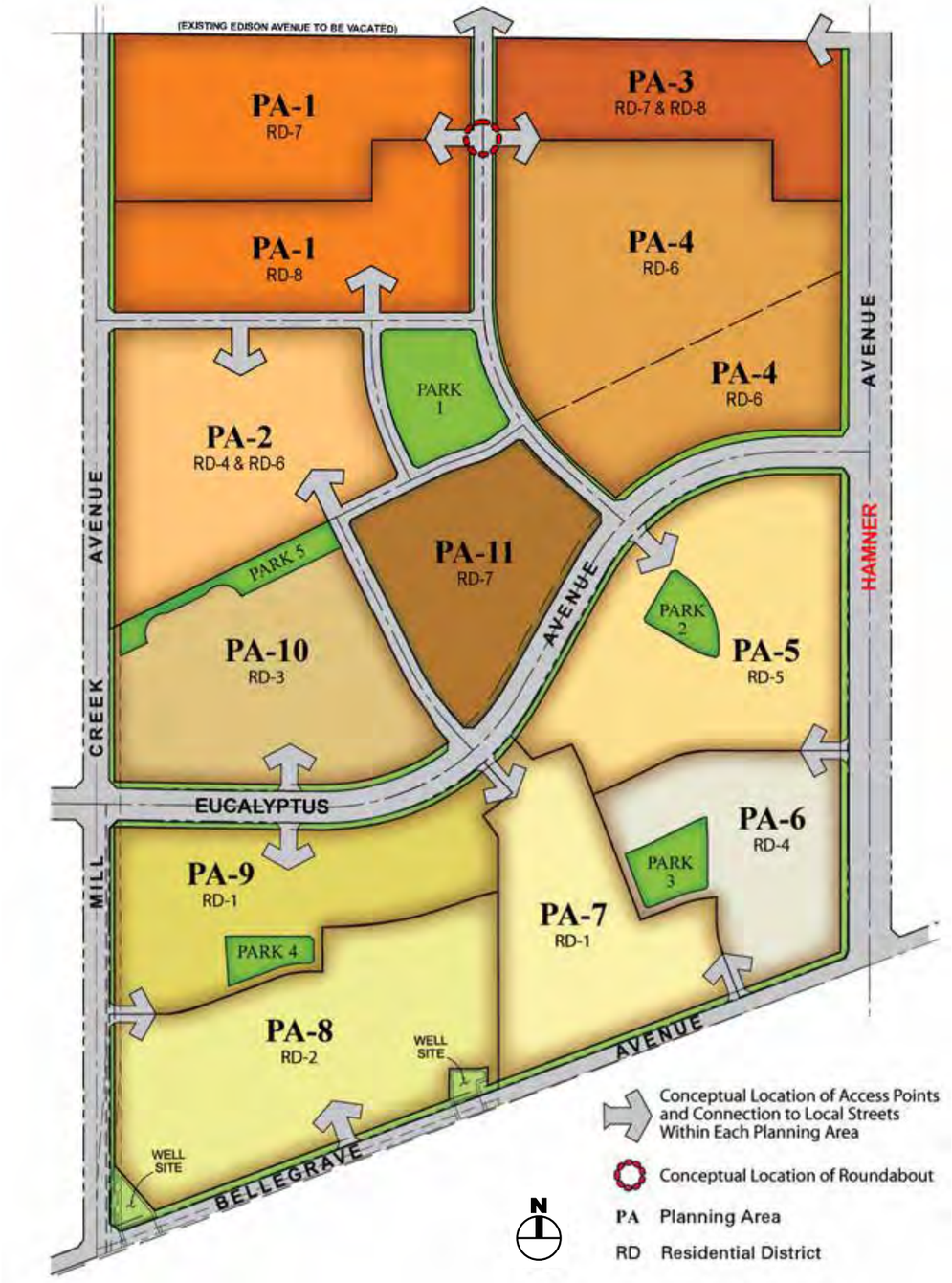


EXHIBIT 8
Land Use Plan

LAND USE	UNITS	GROSS ACRES	UNITS/ GROSS ACRES	NET ACRES	UNITS/ NET ACRES
Residential Uses					
PA-1 (RD-7/ Row Townhomes, RD-8/ Motorcourt Townhomes)	319 DU	29.35 AC	10.87 DU/AC	28.97 AC	11.01 DU/AC
PA-2 (RD-4/ SFD Cottages, RD-6/ 6-Pack Courtyard)	113 DU	22.84 AC	4.95 DU/AC	17.36 AC	6.51 DU/AC
PA-3 (RD-7 & RD-8/ Row Townhomes)	156 DU	11.40 AC	13.68 DU/AC	11.10 AC	14.05 DU/AC
PA-4 (RD-6/ 6-Pack Courtyard, 8-Pack Courtyard, Row Townhomes)	303 DU	27.41 AC	11.05 DU/AC	19.30 AC	15.70 DU/AC
PA-5 (RD-5/ 4-Pack Courtyard)	157 DU	23.78 AC	6.60 DU/AC	17.64 AC	8.90 DU/AC
PA-6 (RD-4/ SFD Cottages)	78 DU	13.64 AC	5.72 DU/AC	10.00 AC	7.80 DU/AC
PA-7 (RD-1/ SFD 50' wide lots)	76 DU	14.36 AC	5.29 DU/AC	12.56 AC	6.05 DU/AC
PA-8 (RD-2/ SFD 55' wide lots)	107 DU	23.72 AC	4.51 DU/AC	19.26 AC	5.56 DU/AC
PA-9 (RD-1/ SFD 50' x 80')	82 DU	17.75 AC	4.62 DU/AC	13.27 AC	6.18 DU/AC
PA-10 (RD-3/ SFD 2-Pack)	100 DU	19.92 AC	5.02 DU/AC	14.62 AC	6.84 DU/AC
PA-11 (RD-7/ Row Townhomes)	161 DU	13.10 AC	12.29 DU/AC	10.02 AC	16.07 DU/AC
Park 1		5.75*AC			
Residential land Use Total	**1,652 DU**	**223.00 AC**	**7.41 DU/AC**	**174.10 AC**	**9.49 DU/AC**
Parks				9.89 AC	
Neighborhood Edge Buffers				6.62 AC	
Roadways				28.25 AC	
SCE Easements and Well Sites				4.14 AC	
PROJECT TOTAL	**1,652 DU**	**223.00 AC**		**223.00 AC**	

NOTES:

1. *Gross residential acres do not include the 13.10 gross acres for a school site.*
2. *Net residential acres are gross acres less parks, neighborhood edge buffers, roadways, and easements and net area for school site.*

** PA-2 includes 3.45 AC of Park 1*

TABLE 2
Land Use Summary

4.2.1.2 Single Family Detached – RD-2 (55' wide lots)

The Esperanza Specific Plan allows for the development of approximately 107 conventional single-family dwelling units at a density of approximately 5.56 dwelling units per net acre. The RD-2 neighborhood is designed with access from the local street with garage configurations which include recessed garages, mid or deep recessed garages, split garages and tandem garages to present an architecture forward streetscene. RD-2 homes are planned within Planning Area 8.

4.2.1.3 Single Family Detached – RD-3 (2-Pack)

Approximately 100 residential 2-Pack dwelling units will be developed on approximately 14.62 acres at a density of 6.84 dwelling units per net acre with a minimum lot size of 3,400 square feet. By configuring the units in a 2 Pack design, a larger usable sideyard area is provided for each unit and garages can be either located to the rear of the lot or set back from the front of the homes at a distance, which preserves the streetscene for home frontage. Residential housing in a 2 Pack design is planned for Planning Area 10.

4.2.1.4 Single Family Detached – RD-4 (Cottage Homes)

Esperanza will allow for approximately 243 single family detached cottage home residential dwelling units developed on approximately 30.81 acres on lots of approximately 2,400 minimum square feet at an average density of 7.89 dwelling units per net acre. This alley loaded residential development will be designed to embrace the street and maintain an architectural orientation for the street. Cottage single family detached residential dwelling units are proposed for Planning Areas 2 and 6 within Esperanza.

4.2.1.5 Single Family Detached or Attached – RD-5 and RD-6 (Courtyard & Row-Townhomes)

Two types of single family detached housing in a courtyard design are proposed for Esperanza. A total of 157 dwelling units will be developed as RD-5 residential housing within a module comprised of 4 residential units surrounding a common motorcourt. RD-5 residential products are proposed for 17.64 acres of Esperanza within Planning Area 5 at a density of 8.90 dwelling units per net acre. A total of 303 dwelling units will be developed as RD-6 residential housing within a module comprised of 6 residential units surrounding a common motorcourt or row townhomes. RD-6 residential products are proposed for 19.92 acres of Esperanza within Planning Areas 2 and 4 at a density of 16.72 dwelling units per net acre. Garages are accessed from the motorcourt or alley, which allows for the fronts of garages to be turned away from the street or set back far enough from the street that the residential architecture is the predominant streetscene feature.

4.2.1.6 Single Family Attached – RD-7 (Row Townhomes)

RD-7 residential product proposed for Esperanza consists of 319 units of attached row and motorcourt townhomes within Planning Area 1, 156 units of attached row townhomes to be developed on approximately 11.1 acres at density of 14.05 dwelling units per net acre within Planning Area 3 and ~~46~~ 161 row townhomes at approximately 16.07 dwelling units per net acre in PA 11. RD-7 residential product is designed with alley access maintaining an architectural streetscene.

4.2.1.7 Single Family Attached – RD-8 (Motorcourt Townhomes)

RD-8 residential product proposed for Esperanza consists of 238 units of attached townhomes designed around a common motorcourt. RD-8 residential product will be developed on approximately 19.42 acres at a density of 13.76 dwelling units per net acre within Planning Area 3.

4.2.2 Neighborhood Design

The community plan for Esperanza offers a neighborhood design reminiscent of older traditional Southern California neighborhoods. The design features described below are intended to create a strong identity and sense of neighborhood for the residents of Esperanza.

A "modified grid" style of street design in residential neighborhoods with sidewalks separated by landscaped parkways provide visual interest, slow traffic on each street by providing alternate routes, and enhance a pedestrian orientation for neighborhoods. Sidewalks separated from streets by landscaped parkways promote pedestrian mobility and encourage opportunities for neighbors to meet and greet each other along the street.

A human scale of architecture within Esperanza will enhance the pedestrian friendly character of the community. Architectural features such as front porches, railings, enhanced entries, a mix of materials and textures, and authentic detailing on elements such as windows and doors, columns, balconies, and lighting combine to create a human scale of residential architecture.

Innovative garage designs will be utilized in order to de-emphasize the visual impact of garage doors on the streetscene. Such design techniques will include shallow, mid, or deep recessed garages , split-garages, turn-in garages, tandem garages, garages located on rear alleys, and garages located around a common courtyard in order to de-emphasize their view from the street.

4.3 Parks

Parks are provided throughout the Esperanza Specific Plan area within easy walking distance to any residential neighborhood. Exhibit 9, "Master Plan of Parks," illustrates the types and locations of parks planned for Esperanza.

4.3.1 Neighborhood Park

An approximately 5.39 net acre centrally located neighborhood park will be developed as part of Esperanza. The neighborhood park will include picnic areas, tot lots, trails, and open play fields.

4.3.2 Pocket Parks

An approximately .84 net acre park will be provided for recreational use within Planning Area 9. An approximately 1.29 net acre park will be located within Planning Area 6, a one acre park will be provided within Planning Area 5, and an approximately 1.39 net acre linear park will be provided in Planning Area 10. Private open space areas of approximately ½ acre in size will be provided as part of the development of Planning Areas 1, 3 and 4. The exact size and locations of these private open space areas will be determined as part of the final site design for these neighborhoods.

4.4 School Site

A 10.02 net acre site was originally reserved within the Esperanza Specific Plan for the development of an elementary school to serve the K-5 school age needs of the Ontario community. In the event the school site in Esperanza is not purchased by the Mountain View School District the 10.02 acre site may revert to a residential zone for the development of an additional ~~46~~ 161 row townhome residential dwelling units pursuant to the provisions established in Section 7, "Implementation."

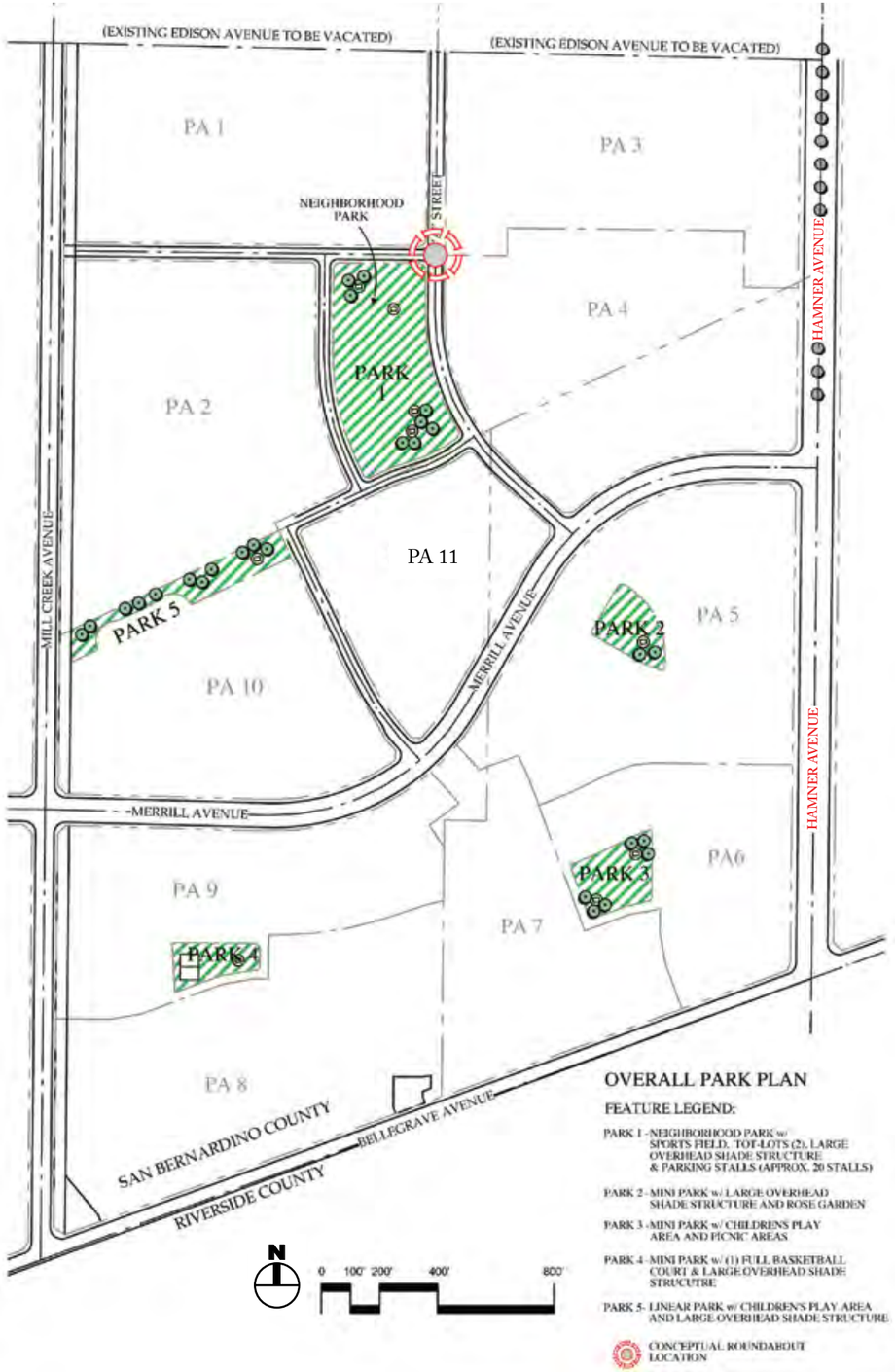


Exhibit 9
Master Plan of Parks

Section 5. Infrastructure and Services

The infrastructure, utilities, and public services to be provided as part of the development of the Esperanza Specific Plan are discussed in this section.

5.1 Circulation

The circulation plan for Esperanza reinforces the objectives of providing a traditional neighborhood design. In addition to providing safe and efficient movement of vehicular traffic through the project, the Circulation Plan also provides a safe environment for pedestrian movement and bicycle traffic reducing the reliance on the automobile as a means of travel. In addition, transit stops and bus turnouts will be provided as required by Omnitrans, along the Master Plan streets, which are a part of the Esperanza community. The "Master Circulation Plan," Exhibit 10 establishes the hierarchy and general location of roadways within Esperanza.

The minimum design speeds to be used for centerline curve radii, super elevation, corner sight distance; vertical and horizontal alignment and sight distance, etc. are listed below:

Hamner Avenue	50 m.p.h.
Eucalyptus Avenue	40 m.p.h.
Bellegrave Avenue	45 m.p.h.
Mill Creek Avenue	40 m.p.h.
"A" Street	45 m.p.h.

5.1.1 Master Planned Roadways

The Esperanza Specific Plan is bounded on the east, south, west, and is bisected by four City of Ontario Master Plan roadways, which will provide access to and from the Specific Plan area. Additional rights of way may be needed at critical intersections to accommodate additional left and right turn lanes pursuant to the recommendations of the traffic study prepared for the Ontario Ranch. Hamner Avenue bounds the Specific Plan area to the east and is the county line between San Bernardino and Riverside Counties; Bellegrave Avenue bounds the Specific Plan area to the south and is also the county line between San Bernardino and Riverside Counties; Mill Creek Avenue bounds the Specific Plan area to the west, and Eucalyptus Avenue bisects the Specific Plan area in an east/west direction.

Where the Specific Plan limits extend to the centerline of any roadway, the development project shall construct the full half-width street improvement, plus a 14-foot travel lane with a 5-foot paved shoulder beyond the centerline. If the roadway includes a raised median, the project shall construct the full median, and the additional 14-foot travel lane with a 5-foot paved shoulder. The 14-foot travel lane is a minimum that may be increased as necessary pursuant to the requirements of the City Engineer.

5.1.1.1 Hamner Avenue

Hamner Avenue abuts the Specific Plan area on the east. Hamner Avenue is a designated Divided Arterial Parkway 1-1 roadway with a total right-of-way of 148 feet. Hamner Avenue will carry regional traffic to and from Esperanza and will provide access to the specific plan area along the eastern boundary of the specific plan area. Exhibit 11, "Hamner Avenue" illustrates the improvements for Hamner Avenue. The developer of the Specific Plan area adjacent to Hamner Avenue will be responsible for all on site improvements for the westerly half of Hamner Avenue as determined by the City Engineer and pursuant to the mitigation measures identified in the EIR and the Conditions of Approval established on the approved tentative maps for the project. Bus turnouts will be required along Hamner Avenue to the satisfaction of the City Engineering Department and Omnitrans. Parking will be prohibited on Hamner Avenue.

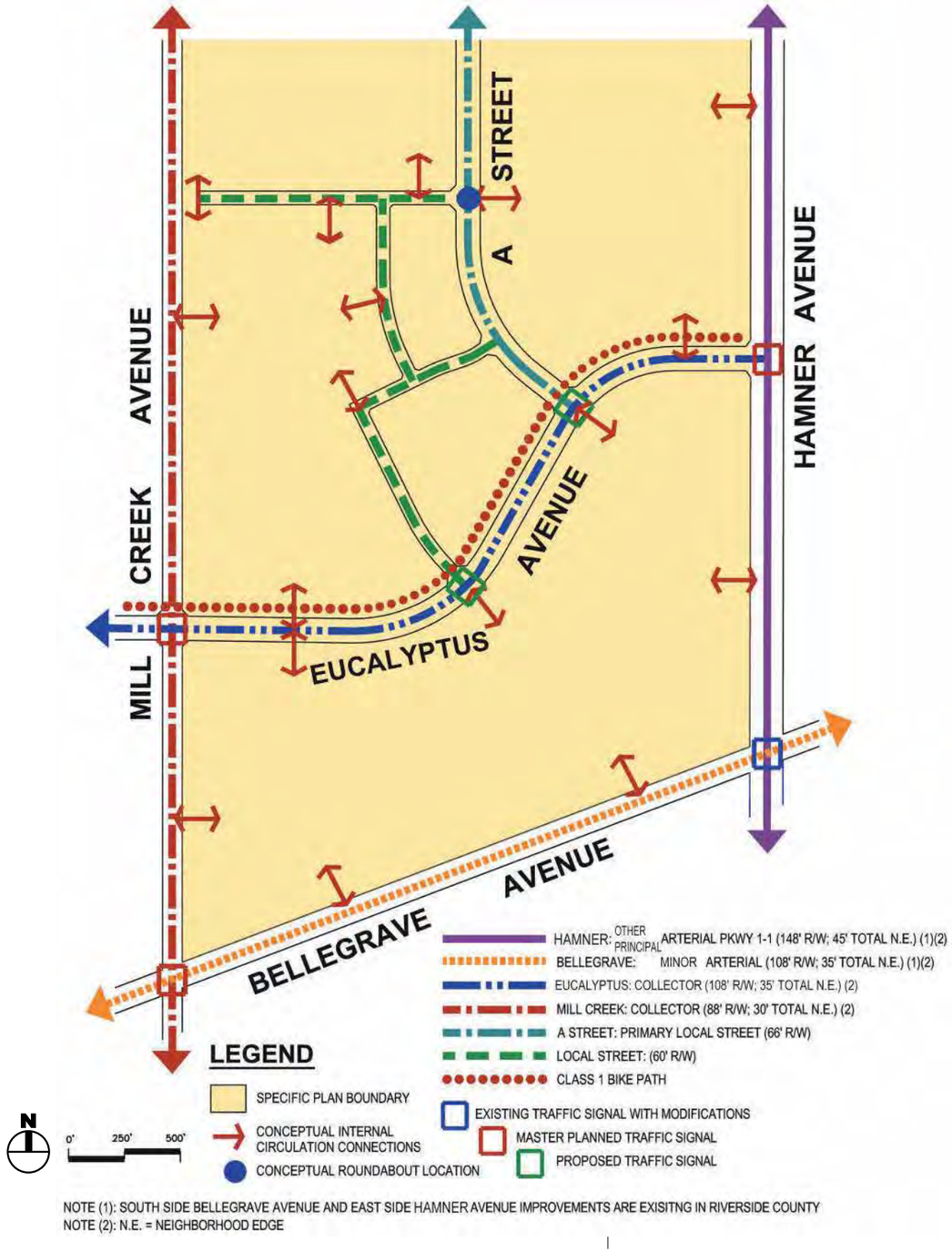


Exhibit 10
Master Circulation Plan

5.1.1.2 Bellegrave Avenue

Bellegrave Avenue, a Standard Arterial roadway, abuts the Specific Plan area on the south and carries regional east/west traffic to and from Esperanza. Improvements to the south side of Bellegrave Avenue currently exist. Exhibit 12, "Bellegrave Avenue" illustrates the half-street improvements for Bellegrave Avenue. The developer will be responsible for all on site improvements for the northerly half of Bellegrave Avenue. Phasing of the improvements will be determined by the City Engineer and pursuant to the mitigation measures identified in the EIR and the Conditions of Approval established on the approved tentative maps for the project. Bus turnouts will be required along Bellegrave Avenue to the satisfaction of the City and Omnitrans.

5.1.1.3 Mill Creek Avenue

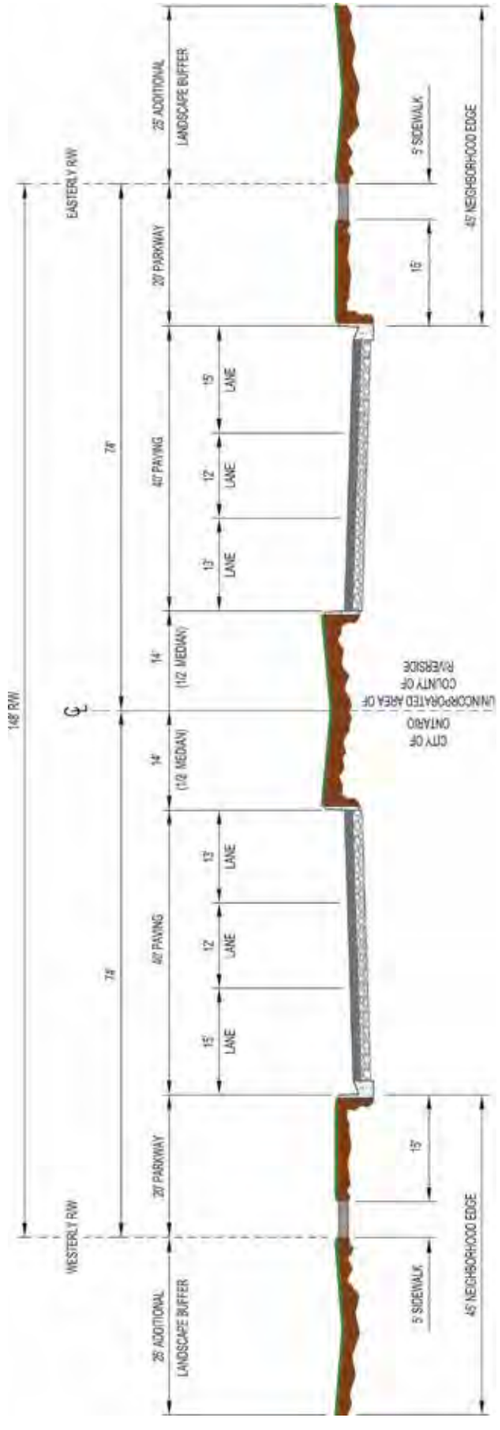
Mill Creek Avenue abuts the Specific Plan area on the west. Mill Creek Avenue is a designated Collector Street with an ultimate right-ofway of 88 feet, with 64 feet of paved area and a 12-foot parkway on each side of the street, to include a 5-foot sidewalk separated from the street by a 7-foot landscaped area. In addition a landscaped buffer of 18 feet in width will be provided between the back of the sidewalk and the residential community wall. The rightof-way improvements required to Mill Creek Avenue are illustrated in Exhibit 13, "Mill Creek Avenue." The developer(s) will be responsible for the off site improvements as determined by the City Engineer and pursuant to the mitigation measures identified in the EIR and the Conditions of Approval established on the approved tentative maps for the project. Bus turnouts will be required along Mill Creek Avenue to the satisfaction of the City and Omnitrans. Parking will be prohibited on Mill Creek Avenue. Exhibit 13, "Mill Creek Avenue" illustrates these improvements.

5.1.1.4 Eucalyptus Avenue

Eucalyptus Avenue bisects the Specific Plan area and is designated as a Standard Arterial roadway. Exhibit 14, "Eucalyptus Avenue" illustrates the Eucalyptus Avenue full-street improvements. The developer will be responsible for all improvements to Eucalyptus Avenue. The phasing of these improvements will be determined by the City Engineer and pursuant to the mitigation measures identified in the EIR and the Conditions of Approval established on the tentative maps for the project. Parking will be prohibited on Eucalyptus Avenue.

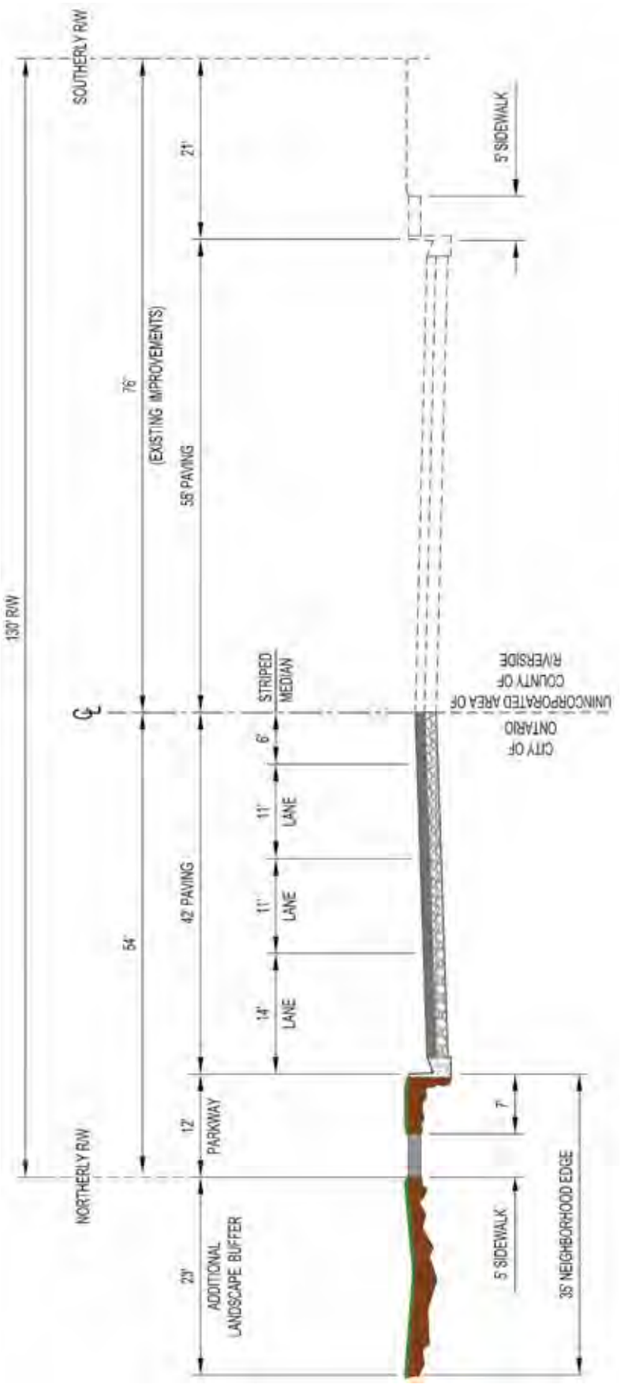
5.1.2 Local Streets and Alleys

Within the Specific Plan area neighborhood streets of varying design will provide access and circulation through the community. Many of the neighborhoods will be served by private alleys, which are located in the rear of residences, in order to maintain a traditional, "architecture forward" streetscape for the community. Public and private local streets within residential areas are designed to distribute vehicular traffic from the public arterial and collector streets adjacent to the Specific Plan area into and through residential neighborhoods. Local streets and private alleys proposed for Esperanza are illustrated on Exhibit 15, "A Street" – Primary Local Street" Exhibit 16, "Local Streets and Cul-De-Sac Sections;" Exhibit 17, "Private Neighborhood Streets;" and Exhibit 18, "Private Alley and Drive Aisle Sections;" and discussed below.



Other Principal Arterial Parkway 1-1
Hamner Avenue
(On Street Parking is Prohibited)

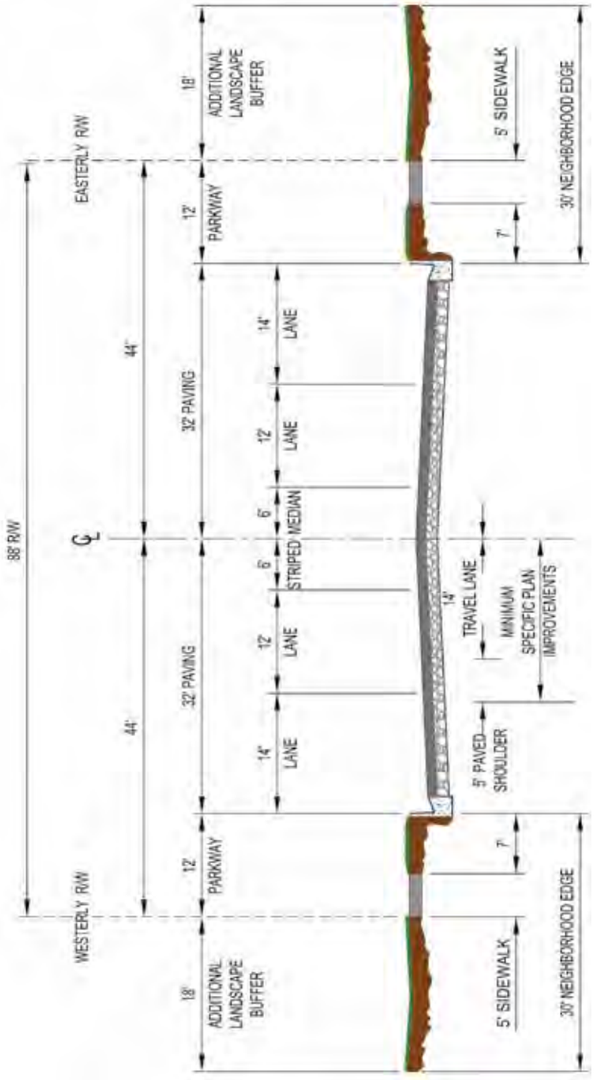
Exhibit 11
Hamner Avenue



Minor Arterial
Bellegrave Avenue
(On Street Parking is Prohibited)

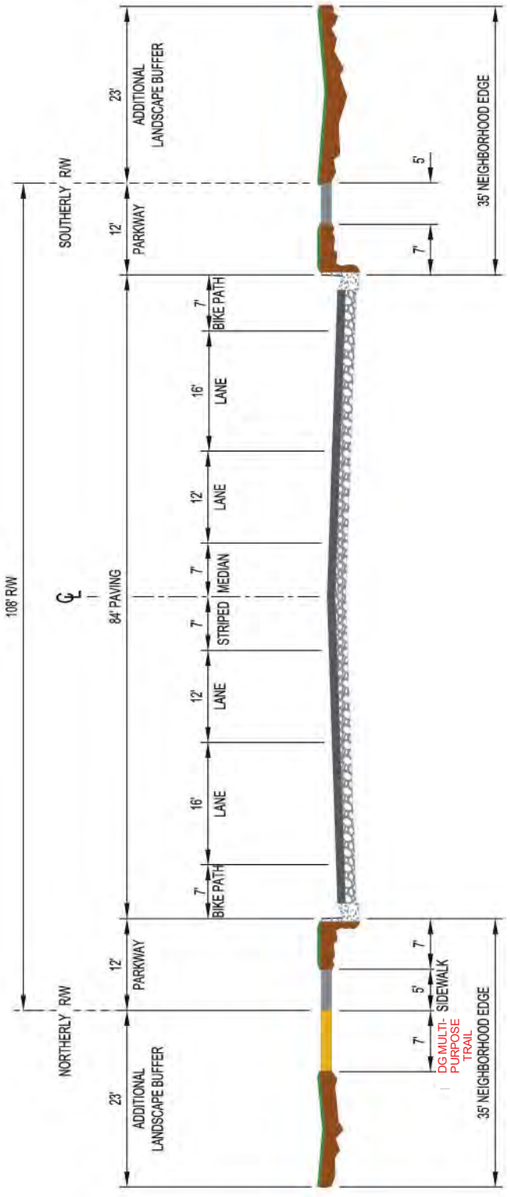
Note: Final required level of improvement of Bellegrave Avenue within the City of Ontario to be determined by City of Ontario and Riverside County.

Exhibit 12
Bellegrave Avenue



Collector
Mill Creek Avenue
(On Street Parking is Prohibited)

Exhibit 13
Mill Creek Avenue



Collector
Eucalyptus Avenue
(On Street Parking is Prohibited)

Exhibit 14
Eucalyptus Avenue

5.1.2.1 "A" Street

"A Street" bisects the Specific Plan area in a north/south direction and is designated as a Primary Local Street. "A Street" will provide internal access and connectivity between residential areas and the Neighborhood Park. Exhibit 15, "A Street" – Primary Local Street" illustrates the improvements planned for "A Street."

5.1.2.2 Local Neighborhood Streets and Cul-De-Sac Streets

A network of local public neighborhood streets and cul-de-sac streets will provide internal circulation throughout Esperanza for residents. Exhibit 16, "Local Streets and Cul-de-sac Sections" illustrates these street concepts.

5.1.2.3 Private Neighborhood Streets

Private neighborhood streets will provide internal circulation within single family attached and single family courtyard product areas. Water, recycled water, and sewer utilities may be designated as "public utilities" if located within public or private streets. All public utilities within private streets shall be designed per City standards and contained within acceptable easements. The CC&Rs for the project shall contain language requiring all work proposed by the HOA within such easements to be plan checked and inspected by the City, including applicable fees. Generally, utilities will not be accepted as public within alleys, parking areas or driveways. The extent to which said utilities will be accepted as public utilities shall be at the full discretion of the City during final design review. Private Neighborhood Streets planned for Esperanza are illustrated in Exhibit 17, "Private Neighborhood Streets."

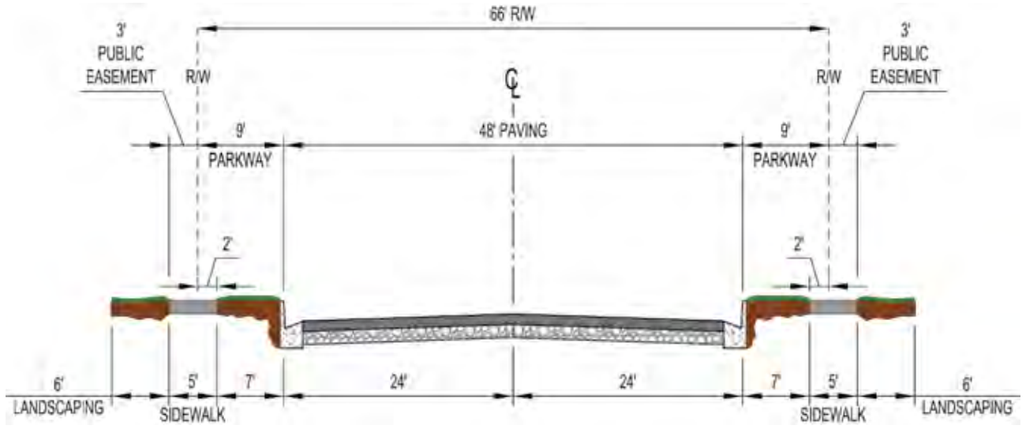
5.1.2.4 Private Alleys

Private alleys within the residential development will have a minimum of 20 feet of paved area with 5 feet of landscaping on each side. In areas where fire access is required, the minimum paved area will be 24 feet with 3 feet of landscaping on each side. Alleys with "dead end" conditions will be a maximum length of 150 feet. Parking is prohibited along alleys. Tapers will be incorporated at the point where private alleys intersect with public streets. The taper width will be determined per the approval of City of Ontario Fire Department, Engineering Department and Planning Department.

5.1.2.5 Private Drive Aisles

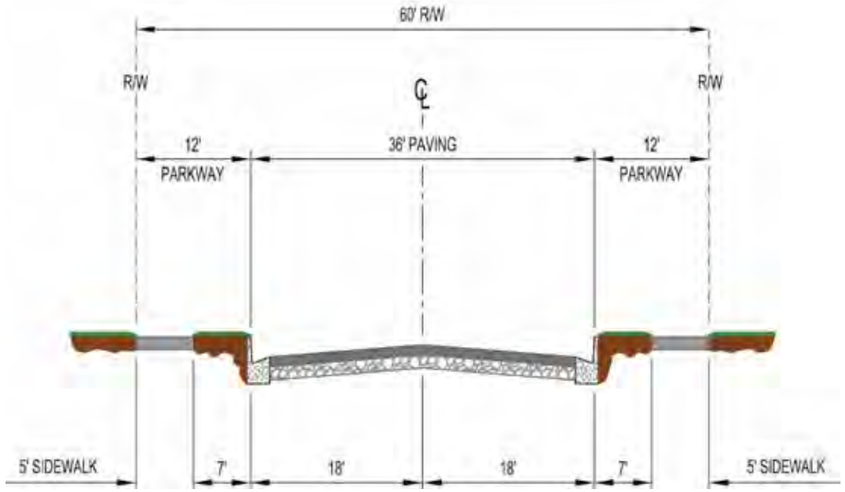
Private drive aisles are planned with a total paved width of 24 feet and an 18 foot deep parking area on each side.

Water, recycled water, and sewer utilities may be designated as "public utilities" if located within public or private streets. All public utilities within private streets shall be designed per City standards and contained within acceptable easements. The CC&Rs for the project shall contain language requiring all work proposed by the HOA within such easements to be plan checked and inspected by the City, including applicable fees. Generally, utilities will not be accepted as public within alleys, parking areas or driveways. The extent to which said utilities will be accepted as public utilities shall be at the full discretion of the City during final design review. Private Alleys and Private Drive Aisles planned for Esperanza are illustrated in Exhibit 18, "Private Alley and Drive Aisle Sections."



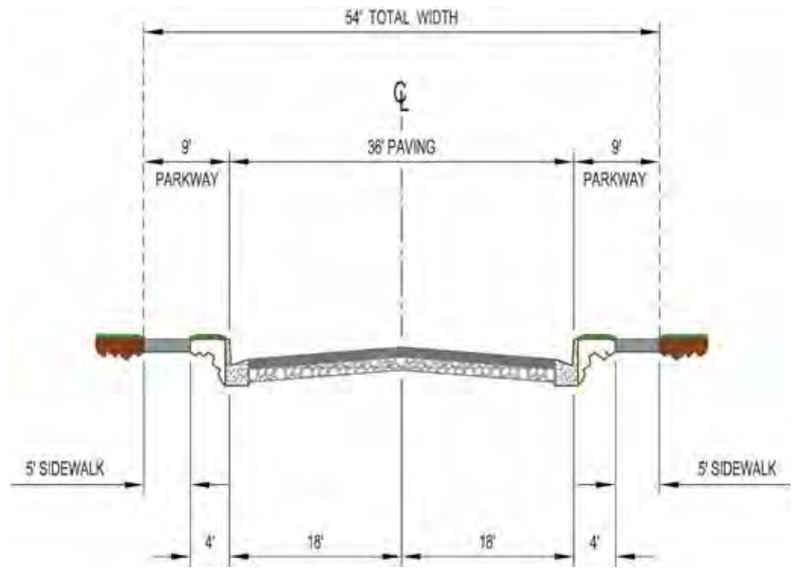
"A" Street
(Parking Permitted)

Exhibit 15
"A" Street - Primary Local Street



Note: Parking may be restricted within 100-150 feet of ~~Merrill~~ Eucalyptus Avenue, 'A' Street, Mill Creek Avenue and Hamner Avenue Intersections.

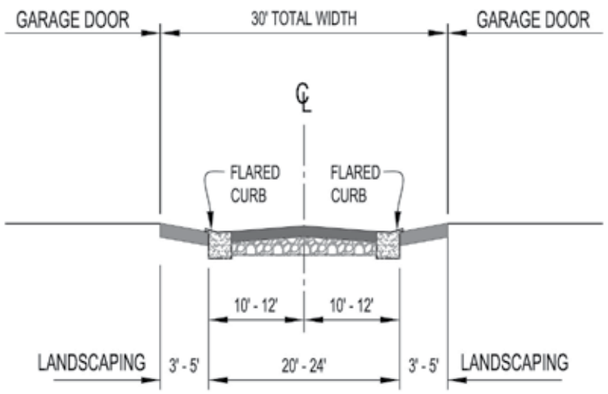
Exhibit 16
Local Street and Cul-De-Sac Sections



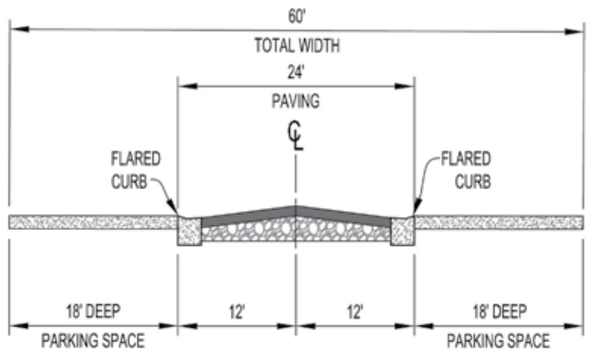
Private Neighborhood Streets
(Located in Planning Areas 1, 3, 4, 5 & 11)

Note: All public utilities within private streets shall be designed per City standards and contained within acceptable easements. The extent to which said utilities will be accepted as public utilities shall be determined at the full discretion of the City during final design reviews.

Exhibit 17
Private Neighborhood Streets



Private Alley
(On Street Parking is Prohibited)



Private Drive Aisle

Notes:

1. *Final Alley Design is subject to approval by the City Engineer, Fire Department and Planning Department.*
2. *All public utilities within private streets shall be designed per City standards and contained within acceptable easements. The extent to which said utilities will be accepted as public utilities shall be determined at the full discretion of the City during final design review.*

Exhibit 18
Private Alley and Drive Aisle Sections

5.1.3 Traffic Calming

The Esperanza Specific Plan includes design features within residential neighborhoods to encourage drivers to proceed slowly and reduce traffic noise on streets contributing to safe and livable neighborhoods in which to walk, bike, and drive.

Traffic calming within the Esperanza Specific Plan is designed to address the following goals:

- Reduction in traffic speeds.
- Reduction in traffic related noise.
- A safe and pedestrian friendly circulation system to encourage walking.

The following design features will be implemented in the roadways within Esperanza.

Local Neighborhood Street Design

Neighborhood streets within Esperanza are designed in a "modified grid" with landscaping on either side within parkways to add interest in the street encouraging drivers to slow their travel speed and observe their surroundings. Incorporating tapered intersections for local streets as illustrated in Exhibit 19, "Neighborhood Street Tapers," may reduce traffic speeds on local residential streets.

Alleys Tapers

Private alleys within Esperanza will consist of 20-24 feet of paved travel area with 3-5 feet of landscaping on each side. Speeds for traffic entering the alleys and cut through traffic can be reduced by incorporating tapers at the entrance to these alleys as illustrated on Exhibit 20, "Alley Tapers."

Landscaping

Landscaping adjacent to streets within the Specific Plan area will combine the use of shade trees, shrubs, and groundcover adjacent to sidewalks to create a more intimate streetscape encouraging drivers to reduce driving speeds. The landscape concept for Esperanza is designed to contribute to a sense of the street system as a pedestrian protected area to promote slower traffic speeds.

Roundabouts

A roundabout will be incorporated into the street design at the intersection of two local streets as illustrated in Exhibit 10, "Master Circulation Plan." The use of a roundabout rather than a conventional all-way stop at this intersection will maintain traffic flow by requiring traffic entering the roundabout to yield to traffic traveling within the roundabout. The lack of a stop sign allows entering traffic to merge with the flow of traffic.

5.1.4 Pedestrian Circulation

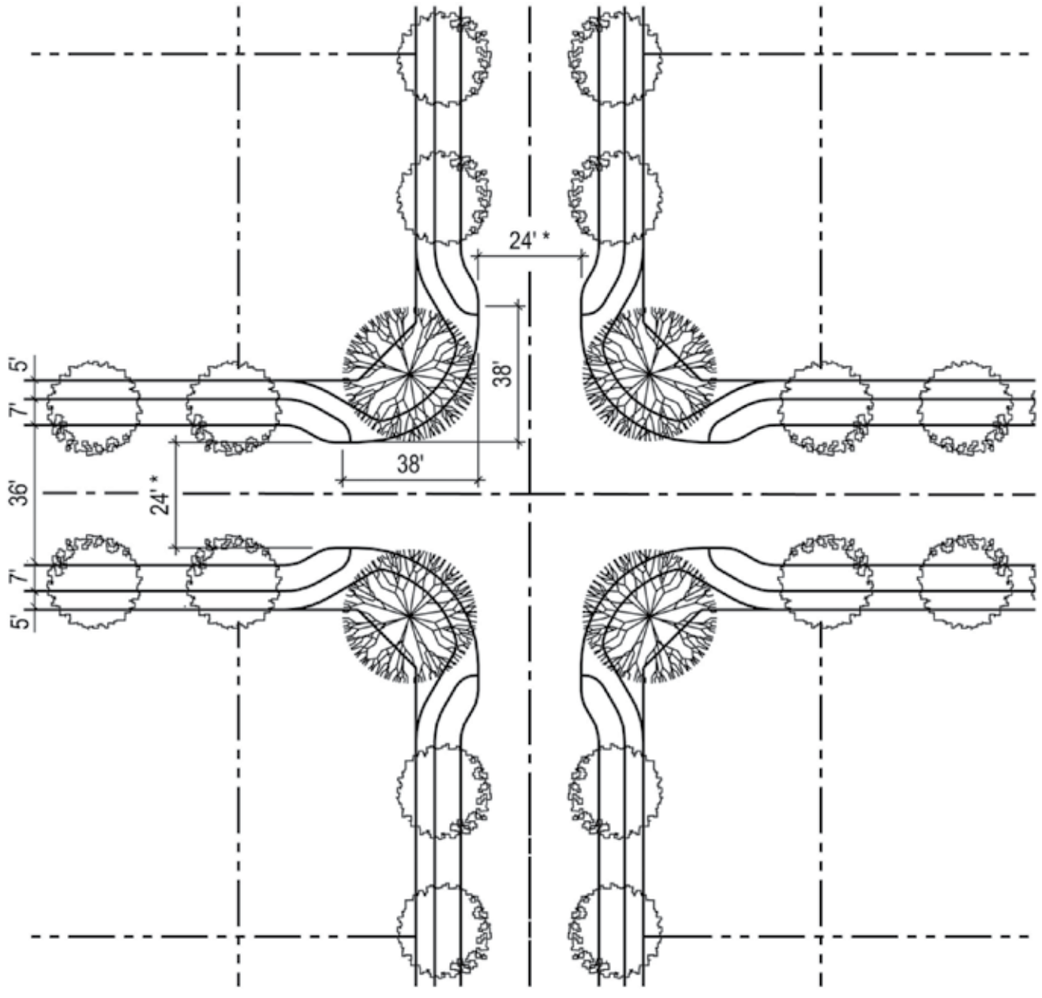
Off-street pedestrian circulation will be available throughout Esperanza by means of the interconnected, paved sidewalk system within the roadway right-of-way, separated from vehicular travel lanes by a landscaped parkway. The Esperanza pedestrian system provides connectivity among residential neighborhoods to the Neighborhood Park and pocket parks within the Specific Plan area.

5.1.5 Bicycle Trails

Bicycle trails are an integral element to creating accessibility and mobility within Esperanza. A Class 1 bike trail will be provided within the parkway on the north side of Eucalyptus Avenue and an on-street bike trail will be provided on both sides of Eucalyptus Avenue connecting to on-street bike trails provided on local residential streets within the Specific Plan to connect all residential neighborhoods to one another, and to the Neighborhood Park located towards the center of the Specific Plan boundary.

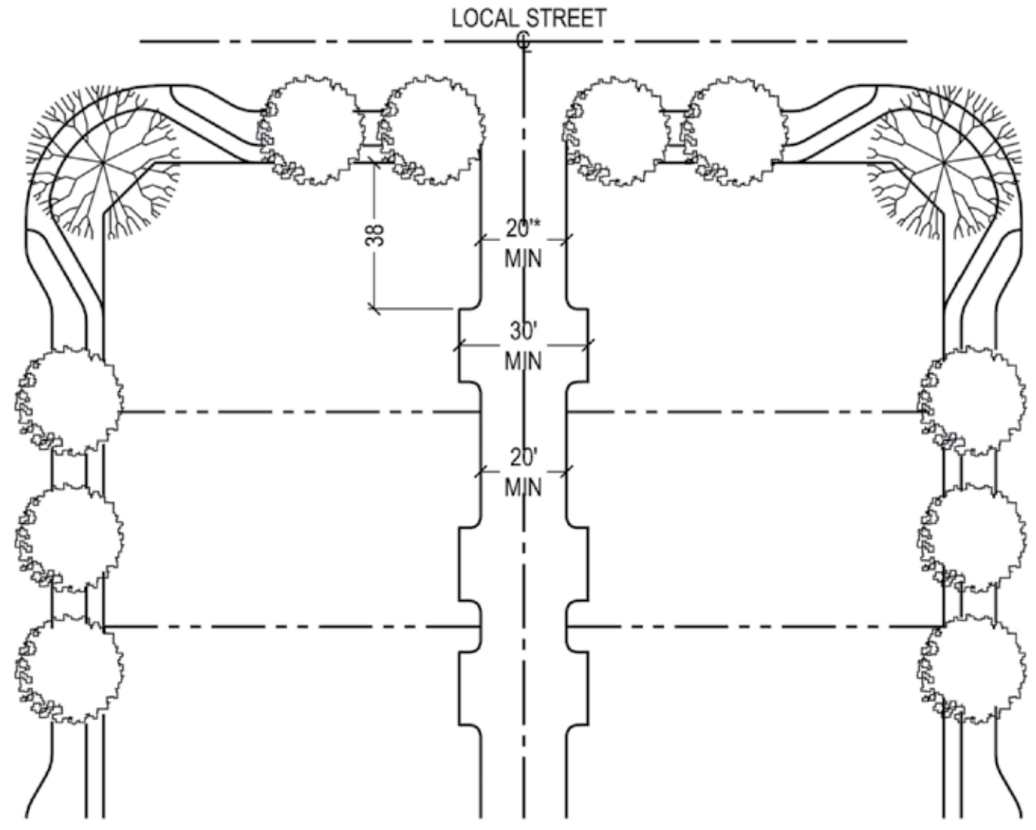
Class II on-street striped bike lanes shall be provided on roadways within the Esperanza Specific Plan area as determined by City Engineer.

The Master Plan for pedestrian and bicycle circulation for Esperanza is illustrated on Exhibit 21, "Pedestrian and Bicycle Circulation Plan."



* (TAPER WIDTHS SUBJECT TO PLANNING, ENGINEERING, & FIRE DEPARTMENT APPROVAL)

Exhibit 19
Neighborhood Street Tapers



(*) TAPER WIDTHS ARE SUBJECT TO PLANNING, ENGINEERING, & FIRE DEPARTMENT APPROVAL

Exhibit 20
Alley Tapers

Exhibit 21
Pedestrian and Bicycle Circulation Plan

5.2 Domestic and Recycled Water Master Plan

Domestic water will be provided by the City of Ontario. The Ontario Ranch Water Master Plan Phase 1 (Phases 1a–1d) identifies new water facilities to include one reservoir, three groundwater wells and potable and reclaimed transmission water lines. Construction of the on site and off site Master Plan water service improvements shall be the responsibility of the developer(s) and is required prior to issuance of building permits for Esperanza. Two of the waterlines included in the Phase 1 improvements are a 24 inch water line in Hamner Avenue, adjacent to the site on the east, and a 24-inch water main in Eucalyptus Avenue, which goes through the center of the project.

5.2.1 Domestic Water

The project lies within the 925 Zone. New domestic water mains to be constructed as part of the development of Esperanza will include a 12-inch Master Plan water main in Mill Creek Avenue, from the northerly boundary of the Specific Plan to Eucalyptus Avenue. Within the Specific Plan area, a network of 8-inch and 12' inch water lines will be installed. The On Site water system will include connections to two different transmission mains.

The City is in the process of updating the Water Master Plan. Any changes resulting from the updated Master Plan will be incorporated into the Esperanza Water Master Plan.

There are two groundwater wells located adjacent to Bellegrave Avenue to the north. These wells and water transmission lines in Bellegrave Avenue, are owned and operated by the Chino Basin Desalter Authority (CDA). As part of the development of the Specific Plan area, improvements shall be made, to the satisfaction of the CDA and the City of Ontario, surrounding the two existing well sites located at the north side of the ultimate right of way of Bellegrave Avenue. Improvements shall include, but are not limited to, perimeter fencing, relocation of existing utilities within the ultimate right of way, street landscaping within the right of way fronting the project, and driveway approaches. The Master Plan for domestic water for Esperanza is illustrated on Exhibit 22, "Conceptual Domestic Water Master Plan." The conceptual on site domestic water system is illustrated on Exhibit 23 "On Site Domestic Water Plan."

5.2.2 Recycled Water System

The Inland Empire Utilities Agency (IEUA) will ultimately provide recycled water from IEUA's RP-1 and RP-1 outfall parallel located in Carpenter Avenue via City of Ontario recycled water mains as presented in the Water Master Plan for the Ontario Ranch. The Specific Plan area is located within the 930 Zone. The construction phase source of recycled water to serve the Specific Plan area will be conveyed to the 930 Zone from the 1050 Zone via a Master Plan pressure reducing station located in Archibald Avenue north of Chino Avenue. The master planned recycled water mains to be constructed as part of the development of Esperanza will include the following:

- A 12-inch recycled water line in Mill Creek Avenue from the northerly boundary of the Specific Plan area to Eucalyptus Avenue.
- An 8-inch recycled water line in Hamner Avenue from the northern boundary of the Specific Plan area to Eucalyptus Avenue.
- An 8-inch recycled water line in Eucalyptus Avenue from Hamner Avenue to Mill Creek Avenue.
- A 12-inch line in Eucalyptus Avenue from Mill Creek Avenue to Haven Avenue.
- A 16-inch line in Eucalyptus Avenue from Haven Avenue to Archibald Avenue.
- A 16-inch line in Archibald Avenue from Eucalyptus Avenue to Edison Avenue.
- A 20-inch line in Archibald Avenue from Edison Avenue to Schaefer Avenue.
- A 36-inch line in Archibald Avenue reducing to a 24-inch line from Schaefer Avenue to Chino Avenue.
- Utilization of the existing 10-inch main which extends from the IEUA facility adjacent to Westwind Park to the intersection of Archibald Avenue and Schaefer Avenue.

The developer will provide all recycled water lines required to serve the Specific Plan area.

Within the Specific Plan area, 8-inch recycled water mains are proposed to serve the development. The City's goal is to maximize the use of recycled water including but not limited to irrigation of parks, schools, street landscaping, recreation trails, common area residential landscaping and commercial/industrial landscaping edges. The parks and landscaped areas that will be irrigated with recycled water and the calculated recycled water demand are contained in the report titled, "Esperanza Water and Recycled Water Hydraulic Analysis." An Engineer's Report approved by the City and the Department of Health is required prior to the use of recycled water.

The conceptual Master Plan for recycled water for Esperanza is illustrated on Exhibit 24, "Conceptual Recycled Water Plan." The conceptual on site recycled water system is illustrated on Exhibit 25, "Conceptual On Site Recycled Water System."

5.3 Sewer Master Plan

Sewer service for Esperanza will be provided by the City of Ontario. The City's Sewer Master Plan identifies ultimate sewer facilities from the Specific Plan area to the Eastern Trunk Sewer. These Master Planned facilities include a 15inch sewer main extending from the northerly boundary of the Specific Plan area, along Mill Creek Avenue increasing to a 21-inch sewer main at Eucalyptus Avenue and a 24-inch sewer main along Bellegrave Avenue westerly to the Master Planned Eastern Trunk Sewer. Completion of these Master Plan improvements is required to provide the ultimate sewer service to Esperanza. Within the Specific Plan area a network of 8-inch and 15-inch sewer lines will be installed. The sizing and alignment of all off site sewer improvements necessary for mitigation of impacts shall follow the results of the approved Sanitary Sewer Technical Study.

The Conceptual Sewer Master Plan for Esperanza is illustrated on Exhibit 26, "Sewer Master Plan." The conceptual on site sewer lines are illustrated on Exhibit 27, "Conceptual On Site Sewer."

5.4 Drainage

The City's Storm Drain Master Plan identifies new storm drain facilities to serve the Specific Plan area extending northerly from the County Line Channel within Mill Creek Avenue. Completion of these Master Plan improvements will provide permanent storm drain service to Esperanza.

That portion of the Master Planned line, which lies within Esperanza, will be constructed as a part of the development of the project. These improvements include a 90-inch storm drain in Mill Creek Avenue transitioning to a 102inch storm drain, connecting to the County Line Channel.

On site storm drains will be constructed to convey the on site flows to the proposed Master Planned storm drain line in Mill Creek Avenue. The locations and size of on site storm drains within Esperanza will be established in accordance with City requirements as part of the approval by the City of Ontario of tentative tract maps for the Esperanza Specific Plan area.

The Drainage Master Plan for Esperanza is illustrated in Exhibit 28, "Storm Drain Master Plan." The size and location of the proposed storm drain may change based on the final design.

5.4.1 NPDES Compliance

The grading and drainage of the Esperanza Specific Plan area shall be designed to detain, filter and treat surface runoff, in a manner and combination which is practical, to comply with the most recent requirements of the San Bernardino County NPDES Storm Water Program's Quality Management (WQMP) for significant new development projects. The objective of the WQMP for this project is to minimize the detrimental effects of urbanization on the beneficial uses of receiving waters, including effects caused by increased pollutants and changes in hydrology. These effects may be minimized through the implementation of site designs that reduce runoff and pollutant transport by minimizing impervious surfaces and maximizing on-site infiltration, Source Control Best Management Practices (BMP's) and/or either on-site Structural Treatment Control BMP's, or participation in regional or watershed-based Treatment Control BMP's.

Prior to the issuance of a grading or construction permit, a Storm Water Pollution Prevention Plan (SWPPP) will also be prepared. The SWPPP will be prepared to comply with the California State Water Resources Control Board's (State Water Board) current, "General Permit to Discharge Storm Water Associated With Construction Activity" and the current Area Wide Urban Storm Water Runoff (Regional NPDES Permit). The SWPPP will identify and detail all appropriate Best Management Practices (BMP's) to be implemented or installed during construction of the project.

In addition to the preparation of a SWPPP for construction-related activities, and as part of the approval of any grading plans within the Specific Plan Area, the applicant will be required to submit a Water Quality Management Plan (WQMP) on the regional model form provided by the City. The WQMP shall identify and detail all Site Design BMP's, Source Control BMP's and Treatment Control BMP's to be implemented or installed at this site in order to reduce storm water pollutants and site runoff.

An off site regional stormwater runoff treatment facility with capacity to accept and treat drainage from portions of the Specific Plan Area has been constructed. This regional treatment facility will be part of an overall solution for storm water treatment within this planned development area. Projects with reserved treatment capacity allocations sin the regional facility will utilize this off-site facility as their primary BMP for addressing urban runoff water quality and hydro-modification impacts, in their respective WQMPs. If a project cannot obtain treatment capacity in the regional stormwater treatment facility, alternative on-site or off-site Low Impact Design BMBs will be required based on the must current MS4 Permit requirements.

5.5 Schools

The Mountain View School District is the school district serving the K-8 school needs of Esperanza. The Chaffey Joint Union High School District serves the 9-12 school age needs of the Specific Plan area. Additional elementary, middle, and high schools are needed to serve the needs of school age children within the Ontario Ranch. An elementary school site has been proposed within the Esperanza Specific Plan and a middle school site has been proposed in Planning Subarea 24. Colony High School is located at the southwest intersection of Mill Creek Avenue and Riverside Drive and a future high school has been proposed in Planning Subarea 23. Development of the Esperanza Specific Plan area will generate an estimated student population as follows (based on student generation numbers supplied by the City of Ontario, "School Generation for Ontario Ranch Subareas," July 2, 2004. The developer(s) of Esperanza will be required to pay school fees as required by State of California.

Grades K- 5
Generation Factor 0.38/D.U.
0.38 x 1594 = 606

Grades 6-8
Generation Factor 0.22/D.U.
0.22 x 1594 = 351

Grades 9-12
Generation Factor 0.20/D.U.
0.20 x 1594 = 319

5.6 Public Utilities

5.6.1 Natural Gas

The Gas Company will provide natural gas to the Specific Plan area. Gas mains will be installed to the Specific Plan area by the Gas Company as necessary.

5.6.2 Electricity

Southern California Edison will provide electricity to the Specific Plan area from existing facilities in the vicinity of the Specific Plan area. Proposed new facilities to serve the project will be owned and operated by the City of Ontario and located underground. Existing lines within the Specific Plan area shall be placed underground by developer and according to the City of Ontario adopted ordinance.

5.6.3 Telecommunications

The City of Ontario will be providing OntarioNet, fiber-to-the-home. OntarioNet is a fiber-optic telecommunications system capable of providing advanced Internet/data services to all homes and businesses within the Ontario Ranch. OntarioNet will provide community related services including: traffic management; on-line civic services; meter reading; educational services; and a variety of other community services. Based on the demographics of the Ontario Ranch and the traffic issues into Orange and Los Angeles Counties, the demand for telecommuting in the Ontario Ranch is anticipated to be significant. OntarioNet and the high-speed data services it provides will allow residents of the Esperanza Specific Plan to effectively telecommute to their jobs and in general provide a significant economic benefit to Ontario. Verizon currently provides telephone service within the Specific Plan area and can provide telecommunication service if they choose to do so.

5.6.4 Solid Waste

The City of Ontario provides solid waste collection services for the Ontario Ranch and will service the Specific Plan area. The project will comply with Municipal Code Section 6-3.314, "Commercial Storage Standards" and Section 6-3.601, "Business Recycling Plan" for the use of any commercial bin service for apartment development. All residential development shall comply with Municipal Code Section 6-3.308.9 (a) and (d), "Residential Receptacles, Placement" for curbside automated container service. The project shall comply with Municipal Code Article 6, "Recycling Requirements for Specified Business Activity", Section 6-3.601 Business Recycling Plan, and Section 6-3.602, "Construction and Demolition Recycling Plan." All site development shall comply with the City of Ontario refuse collection standards. All project sites shall be designed to meet all the Integrated Waste Department's requirements, including the requirements for Sizing of Storage, Location of Collection Area, Accessibility for Collection Vehicles, and Collection of Sorted/ Diverted Waster Types including Organics.

5.7 Grading Concept

The site falls at an average slope of approximately two percent (2%). The Grading Concept for Esperanza is to work with the existing topography to maintain natural grade and elevations wherever possible. The grading operation for the Specific Plan area will generally consist of the removal of any manure remaining from dairy operations, clearing and grubbing, demolition of existing structures, and moving of surface soils to construct building pads and streets. Additionally, where slope conditions are present, the property shall be located at the top of the slope. In areas adjacent to a ridgeline or in moderate slope areas, dwelling units and structures should be sited to:

- Use the natural ridgeline as a backdrop for structures;
- Use landscape plant materials as a backdrop; and
- Use structure to maximize concealment of cut slope.

If retaining walls are required, the following criteria shall be used:

- Exposed walls and fences facing roadways shall be no greater than 3-feet retaining (9-foot total wall) in height, except as necessary for acoustical purposes to satisfy the intent of the noise ordinance.
- Where retaining walls or fences face roadways, they shall be built, when feasible, of decorative materials consistent with the wall theme of the neighborhood.

The Conceptual Grading Plan, as illustrated in Exhibit 29, "Conceptual Grading Plan," will provide for a balance of cut/fills for the site Grading plans for each tract in the Specific Plan area will be reviewed and approved by the City of Ontario Building, Planning, and Engineering Departments prior to the issuance of grading permits. All grading plans and activities will conform to the City grading ordinance and dust and erosion control requirements.

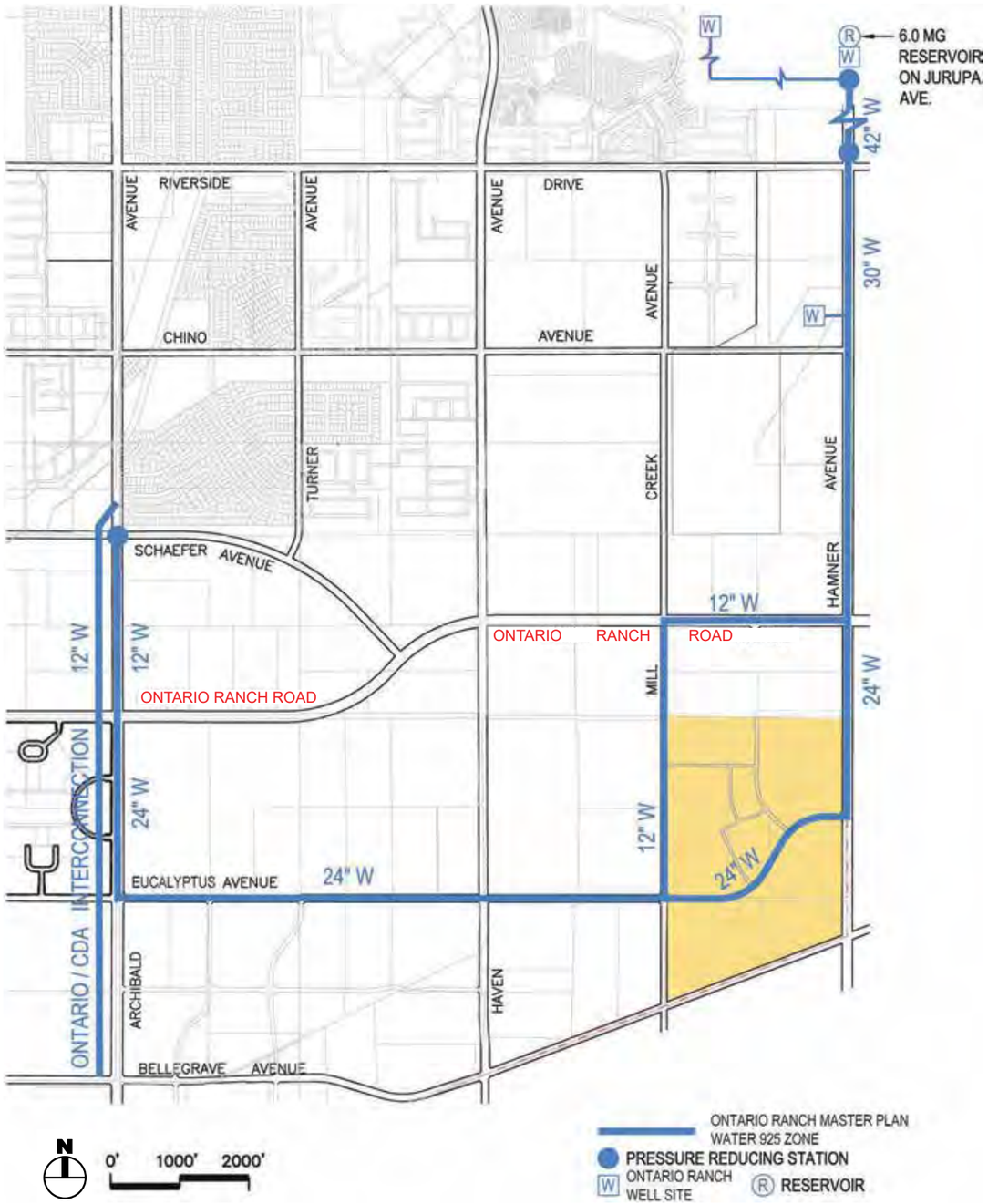


Exhibit 22

Conceptual Domestic Water Master Plan

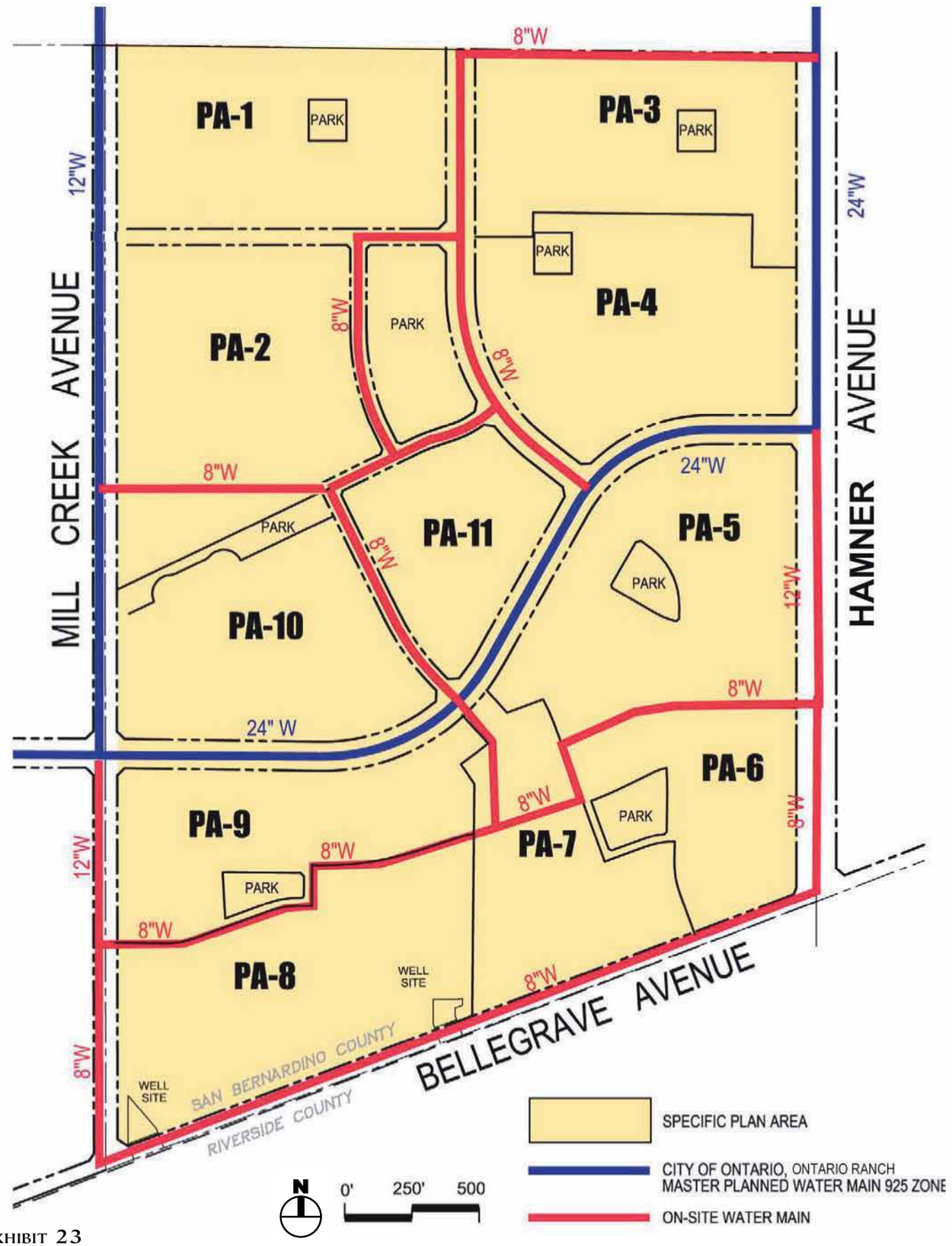


Exhibit 23

On Site Domestic Water Plan

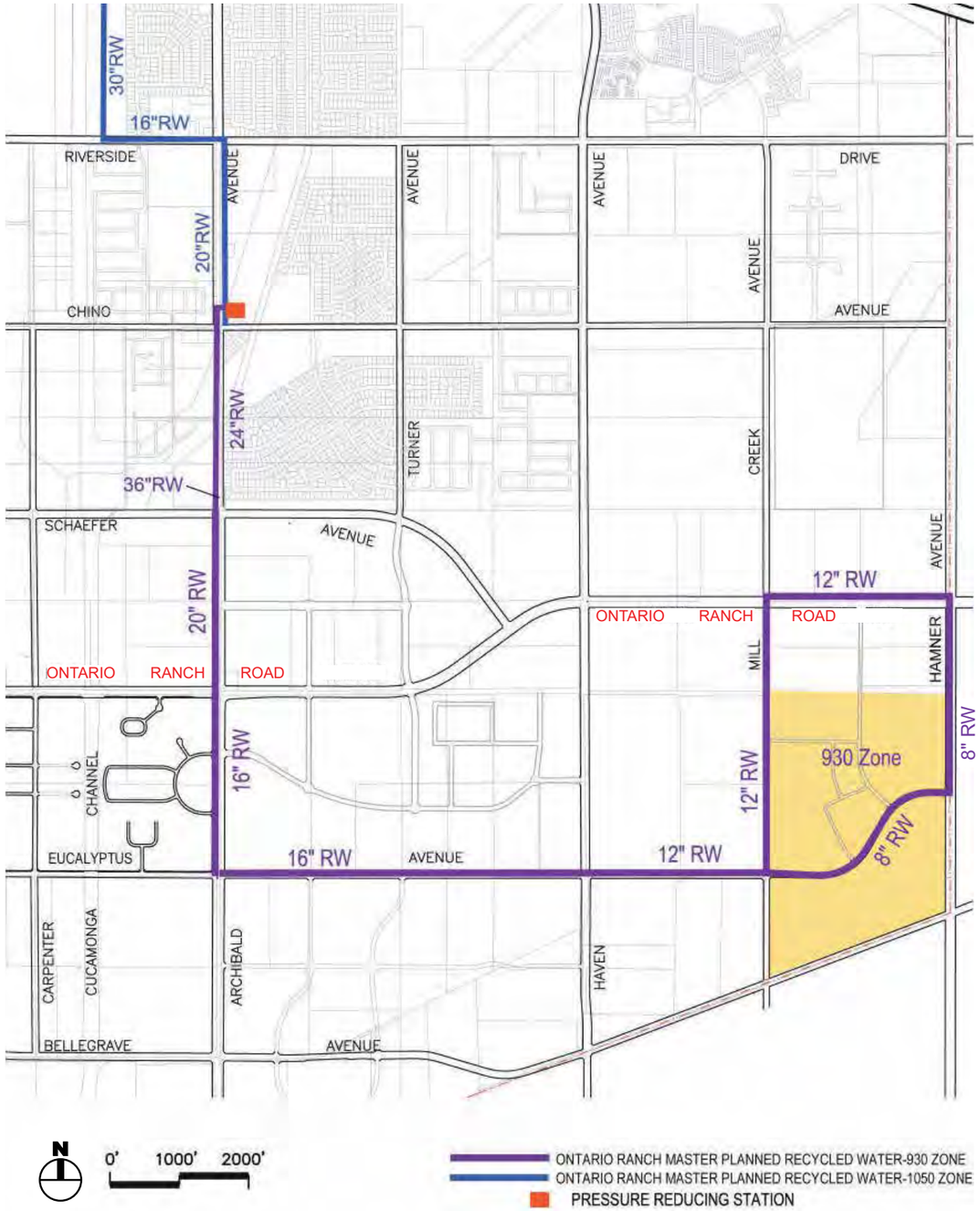
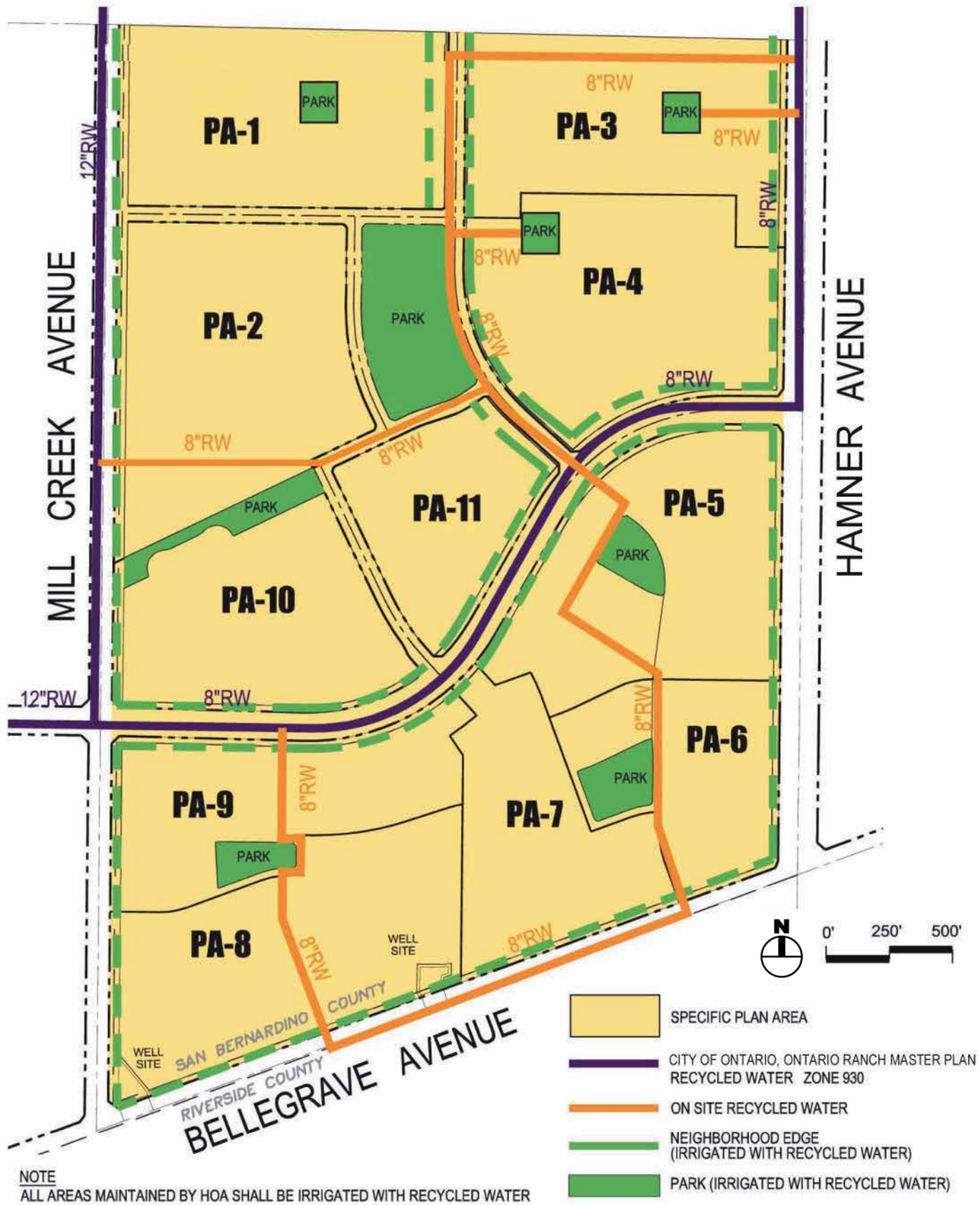


Exhibit 24
Conceptual Recycled Water Plan



NOTE
ALL AREAS MAINTAINED BY HOA SHALL BE IRRIGATED WITH RECYCLED WATER

Exhibit 25
Conceptual On Site Recycled Water System

Exhibit 26
Sewer Master Plan

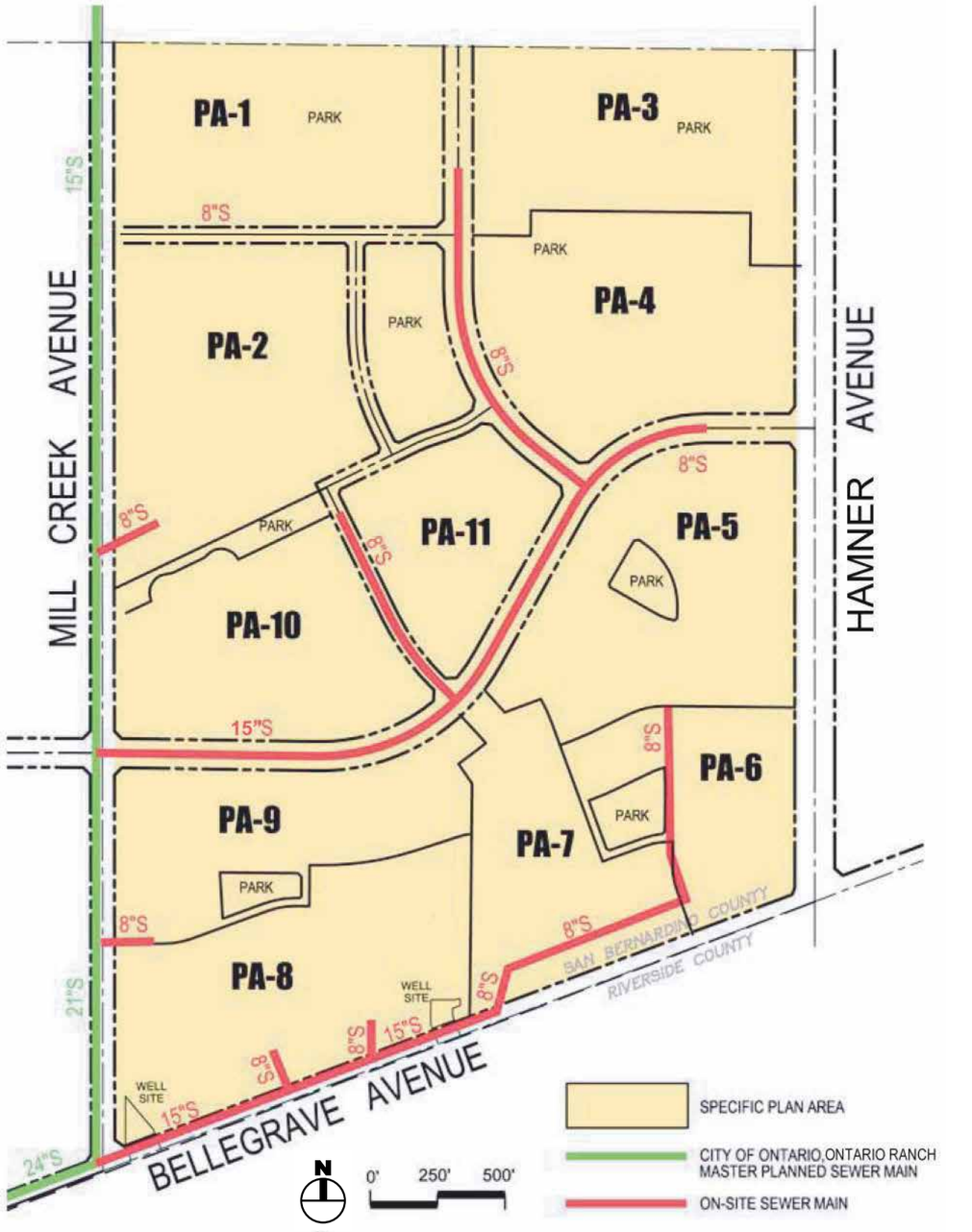


Exhibit 27
Conceptual On Site Sewer

Exhibit 28
Storm Drain Master Plan

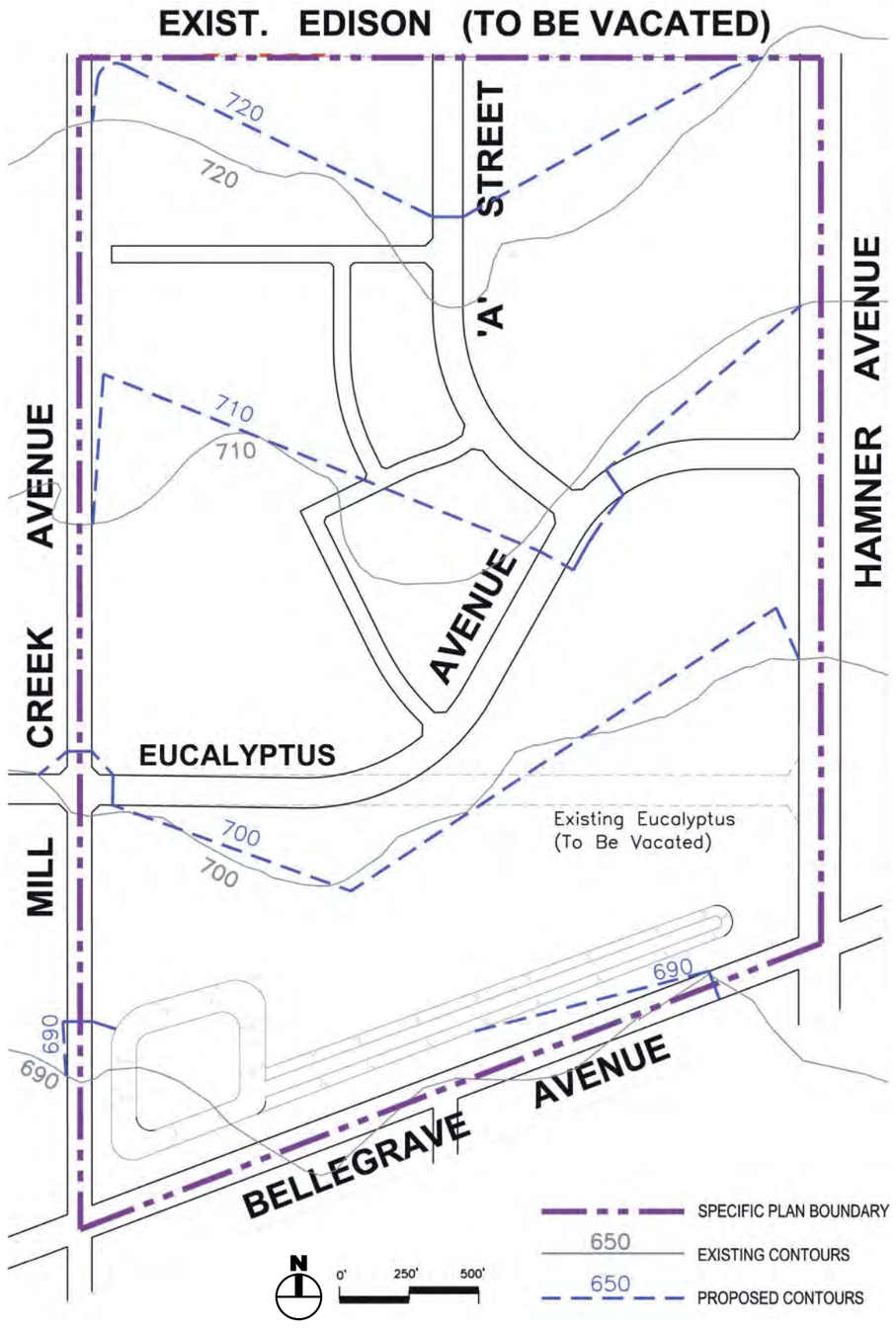


Exhibit 29
Conceptual Grading Plan

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Section 6. Development Regulations

6.1 Introduction

The provisions contained herein will regulate design and development within the Esperanza Specific Plan.

6.2 Definition of Terms

The meaning and construction of words, phrases, titles, and terms shall be the same as provided in the City of Ontario Development Code Article 2, "Definitions," unless otherwise specifically provided herein. The definitions of product types shall be those defined in Section 4, "Land Use" within the discussion of each respective product type. The definition of architectural and design terms shall be the same as those provided in the City of Ontario Glossary of Design Terms which follows the City of Ontario Development Code.

6.3 Applicability

The development regulations contained herein provide specific standards for land use development within the Esperanza Specific Plan area. Regulations address residential land uses and provide for general landscaping regulations. Application of the following regulations is intended to encourage the most appropriate use of the land, ensure the highest quality of development, and protect the public health, safety, and general welfare. Whenever the provisions and development standards contained herein conflict with those contained in the City of Ontario Development Code, the provisions of the Esperanza Specific Plan shall take precedence. Where the Esperanza Specific Plan is silent, City codes shall apply. These regulations shall reinforce specific site planning, architectural design, and landscape design guidelines contained in Section 8, "Design Guidelines" of the Esperanza Specific Plan.

6.4 Administration

The Esperanza Specific Plan, upon adoption, will serve as the implementation tool for the General Plan as well as the zoning for the Specific Plan area. The Esperanza Specific Plan Development Regulations address general provisions, permitted uses, and development standards for the community.

6.5 General Site Development Criteria

The following general site development criteria shall apply to all land development proposed in Esperanza.

1. **Gross Acres** - Except as otherwise indicated, gross acres for all development areas are measured to the centerline of streets.
2. **Grading** - Development within the Specific Plan area shall utilize grading techniques as approved by the City of Ontario. Grading concepts shall respond to the design guidelines included in the Esperanza Specific Plan which guide the development of land use toward the goal of providing for a livable community with streets and entries designed for walking and resident interaction.
3. **Building Modification** - Additions and alterations permitted by the Esperanza Specific Plan shall match the architectural style of the primary unit and shall be constructed of the same materials, details, and colors as the primary unit.
4. **Utilities** - All new and existing public utility distribution lines of 35.5kV or less shall be subsurface throughout the planned community.
5. **Technology** - All homes and businesses shall accommodate modern telecommunications technology (OntarioNet) for computer internet access, phone, fax, and television. Broadband fiber optics cable will be installed to all the properties per the approved Fiber Optic Master Plan.

6. **Transfer of Dwelling Units** -The Esperanza Specific Plan allocates a total number of units to each Planning Area as indicated in the "Land Use Summary" Table 2, Section 4, of the Esperanza Specific Plan. Variations in the number and type of dwelling units within each residential Planning Area may occur at the time of final design of the neighborhood depending upon the residential product identified for development. Changes in allocation of residential units, up to a maximum of fifteen percent (15%), are permitted among the residential planning areas within the Esperanza Specific Plan, subject to approval by the City and upon agreement of each respective property owner/developer, provided the total number of units established for the Esperanza Specific Plan area is not exceeded.

7. **Best Management Practices –** Development of storm water runoff improvements, within the Esperanza Specific Plan, shall adhere to currently adopted Best Management Practices (BMP's). The Site Design BMP's may include but not be limited to creating landscape strips and landscaped setback areas that can be swaled and depressed to retain and infiltrate irrigation water and runoff from smaller storm events, drain rooftops into rain gutters which would drain into an area of porous subgrade, and depressing the park areas to provide storm water infiltration and water quality treatment. Common area landscaping and parks shall be designed to function as a series of shallow storm water treatment basins and infiltration zones for storm water runoff from surrounding areas wherever moderately well draining soils exist. Currently the City of Ontario is considering construction of a regional storm water runoff treatment facility for the sub-watershed area that this project lies within. If the treatment facility is constructed, it may satisfy the requirement for on-site treatment control BMP's for the Esperanza project.

8. **Maximum Number of Dwelling Units** - The maximum number of residential dwelling units permitted within the Esperanza Specific Plan is ~~1,594~~ 1,491 unless the 10.02 acre elementary school site is not purchased by the Mountain View School District. Pursuant to approval of a Specific Plan Amendment the total permitted residential dwelling units within the Esperanza Specific Plan area shall be ~~1,640~~ 1,652 dwelling units.

9. **Agricultural Buffer** - A minimum 100-foot separation shall be required between a new residential structure and an existing animal feed trough, corral/pen or an existing dairy/feed lot including manure stockpiles and related wastewater detention basins. The 100-foot separation requirement may be satisfied through an off-site easement with adjacent properties, acceptable to the Planning Director, submitted with a final map, and recorded prior to or concurrent with a final map.

10. **Solid Waste/Recycling** - Development within the Esperanza Specific Plan area shall comply with City of Ontario requirements for the provision and placement of solid waste and recycling receptacles.

6.6 RESIDENTIAL DEVELOPMENT STANDARDS

6.6.1 Residential Detached (RD-1 through RD-6)

6.6.1.1 General

This category includes the development of single family detached dwelling units. The purpose of the residential standards for single family detached housing is to establish the minimum criteria for the development of these product types on individual lots within the neighborhoods specified within Esperanza.

6.6.1.2 Permitted Uses

1. Single family detached dwellings.
2. Public or private parks, recreational buildings, greenbelts, and open space.
3. Accessory uses to include the following:
   a. Garages.
   b. Granny Flats (i.e. Second Dwelling Units, in accordance the City's Development Code.)
   c. Home occupations.
   d. Swimming pools, spas, sports courts, and other similar outdoor recreational amenities.
   e. Patios and patio covers.
   f. Storage, garden structures, cabanas, and greenhouses.
   g. Monument signage.
   h. Model home and subdivision sales trailers; temporary construction parking, offices, and facilities; real estate signs, signage indicating future development and directional signage in accordance with the City's Development Code.
   i. Second story additions to existing single story dwelling units.
   j. Small family child care/day care facilities (up to 8 children), in accordance with the City's Development Code.

6.6.1.3 Conditionally Permitted Uses

1. Places of worship including but not limited to churches and synagogues.
2. Large family child/day care facilities (between 8-14 children), in accordance with the City's Development Code.

6.6.1.4 Temporary Uses

1. Temporary uses shall be permitted pursuant to Article 13 of the City's Development Code.

6.6.1.5 Free Standing Satellite Dish / Antennas

1. Free standing satellite dishes and/or antennas are permitted pursuant to Article 32, Section 9.1.3289 of the City of Ontario Development Code.

6.6.1.6 Recreational Vehicle Storage and Parking

1. Recreational Vehicle (RV) storage is prohibited on public and private streets and in private alleys. RV parking on public and private streets is limited to 72 hours.

PRODUCT TYPE	RD-1	RD-2	RD-3	RD-4	RD-5	RD-6
	50' Wide Lots PA-7 & PA-9	55' Wide Lots PA-8	40' 2-Pack PA-10	Cottage PA-2 & PA-6	4-Pack Courtyard PA-5	6-Pack/8-Pack Courtyard Row Townhomes PA-2 & PA-4
LOT CRITERIA						
Min. Lot Width at Front Setback Line for Standard Lot	50'	55'	40'	33'	NA	NA
Min. Lot Width at PL for Cul de sac, standard knuckle or modified knuckle lots (Min. side and rear yard setbacks to be maintained)	35'	35'	35'	33'	NA	NA
Min. Lot Width on Corner	55'	60'	45'	38'	NA	NA
Min. Lot Depth	80'	90'	75'	75'	NA	NA
Min. Lot Size	3,900 sq.ft.	4,800 sq.ft.	3,400 sq.ft.	2,400 sq.ft.	2,500 sq.ft.	2,200 sq.ft.
MINIMUM SETBACKS [1]						
All setbacks are measured from PL except for RD-5 and RD-6 where front and streetside setbacks are measured from back of sidewalk.						
Front Setbacks						
• Living Area	10'	12'	10'	10'	10'	10'
• Porch w/single story plate	8' [2]	8' [2]	8' [2]	8' [2]	8'	8'
• Front Entry Garage (street facing door) [3]	18'	18'	18'	NA	18'	18'
• Turn in Garage	10'	10'	NA	NA	NA	NA
Side [4]						
• From Interior PL	5'	5'	5'	4'	4'	4'
• From Residential Street or Parking Lot	10'	10'	10'	10'	10'	10'
Rear						
• Main Structure 1st Floor	15'	15'	10'	5' from Alley ROW	10'	5'
• Main Structure 2nd Floor	15'	15'	10'	5'	10'	5'
• Garage (Single Story Plate Line)	5'	5'	5'	3'	5'	5'
• Patio Cover / 2nd Story Deck	5'	5'	5'	5'	5'	10'
LOT COVERAGE						
Max. Coverage	50%	50%	50%	55%	55%	55%

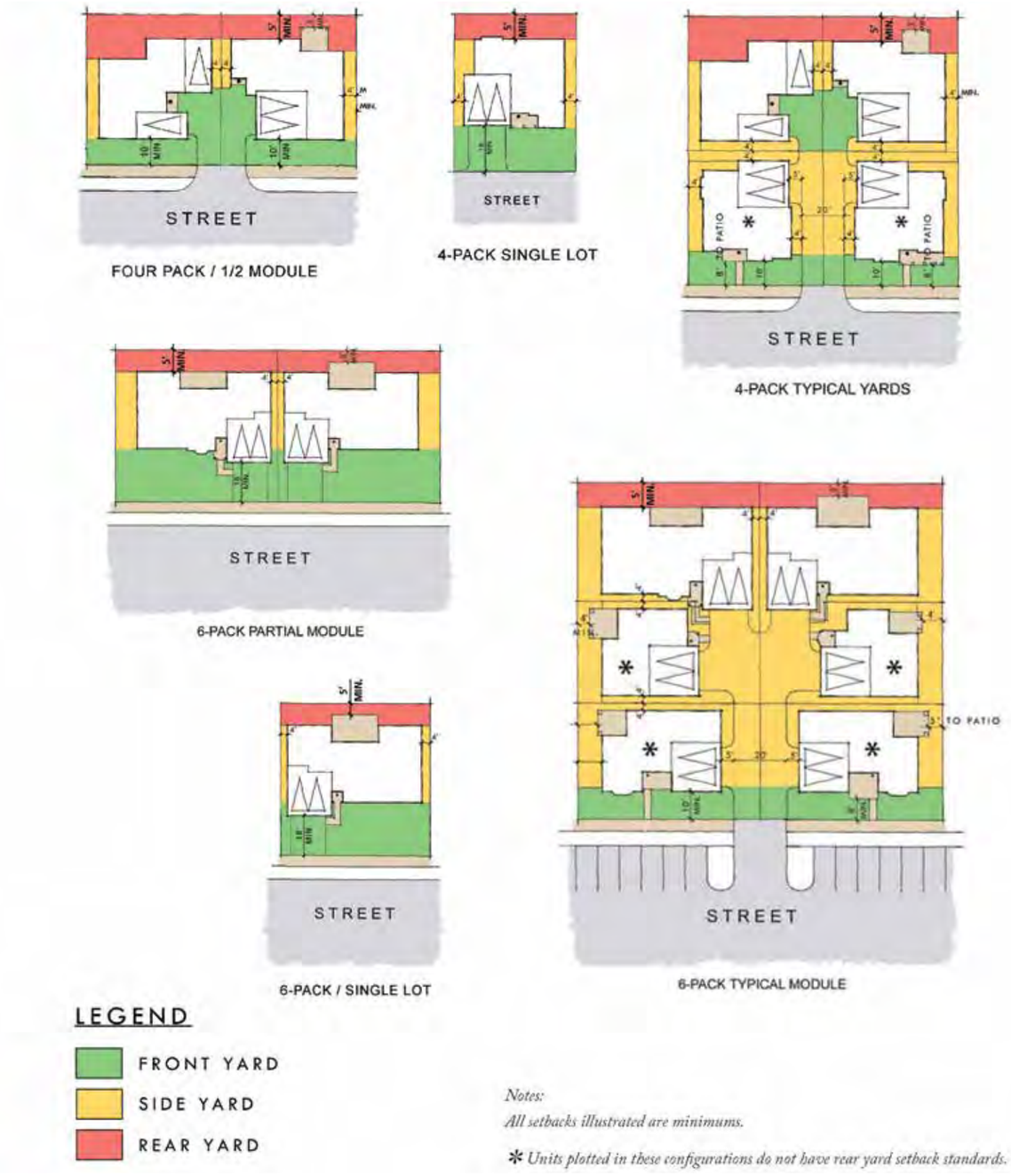
TABLE 3
Residential Detached Site Development Standards

PRODUCT TYPE	RD-1	RD-2	RD-3	RD-4	RD-5	RD-6
	50' Wide Lots PA-7 & PA-9	55' Wide Lots PA-8	40' 2-Pack PA-10	Cottage PA-2 & PA-6	4-Pack Courtyard PA-5	6-Pack/8-Pack Courtyard Row Townhomes PA-2 & PA-4
MINIMUM BUILDING SEPARATION						
Between main structures rear to rear	20'	20'	15'	30'	6'	10'
Between main structures front to front	NA	NA	NA	20'	NA	30'
Between structures side to side [1]	10'	10'	10'	8'	6'	6'
Between main structures front to side	NA	NA	NA	NA	8'	6'
Between front porch/ balcony to front porch/balcony	NA	NA		15'		
MAXIMUM BUILDING HEIGHT						
Main Structure	35'	35'	35'	35'	35'	35'
MAXIMUM BUILDING HEIGHT						
Maximum Height at Front and Street Side Property Line [5]	3'	3'	3'	3'	3'	3'
Maximum Height at Interior or Rear Property Line [6]	6'	6'	6'	6'	6'	6'
Maximum Height of Retaining Walls	3'	3'	3'	3'	3'	3'
PARKING						
Min. Number of Parking Spaces Required Per Unit [7]	2	2	2	2	2	2

NOTES:

1. *Architectural projections may project a maximum of 3 feet into required front, rear or side setback areas; however, in no case shall such projection be closer than 3 feet to any property line. An architectural projection is defined as an element that articulates the building elevation such as eaves, window and door pop-out surrounds, media niches, bay windows, pot shelves, chimneys, enhanced window sills, shutter details, window trim, balconies and entry gates, and other similar elements.*
2. *The minimum depth of a porch shall be 7 feet with a minimum clear area of 70 square feet.*
3. *Minimum 20' for front facing/ garage forward design.*
4. *RD-3, RD-4, RD-5 and RD-6 with shared-use easement sideyards.*
5. *Solid masonry walls or wood fencing materials may be permitted on the front property line. Fences, walls, hedges or similar view obstructing structures or plants that reduce safe ingress or egress of vehicles or pedestrians shall not exceed three feet in height in any required front yard.*
6. *Walls may exceed six feet in height for noise attenuation purposes subject to an Acoustical Study and Planning Department approval.*
7. *All parking spaces to be within an enclosed garage (minimum 20' x 20' clear inside dimension) for two spaces and 10' x 20' for single spaces.*
8. *For single story homes only, the maximum lot coverage may increase up to a maximum of 60%.*

TABLE 3
Residential Detached Site Development Standards (cont.)



4-Pack and 6-Pack Typical Plotting

6.6.2 Residential Attached (RD-7 and RD-8)

6.6.2.1 General

This category includes the development of attached type residential dwelling units such as townhomes, and other attached multi-family products.

6.6.2.2 Permitted Uses

1. Single family attached row townhomes, motorcourt townhomes, paired homes, condominiums, apartments, and duplexes.
2. Public or private parks, recreational buildings, greenbelts, pocket parks, and/or open space.
3. Accessory uses to include the following:
   - Garages.
   - Home occupations in accordance with the City's Development Code.
   - Swimming pools, spas, tennis courts, sports courts, and other similar outdoor recreational amenities.
   - Patios and patio covers.
   - Mailboxes.
   - Recreation center buildings.
   - Maintenance storage buildings.
   - Monument signage.
   - Model units, sales offices, and subdivision sales trailers, temporary construction offices and facilities, real estate signs, signage indicating future development and directional signage in accordance with the City's Development Code.
   - Small family child care facilities/day care facilities, up to 8 children in accordance with the City's Development Code.
   - Permanent Leasing Offices.

6.6.2.3 Conditionally Permitted Uses

1. Places of worship including but not limited to churches and synagogues.
2. Large family child care facilities/day care facilities (8-14 children) in accordance with the City's Development Code.

6.6.2.4 Temporary Uses

1. Temporary uses shall be permitted pursuant to Article 13 of the City's Development Code.

6.6.2.5 Free Standing Satellite Dish/Antennas

1. Free standing satellite dishes and/or antennas are permitted pursuant to Article 32, Section 9.1.3289 of the City of Ontario Development Code.

6.6.2.6 Recreational Vehicle Storage and Parking

1. Recreational Vehicle (RV) storage is prohibited on public and private streets and in private alleys. RV parking on public and private streets is limited to 72 hours.

6.6.2.7 Open Space

1. A minimum of 150 square feet of private open space shall be provided per dwelling unit as follows:
   a. Private open space features may include fenced yards, patio areas, and balconies.
   b. At least one-half (½) of the required open space area must be provided at the ground level, not including front yard setbacks, and not more than ½ of the open space requirement is to be satisfied by balconies or roof decks. For the Row Townhome product (RD-6) open space may be satisfied by balconies for up to 33% of the units proposed.

c. Private open space located at ground level shall have a minimum contiguous area of one hundred and fifty (150) square feet in area with a minimum dimension ten (10) feet in any one direction and shall be landscaped. Open space located on roof decks or balconies must have a minimum contiguous area of fifty (50) square feet in area and a minimum dimension of five (5) feet in any one direction.

d. Private, ground level open space on the street side of a structure is to be suitably screened from streets by a fence, densely planted shrub, or combination of both.

2. A minimum of 250 square feet of common open space shall be provided per unit as follows:

a. Common Open space features include, but are not limited to, landscaping, picnic and barbecue areas, pools and spas, tennis and sport courts, clubhouse, tot lots or playgrounds, paseos, and trails.

b. Common open space shall have a minimum contiguous area of three hundred (300) square feet with no dimension less than 15 feet in any direction.

c. All required ground level common open spaces shall be planted with permanent landscaping or be devoted to recreational facilities, such as swimming pools, tennis courts, tot lots, patios or similar open space and/or recreational facilities.

d. Common and private open spaces are to be permanently maintained in an orderly fashion.

e. Parking areas, driveways or service areas shall not be counted in the minimum open space requirement.

PRODUCT TYPE	**RD-6 & RD-7**	RD-8
	Row Townhomes **PA-1**. PA-3. **PA-4** & PA-11	**Motorcourt Townhomes** PA-1 & **PA-3**
MINIMUM SETBACKS [1]		
All front and corner setbacks for RD-8 are measured from the property line at back of sidewalk. All other setbacks for RD-8 are measured from the parcel line of the cluster. All setbacks for RD-7 are measured from property line unless otherwise noted.		
Front		
• Living Area	10'	10'
• Porch [2]	8'	8'
Side		
• From Residential Street	10'	10'
• From any local streetside property line	10'	10'
• From interior property line for RD-7 or parcel line for RD-8	5'	4'
Rear		
• 1st floor from alley R/W for RD-7 or parcel line for RD-8	3'	10'
• 2nd floor from alley R/W for RD-7 or parcel line for RD-8	3'	15'
MINIMUM BUILDING SEPARATION		
• Front to front	25'	25'
• Side to Side	10'	25'
• Front to Side	NA	25'
• Rear to Rear	25'	NA
• Front of garage to front of garage	30'	30'
BUILDING SITE COVERAGE		
Max. Coverage	60% of site	60% of site
MAXIMUM BUILDING HEIGHT		
Main Structure	45'	35'

TABLE 4
Residential Attached Site Development Standards

PRODUCT TYPE	RD-6 & RD-7	RD-8
	Row Townhomes **PA-1. PA-3. PA-4 & PA-11**	**Motorcourt Townhomes** **PA-1 & PA-3**
WALLS, FENCES, AND HEDGES		
Maximum Height at Front and Street Side Property Line [3]	3'	3'
Maximum Height at Interior or Rear Property Line [4]	6'	6'
Maximum Height of Retaining Walls	3'	3'
PARKING [5]		
Min. Resident Parking Required	1.75 spaces per one bedroom unit including 1 in a garage or carport, 2 spaces per two bedroom unit including 1 in a garage or carport, and 2.5 spaces per three or more bedroom unit including 2 in a garage or carport.	
Min. Guest Parking Required	1 space for each 4 units under 50 on the building lot. 1 space for every 5 units between 51-100 units on the building lot. 1 space for every 6 units over 100 units on the building lot. Public on-street parking may be counted toward guest requirement.	

NOTES:

1. *Architectural projections may project a maximum of 3 feet into required front, rear or side setback areas; however, in no case shall such projection be closer than 3 feet to any property line. An architectural projection is defined as an element that articulates the building elevation such as eaves, window and door pop-out surrounds, media niches, bay windows, pot shelves, chimneys, enhanced window sills, shutter details, window trim, balconies and entry gates, and other similar elements.*
2. *The minimum depth of a porch shall be 7 feet with a minimum clear area of 70 square feet.*
3. *Solid masonry walls or wood fencing materials may be permitted on the front property line. Fences, walls, hedges or similar view obstructing structures or plants that reduce safe ingress or egress of vehicles or pedestrians shall not exceed three feet in height in any required front yard.*
4. *Walls may exceed six feet in height for noise attenuation purposes subject to an Acoustical Study and Planning Department approval.*
5. *All parking spaces within an enclosed garage shall have a minimum 20'x20' clear inside dimension for double spaces and 10' x 20' single spaces.*

TABLE 4
Residential Attached Site Development Standards (cont.)

6.7 LANDSCAPE STANDARDS

6.7.1 General Provisions

1. All landscape and irrigation plans for streetscapes and graphic designs with regard to the identity of Esperanza, neighborhood identity or entry monuments shall conform to the Design Guidelines and regulations as set forth herein and shall be subject to review and approval by the City of Ontario at the time of Development Plan review. The form and content of landscape plans for streets, parks, and other common areas shall conform to the requirements of the City's Development Plan application requirements.
2. The Landscape/Streetscape improvements for the Esperanza Specific Plan shall establish a landscape theme reminiscent of the regional landscape character of the surrounding area.
3. The design and improvement of all parks, including landscape and irrigation plans, within Esperanza shall be reviewed and approved by the City at the time of Development Plan review and shall conform with the requirements of the City's Parks and Maintenance Department.
4. Installation of landscaping and automatic irrigation within the front yards of all residential areas will be provided by the home builder. At a minimum, the builder will install turf and appropriate shrubs and trees in the front yards of homes within residential areas. At a minimum two trees shall be installed, of which at least one, is a shade tree. A variety of front yard landscape designs shall be provided by the developer for use by homeowners. Within multi-family residential areas the builder shall be responsible for the installation of full landscape improvements within the multi-family development. Areas not used for hardscape shall be fully landscaped. All landscape plans shall be reviewed and approved by the City at the time of Development Plan review.

6.7.2 Landscape Standards

1. Landscaping within the Esperanza Specific Plan area shall be provided in accordance with the Design Guidelines utilizing plant materials specified on the Plant Palette included in Section 8, "Design Guidelines" established for the Esperanza Specific Plan.
2. Boundary landscaping will be required adjacent to residential areas. Landscaping shall generally be placed along the entire perimeter property line.
3. Landscaping and automatic irrigation systems within the public rights of way of the Esperanza Specific Plan area shall be installed by the developer.
4. Freestanding perimeter walls and view fencing shall be provided within, and at the perimeter of the Specific Plan area as specified in the Wall and Fence Master Plan contained within, Section 8, "Design Guidelines." Such walls and fences will be constructed concurrently with the construction of improvements required for development of the neighborhoods of the Specific Plan.
5. Walls and Fencing - Perimeter walls shall be constructed in locations and of a design consistent with the "Wall Master Plan" and "Wall Details" Exhibits located within Section 8, "Design Guidelines." Perimeter walls shall not exceed six feet in height from finished grade. If required for sound attenuation, perimeter walls may exceed six feet in height, subject to the recommendations of an acoustical study and approval by the Planning Department. Perimeter walls shall be constructed of either masonry or other permanent, durable, low maintenance material. Thematic perimeter fencing shall be constructed of all durable materials, which may include materials with a wood-like appearance, or tubular steel subject to approval by the City. In no instance shall wooden fencing be permitted along perimeters.

Individual residential lot side and rear yard walls and fencing shall not exceed six feet in height from highest adjacent finished grade. Side and rear walls may exceed six feet (6') in height if required by the City for sound attenuation pursuant to the recommendations of an Acoustical Report. Walls and fencing within the residential front yard setback area shall not exceed three feet in height. Side and rear yard walls shall be of decorative masonry construction on both sides of the wall or other permanent low maintenance materials. Front yard fences may be constructed of either wood, or any other durable materials with a wood like appearance, subject to approval by the Planning Department. View fencing may be of a decorative wrought iron, tubular steel/aluminum glass panels, or other durable material approved by the City.

6. All perimeter wall and fence materials throughout Esperanza will be of uniform manufacture with colors specified for the overall design theme.
7. The developer will provide site inspection of all construction and installation of open space areas in accordance with City of Ontario requirements.
8. Non-toxic vegetation shall be utilized adjacent to all public open space areas.

6.8 Signage

A Master Sign Program shall be submitted by the developer(s) of Esperanza and approved by the City of Ontario pursuant to Article 31 of the City's Development Code to address residential project entries, residential neighborhood identification signs, and way finding signs within Esperanza. No project signs shall be permitted in the public right-of-way. All other signs shall be subject to the approval of a sign permit pursuant to the City's Development Code.

6.8.1 Master Sign Program Contents

All sign programs shall address, at a minimum, the following:

1. Permitted signs.
2. Prohibited signs.
3. The hierarchy of signage.
4. Definition of types of signs.
5. Locations and dimensions for monument signs, neighborhood identification signs, and public facilities signs.
6. Locations and dimensions of directional signage.
7. Provisions for size, location, and duration of display of temporary signs.
8. Permitted sign types, styles, construction materials, colors, and lettering styles.
9. Requirements for a sign permit application.
   a. Procedures for obtaining approval of a sign permit.
   b. Procedures for amendments to the sign program.

6.9 Lighting

6.9.1 Street Lights along Public Streets

Streetlights along public streets, within the Esperanza Specific Plan shall be high-pressure sodium vapor. Design of fixtures shall be approved by the City as part of the City's Development Plan Review.

6.9.2 Alley Lighting Fixtures

Alley lighting fixtures shall be on sensors for automatic nighttime lighting. Style and specifications for alley lights shall be approved by the City as part of the City's Development Plan Review.

6.9.3 Lighting within Parks, Paseos, Tot Lots and Other Recreational Areas

Lighting within Parks, paseos, tot lots and other recreational areas shall be approved by the City as part of the City's Development Plan Review of these facilities.

6.10 Park Furniture

Park furniture, including but not limited to, benches, barbeques and picnic tables, shall be approved as part of the City's Development Plan Review of parks, paseos and other public gathering places.

6.11 Bus Shelters

Bus shelters shall be installed in a number of locations designated by OmniTrans and shall be compatible with the architectural character established at the project entries to Esperanza.

6.12 Mailboxes

Within RD-3 through RD-8 Residential Planning areas mailboxes shall be clustered and installed in locations approved by the City as part of the City Development Plan Review of each resident project within Esperanza.

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SECTION 7. IMPLEMENTATION

The City of Ontario will adopt the Esperanza Specific Plan by ordinance. Following approval by the City, the Esperanza Specific Plan will serve as the implementation tool for the ~~NMC~~ Ontario Ranch General Plan as well as the zoning for the Specific Plan area. Concurrently with the adoption of the Specific Plan, the City Planning Commission will also approve tentative tract maps establishing legal residential lots within the Esperanza Specific Plan area.

7.1 METHODS AND INTERPRETATION

Development within the Esperanza Specific Plan shall be implemented through the approval by the City of tentative and final tract maps and through development plans approved through the Development Plan Review process as established in the City of Ontario Development Code. The implementation process described below provides the mechanisms for review and approval of development projects within the Esperanza Specific Plan area.

7.2 APPLICABILITY

All development proposals within the Esperanza Specific Plan shall be subject to the implementation procedures established herein. Whenever the provisions and development standards contained herein conflict with those contained in the City of Ontario Development Code, the provisions of the Esperanza Specific Plan shall take precedence.

7.3 INTERPRETATION

Unless otherwise provided, any ambiguity concerning the content or application of the Esperanza Specific Plan shall be resolved by the City of Ontario Planning Director (Director) or his/her designee in a manner consistent with the goals, policies, purpose and intent established in this Specific Plan.

7.4 SEVERABILITY

If any portion of these regulations is declared to be invalid or ineffective in whole or in part, such decision shall not affect the validity of the remaining portions thereof. The legislative body hereby declares that they would have enacted these regulations and each portion thereof irrespective of the fact that any one or more portions be declared invalid or ineffective.

7.5 IMPLEMENTATION OF DESIGN GUIDELINES

Adoption of the Esperanza Specific Plan by the City includes adoption of the design guidelines contained herein, which shall be the design criteria by which development projects within the Specific Plan area will be reviewed during Development Plan Review. The design guidelines are intended to be flexible in nature while establishing basic evaluation criteria for the review by the City of developer projects during Development Plan Review.
Any major deviation from the design guidelines within the Esperanza Specific Plan shall require approval by the Planning Commission. The determination of a major deviation from the design guidelines shall be made by the Director.

7.6 DEVELOPMENT REVIEW PROCESS

7.6.1 Subdivision Maps

Approval of tentative tract maps may occur concurrently with the adoption of the Esperanza Specific Plan. All tentative and final tract maps will be reviewed and approved pursuant to applicable provisions of the City of Ontario Subdivision Ordinance and consistent with the applicable provisions of Land Use, Infrastructure, Design Guidelines, and Development Regulations contained within the Esperanza Specific Plan.

7.6.2 Development Plan

All development projects within Esperanza shall be subject to the Development Plan Review Process as established in Article 8 of the City's Development Code. Pursuant to these provisions, the Development Plan process constitutes a design review of project architecture, site plans, and landscape plans. Adoption of the Specific Plan by the City includes adoption of the design guidelines contained within the Specific Plan and which provide direction for the design of development projects within Esperanza. Where the Esperanza Specific Plan development regulations and design guidelines are silent, the applicable development regulations and design guidelines contained within the City's Development Code shall apply. The design guidelines are intended to be flexible in nature while establishing basic evaluation criteria for the review by the City of developer projects during design review.

All development project applications shall include a landscape and irrigation plan describing plant materials and their growth habits, plant size and spacing, methods of irrigation and landscaping maintenance, site plans, architectural elevations, floor plans, grading plans and other requirements as specified by the City.

7.6.3 Additional Entitlement Requirements

All entitlement applications shall prepare and submit a Conceptual Utilities Systems Map, Integrated Waste Management Report, and Solid Waste Handling Plan in accordance with requirements of the Development Application.

7.7 Dwelling Unit Allocations

The Esperanza Land Use Plan allocates a maximum number of dwelling units to each residential Planning Area. Variations in number of dwelling units, per Planning Area, may occur at the time of final design of the Planning Area subject to approval by the City and agreement by affected property owners/developers, depending upon the residential product identified for development. Variations in allocation of units within the Planning Areas of the Esperanza Specific Plan are permitted provided the increased number of dwelling units in a Planning Area does not exceed 15% and the maximum dwelling unit count for the entire Specific Plan area does not exceed that established for Esperanza.

1. Water and Sewer Technical Studies shall be prepared to study how the transfers change the quantity and locations of sewer and water demands and how those changes impact the Water and Sewer Master Plan Systems and local sewer and water systems.
2. If unit transfers result in net changes to the overall projected water demands, then the initializing project shall be responsible for processing an Amendment to the Water Master Plan as part of the entitlement process of Implementation.
3. If unit transfers result in net changes to the overall projected sewer demands or the sewer demands are transferred between different Master Plan Trunk Sewer Tributary Areas and Specific Plan Sewer Tributary Areas, then the initializing project shall be responsible for processing an Amendment to the Sewer Master Plan as part of the entitlement process of Implementation.

7.8 Specific Plan Modifications and Amendments

7.8.1 Minor Modifications

The following constitute minor modifications to the Specific Plan, not requiring a Specific Plan Amendment, and are subject to review and approval by the Zoning Administrator. The Zoning Administrator shall have the discretion to refer any such request for modification to the Planning Commission or the City Council.

1. Change in utility and/or public service provider.
2. Collector roadway alignment when the change results in a centerline shift of less than 250 feet.
3. An increase of more than fifteen percent (15%) in the number of units within an individual Planning Area are subject to approval of the City and agreement of the property owners, provided the total number of units for the entire Specific Plan area does not exceed that established in the Specific Plan.
4. Adjustment of a Planning Area boundary or acreage designated for a Planning Area provided the total acreage of the affected Planning Area does not increase by more than 15%.
5. Minor changes to landscape materials, wall materials, wall alignment, entry design, and streetscape design which are consistent with the conceptual design set forth in the design guidelines contained within the Specific Plan.
6. Minor changes to the design guidelines, which are intended to be conceptual in nature only, and are intended to be flexible in implementation.
7. Other modifications of a similar nature to those listed above, which are deemed minor by the Zoning Administrator, which are in keeping with the purpose and intent of the approved Esperanza Specific Plan and which are in conformance with the ~~NMC~~ Ontario Ranch General Plan.

7.8.2 Reversion of Planning Area 11 to Residential Uses

The ~~NMC~~ Ontario Ranch General Plan establishes a total residential unit allocation of ~~1,456~~ 1,652 units for the Esperanza Specific Plan. The Land Use Plan for Esperanza designates a total of ~~1,410~~ 1,491 residential dwelling units within Planning Areas 1-10 and reserves Planning Area 11, a 10.02 acre site, ~~for~~ was not purchased ~~and use~~ by the Mountain View School District (School District). ~~of an elementary school. In the event the School District does not purchase Planning Area 11 for development of an elementary school,~~ Planning Area 11 ~~may revert~~ will be converted to a Residential – Medium Density zoning district permitting development of a maximum of ~~46~~ 161 residential dwelling units subject to approval by the City of a Specific Plan Amendment. On ~~XX-XX-2020~~ 10-20-2020 a request for an increase in density for Planning Area 4, from 6.26 gross DU/AC to 14.0 gross DU/AC and an accompanying general plan amendment to increase the density from low density residential (2.1-5 DU/AC) to medium density residential (11.1-25 DU/AC) was approved, which increased the total residential allocation of ~~1,640~~ 1,652 units (~~1,594~~ 1,491 units if the school remains a school). The Environmental Impact Report prepared for the Esperanza Specific Plan has evaluated the impacts of development of Planning Area 11 alternatively for ~~46~~ 161 residential dwelling units in conjunction with the analysis of all other project related impacts. Development of Planning Area 11 for residential land uses shall be subject to all other review and administrative and discretionary approvals requirements required for residential land uses as established within the Esperanza Specific Plan.

7.8.3 Specific Plan Amendments

Amendments to the Esperanza Specific Plan may be requested by the applicant or by the City at any time pursuant to Section 65453(a) of the Government Code. Amendments shall be processed pursuant to the provisions of the Government Code for Specific Plan Amendments. In the event the proposed amendment requires supplemental environmental analysis pursuant to the California Environmental Quality Act (CEQA), the applicant(s) are responsible for preparing the necessary CEQA documentation.

7.9 VARIANCES

Variances and Administrative Exceptions to the development regulations contained in the Esperanza Specific Plan with respect to landscaping, screening, site area, site dimensions, yards and projects into yards, heights of structures, distances between buildings, open space and off-street parking and loading can be considered pursuant to Article 10, "Variances and Administrative Exceptions" of the City of Ontario Development Code.

7.10 CONDITIONAL USE PERMITS

Uses specified as conditionally permitted uses within Section 6, "Development Regulations, of the Esperanza Specific Plan shall be reviewed and approved by the City pursuant to the requirements of Article 9, "Conditional Use Permits."

7.11 COMPLIANCE WITH MITIGATION MONITORING PLAN

Certification of an Environmental Impact Report (EIR) shall be required prior to approval of the Esperanza Specific Plan. Development within the Esperanza Specific Plan area shall comply with all approved mitigation measures as described in the Mitigation Monitoring Program included as part of the Esperanza EIR.

7.12 PROJECT PHASING

Phasing of the Esperanza Specific Plan will meet the following objectives:

- Orderly build-out of the community based upon market and economic conditions.
- Provision of adequate infrastructure and public facilities as determined and deemed necessary by the City Engineer concurrent with development of each phase.
- Protection of public health, safety and welfare.
- Accommodation of continued agricultural operations within the proposed Specific Plan area.

7.12.1 Residential Development

The phasing of residential development areas will be determined by the developer. The development of residential uses will be implemented through the approval of tentative and final tract maps and development permits for each Planning Area as developed. Appropriate levels of infrastructure and community facilities shall be subject to the review and approval of the City Engineer and shall be installed and available to serve each subsequent phase of residential development as it occurs.

7.12.2 Infrastructure

Backbone infrastructure to serve all areas of Esperanza shall be installed by the developer in accordance with the City's adopted Master Plan or any approved amendments to it. Infill service mains will be installed and constructed in phases as development proceeds and conditioned by the City Engineer's office to support individual phases of development, which may require installation of offsite infrastructure improvements beyond a given phase boundary.

Grading and installation of infrastructure to serve Esperanza are anticipated to be completed in three phases. Following completion of grading and infrastructure installation, the developer will construct models for each product type within each neighborhood. Phase I will include installation of infrastructure adequate to serve Planning Areas 5-9 located south of Eucalyptus Avenue between Hamner Avenue and Mill Creek Avenue. Phase II will include installation of infrastructure adequate to serve Planning Areas 4A and 10. Phase III will include installation of infrastructure adequate to serve Planning Areas 1-4B and the Neighborhood Park. As the Specific Plan is Phased, the following minimum criteria shall be met for each Subdivision and Development of each Phase:

1. For Domestic Water, all the Master Plan, Regional and Local Infrastructure identified in Section 5 and the Conceptual Domestic Water Plan for the Water Pressure Zone that the Phase is within shall be completed as part of the Phase's infrastructure requirements. Also, any domestic water infrastructure necessary to provide primary looping, secondary looping, and meet all hydraulic criteria and fire fl ow shall be completed as part of the Phase's infrastructure requirements.
2. For Recycled Water, all the Master Plan, Regional and Local Infrastructure identified in Section 5 and the Conceptual Recycled Water Plan for the Recycled Water Pressure Zone that the Phase is within shall be completed as part of the Phase's infrastructure requirements. Also, any recycled water infrastructure necessary to provide primary looping, secondary looping, and meet all hydraulic criteria shall be completed as part of the Phase's infrastructure requirements.
3. For Sewer, all the Master Plan, Regional and Local Infrastructure identified in Section 5 and the Conceptual Sewer Plan for the Master Plan Sewer Tributary Area that the Phase is within and upstream of shall be completed as part of the Phase's infrastructure requirements. Also, any sewer infrastructure necessary to meet all hydraulic criteria shall be completed as part of the Phase's infrastructure requirements.

7.12.4 Parks

Following issuance of Certificates of Occupancy for no more than 50% of the total dwelling units within Esperanza, Park 1, the Neighborhood Park, will be developed. The timing for installation of infrastructure and utilities and the provision of public services will be determined as part of the City's approval of tentative maps or development plans. Facilities will be constructed and services made available in a timely manner as development progresses. Pocket Park 2 will be developed at the time of issuance of 50% of Certificates of Occupancy for Planning Area 5. Pocket Park 3 will be developed at the time of build-out of Planning Areas 6 and 7 combined. Pocket Park 4 will be developed at the time of issuance of 50% of Certificates of Occupancy for Planning Areas 8 and 9. Pocket Park 5 will be developed at the time of issuance of 50% of Certificates of Occupancy for Planning Area 10.

7.12.4 Community Facilities and Services

The timing for installation of community facilities and payment of impact fees for public improvements and services for the Esperanza Specific Plan will be determined as part of the City's approval of tentative tract maps in accordance with the provisions of the existing City development impact fee ordinances. Community facilities such as bike trails will be developed in conjunction with construction of the public street improvements.

7.13 APPEALS

Appeals from any determination of the City Planning Director, Zoning Administrator or the Planning Commission, may be made by the applicant or any other aggrieved party filing an application on forms provided by the City of Ontario and accompanied by the appropriate filing fee, where applicable, within ten (10) days following the final date of action for which an appeal is made. Appeals shall be processed consistent with the provisions of Article 5, "Appeals" of the City of Ontario Development Code.

7.14 PROJECT FINANCING

The financing of construction, operation, and maintenance of public improvements and facilities (the "facilities"), and public services will include funding through a combination of financing mechanisms. Final determination as to the facilities to be constructed and as to maintenance responsibilities, whether publicly or privately maintained, will be made prior to recordation of final maps. In order for the project to be fiscally self sufficient, the following financing options can be considered for implementation:

7.14.1 Facilities and Services

- Private capital investment for the construction of facilities.
- Community Facilities District (CFD) established pursuant to the Mello-Roos Community Facilities District Act of 1982, or other special district, to provide funding for the construction of a variety of public facilities and the provision of public services.

7.14.2 Operation and Maintenance

- By individual private property owner.
- By private property owners or Home Owners Association (HOA).
- By Community Facilities District (CFD) established pursuant to the Mello-Roos Community Facilities District Act of 1982, or other special district.

City Council approval is a prerequisite for the implementation and establishment of any and all special district-financing mechanisms. The use of the Mello-Roos Community Facilities District Act of 1982 (the "Act") to finance public facilities and services will be at the City's sole discretion. Moreover, the use of the Act must be consistent with the City's adopted goals and policies concerning the use of the Act.

7.15 MAINTENANCE RESPONSIBILITIES

The public and private improvements constructed within Esperanza will be maintained through a combination of public and private entities as described below and in Table 5.

7.15.1 Public Maintenance

1. All streets and sidewalks serving residential product areas RD–1 through RD–6 single family detached or attached residential will be dedicated as public streets to the City of Ontario and will be maintained by the City.
2. Landscape improvements within the public right-of-way of Master Plan streets, neighborhood edges, community and neighborhood entries, and public street lights within Esperanza shall be maintained through a landscape and lighting district or other special maintenance district established by the City for the ~~New Model Colony~~ Ontario Ranch.
3. All on site water, sewer, and storm drain facilities that meet public improvement design criteria within the public streets or easements dedicated to the City shall be constructed by the developer and, upon acceptance, shall be maintained by the City.
4. Offsite infrastructure improvements such as water, sewer and storm drain facilities will be maintained by the City. The City intends to participate in a Regional Water Quality Basin. In the event permanent on site basins are developed within Esperanza as an alternative to a regional water quality basin, such facilities shall be maintained by the HOA.
5. NPDES facilities within public streets and/or easements. Operation and Maintenance (O&M) requirements for all NPDES storm water runoff source control and treatment control Best Management Practices (BMP's) shall be identified in the approved Water Quality Management Plan for the project. An O&M Plan shall be created to ensure ongoing long-term maintenance of all structural and non-structure BMP's.

7.15.2 Homeowner Association

A Homeowner Association will be established for the maintenance of common area landscape improvements within residential areas of Esperanza. Improvements to be maintained by the Homeowner Association include: Designated private alleys and adjacent landscaping.

- Designated private streets and landscaping. During the course of maintenance of public utilities within public streets, private streets, private drive aisles, or alleys, the City will restore the streets to City standards for trench backfill, pavement repair, and hardscape or landscape, as applicable. Restoration of any enhancements above and beyond City standards, including but not limited to architectural paving, hardscape and landscape enhancements shall be the responsibility of the HOA or other entity maintaining those enhancements.
- Courts, parkways and landscaping within the residential areas.
- Parkways of Interior Local Streets including sidewalks, landscaping and street lights as well as common areas distinct to individual residential types and neighborhoods.
- Maintenance of interior local streets including landscaping and associated architectural monument elements required to restore these areas to their condition as originally installed.
- Internal slopes fronting streets and slope areas in the rear of homes.
- All internal open spaces, parks, and common areas.
- NPDES facilities within private streets and/or common areas.

	City CFD	Private Homeowners Association (HOA)	Private Homeowner	Utility Entity
Master Plan Roadways (Bellegrave Avenue, ~~Milliken~~ Hamner Avenue, Mill Creek Avenue, ~~Merrill~~ Eucalyptus Avenue)	●			
Interior Public Project Streets (curb to curb for primary entry streets, secondary entry streets, and neighborhood streets)	●			
Parkways of Master Plan Roadways and Neighborhood Edges (curb to perimeter walls, including landscape, sidewalks and street lights)	●			
Parkways of Interior Project Streets (landscaping and sidewalks)		●		
Traffic Signals and Street Lights	●			
Traffic Control Signs	●			
Alleys and Drive Aisles		●		
Interior Streets within Single Family Attached (Multi-Family) Developments		●		
Off -site and In-Tract Water, Sewer, and Storm Drain Improvements (only those facilities in public roads and those in private streets within public utilities easements that meet public improvement design criteria)				●
On-site water, sewer, and storm drain improvements (improvements that are: private, laterals, and lines behind meters and /or DCDAs, improvements serving only one lot/parcel, not within public or private roads, not within public utility easements, or not meeting public improvement design criteria)		●		
Neighborhood Park		●		
Pocket Parks		●		
Linear Parks		●		
Private Recreation Areas		●		
Front Yard and Corner Streetside Landscaping for Single Family Detached Areas RD-1 through RD-4			●	
Front Yard and Corner Streetside Landscaped Areas RD-5 through RD-8		●		
Community Theme Wall on Master Planned Roadways (outside face for graffiti removal and paint)	●			
Community Theme Wall on Master Planned Roadways: Surface (interior) opposite streetside (structural integrity and face repair)		●		
Private Interior Yard Walls		●	●	
Alley Landscaping and Lighting		●		
Police and Fire	●			
Electricity and Natural Gas				●
Communication Systems	●			●
NPDES Facilities (onsite) W.Q.M.P. (1)	●			
NPDES Facilities/Interim Detention Basin on Private Property		●		

NOTES:

(1) Only those facilities in public roads and/or easements, including restoration work following public street repair.

TABLE 5
Maintenance Responsibilities

SECTION 8. DESIGN GUIDELINES

8.1 INTRODUCTION

On a sunny morning in the fall of 1882, George Chaffey stands on a mesa between the floodwater washes of Cucamonga Canyon to the east and San Antonio Canyon on the west, gazing at the country directly in front of him lying at the foot of snow-capped Old Baldy, beneath the Sierra Madre Mountain Range. Having little capital, George would rely on his powers of leadership and vision and, at that moment, would throw his heart and soul into the new colonizing movement sweeping Southern California. With help of his brother William and surveyor J. C. Dunlap, he would purchase 6,218 acres and design what would become the "City of Ontario," named after his former home in Ontario, Canada. His vision of a model colony featured the first reclamation irrigation system, abundant electricity power and a beautiful parkway that captured the imagination and interest of people throughout the world. His vision was one of hope for a great community. "Esperanza," which means "hope" in Spanish and accurately describes the original vision intended for the "new" Ontario.

Ontario is a thriving city today, although the orchards and packing houses have since given way to new landmarks such as Ontario Mills, Ontario Convention Center and Ontario International Airport. Hundreds of new businesses have discovered that Ontario is "The Gateway" to Southern California, conveniently located 35 miles east of Los Angeles, and easily accessible to I-10, I-15 and I-60 freeways.

Ontario spans nearly 28,000 square miles, with a population of over 168,000, and is one of Southern California's fastest growing cities. Ontario's sun-belt mild weather and 312 days of sunshine, allows you to enjoy the many parks as well as the nearby mountains, beaches, and deserts. The world-class Empire Lakes Golf Course, designed by Arnold Palmer, will challenge the avid golfer. The wine aficionados will love sampling California's finest at Galleano Winery, Joseph Filippi Winery, and Vineyards.

8.2 DESIGN GUIDELINES FOR ARCHITECTURAL CHARACTER

Architectural design should provide for high quality neighborhoods.

- Residential project design should consider the total context of the site with the incorporation of appropriate scale and proportions of building massing and details.
- The use of transitional spaces between common and private areas such as entry courtyards, private patios, low walls, and porches is encouraged.
- The variation of both front and rear building setbacks should be implemented to create visual variety.
- The variation of garage placement on adjacent lots is encouraged to provide a more diverse street scene.
- Residential structures should be varied in massing and articulation to provide visual interest.

Neighborhoods should be sustained over time.

- Architectural design themes should reflect historic Southern California styles.
- The use of natural indigenous building materials and colors is encouraged.
- Structures should incorporate genuine architectural details and decorative features.
- Architectural design should relate to human scale.
- The location of doors and windows should consider indoor/outdoor relationships to create intimate and secure spaces.
- Architectural designs should create a cohesive community without dominating the overall street scene.

Building design should be sensitive to climatic conditions and context.

- Building elevations should consider sun orientation by including shaded and sheltered areas.
- Variation of architectural designs should include methods of protection from inclement weather.
- Residential structures should be compatible with, and responsive to, the environmental setting.
- Building designs should incorporate spaces that encourage outdoor use to take advantage of temperate climatic conditions.

Architectural design should incorporate materials and techniques that are cost effective.

- The use of building materials should reflect the implementation of efficient construction methods.
- Building elevations should include compatible window and doors sizes that create a consistent design theme.
- Construction techniques should incorporate the use of standard components and dimensions.

Varied floor plans and elevations in single-family detached residential architectural packages should be incorporated as follows:

Reverse elevations and floor plans are considered as a separate elevation and floor plan. Reverse floor plans and elevations are considered as a separate floor plan and/or elevation for purposes of implementing the table below.

Diversity is a fundamental guiding principle at Esperanza. This ensures that neighborhoods are varied and that blanket uniformity is avoided.

Builders are required to produce a minimum of two styles for a 3-plan design program, and three styles for a 4-plan or more design program.

Number of Dwelling Units	Number of Differing Floor Plans and Elevations
5-10	As required by Planning Commission
11-25	2
26-50	3
51-75	3
76-100	4
Over 100	4; +1 additional floor plan with 4 elevations for each additional 50 units exceeding 100

8.3 ARCHITECTURAL CONTEXT

The original model colony of Ontario has a rich agricultural legacy of farming including citrus orchards, grape vineyards and alfalfa fields. Typical of Southern California farming communities, Ontario has a variety of traditional architectural styles. Western European and East Coast architectural details and forms were incorporated into the farm houses and local styles evolved from Country French and Tuscan styles and new interpretations of Monterey, Traditional, Craftsman and Ranch styles were erected. Architectural styles, elements and massing were reinvented utilizing available indigenous building materials. Plan designs and elements such as window sizes and proportions were modified to address local climatic conditions which were warmer and drier. Materials were plaster, stucco and siding with brick, stone or other masonry accent materials. The sunny Southern California climate allowed year round use of outdoor spaces and inspired covered porches and balconies.

Southern California was also influenced by Spanish architectural styles brought to the region by Spanish settlers and missionaries. These homes were well suited for the temperate climate of Southern California. The architectural theme for Esperanza is based upon these historical styles found in Ontario and the architectural styles have been selected in order to be reflective of older neighborhoods of historic Ontario.

Each architectural style outlined in these guidelines should be detailed with elements that represent the authentic character of that particular style.

Together the styles should be designed to create a neighborhood character that will be sustainable over time. Each home should contribute to the architectural character of the neighborhood. Design elements such as porches, recessed windows, architectural details and accents, alternate garage configurations / orientations, covered balconies, and articulated elevations are encouraged to enhance individual homes and to promote the overall neighborhood character.

8.3.1 Residential Design Objectives

- Interpret architectural styles that are authentic and reflect the historical character of the region.
- Emphasize styles of architecture that are compatible, yet vary enough to create interest and diversity.
- Create visually interesting neighborhood streets by varying elevation and floor plan plotting.
- Utilize authentic materials and colors that reinforce the overall design theme.
- Emphasize front elevations that relate strongly to the street and contribute to the livability of that realm.
- Provide alternative garage configurations.

The Esperanza Design Guidelines are to be used as a tool to ensure the character and design quality anticipated for the Community. The Guidelines express objectives and approaches rather than formulas and standards, allowing certain architectural creativity and flexibility. The images and sketches illustrated in the Guidelines are intended to be conceptual in nature and are to be used as general visual aids in understanding the basic architectural design intent of Esperanza. They are not meant to depict specific floor plans or architectural elevations.

These Guidelines are organized into the following sections:

- Architectural Styles
- Massing Principles
- Materials & Detailing
- Home Types
- Landscape Design

8.3.2 Architectural Styles

The architectural character within each neighborhood shall consist of complementary traditional architectural styles. The materials and colors of these home styles shall complement the overall neighborhood design.

Architectural styles within each neighborhood and product area within each neighborhood should be compatible with one another and blend with the character of each neighborhood.

Within cluster court style residential products, a consistent architectural style shall be used throughout the individual cluster.

Acceptable architectural styles within Esperanza include:

- Country French
- Tuscany
- Monterey
- Spanish Colonial
- Craftsman
- Traditional
- Western Ranch

The styles selected share similar design attributes and have been selected in response to the following considerations:

- They have a historic relevance to the region.
- They are compatible and complementary.
- They can be interpreted in a variety of ways.
- They are generally accepted by the market.
- They can be constructed using current building materials and methods.

Note: Additional styles proposed by the homebuilder must be submitted to, and approved by, the City of Ontario. Builders may submit home designs using alternative architectural styles that meet the design objectives of the specific plan, provided they are appropriate to the region and compatible with the character of Esperanza.

8.3.2.1 Country French

History and Character:

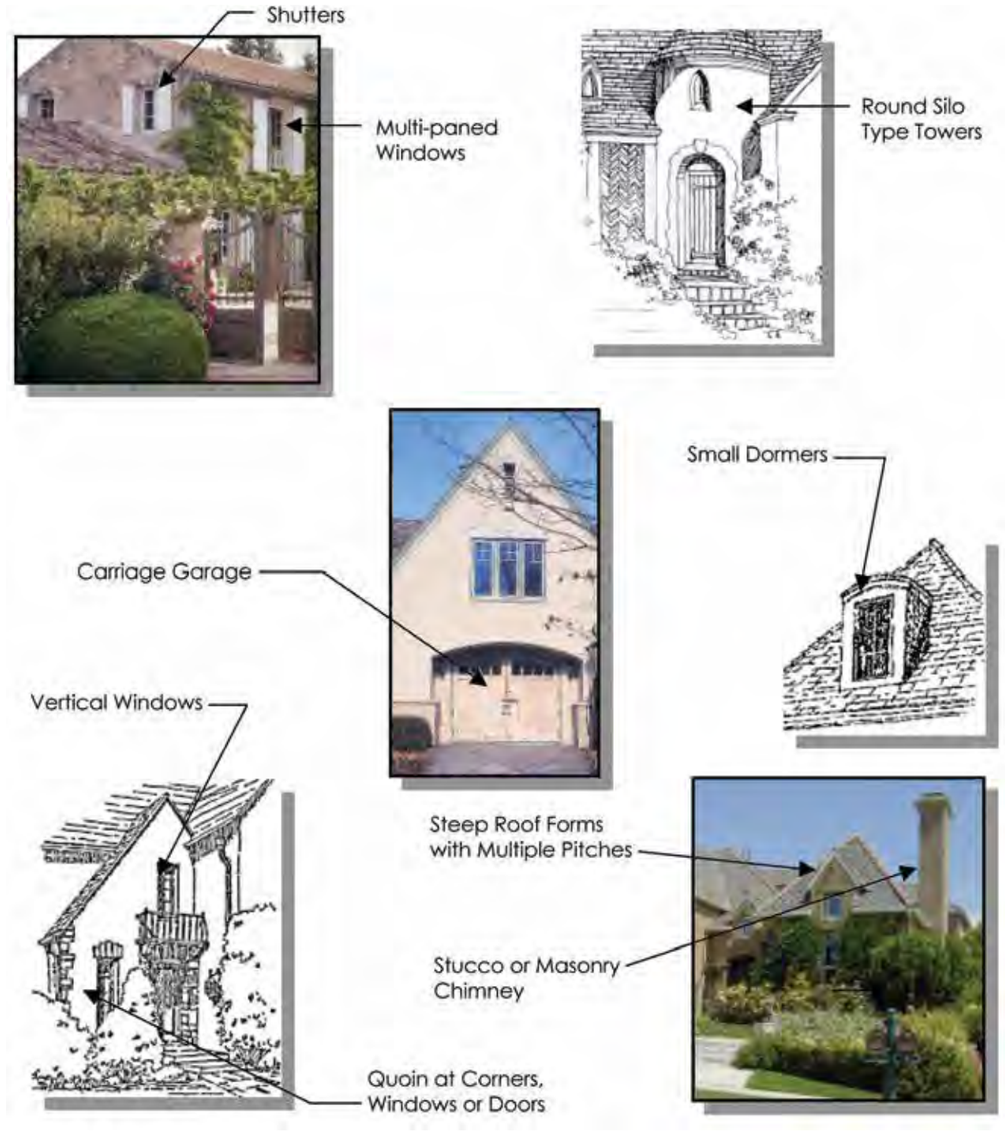
French Country architectural style is based upon early American interpretations of French Medieval architecture that made their way across the United States from the Mississippi regions around the turn of the century. Usually taking the form of larger manor homes and estates, this architectural style was adapted to fit smaller rural homes. The French Country style conveys a romantic and picturesque architecture. American interpretations include houses with simple forms with steeply-pitched roofs.

Massing:

- Simple massing with asymmetrical forms and gable roofs.

General Materials:

- Stucco finished walls.
- Deep recessed accents.
- Vertical windows.
- Simple detailing.
- Stucco or masonry chimneys.
- Decorative chimney caps.
- Carriage garage doors or roll-up doors with a variety of panel patterns to reflect architectural style.



Country French

Roof Materials and Forms:

- Small dormers.
- Steep roof forms with multiple pitches.
- Gable roof forms, accented with flared roof treatments.
- Large, simple roof planes. • Gable end venting in various styles.
- Rooflines may extend below window.
- Extended roof overhangs.
- Flat concrete tile to simulate slate materials.
- Round silo type towers.

Detail Elements:

- Decorative shutters.
- Wood balcony railings.
- Deep recessed windows.
- Multi-paned windows.
- Quoin at corners, windows or doors.

8.3.2.2 Tuscany

History and Character:

Tuscan-inspired homes began appearing at the turn of the 20th Century in Southern California as an interpretation of the picturesque movement in art where the architecture was less formalized and more responsive to the natural environs. Arranged building forms of predominantly stucco and stone with tile roofs reflecting the architectural styles of Northern Italy took root in informal plan arrangements and massing.

Massing:

- Simple massing with assembled forms and varied roof forms.

General Materials:

- Stucco finished walls and columns.
- Large, simple roof planes.
- Extended roof overhangs.
- Wood posts or masonry columns.
- Simple stucco chimneys.
- Decorative columns accents.
- Simple wrought iron, metal railings and details.
- Shutters as occasional accent.
- Deep recessed openings.
- Covered patios /porches.

Roof Materials and Forms:

- Tile hipped roofs.
- Low-pitched roofs.
- Stucco eave details or wood corbeled rafter tails.
- Gable end roof vents with decorative stucco accents.
- Gables and appropriate hip roofs.
- Shallow sloped, concrete 'S' tile roofs.

Detail Elements:

- Barrel/S-Tile roof.
- Varied stucco finish.
- Shallow pitch roof.
- Exposed rafter tails.
- Arched openings.
- Recessed windows.
- Wrought iron accents below windows.
- Vertical proportioned or arched windows.
- Balconies opened or roofed.
- Decorative brackets below roof overhangs.

Tuscany

8.3.2.3 Monterey

History and Character:

The Monterey style is a combination of Spanish construction methods and the basic two-story Eastern Colonial house. The wooden second story enabled single story Spanish Adobe homes to be developed as two story homes. Cantilevered balcony elements defined the front of the house which originally used adobe wall construction. Exposed rafters, gable or hipped roof, simple wood posts and side chimneys that anchor one end of the house, accompany the balcony as Monterey design elements.

Massing:

- Simple, straightforward rectangular or "L" shaped building forms.
- Cantilevered balcony and covered colonnades.

General Materials:

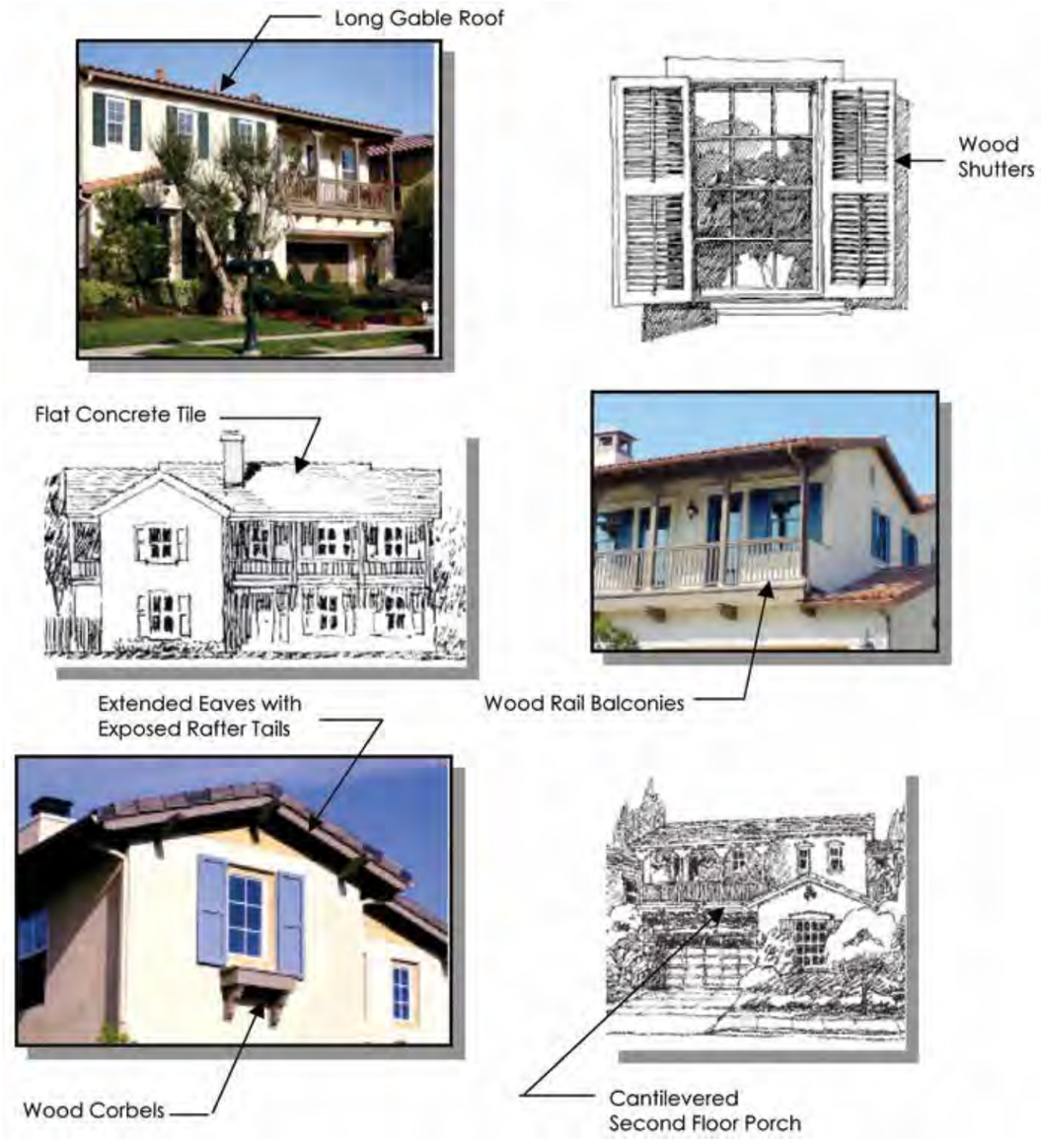
- Stucco on first level.
- Siding on second floor.
- Use of brick or stone on first level.
- Shutter accents.
- Wood or stucco trim.
- Brick and siding used to accent stucco forms.

Roof Materials and Forms:

- Flat concrete tile.
- Simple forms with low pitch.
- Gable forms are predominant. (Long gable roof)
- Tight rake ends.
- Extended eaves with exposed rafter tails.

Detail Elements:

- Wood balcony railing.
- Recessed windows, single hung.
- Wood corbels.
- Accent shutters.
- Cantilevered second floor porch.



Monterey

8.3.2.4 Spanish Colonial

History and Character:

Spanish Colonial homes are an adaptation of the Mission Revival style, reflecting features such as strong form and mass, plain wall surfaces, and tile roofs. The Spanish Colonial style is often characterized by a semi-formal plan arrangement such as a courtyard design.

Massing:

- Simple massing and forms and varied roof forms.

General Materials:

- Stucco finished walls.
- Wood / stucco columns.
- Decorative stucco chimneys.
- Round arches.
- Decorative columns and trim.
- Ornate wrought iron railing and accents.
- Wood shutter accents.
- Thick walls.
- Deep recessed openings.
- Stucco or tile details at gable ends.

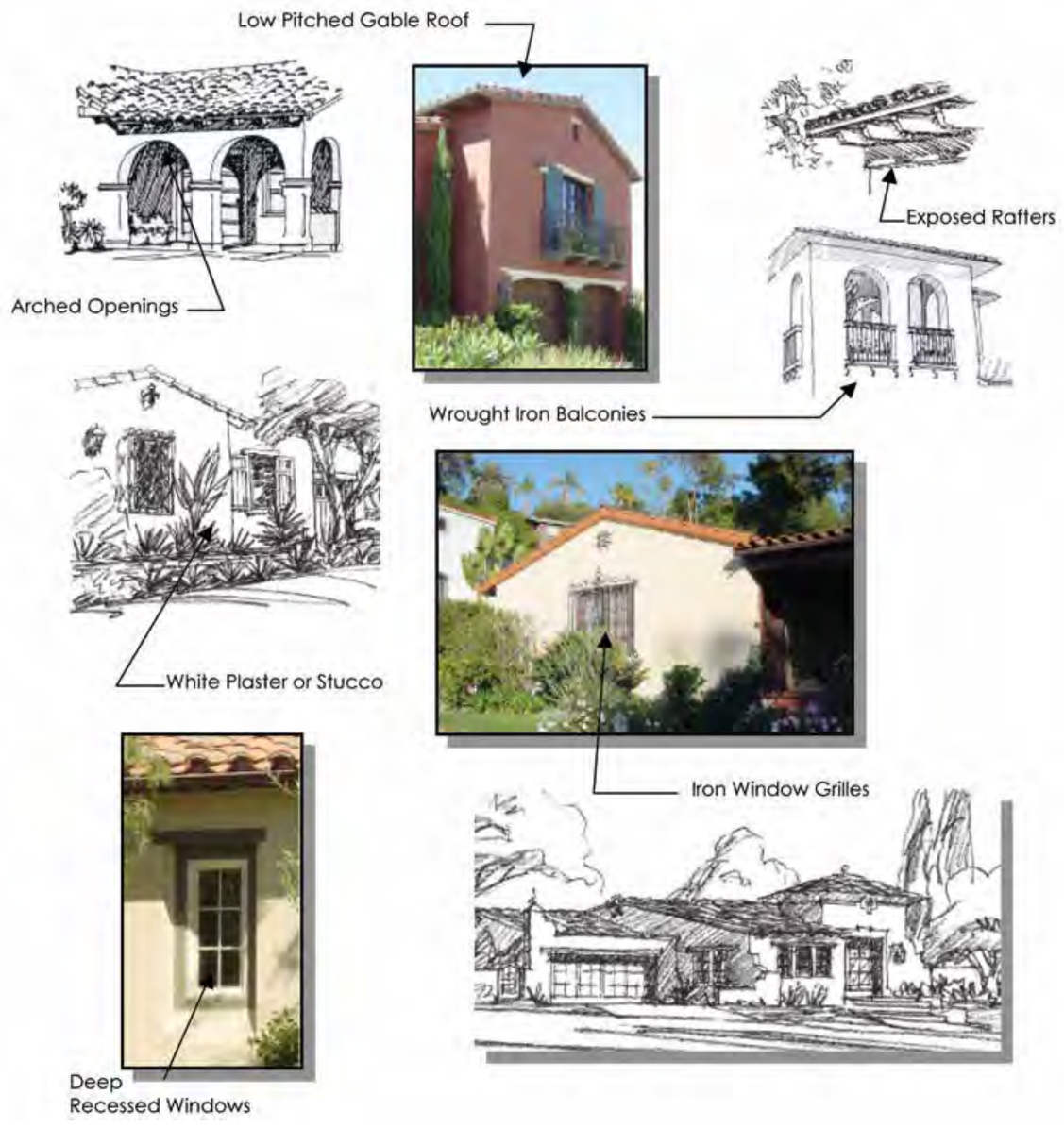
Roof Materials and Forms:

- Low-pitched roofs, with minimal overhang.
- Tight rake ends.
- Extended eaves with exposed rafter tails.
- Gables and hip roofs typical.
- Shallow sloped, concrete 'S' tile roofs.

Detail Elements:

- S-Tile roof.
- Arched window/door openings.
- Recessed window.
- Ornamental wrought iron details.
- Vertical proportioned windows.
- Wrought iron window. Grilles on windows.

Section 8. DESIGN GUIDELINES



Spanish Colonial

8.3.2.5 Craftsman

History and Character:

The Craftsman style home evolved from the late 19th century American Arts and Crafts movement. These moderately detailed buildings are characterized by the use of handcrafted architectural elements and details. Broad open porches, low sloping roofs, deep overhangs, multiple gables, trellis features, oversized first floor windows, expressive trim, rafters, brackets, and wood columns with masonry bases characterize the Craftsman style.

Massing:

- Horizontal proportions simple massing often asymmetrical at the second level.

General Materials:

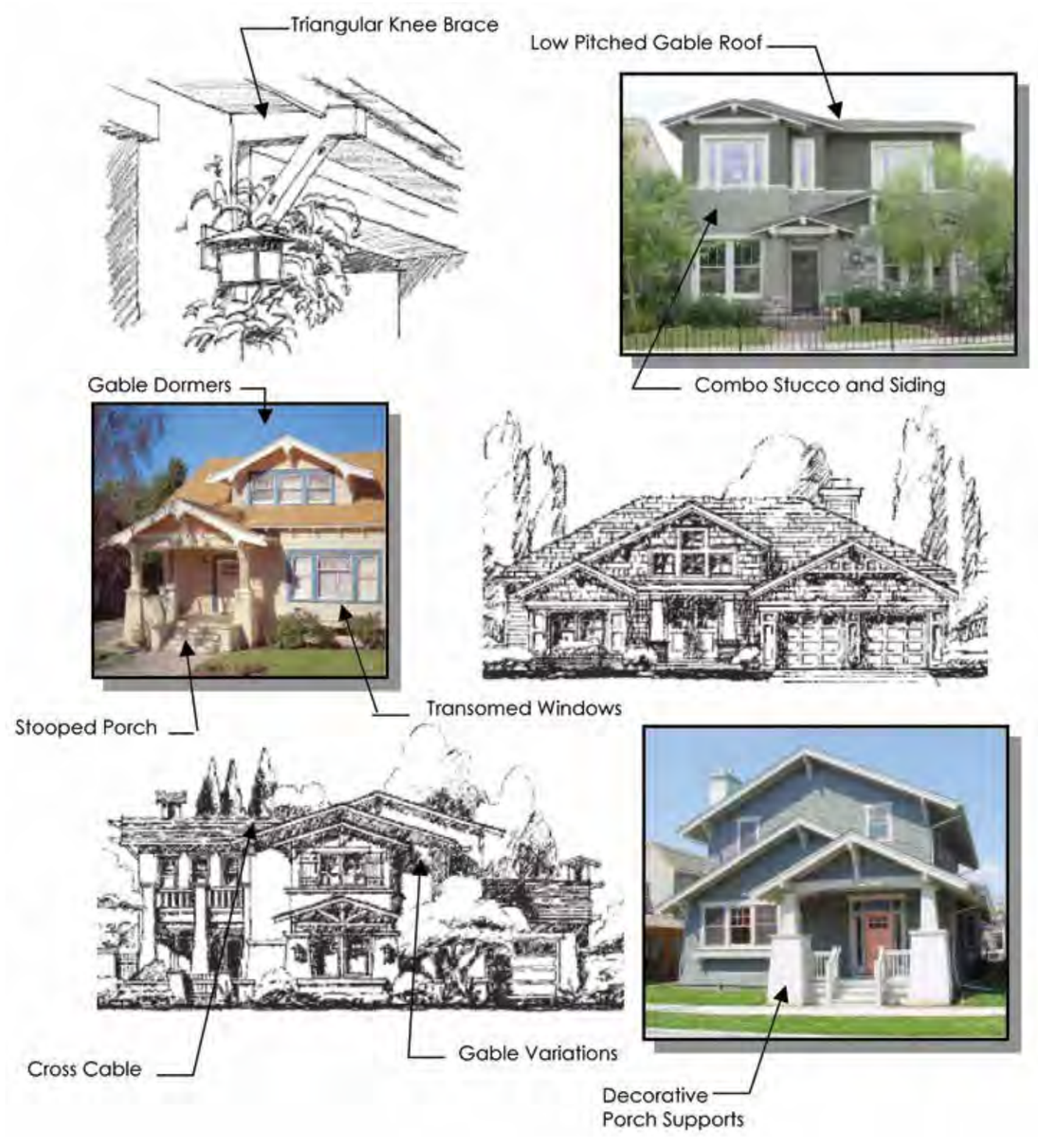
- Simple roof lines with wide projecting gables.
- Covered entry and roofed porches.
- Deep, broad porch elements.
- Expressive structural elements such as rafters, posts, and columns.
- Use of wood, stone or brick at porch columns typical.
- A mixture of materials such as stucco, stone, brick and shingle siding.
- Asymmetrical window and door compositions.

Roof Materials and Forms:

- Predominantly low-pitched gabled roofs, occasional hipped or shed roofs.
- Shallow-pitched roofs with deep overhangs.
- Roof dormers.
- Flat concrete tile or architectural grade asphalt shingle.
- Variation of the gable roof (i.e.: cross gable).

Detail Elements:

- Large gables
- Low pitch roofs with flat concrete tile.
- Windows with accent mullions.
- Exposed rafters and outlookers, triangular knee brace.
- Decorative gable vent detail.
- Decorative porch supports and railings.
- Transomed Windows.



Craftsman

8.3.2.6 Traditional

History and Character:

The Traditional style is based on classical design principles established the American Colonial period and interpreted or blended with the Prairie and Bungalow regional styles. Massing is horizontal in appearance with vertical proportioned windows and door surrounds. Front porches are common. The houses are composed of simple forms with centered entry elements over the front door.

Massing:

- Simple, symmetrical massing.
- Typical two story rectangular masses with added one-story elements such as porches forming more complex building configurations.

General Materials:

- Symmetrical and asymmetrical composition of doors and windows are common.
- Simple classical details such as columns.
- Siding or stucco with brick veneer accents.
- Front porches with wood columns and railings.
- Porches that extend length of the front elevation.
- Stone and brick veneer.

Roof Materials and Forms:

- Medium roof pitch with pitched roof dormer.
- Shallow roof pitch used over the porch.
- Flat concrete roof tile.
- Dormers reinforce symmetrical elevations.
- Bay windows and shed roofed elements added to simple building forms.
- Cupolas, weather vanes and other decorative roof ornamentations.

Detail Elements:

- Symmetrical or centered entry feature.
- Shutters accented with color.
- Columns at entries and porches.
- Roof dormers.
- Stooped porches.

Traditional

8.3.2.7 Western Ranch

History and Character:

The Western Ranch style is reminiscent of the early ranchers and farmers of Southern California. The Ranch Style evolved regionally in response to available building materials and environmental considerations. The distinctive porch covered terrace elements are a natural response to the temperate Southern California climate. Ranch style homes utilized simplified architectural details inspired by Spanish Colonial, Colonial and Monterey architecture.

Massing:

- Simple horizontal massing and rectilinear forms.

General Materials:

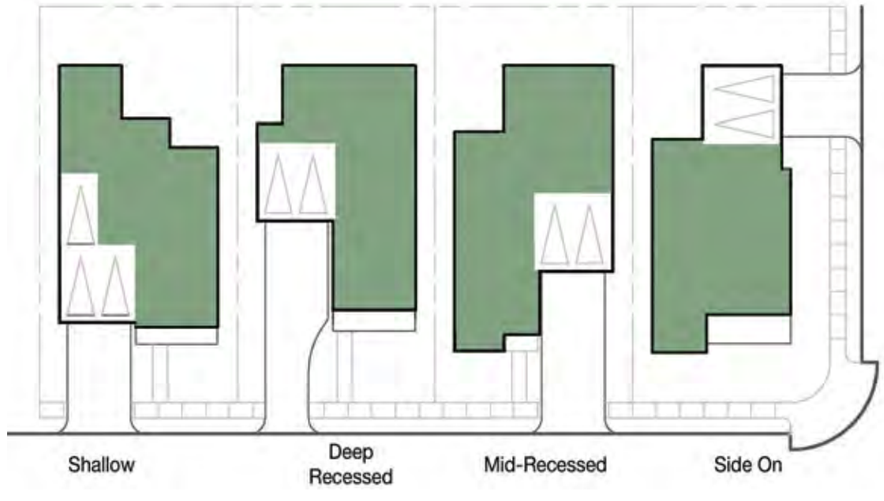
- Stucco, board and batten, and horizontal siding.
- Porches along front and rear elevations with a shallow roof break.
- Decorative shutters at windows.
- Wood window trim surrounds.
- Simple column and railing detailing.
- Substantial (8" x 8" min.) wood columns.

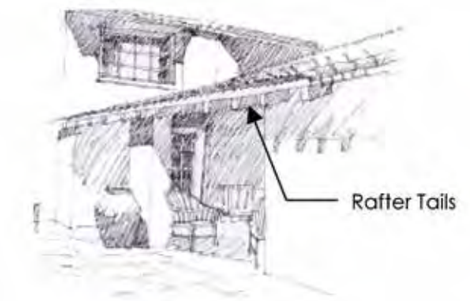
Roof Materials and Forms:

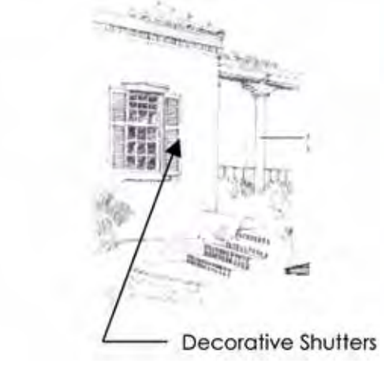
- Horizontal gable roofs with medium pitch and deep overhangs.
- Porches with shallow roof pitch.
- Gabled dormers.

Detail Elements:

- Corbeled wood columns.
- Heavy rafter elements.
- Simple accent shutters.
- Minimum 8" x 8" wood posts.







Western Ranch

8.4 Massing Principles

This section provides suggestions for creating neighborhoods and street scenes that have a variety of building forms that are proportionate to a human-scale and inviting to the pedestrian.

General Elements:

The general elements of building massing include:

- Front Articulation.
- Rear Articulation.
- Garage Placement.
- Roof Form.
- Balconies and Projections.
- Building Offsets/Variable Setbacks.

Objectives:

- Incorporate single-story elements.
- Avoid large flat two-story walls.
- Minimize two-story dominance on street scene, sidewalks and open spaces.
- Vary building setbacks along the street.
- Minimize visual impact of garages.

8.4.1 Front Articulation

Intent:

The front elevation of the home is an important element in creating a quality community at Esperanza. Close attention will be placed on the elevations and how they address the streetscene. Emphasis on location and entry designs, living areas and garages will provide a special street appeal. Emphasis on a variety of building massing will create a diverse street scene.

Guidelines:

- Building massing should reflect the architectural style.
- Massing elements should project enough to avoid elevations that appear to be "tacked on."
- Building details such as doors and windows should be in proportion to the overall massing.
- Building form is encouraged to reflect the interior uses of the home.
- Front elevations for two-story homes should incorporate a single-story element.
- Recessed two-story elements should create human-scale buildings.
- All homes should have at least two plane variations (excluding the garage) in front elevation massing.

8.4.2 Rear Articulation

Intent:

Special attention shall be given to the design of those dwellings adjacent to, or in close proximity of, major community roadways, common areas, open spaces, or entry features. Whether viewed from distant or close range, massing requirements will be implemented to ensure positive community character in these conditions. Generally, repetitious elements such as similar building profiles and continuous gable ends are to be avoided.

Guidelines:

- Architectural massing and articulation should be consistent with the style of the home.
- Plans shall incorporate projections and/or offsets that extend from the main wall lane.
- Vertical and horizontal plane breaks are encouraged.
- Homes directly adjacent to arterial roadways, collector roads, entry drives, common areas, and open spaces should be given particular attention in their rear articulation, contributing positively to these edges.

8.5 Garage Placement

Intent:

The configuration, location and orientation of the garage on the lot are integral design elements, both for the composition of the home and its contribution to the streetscene. Deemphasizing the garage is important in order to maintain the overall community design. Emphasizing the living areas of the home as they address the street will achieve this goal.

Placing living areas forward promotes social interaction and facilitates 'eyes on the street' for neighborhood security, while at the same time establishing neighborhood orientation to the pedestrian instead of the automobile.

Guidelines:

- Garage door patterns should vary among elevation types and reinforce the architectural theme of the home.
- Standard 3-car garage configurations are discouraged.

8.5.1 Garage Treatments

The home and the yard rather than the garage must be the primary emphasis of the elevation as seen from the street. Each plan shall incorporate one of the garage design techniques listed below and each parcel shall include at least two of these techniques to reduce the emphasis on the garage; and therefore, enhance the variable massing of the streetscene.

8.5.1.1 Shallow Recessed Garages

Setting the garage back a minimum of three feet in relationship to the front of the house/ or porch is intended to reduce the overall visual mass of the garage. The number of homes with shallow recess garage configurations shall be limited to 25% of the total number of units in each builder package.

8.5.1.2 Mid or Deep Recessed Garages

Setting the garage back to the middle or rear of the lot. This design treatment is intended to expose more living space areas toward the street, further reducing the visual impact of the garage along the street.

8.5.1.3 Alley Loaded

The use of the alleyways locates garages off a main loop road and creates a more traditional streetscene, with the fronts of the houses facing the street.

8.5.1.4 Split Garage

This treatment de-emphasizes the garage by reducing the length of the continuous door. Typically a one car garage and a one or two car garage are split to provide a variation in the appearance of the home. The single car garage elements in this split condition may option into living space that further enhances the streetscene by replacing the garage door with windows.

8.5.1.5 Tandem Garage

This garage layout de-emphasizes the third garage by concealing it behind a standard two-car garage condition. The tandem space is located so that it may option into living space. The two car garage is typically either shallow or deeply recessed into the lot and incorporated into the architecture of the home.

8.5.1.6 Setbacks

A varied setback is encouraged along the street frontage. Refrain from strict compliance to the minimum garage setback so as not to contribute to a repetitious and monotonous appearance along the street.

Where garages are adjacent to one another at common property lines, a two-foot minimum difference in setbacks shall occur.

8.6 Accessory Structures

Intent:

Accessory structures should be designed to reinforce the architectural style of the primary residence.

Guidelines:

- Detached structures, such as casitas, pool cabanas and guest quarters associated with the single-family lot shall be designed to match the style, detail, roof material/pitch and massing criteria of the primary home.
- Detached garages, storage buildings and outdoor sheds should incorporate design features, materials and colors compatible with the primary home.

8.7 Roof Form/Pitch

Intent:

- Roof form is another important design element as it relates to the character of the community, observed from both the external edges and inside the neighborhood.
- Variety of roof form along streets creates a positive visual edge.
- Appropriate massing of roof forms helps to create human scale architecture to the street.

Guidelines:

- Roof forms/pitch should reinforce the architectural style of the homes.
- Roofs shall be composed of a series of simple roof forms.
- Primary roof forms should be gable or hip designs.
- Roofs shall vary in massing along street scene and open spaces.
- Changes in the primary roof (ridge) orientation are encouraged.
- Flat roof elements should be minimized and incorporated only if appropriate to the architectural style.

8.8 Balconies And Projections

Intent:

As part of the overall design of a two-story dwelling, balconies and projections provide relief and interest at the second story. Balcony projections shall be consistent with the architectural character of the home. Additionally, these elements create ideal outdoor spaces.

8.9 Building Offsets/ Variable Setbacks

Intent:

Quality neighborhood design orients the 'living' areas of the home towards the street. To encourage this orientation, alternative setbacks are allowed for living areas as measured from the back of walk.

The development standards for each planning area/home type including building setbacks are established by the Esperanza Specific Plan. Additionally, building offsets or variable setbacks for both living and garages are encouraged to create variety in street scenes.

Guidelines:

- Setbacks shall be appropriate and proportionate to the housing type and lot size.
- Front setback should be varied along the street. A front offset of a minimum of two feet (2') is encouraged between the front walls of adjacent homes.
- Edge conditions such as homes backing to collector roads and back-to-back homes should incorporate variable rear setbacks to create variety.

8.10 Materials and Details

Architectural materials and detailing are central elements to creating quality communities. Appropriate focus should be given to the architectural details and the design of the details and architectural elements of the home.

General Elements:

The general elements comprising the materials and details of a building are:

- Wall Materials/Finishes.
- Doors and Windows.
- Roofing Materials and Slope.
- Fascias, Eaves and Rakes.
- Accent Materials.
- Exterior Colors.

8.10.1 Wall Materials/Finishes

Approved Materials:

- Board and batten siding.
- Cement plank siding.
- Stucco.
- Exposed masonry walls (brick, slump block, etc.)
- Stone, brick, brick veneers (accent materials).

Approved Finishes:

- Stucco finishes appropriate to the architectural style of the home.
- Smooth or sand finishes are encouraged. Heavy or Spanish Lace stucco finishes are prohibited.

Guidelines:

- Building materials should reflect the architectural style of the home.
- Siding materials should be wrapped beyond front elevations and should terminate at an inside corner or extend to the location of the lateral fence.
- Masonry elements and accents should reflect building forms and not appear as an applied veneer.
- Footings shall be exposed no higher than six inches (6") above finished grade.

8.10.2 Accent Materials

Accent materials promote individuality in each home and ensure diverse character within the neighborhood. Accents can be used to reinforce the architectural theme of the home.

Guidelines:

- Accent materials should complement the overall color and style of the home.
- Accent materials shall terminate at inside corners and be wrapped to coincide with an architectural element.
- Accent materials may terminate at location of the lateral fence or at logical end.
- Architectural trim applied to all elevations should be consistent with front elevation of the home.

8.10.3 Doors and Windows

The design and detail of the doors and windows on a home reinforce the architectural style and are key elements in the composition of the exterior elevation of the home.

Guidelines:

- Door designs shall be consistent with the architectural style of the home.
- Doors should be protected by porch elements or recessed entries.
- Garage and entry door design shall be appropriate to the style of the home.
- Maximum garage door height shall be eight feet (8').
- Garage doors should be recessed a minimum of twelve inches (12") from building plane.
- Alignment and proportions of windows shall be appropriate to the architectural style of the home.
- All windows (including garage door windows) are to be consistent with the architectural style of the home.
- Divided light windows are encouraged in keeping with the architectural style.
- Highly reflective glazing is not permitted.
- Window details such as shutters, trim surrounds, window boxes and window recesses are encouraged in keeping with the architectural style.

8.10.4 Roofing Materials and Details

Roofing materials as well as roof forms, pitch and design details are integral elements that reinforce the intended architectural style of the home.

Proposed roofs should be reflective of the architectural style of the home.

Attention should be given to address the context of the roof of each home relative to the adjacent homes along the street.

Approved Roofing Materials:

(Subject to compatibility with the intended architectural style)

- Concrete tile (flat or curved profile)
- Clay tile
- Slate
- High profile composition shingle (3-Dimensional)

Prohibited Roof Materials:

- Wood Shake
- Wood Shingle
- Low Profile Asphalt Composition
- Corrugated Metal

Guidelines:

- Roof materials and roof pitches need to be selected to reinforce the architectural style.
- Standing seam metal roofs painted in non-reflective neutral colors are allowed in appropriate architectural styles.
- Avoid repetition in continuous gable-ends and similar ridge heights.
- Skylights are not allowed on the sloped roofs of the front elevations of the building.

8.10.5 Roof Options

8.10.5.1 Eaves, Fascias and Rakes

Guidelines:

- Eave, fascia and rake proportions are to be appropriate to the architectural style.
- Larger eave overhangs provide opportunities for shading and should be used in appropriate architectural styles.
- Exposed rafter tails shall be a minimum of four inches (4") in thickness.
- Wood fascias and rafters shall be painted or stained to reinforce the style of the home.
- Attention shall be given to rake return detail.

8.10.5.2 Color

Intent:

Home colors are important to establishing a blended community at Esperanza, yet they should give the impression that each home was designed on its own.

Appropriate color selections make each home unique, but still look natural and in place in the neighborhood context.

Guidelines:

- Diversity of color is encouraged.
- Color shall contribute to distinguishing the overall architectural style of the home.
- Colors should reflect the natural hues found in Southern California.
- Color and hue variation in adjacent homes shall be provided to create neighborhood diversity.

8.10.6 Additional Design Elements

Intent:

Design elements that are utilitarian in nature should be designed as integral features that support the intended architectural style.

Guidelines:

- Exposed gutters and downspouts shall match roof or wall color.
- Faux copper patina is acceptable.
- Rooftop mechanical equipment is prohibited.
- Air conditioning/heating equipment shall be screened from the street and neighboring views and shall be ground mounted.
- Pool, spa, and water softening equipment shall be screened from neighboring views.
- Meters shall be screened from public view to the extent possible.

8.11 HOME TYPES

A variety of housing types, utilizing an architectural program composed of detached and attached housing, are offered at Esperanza. This diversity ensures a range of choices and a mix of homes within each neighborhood. Residences ranging from attached row townhomes and motorcourt townhome/condominiums to alley loaded and traditional single family homes along with innovative home types such as "two-pack" homes and courtyard homes, shall be articulated in traditional architectural styles. Providing a variety of housing programs allows homeowners the opportunity to move-up within the community as their lifestyles and needs change over time.

All project sites shall be designed to meet all the Integrated Waste Department's requirements, including the requirements for Sizing of Storage, Locations of Collection Area, Accessibility for Collection Vehicles and Collection of Sorted/ Diverted Waste Types.

The following pages provide graphic and written information that describes the general appearance of each anticipated home type. Future homebuilders within Esperanza should use these descriptive pages as a guide when designing the home type designated for the appropriate planning area.

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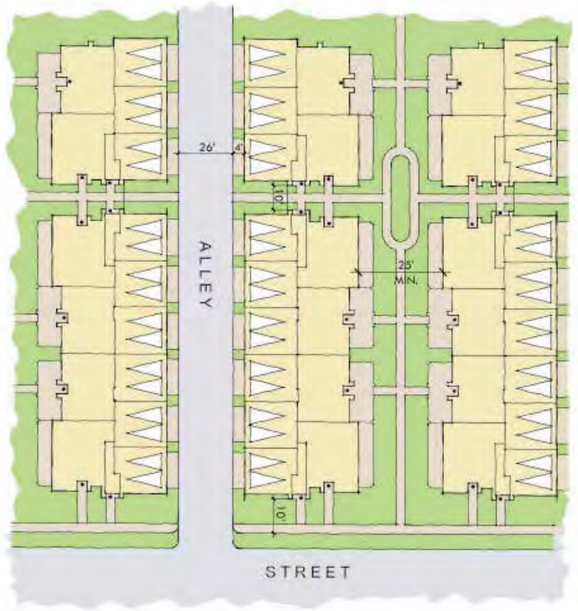
8.11.1 Row Townhomes

ROW TOWNHOMES

- Neo-traditional design places garages onto alleys, hidden from streets.
- Grid street pattern reinforces traditional neighborhood pattern.
- Front doors and porches face onto streets and/or greenbelts.
- Neighborhood open space provides a focal point of the neighborhood.



ROW TOWNHOMES

Patios / Balconies enhance social interaction

Front Doors face open space greenbelts

Street architecture creates traditional front door character

Garage doors oriented away from neighborhood streets

Building setbacks per Ontario Esperanza Specific Plan

CONCEPTUAL FRONT ELEVATIONS

CONCEPTUAL REAR ELEVATIONS

* Images suggest concept

Row Townhomes (2-Story)

Building setbacks per Ontario Esperanza Specific Plan

ROW TOWNHOMES

Patios / Balconies enhance social interaction

Front Doors face open space greenbelts

Street architecture creates traditional front door character

Garage doors oriented away from neighborhood streets

CONCEPTUAL FRONT ELEVATIONS

CONCEPTUAL REAR ELEVATIONS

* Images suggest concept

Row Townhomes (3-Story)

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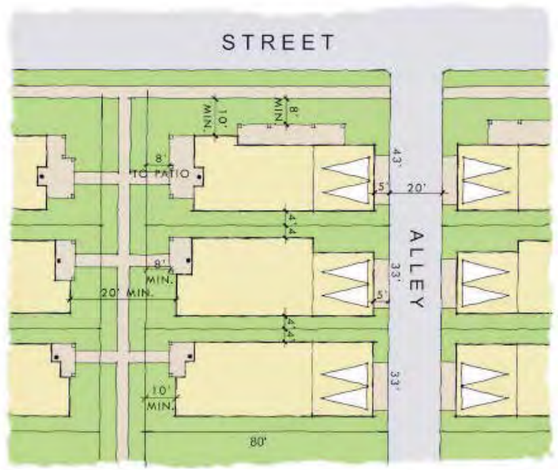
8.11.2 Cottage Single Family Homes

COTTAGE SINGLE FAMILY HOMES

- Neo-traditional design places garages onto alleys, hidden from streets.
- Grid street pattern reinforces traditional neighborhood pattern.
- Front doors and porches typically face onto streets.
- Alternative front door orientation onto greenbelts provide compatible neighborhood edge conditions.
- Public park provides a focal point of the neighborhood.



Building setbacks per Ontario Esperanza Specific Plan

COTTAGE SINGLE FAMILY HOMES

Porches enhance social interaction
Front Doors can face open space greenbelts
Garage doors oriented away from neighborhood streets
Neotraditional street scene places front doors and porches facing neighborhood streets

CONCEPTUAL FRONT ELEVATIONS

CONCEPTUAL STREET SCENE

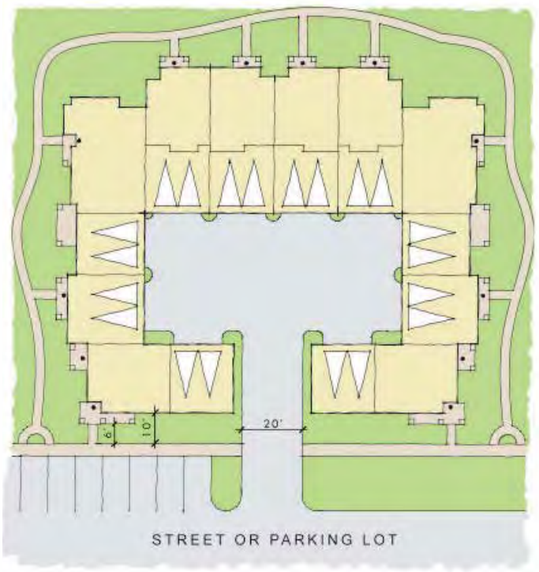
* Images suggest concept

Cottage Single Family Homes

8.11.3 Motorcourt Homes

MOTORCOURT TOWNHOMES

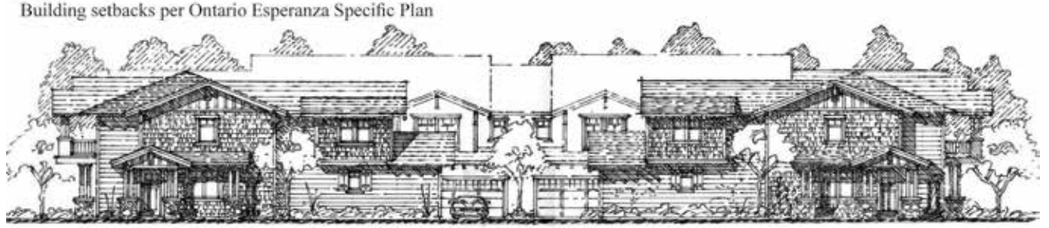
- Motorcourt building design minimizes garage orientation along streets and common drives.
- Grid circulation pattern reinforces traditional neighborhood pattern.
- Orientation of front doors, porches and patios onto streets and/or greenbelts is encouraged.
- Neighborhood open space provides a focal point of the neighborhood.



MOTORCOURT TOWNHOMES

- Garage doors are oriented around a motorcourt hidden from residential streets
- Front doors face onto open space greenbelts

Building setbacks per Ontario Esperanza Specific Plan



CONCEPTUAL FRONT ELEVATION

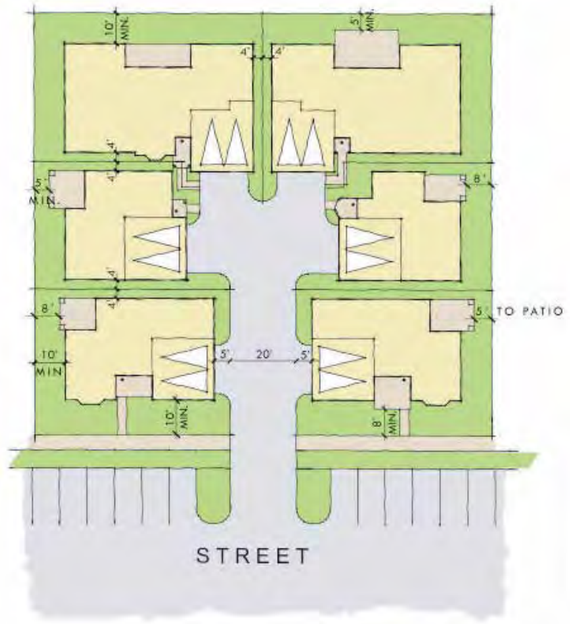
CONCEPTUAL REAR ELEVATION

Motorcourt Townhomes

8.11.4 6-Pack Courtyard Single Family Homes

6-PACK COURTYARD SINGLE FAMILY HOMES

- Courtyard design minimizes garage orientation along streets.
- Grid circulation pattern reinforces traditional neighborhood pattern.
- Conventional building design places front doors, porches and patios onto private motorcourts.
- Neighborhood open space provides a focal point of the neighborhood.



Building setbacks per Ontario Esperanza Specific Plan

6-PACK COURTYARD SINGLE FAMILY HOMES

CONCEPTUAL FRONT ELEVATIONS

CONCEPTUAL PEDESTRIAN COURT VIEW

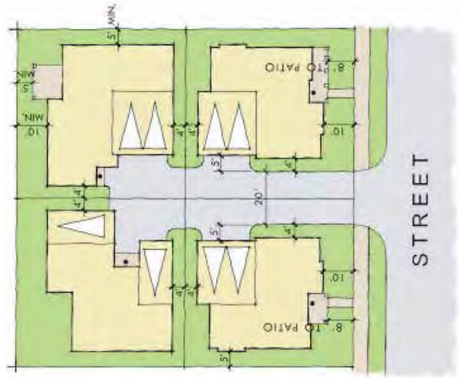
* Images suggest concept

6-Pack Courtyard
Single Family Homes

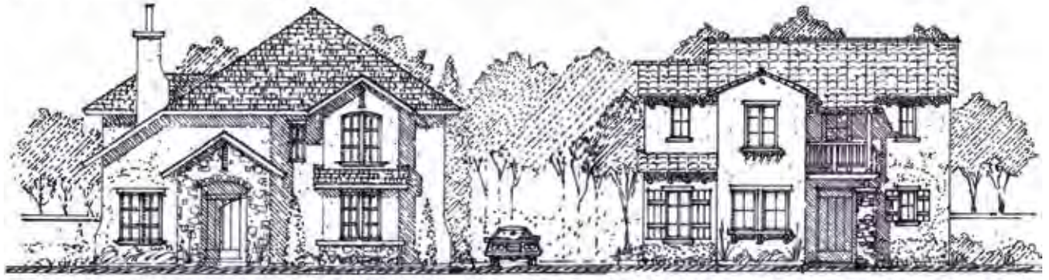
8.11.5 4-Pack Courtyard Single Family Homes

4-PACK COURTYARD SINGLE FAMILY HOMES

- Courtyard design minimizes garage orientation along streets.
- Modified grid street pattern reinforces traditional neighborhood pattern.
- Front doors and porches face onto streets and/or greenbelts.
- Central pocket park provides a focal point of the neighborhood.



Building setbacks per Ontario Esperanza Specific Plan



CONCEPTUAL STREETSCENE

CONCEPTUAL PEDESTRIAN COURT VIEW

* Images suggest concept

4-Pack Courtyard
Single Family Homes

8.11.6 50 Foot Wide Lots (40' Wide Homes)

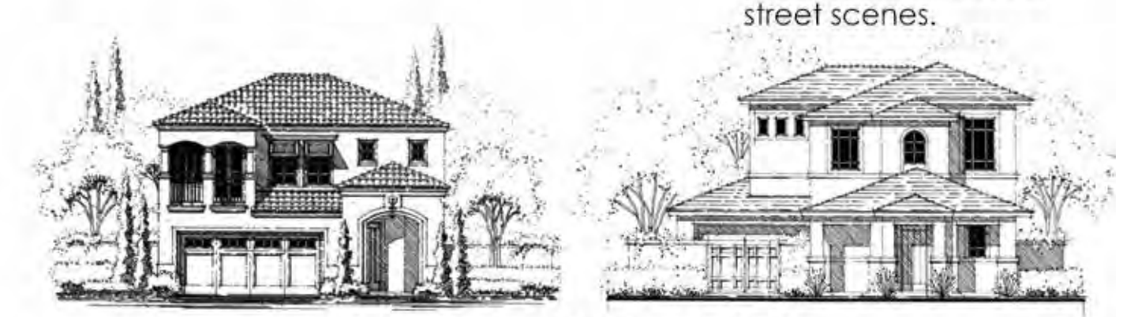
50 FOOT WIDE LOTS
(40' WIDE HOMES)

- Architecture forward design places living space and porches closer to the street than garages to reinforce pedestrian scale along streets.
- Alternative garage configurations provide further visual relief from the garage along streets.
- Grid street pattern reinforces traditional neighborhood pattern.
- Central pocket park/school provides a focal point of the neighborhood.

Building setbacks per Ontario Esperanza Specific Plan

50 FOOT WIDE LOTS
(40' WIDE HOMES)

- Architectural elements minimize garage door presence along neighborhood streets
- Front porches and entries are placed forward of the garage
- Alternate garage configurations create pededstrian oriented street scenes.



CONCEPTUAL FRONT ELEVATIONS

CONCEPTUAL STREET SCENE

* Images suggest concept

50 Foot Wide Lots
(40' Wide Homes)

8.11.7 55 Foot Wide Lots (45' Wide Homes)

55 FOOT WIDE LOTS
(45' WIDE HOMES)

- Architecture forward design places living space and porches closer to the street than garages to reinforce pedestrian scale along streets.
- Alternative garage configurations provide further visual relief from the garage along streets.
- Grid street pattern reinforces traditional neighborhood pattern.
- Central pocket park provides a focal point of the neighborhood.

Building setbacks per Ontario Esperanza Specific Plan

55 FOOT WIDE LOTS
(45' WIDE HOMES)

- Architectural elements minimize garage door presence along neighborhood streets.
- Front porches and entries are placed forward of the garage.
- Alternate garage configurations create pedestrian oriented streetscenes.

CONCEPTUAL FRONT ELEVATIONS

CONCEPTUAL STREETSCENE

* Images suggest concept

55 Foot Wide Lots
(45' Wide Homes)

8.11.8 2-Pack Single Family Homes

2-PACK SINGLE FAMILY HOMES

- Innovative design provides alternating recessed and deeply recessed garages along streets.
- Grid street pattern reinforces traditional neighborhood pattern.
- Architecture forward design places living space and porches closer to the street than garages to reinforce pedestrian scale along streets.
- Front doors and porches face onto streets.
- Neighborhood open space provides a focal point of the neighborhood.

TO LIVING
40'
TO GARAGE/ SINGLE STORY
50'
TO LIVING
40'
TO PATIO/ BALCONY MIN.
TO GARAGE
50'
10'
5'
12'
5'
5'
5

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8.12 DESIGN GUIDELINES FOR LANDSCAPE ARCHITECTURAL CHARACTER

Careful consideration has been given to the design of the community landscape architectural character for the Ontario Esperanza Specific Plan. The following design guidelines are organized to help define the basic landscape design principles for the Ontario Esperanza Specific Plan. Observing these guidelines will help to assure the "design vision" and integrity of this planned community.

All landscape plans, streetscape plans, and graphic designs with regard to community identity, neighborhood identity, or entry monumentation shall conform to the guidelines as set forth herein, and shall be subject to review and approval by the City of Ontario.

The "Conceptual Landscape Master Plan," Exhibit 30 on the next page shows the perimeter streetscape design, Community entries and monumentation, neighborhood park and mini parks, pedestrian greenbelts, and general landscape features of the Ontario Esperanza Specific Plan area.

8.12.1 Perimeter Streetscape Design

Streetscape design guidelines establish a hierarchy for the landscape development along the surrounding roadways, as well as establishing a framework for consistency of design. Three major arterial roadways surround the Ontario Esperanza Specific Plan area: Hamner Avenue to the West, Bellegrave Avenue to the North, and Mill Creek Avenue to the East. Landscape easements associated with these roadways have been defined, as noted in the City of Ontario Ontario Ranch General Plan.

Landscape development surrounding this community will help to set the character, while maintaining consistency with the City of Ontario's pedestrian pathway system illustrated in the Trails and Bikeways section of the Ontario Ranch General Plan. The following section discusses the streetscapes for the Esperanza Specific Plan area. Exhibit 31, "Streetscapes Legend" provides a guide to the location of the streetscapes discussed below.

8.12.2 Hamner Avenue

Hamner Avenue streetscape shall include the following:

- A landscaped parkway (15' wide min.) with a row of street trees (24" Box min.) along both sides of the street.
- A 5' wide sidewalk along west side of the street.
- A 14' wide landscaped median with a single row of street trees.
- A landscape easement (neighborhood edge) of 45' taken from face of curb to perimeter wall.
- Background trees and shrub masses planted in series of layers (foreground, midground, background) to help define borders and plant groupings while combining interesting foliage textures and color.
- Monumentation as shown in Exhibit 30, "Conceptual Landscape Master Plan."
- Refer to Exhibit 32, "Hamner Avenue" section for streetscape illustration."

Exhibit 30

Conceptual Landscape Master Plan

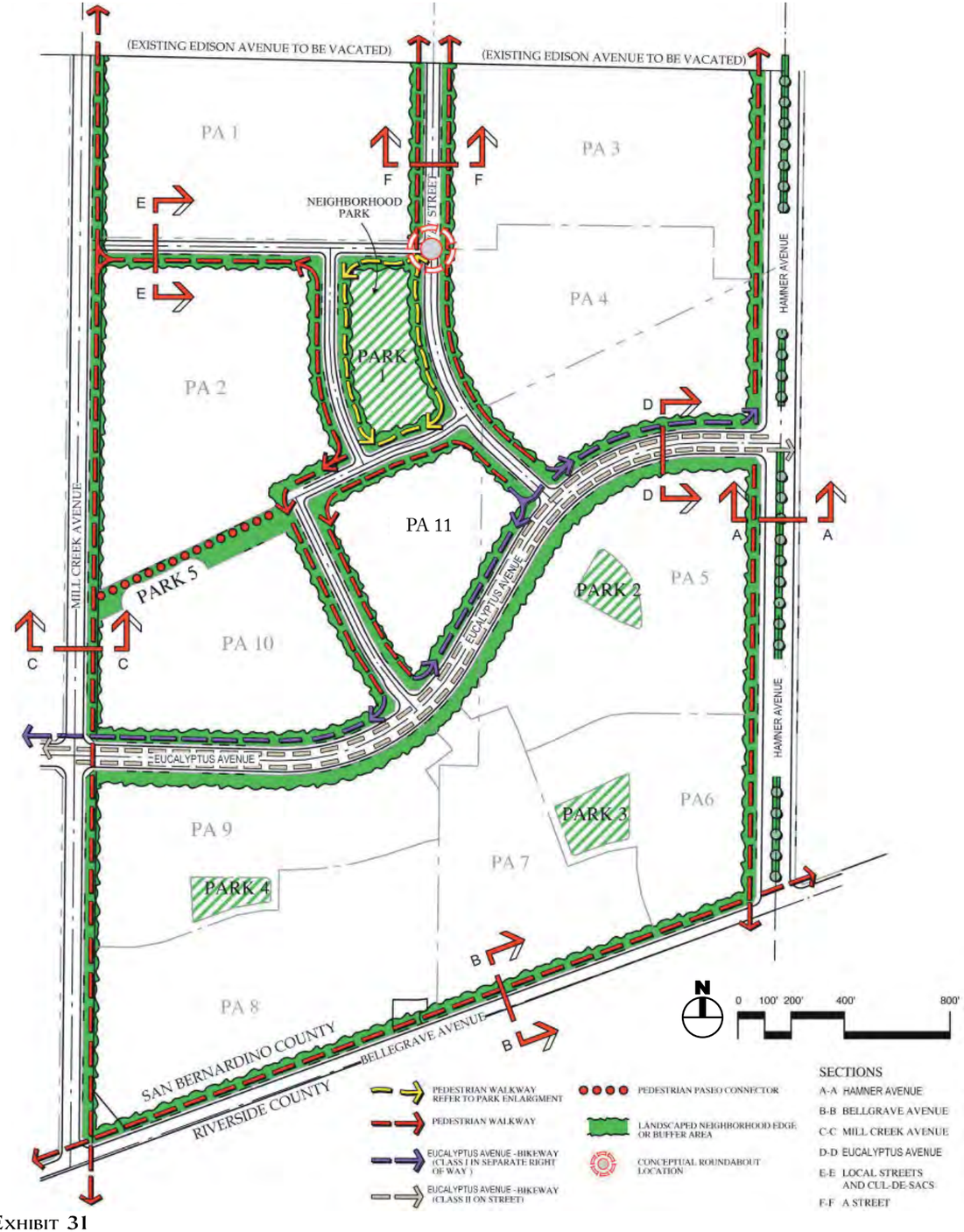


Exhibit 31

Streetscapes Legend

8.12.3 Bellegrave Avenue

Bellegrave Avenue streetscape shall include the following:

- A 5 foot wide lineal sidewalk and a 7 foot wide landscaped parkway along north side of the street.
- A landscape easement (neighborhood edge) of 35' taken from face of curb to perimeter wall on both sides of the street.
- Background trees and shrub masses planted in series of layers (foreground, midground, background) to help define borders and plant groupings while combining interesting foliage textures and color.
- Monumentation as shown in the Conceptual Landscape Master Plan, Exhibit 30, "Conceptual Landscape Master Plan."
- Refer to Exhibit 33, "Bellegrave Avenue" section below for streetscape illustration.
- Additional landscaping requirements for well sites along Bellegrave Avenue may include: landscape screening, earth berming or combination of both to screen undesirable views from public.

8.12.4 Mill Creek Avenue

Mill Creek Avenue streetscape shall include the following:

- A 12 foot wide landscaped parkway on the west with an additional 23' landscape easement include a single row of street trees (24" Box min.) along both sides of the street. The east side of Mill Creek Avenue includes a 12 foot wide landscaped parkway with an additional 50' Southern California Edison (SCE) easement taken from back of improved street right-of-way.
- Provide drought tolerant large shrub (max. 15') and drought tolerant landscaping within the SCE easement.
- Background trees and shrub masses planted in series of layers (foreground, midground, background) to help define borders and plant groupings while combining interesting foliage textures and color.
- Monumentation as shown in Exhibit 30, "Conceptual Landscape Master Plan."
- Refer to Exhibit 34, "Mill Creek Avenue" and Exhibit 35 "Mill Creek Avenue at the SCE Corridor" for streetscape illustration."

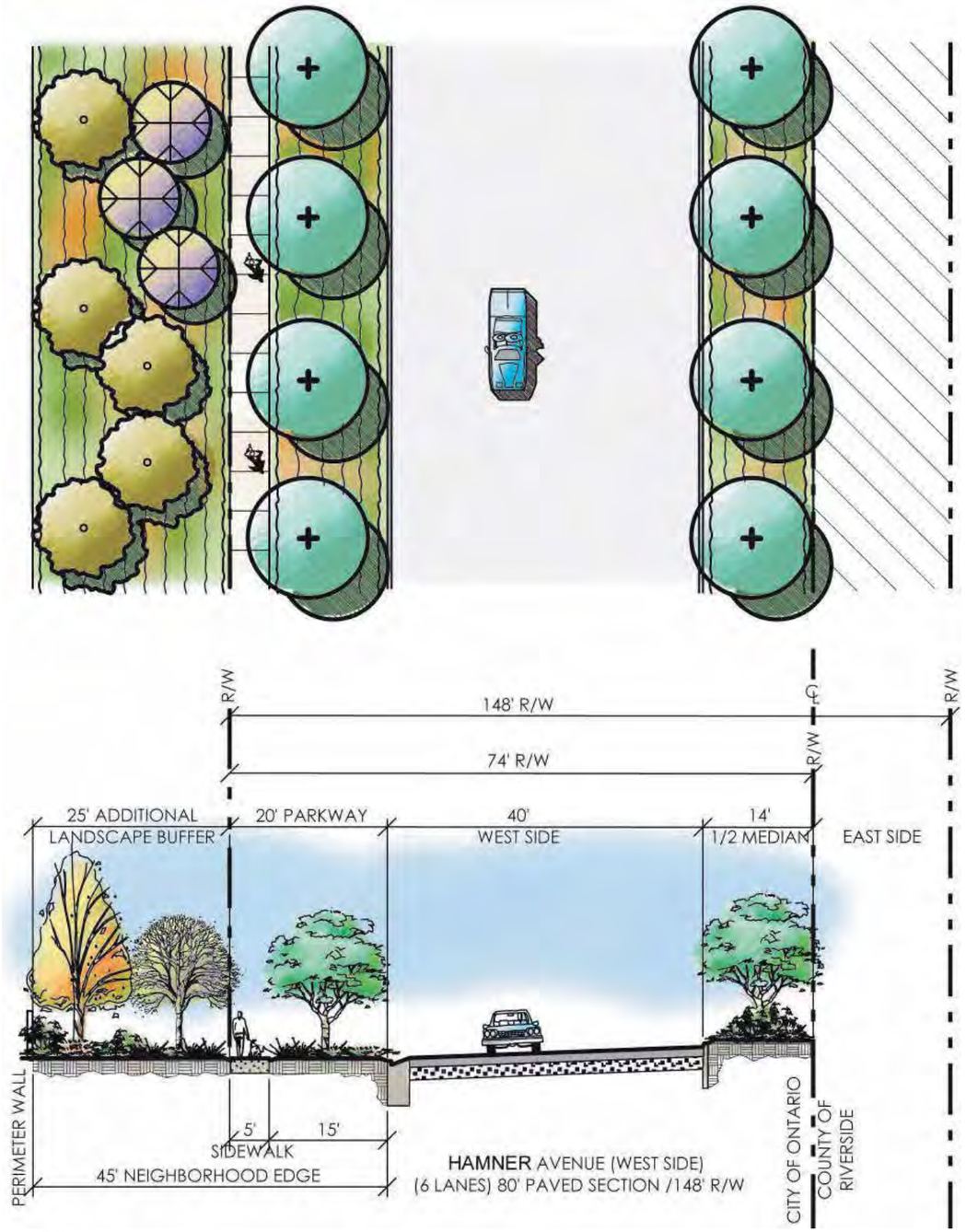


EXHIBIT 32
~~Milliken~~ Hamner Avenue

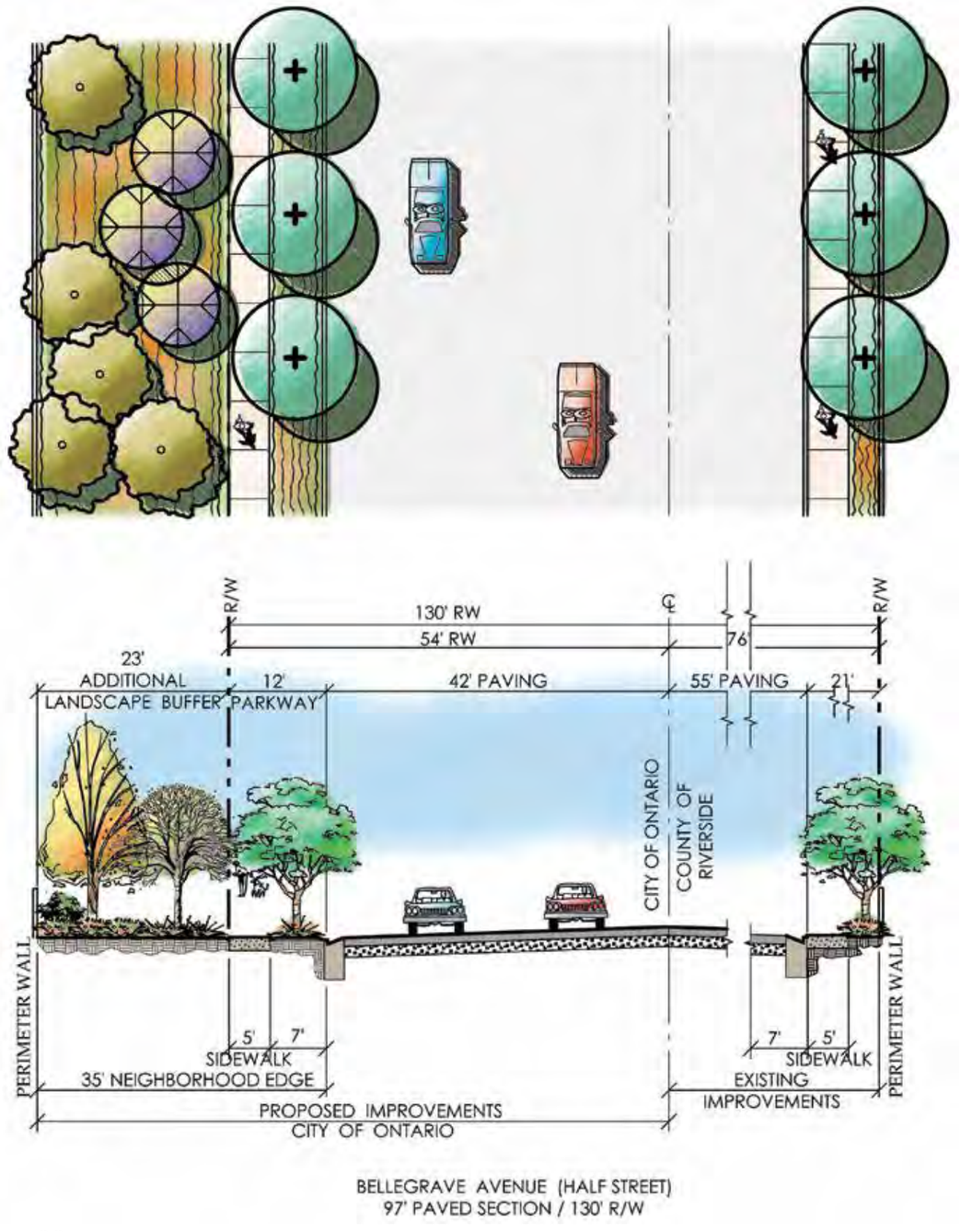


Exhibit 33
Bellegrave Avenue

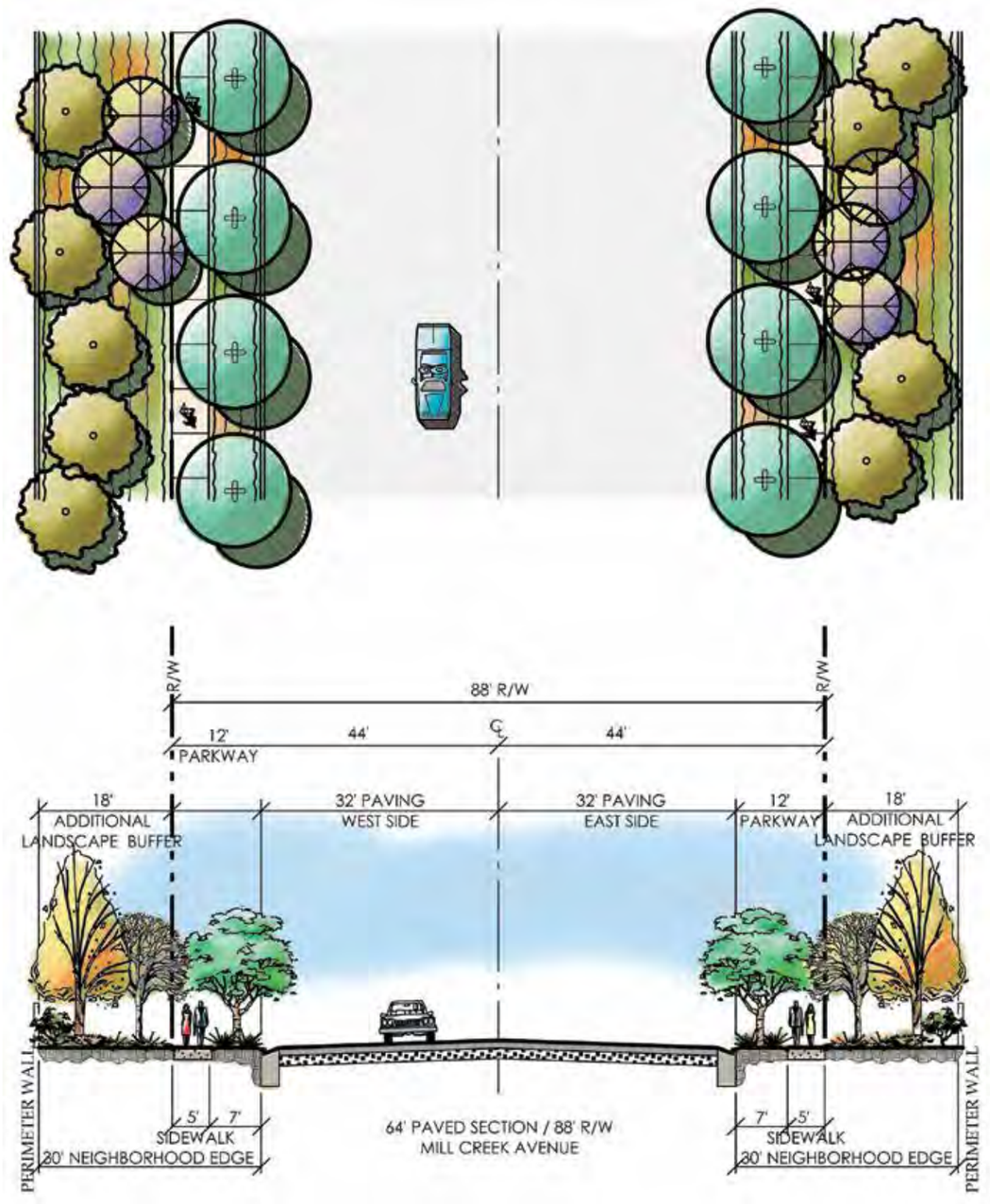
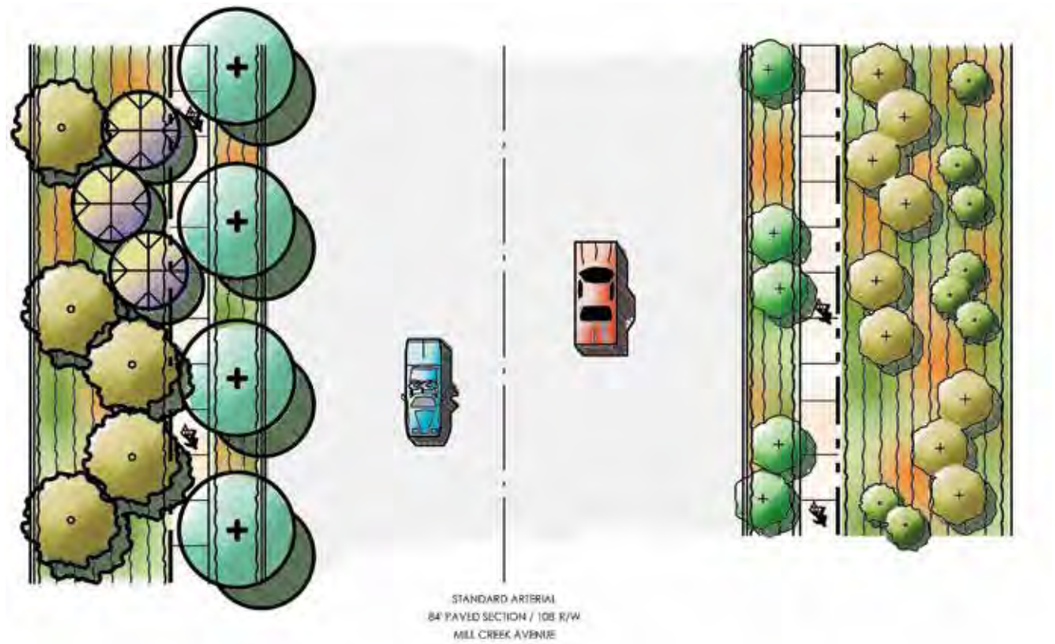


Exhibit 34
Mill Creek Avenue



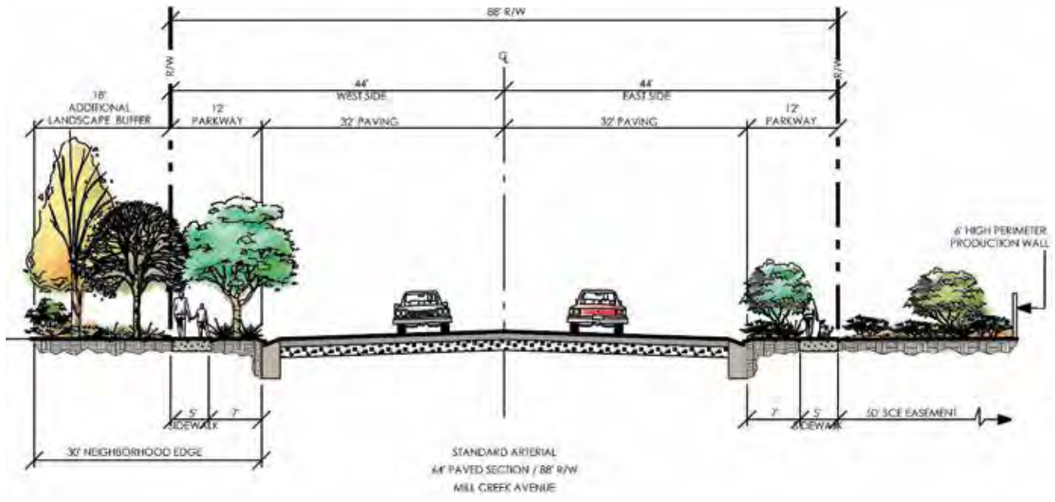


Exhibit 35
Mill Creek Avenue at the SCE Corridor

8.12.5 Interior Streetscape Design

Streetscape design within the interior of the Ontario Esperanza Specific Plan community shall be consistent in character with the perimeter streetscapes and should help to promote pedestrian circulation into the "Community Core."

Where interior streetscapes interface with neighborhood/mini parks and open space, special consideration should be taken to integrate pedestrian circulation into these areas via a streetside pedestrian system that links city sidewalks to active walking trails and open space uses. This is especially important within the multi-family/high density residential planning areas.

Two interior roadways bring residents into the "Community Core," Eucalyptus Avenue, running East/West, and "Street A" that intersects with Eucalyptus Avenue, running North/South.

8.12.6 Eucalyptus Avenue

Eucalyptus Avenue streetscape shall include the following:

- A 7 foot wide landscaped parkway with a single row of street trees (24" Box min.) along both sides of the street.
- A 5' wide concrete sidewalk with a 7' wide decomposed granite multi-purpose trail.
- A 7 foot wide Class II striped on-street bicycle trail within the right of way on both sides of the street.
- A landscape easement (neighborhood edge) of 35' taken from face of curb to perimeter wall on both sides of the street.
- Background trees and shrub masses planted in series of layers (foreground, midground, background) to help define borders and plant groupings while combining interesting foliage textures and color.
- Monumentation as shown in Exhibit 30, "Conceptual Landscape Master Plan."
- Refer to Exhibit 36, "Eucalyptus Avenue" section for streetscape illustration.

8.12.7 "A" Street

"A" Street streetscape shall include the following:

- A landscaped parkway (7' wide minimum) with a single row of street trees (24" box minimum) along both sides of the street.
- A 5' sidewalk separated from the street by a 7 foot wide landscaped parkway on both sides of the street.
- A landscaped buffer of 6' to 10' taken from the back of sidewalk to the perimeter wall on both sides of the street.
- Background trees and shrub masses planted in a series of layers (foreground, midground and background) to help define borders and plant groupings while combining interesting textures and colors.
- Monumentation as shown in Exhibit 30, "Conceptual Landscape Master Plan."
- Refer to Exhibit 37, "A Street" section for streetscape illustration.

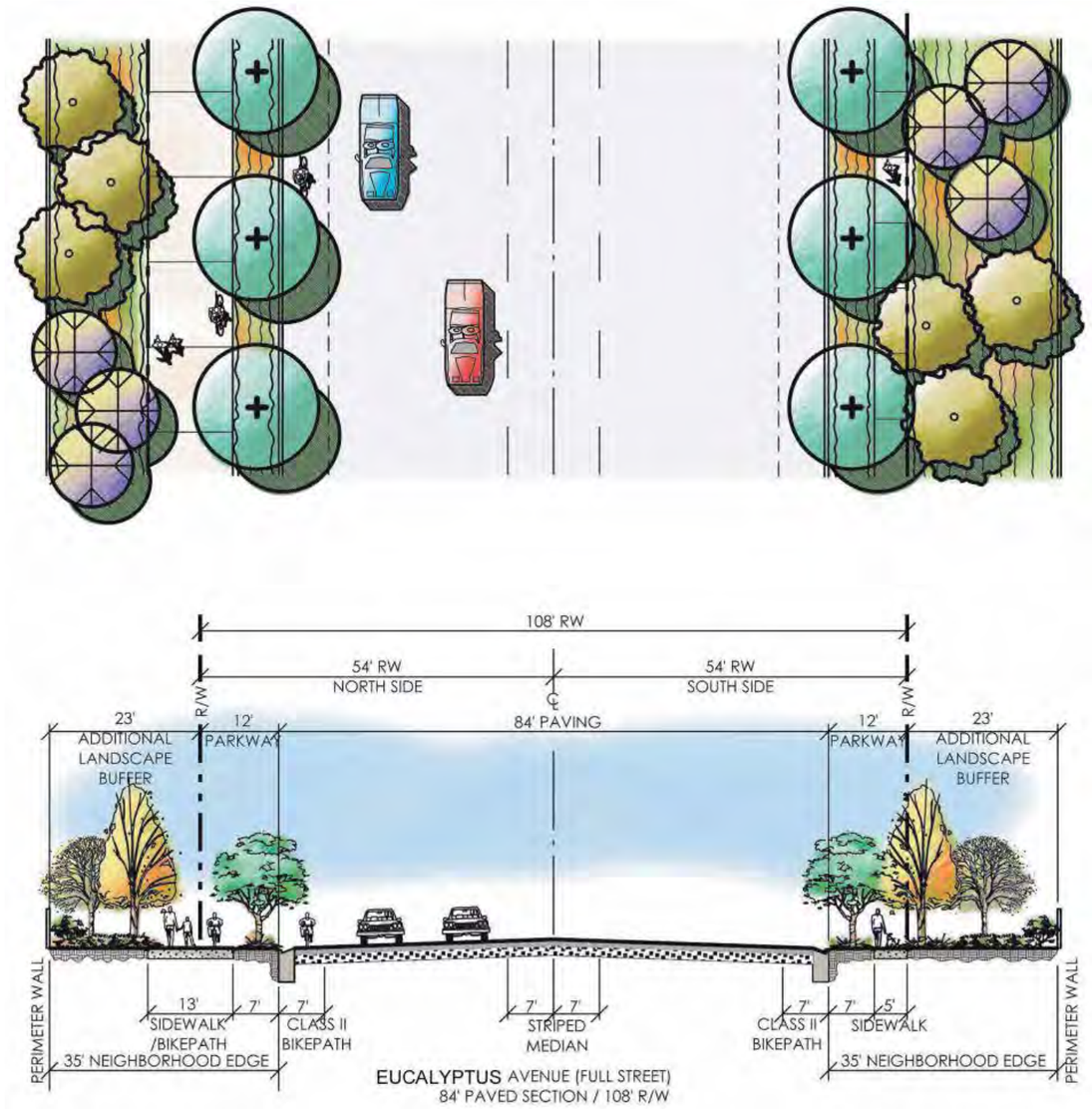


Exhibit 36
Eucalyptus Avenue

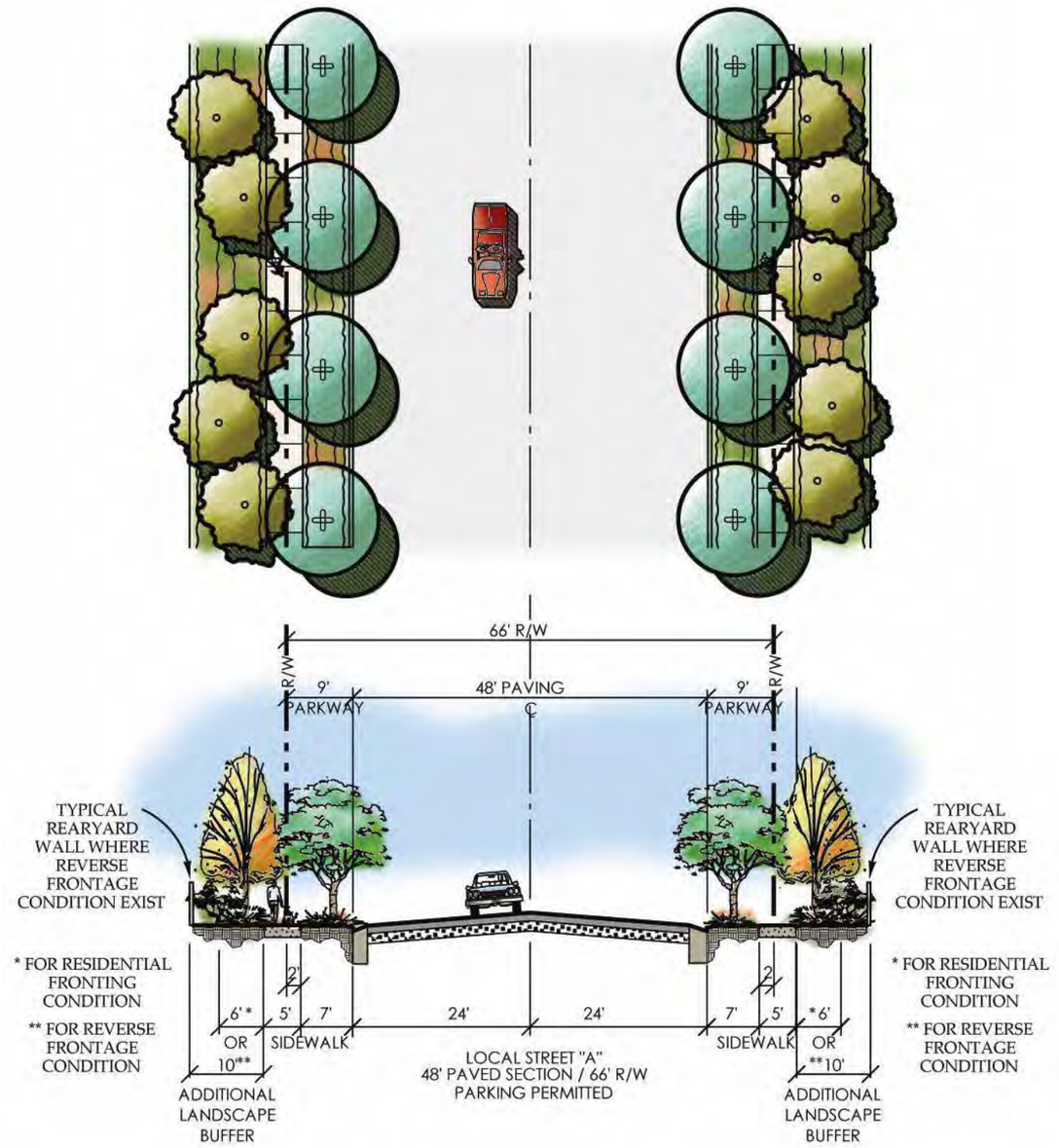


Exhibit 37
"A" Street

8.12.8 Local Streets, Private Alleys, and Private Neighborhood Streets

Local Streets

Local Street streetscapes shall include the following:

- A landscaped parkway (7' wide minimum) with a single row of street trees, 24" box minimum, along both sides of the street.
- A 5' wide sidewalk on both sides of the street.
- A 5' wide minimum planter area from sideyard wall to back of sidewalk along reverse frontage conditions.
- Refer to Exhibit 38, "Local Street and Cul-de-Sac" for streetscape illustration.

Private Neighborhood Streets

Private Neighborhood streets shall include the following:

- A landscaped parkway (7' wide minimum) with a single row of street trees, 24" box minimum, along both sides of the street.
- A 4' wide sidewalk on both sides of the street.
- A 7' wide minimum planter area from sideyard wall to back of sidewalk along reverse frontage conditions.
- Refer to Exhibit 39, "Private Neighborhood Street Section" for streetscape illustration.

Private Alleys

Private Alleys shall include a 5' wide landscaped area on both sides of the alley when the paved area is a maximum of 20' in width. Landscaping will be provided as appropriate in areas of less than 5' in width depending upon the final design of the private alley. Refer to Exhibit 40, "Private Alleys" for illustration.

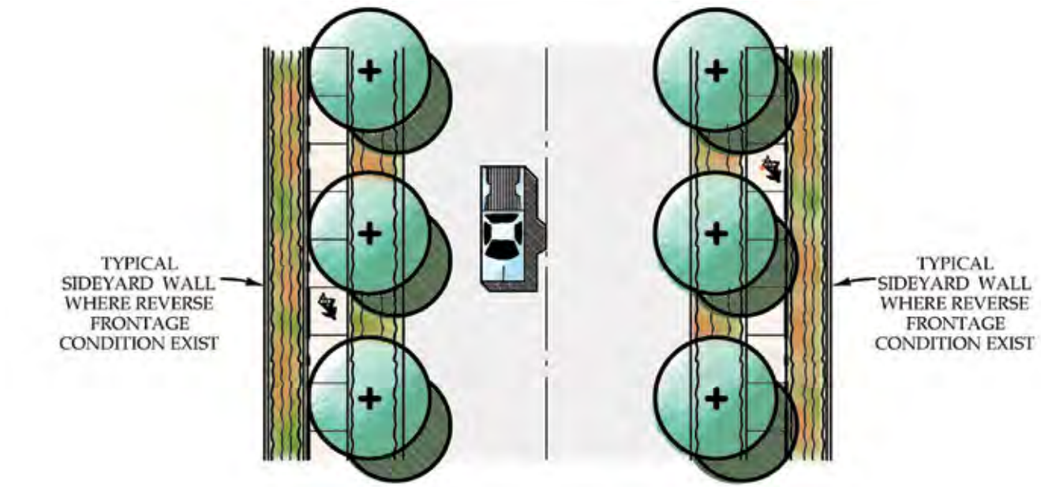


EXHIBIT 38
Local Street and Cul-de-Sac

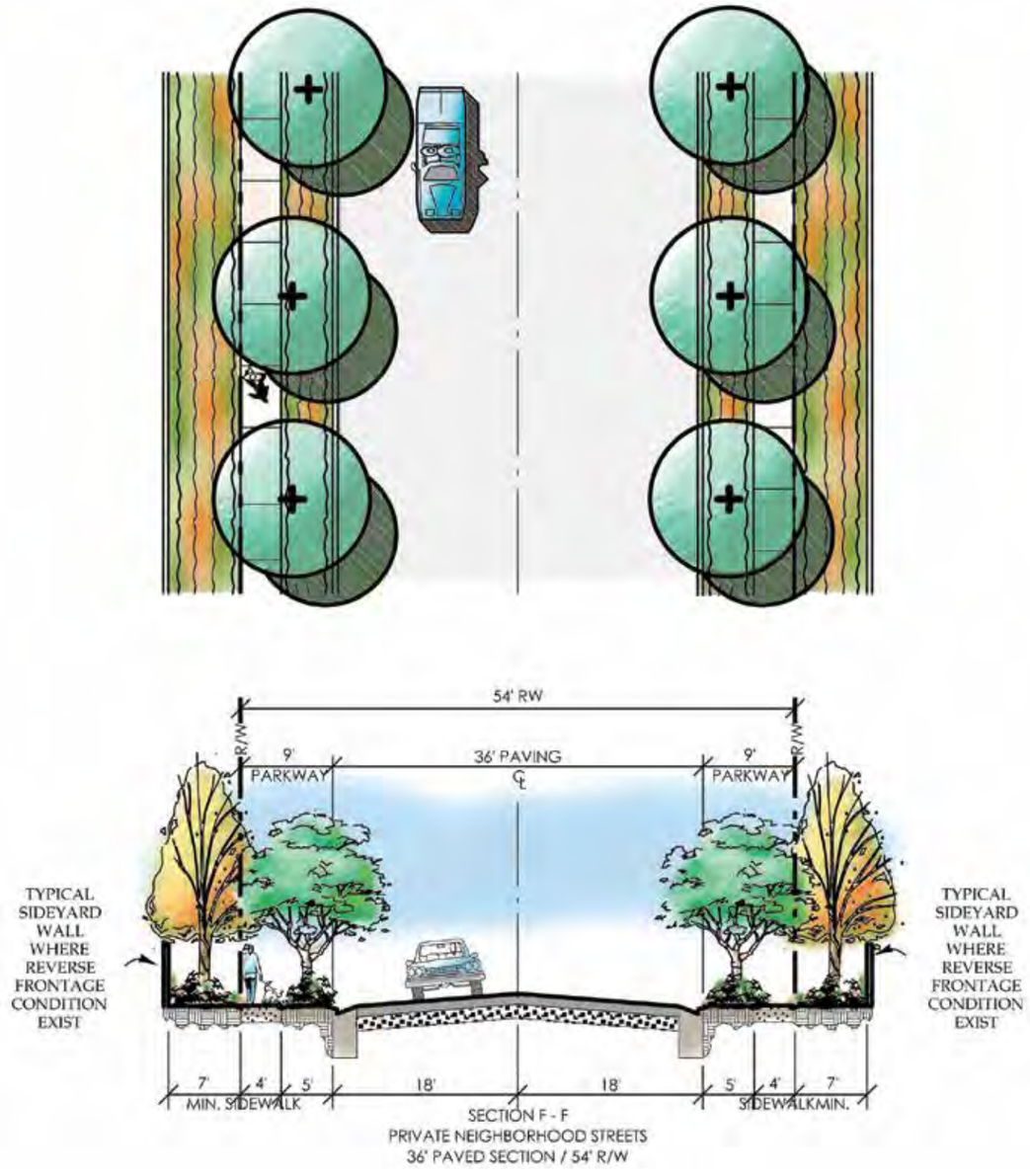


Exhibit 39
Private Neighborhood Street Section

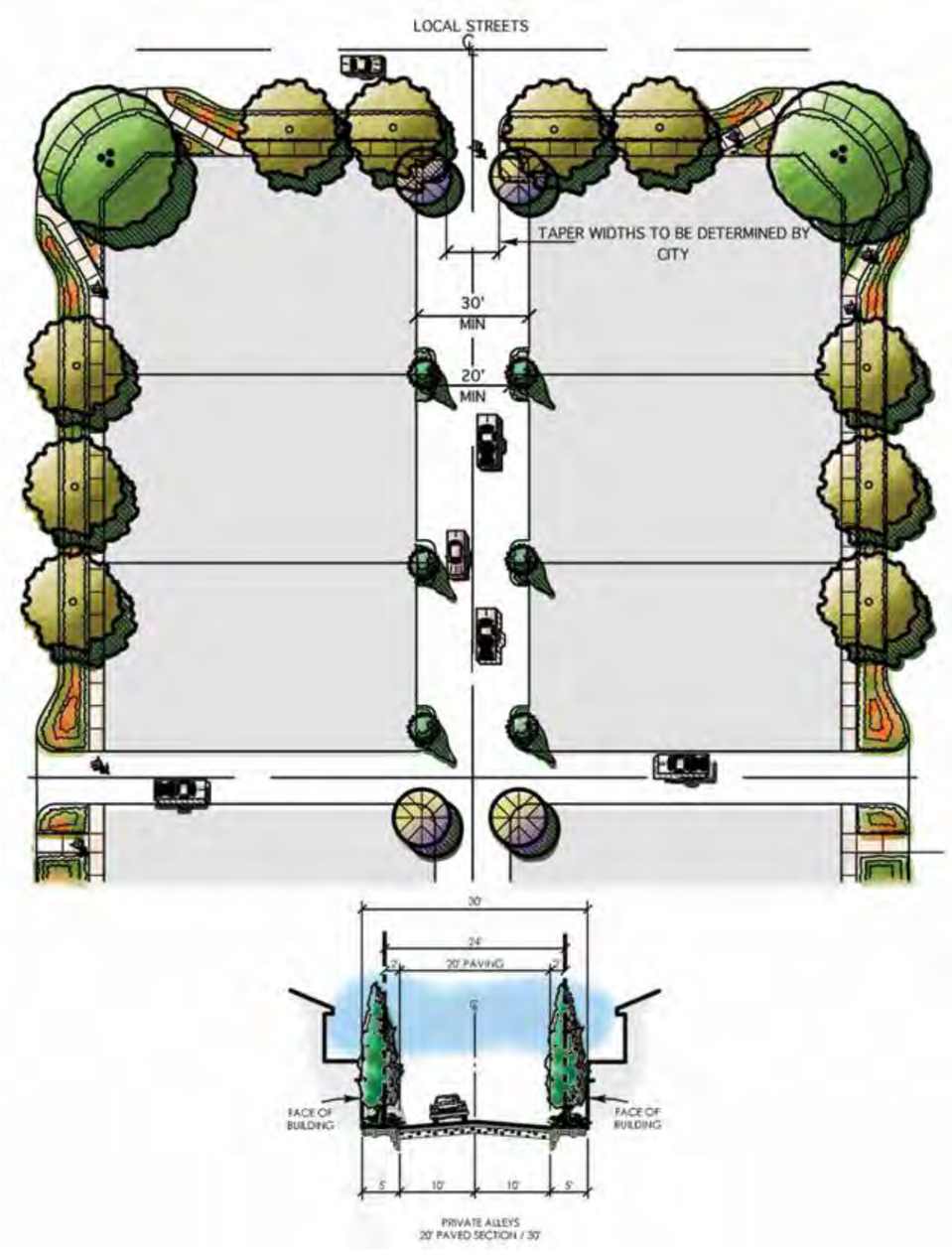


Exhibit 40
Private Alleys

8.13 City of Ontario "Gateway" Monument

At the corner of Hamner Avenue and Bellegrave Avenue, a city "Gateway" monument will be located. Special consideration should be made to integrate the perimeter landscaping along Hamner and Bellegrave Avenue into the final monument design and landscape character. The City of Ontario is currently developing the "Gateway" monument program for the Ontario Ranch. Additional coordination with the City of Ontario will be needed prior to developing this area.

8.14 Entries and Monumentation

Monumentation occurs throughout the Ontario Esperanza Specific Plan community and is designed to establish a basic hierarchy for entering each area of the community. Along the perimeter edges there are several entry points into the community. At key entries a landscape and monumentation program will be utilized to help identify the community as well as convey a "welcoming" feeling for both vehicular and pedestrian traffic. Inspired by the local historical village of "Guasti," home of the Italian Vineyard Company, the project monuments for Ontario Esperanza embody some of the character of this Ontario icon, through the use of similar materials, architectural styles/detailing and landscaping.

Three basic monument treatments are used to set the hierarchy of the entries and monumentation: the Primary Community Entry and Monumentation, the Secondary Community Entry and Monumentation, and the Neighborhood Entry and Monumentation.

8.14.1 Primary Community Entry and Monumentation

The Primary Community Entry and Monumentation shall include the following:

- Freestanding curved monument walls at each corner with highlighted pedestrian portal.
- Identification field for potential sign lettering placement.
- Architectural concrete caps, trim, and bases to help delineate architectural detailing and veneer material used.
- Use of "real" veneer materials instead faux concrete veneers.
- Use of large specimen native trees to anchor each side of entry drive at site entry.
- Seasonal perennial flowering to allow for seasonal flowering interest throughout the year.
- Enhanced pedestrian paving at street crossing and at monument location as approved by the City Engineer.
- Accent trees and shrub masses planted in series of layers (foreground, midground, background) to help define borders and plant groupings while combining interesting foliage textures and color.
- Accent lighting of landscape/monumentation.
- Handicapped ramps designed to City standards.
- Refer to Exhibit 30, "Conceptual Landscape Master Plan" and Exhibits 41-43, "Primary Community Entry and Monumentation" and, "Primary Community Entry and Monumentation – Hamner Avenue, and, "Primary Community Entry and Monumentation – Mill Creek Avenue" for detailed conceptual illustration.

8.14.2 Secondary Community Entry and Monumentation

The Secondary Community Entry and Monumentation shall include the following:

- Freestanding curved walls at each corner with anchoring entry pilaster.
- Identification field for potential sign lettering placement on enhanced perimeter corner cut wall.
- Architectural concrete caps, trim, and bases to help delineate architectural detailing and veneer material used
- Enhancement of corner cut wall and use of accent pilasters to balance each side.
- Use of "real" veneer materials instead faux concrete veneers.
- Use of large specimen native trees to anchor each side of entry drive at site entry.
- Seasonal perennial flowering to allow for seasonal flowering interest throughout the year.
- Enhanced pedestrian paving at street crossing and at monument location as approved by the City Engineer.
- Accent trees and shrub masses planted in series of layers (foreground, midground, background) to help define borders and plant groupings while combining interesting foliage textures and color.
- Accent lighting of landscape/monumentation.
- Handicapped ramps designed to City standards.
- Refer to Exhibit 30, "Conceptual Landscape Master Plan" and Exhibit 44, "Secondary Community Entry and Monumentation Elevation/Plan" for detailed conceptual illustration.

8.14.3 Neighborhood Entry and Monumentation

Neighborhood entries and monumentation should occur on interior corner entries within the Ontario Esperanza Specific Plan Community. These entries should be used to help continue the landscape character theme to the "core" of the community. Each neighborhood built within the project will have the opportunity to identify their individual project character while providing the basic design features of the other monuments. Refer to The Neighborhood Entry and Monumentation shall include the following:

- Freestanding large entry pilaster set within the landscaped parkway. This pilaster should embody the same character as that of the Primary Community Entry Monument portal, but is reduced in scale to create a "pedestrian gateway" into each neighborhood. Project identification plaque or icon can be located at this pilaster
- Identification field for potential sign lettering placement on enhanced perimeter corner cut wall.
- Architectural concrete caps, trim, and bases to help delineate architectural detailing and veneer material used.
- Enhancement of corner cut wall and use of accent pilasters to anchor each side.
- Use of "real" veneer materials instead faux concrete veneers.
- Seasonal perennial flowering to allow for seasonal flowering interest throughout the year.
- Enhanced pedestrian paving at street crossing and at monument location as approved by the City Engineer.
- Accent trees and shrub masses planted in series of layers (foreground, midground, background) to help define borders and plant groupings while combining interesting foliage textures and color.
- Accent lighting of landscape/monumentation.
- Handicapped ramps designed to City standards.
- Refer to Exhibit 30, "Conceptual Landscape Master Plan" and Exhibit 45, "Neighborhood Entry and Monumentation" for detailed conceptual illustration.

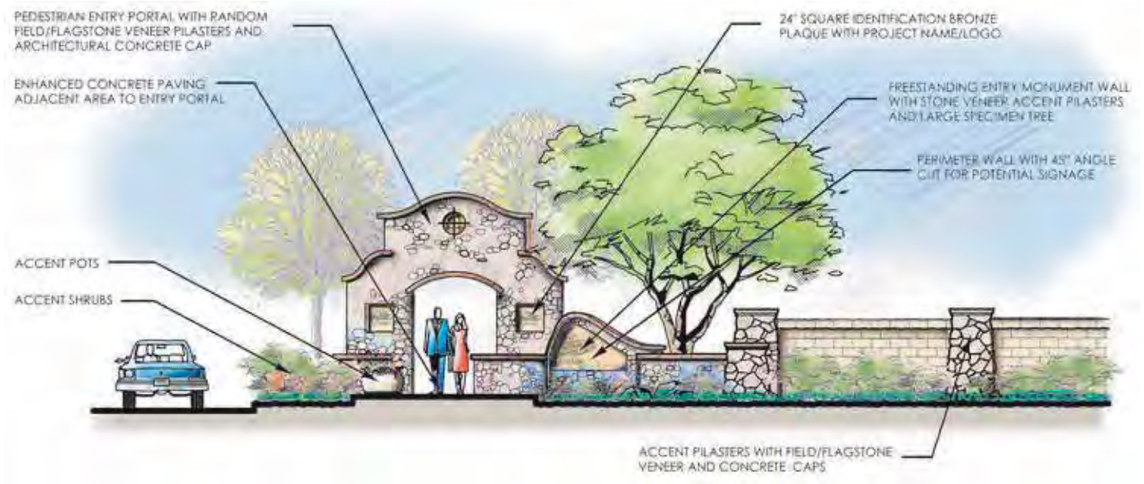
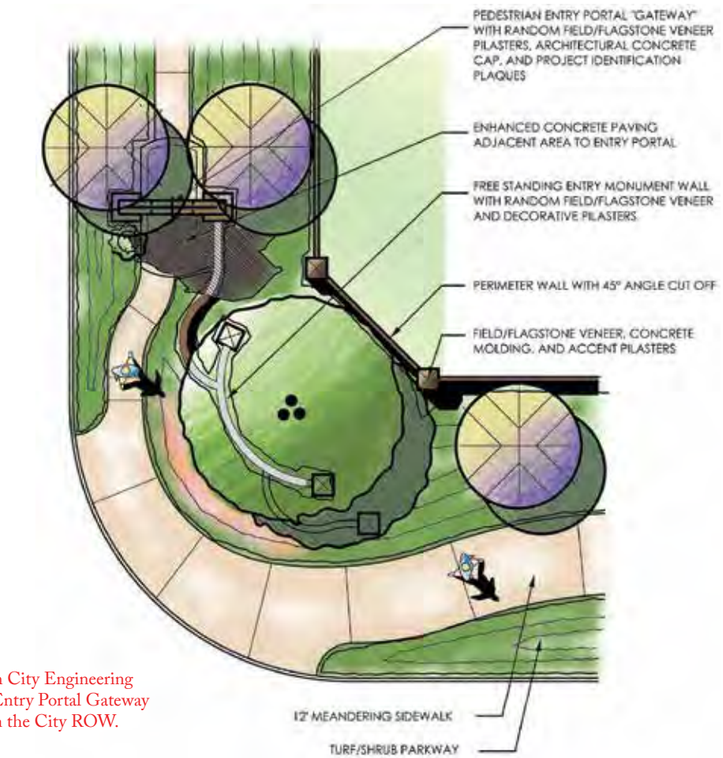


EXHIBIT 41

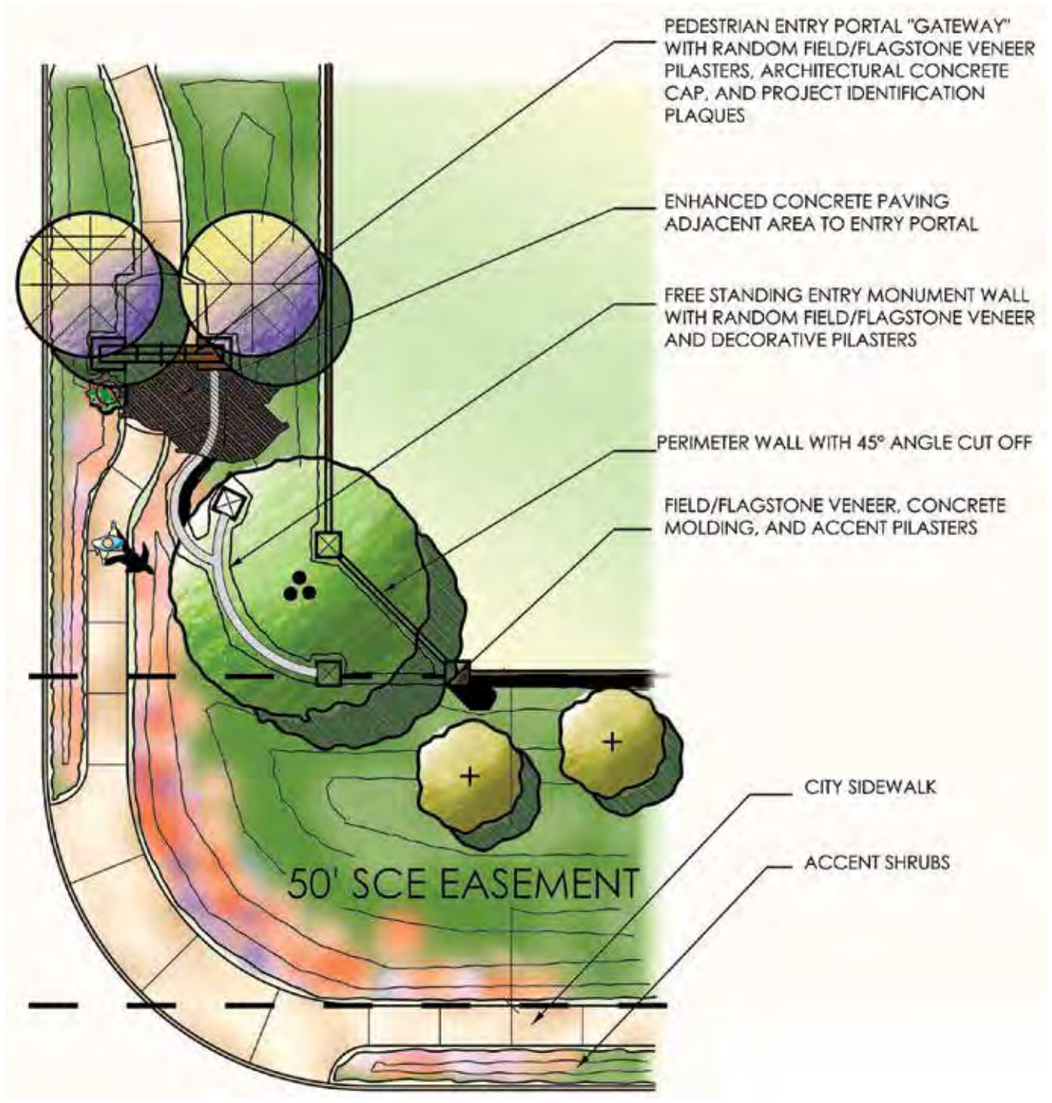
Primary Community Entry and Monumentation



Developer to verify with City Engineering Development that the Entry Portal Gateway will be permitted within the City ROW.

EXHIBIT 42

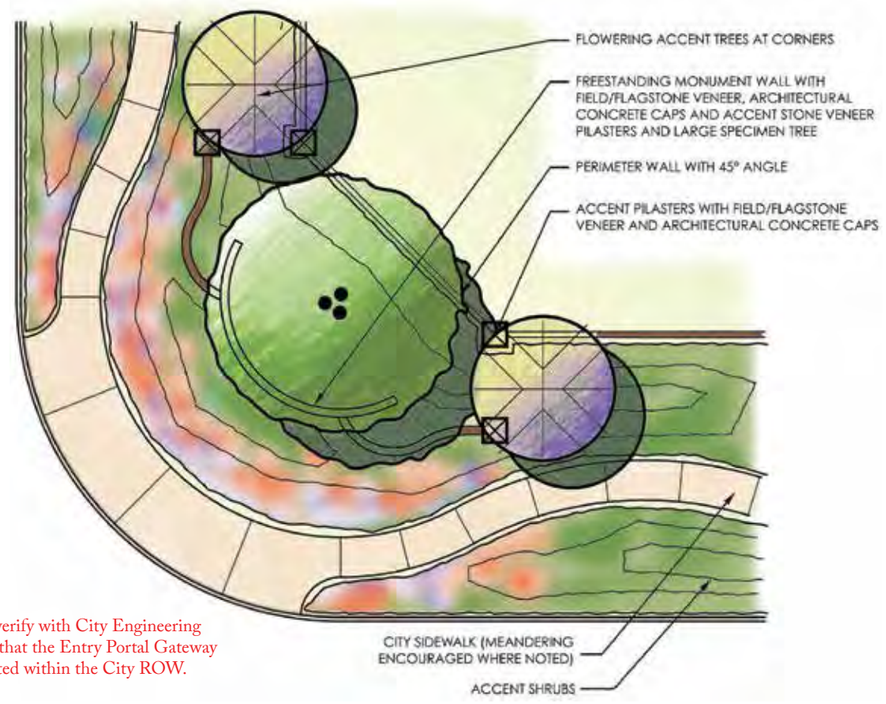
Primary Community Entry and Monumentation – Hamner Avenue



Developer to verify with City Engineering Development that the Entry Portal Gateway will be permitted within the City ROW.

Exhibit 43

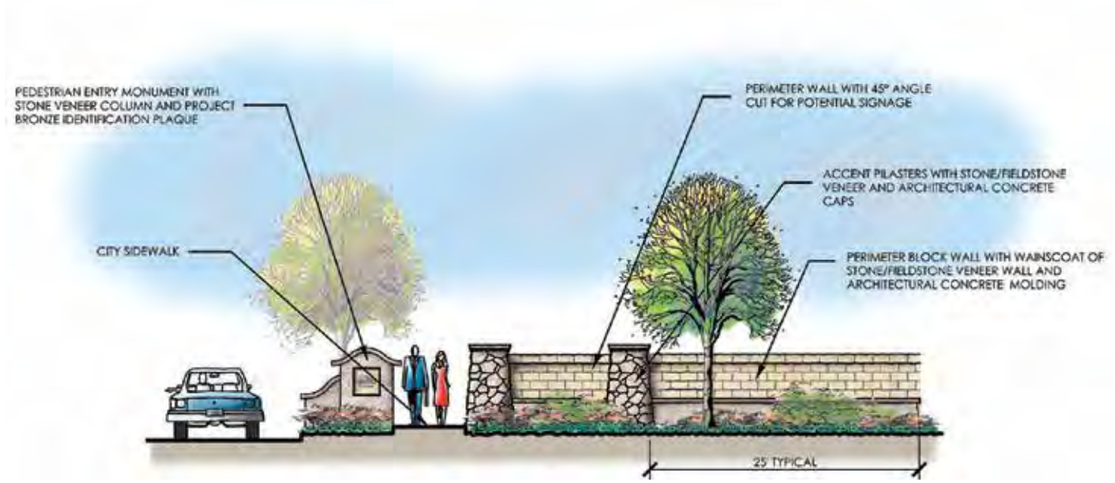
Primary Community Entry and Monumentation – Mill Creek Avenue

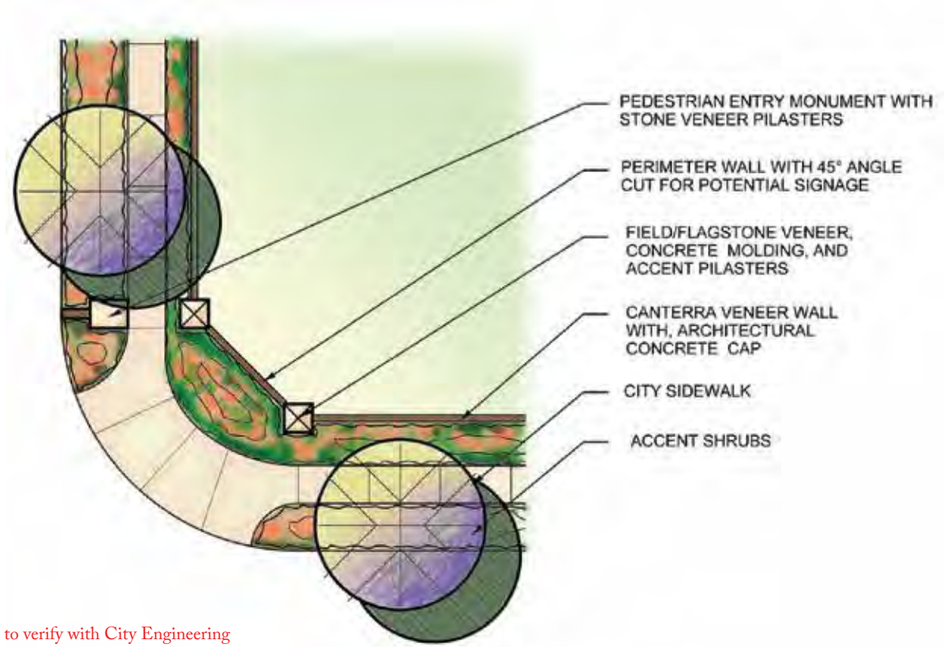


Developer to verify with City Engineering Development that the Entry Portal Gateway will be permitted within the City ROW.

Exhibit 44

Secondary Community Entry and Monumentation Elevation/Plan





Developer to verify with City Engineering Development that the Entry Portal Gateway will be permitted within the City ROW.

Exhibit 45

Neighborhood Entry and Monumentation Elevation/Plan

8.15 Parks and Open Space

The Ontario Esperanza Specific Plan Community will have a central "Community Core" that centers on the Neighborhood Park and the School. Exterior walkways and trails should lead to this centralized area. Exhibit 46, "Pedestrian Circulation Plan" illustrates the pedestrian accessibility and connectivity throughout the Esperanza Specific Plan area. Exhibits 47 through 50 illustrate the planning concepts for the Neighborhood Park and Mini-Parks planned for the Esperanza Specific Plan area.

- All project sites shall be designed to meet all the Integrated Waste Department's requirements, including the requirements for Sizing of Storage, Location of Collection Area, Accessibility for Collection Vehicles, and Collection of Sorted/Diverted Waste Types.

8.15.1 The Neighborhood Park

Park 1, the Neighborhood Park, consists of the following:

- Parking - Parking shall be adequate to accommodate daily use of the park, and should be screened from public view using a combination of berming and landscaping. In addition, the parking configuration should take into consideration alignment with proposed neighborhood streets and provide a minimum of (15) fifteen to (20) twenty parking stalls (including one van accessible handicap stall/unloading area).
- Children's Tot Lot Play Area - A Tot Lot will be located within close proximity to the parking lot and Restroom Building. Play structures and equipment should be staged to allow for separated use based on age (2-5 yr. and 5-12 yr.). The Tot Lot should also follow ADA guidelines and provide access based off of equipment selected. Play areas and fall zones shall be constructed with synthetic surfacing per ADA standards with wood fiber ("Fibar") being available as an alternative in non-fall zone areas. Seating areas shall be located near the Tot Lot to provide areas for parental supervision.
- Open turf area/Barbecue Picnic Facilities - The Neighborhood Park should provide an open turf area and barbecue picnic facilities scattered throughout a looped concrete walkway system. Barbecue facilities (minimum of 50%) should be located adjacent to the walkway system for ADA accessibility; the remaining percentage set in open turf areas. Each barbecue picnic facility shall provide a picnic table, freestanding barbecue, and trash receptacle. These barbecue facilities can be placed on concrete or any other ADA acceptable surfacing. The design of the Neighborhood Park open space should take into account pedestrian circulation and the linkage to the two adjacent roads as well as the surrounding community.
- Sports Fields for unorganized play – The open space turf area should be arranged to accommodate two baseball/softball fields and a soccer field overlay. Sports lighting should be discouraged at the park. Wherever feasible a minimum distance of 20 feet should be provided between streets and play areas. Sports fields will be improved in accordance with the City's Parks and Maintenance Department requirements.
- Landscaping – Landscaping within the Neighborhood Park shall harmonize with the surrounding streetscapes. Large specimen trees should be used within the open turf areas to help provide shade and screening of unwanted views. Accent trees should also be used at pedestrian entries and around the Tot Lot for color and seasonal interest. The park shall be irrigated with reclaimed water by an automated system per the City Standard Specifications for irrigation systems.
- Lighting – Security walkway lighting shall be provided in accordance with City requirements and the design guidelines contained herein.

- Restroom Building – A restroom building shall be located adjacent to the tot lot in clear view of the public streets surrounding the park. The building should be designed to provide separate restroom facilities for both sexes and shall conform to ADA design guidelines. Additional provisions for a storage room for the City of Ontario maintenance personnel shall also be designed (all designs shall be submitted to the City of Ontario and County Health Department for approval).
- Park monumentation/signage and a lockable trash enclosure area.
- Refer to Exhibit 47, "Neighborhood Park" for detailed conceptual illustrations.

8.15.2 Mini Parks and Pedestrian Trails

Pedestrian circulation is highly encouraged within the Ontario Esperanza Specific Plan Community. Landscape easements are provided along major roadways and are encouraged within the neighborhood communities.

- Interior walkways should be designed to provide connections to adjacent neighborhoods as well as linking the Neighborhood Park and School to dedicated neighborhood edge treatments and enhanced landscaped areas.
- Exhibit 47, shows a Neighborhood Park example (5 Acre)."
- Enhanced paving at pedestrian connections where pedestrian circulation crosses roadways.
- Paseos should provide strong connections to "Community Core" (~~school~~/5 AC neighborhood park).
- Connection of neighborhood pocket parks to community. The pocket parks are intended to provide minimal amenities, and should designed with strong neighborhood "eyes-on" approach. Pocket Parks should range between 3/4 – 1 acre in size.

Mini parks for children's play areas may contain the following amenities:

- Paseo walkway (meandering encouraged/ ADA accessible).
- Landscaping - Landscaping shall harmonize with the surrounding streetscapes and utilize trees, shrubs, and groundcovers identified in the plant matrix.
- Lighting – Pole mounted fixtures spaced at appropriate intervals for safety and security.
- Open turf play area

The Mini Parks might contain one or more of the following amenities:

- Barbecue Picnic Facilities
- Basketball/Volleyball Courts
- Tot Lots
- Rose Garden
- Covered Picnic Structures
- Seatwalls/benches
- Community Garden
- Refer to Exhibits 48 through 51 for detailed conceptual illustrations.

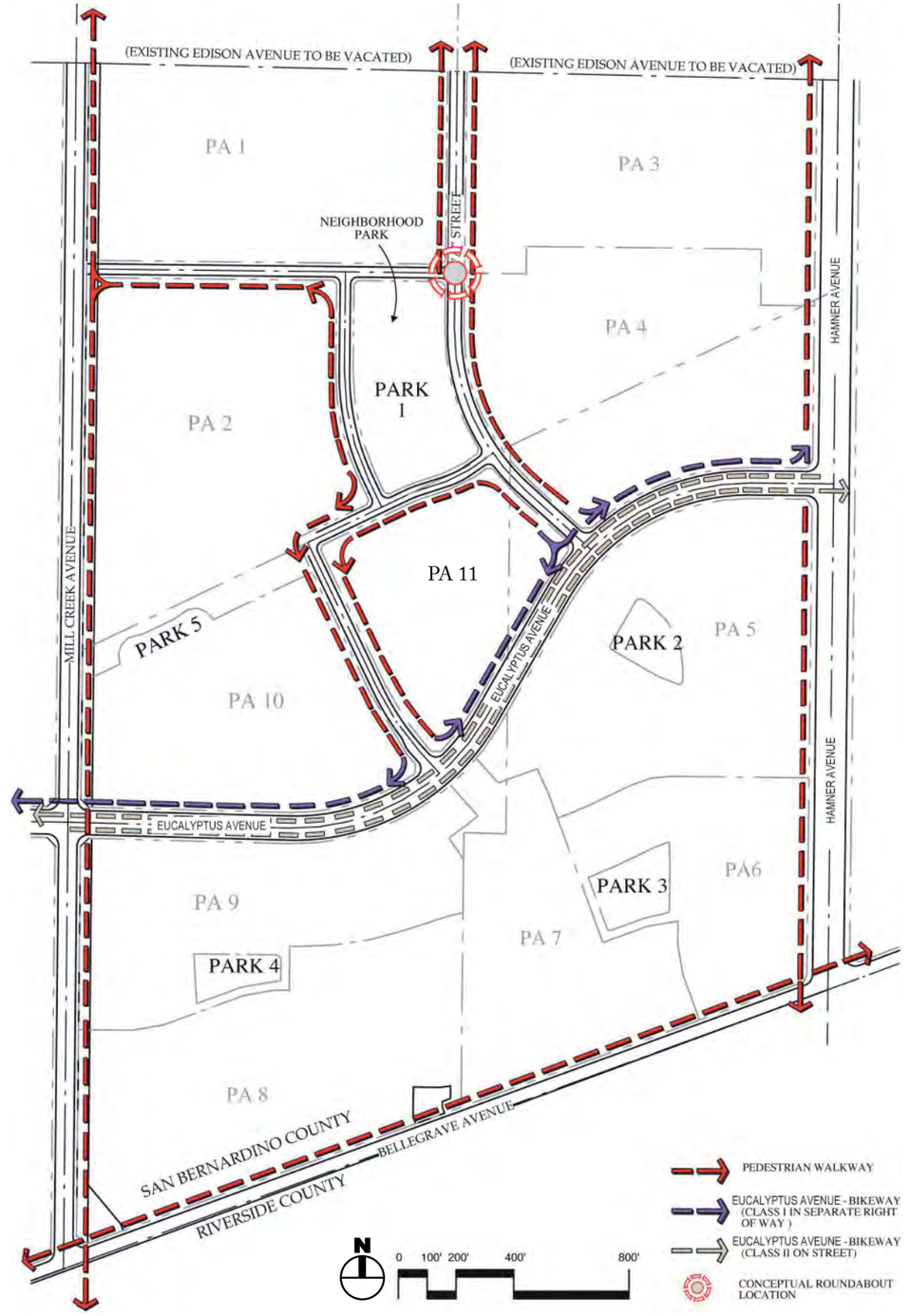


Exhibit 46
Pedestrian Circulation Plan

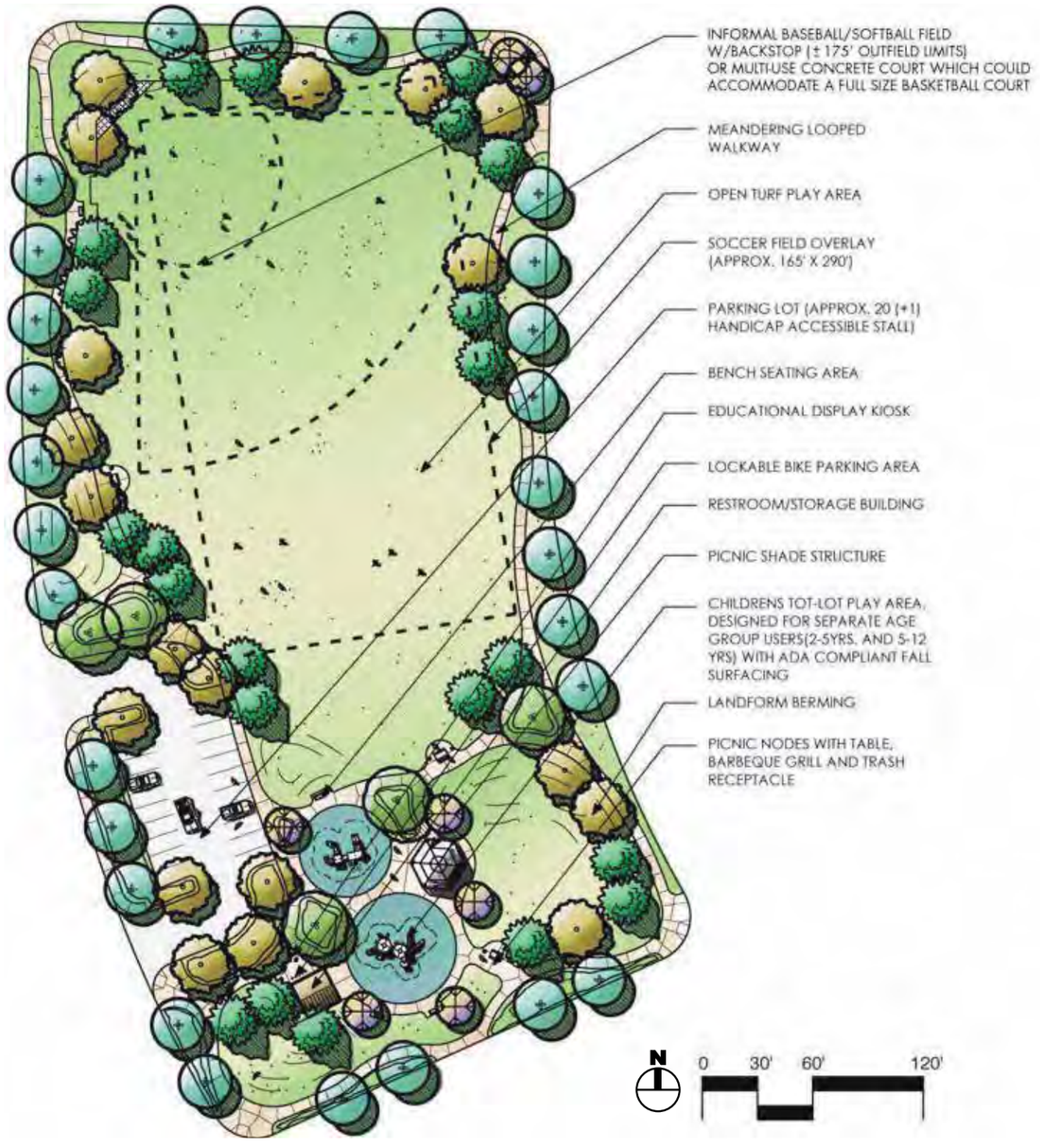


Exhibit 47
Neighborhood Park

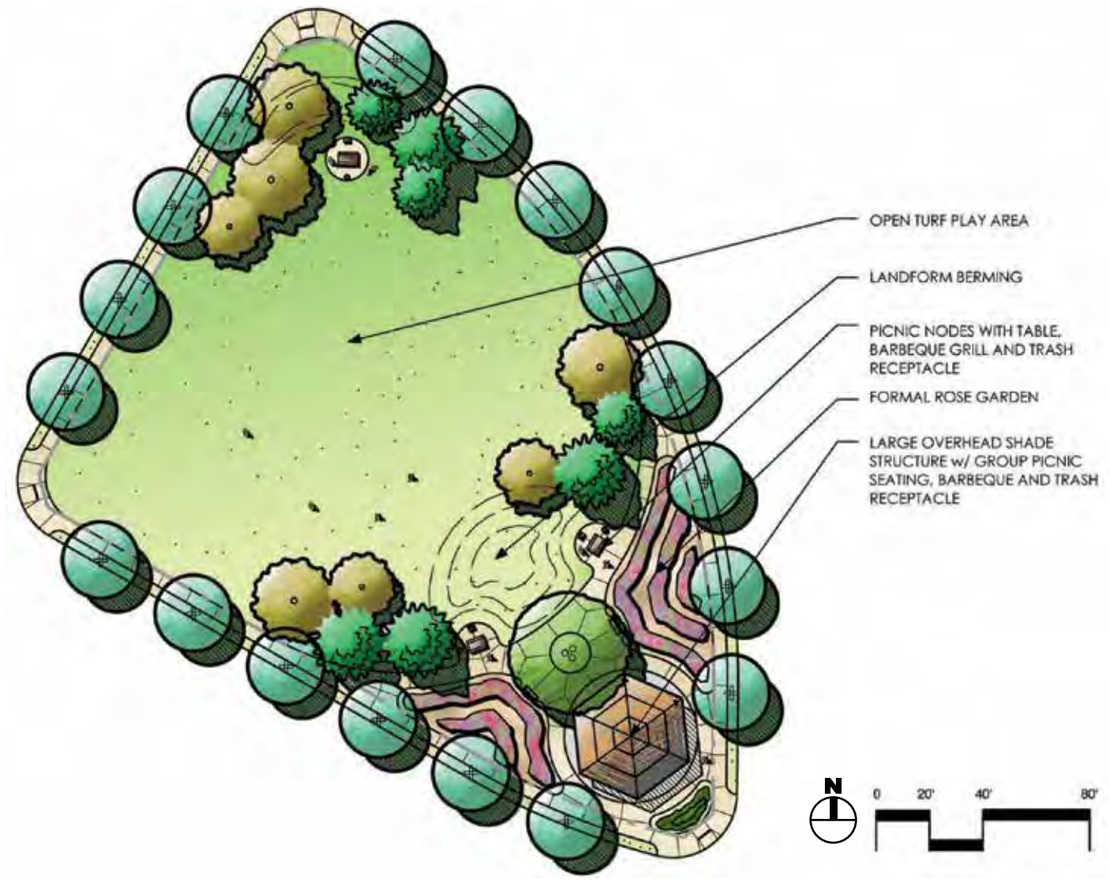


Exhibit 48
Mini Park Example (Park 2)

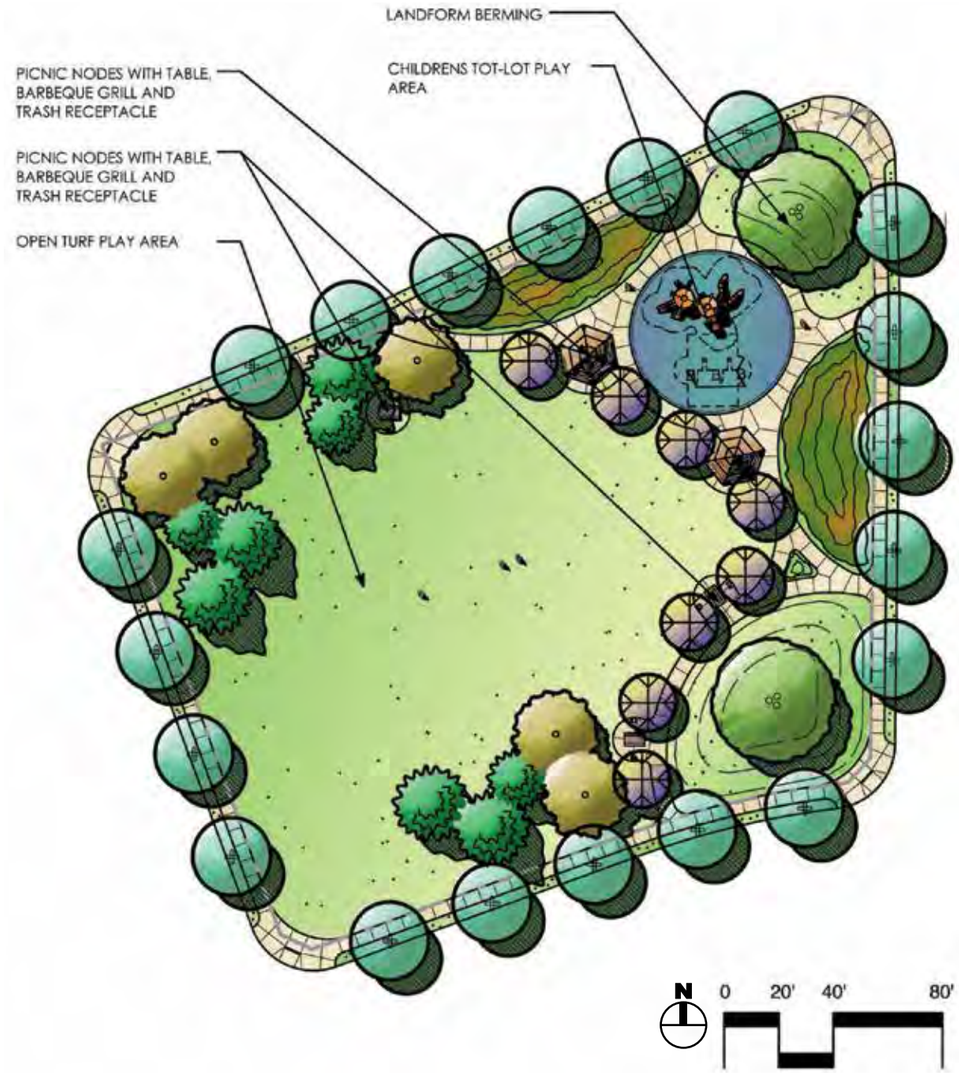


Exhibit 49
Mini Park Example (Park 3)

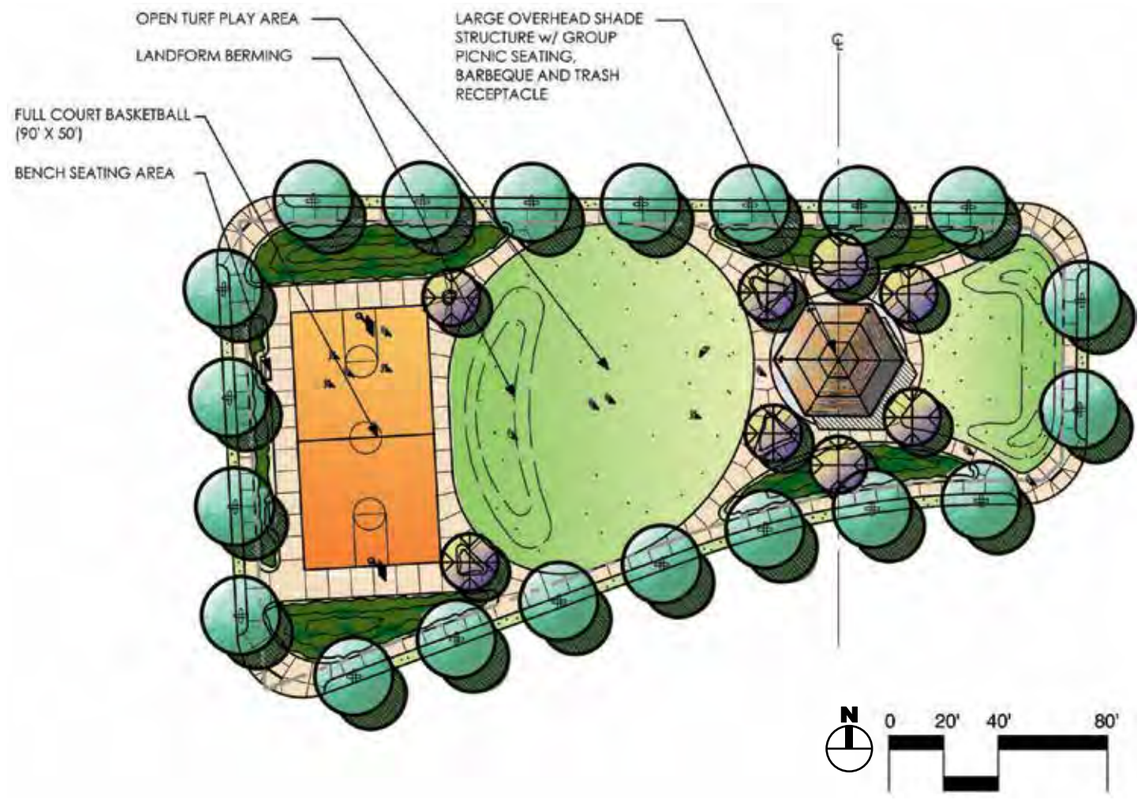


Exhibit 50
Mini Park Example (Park 4)

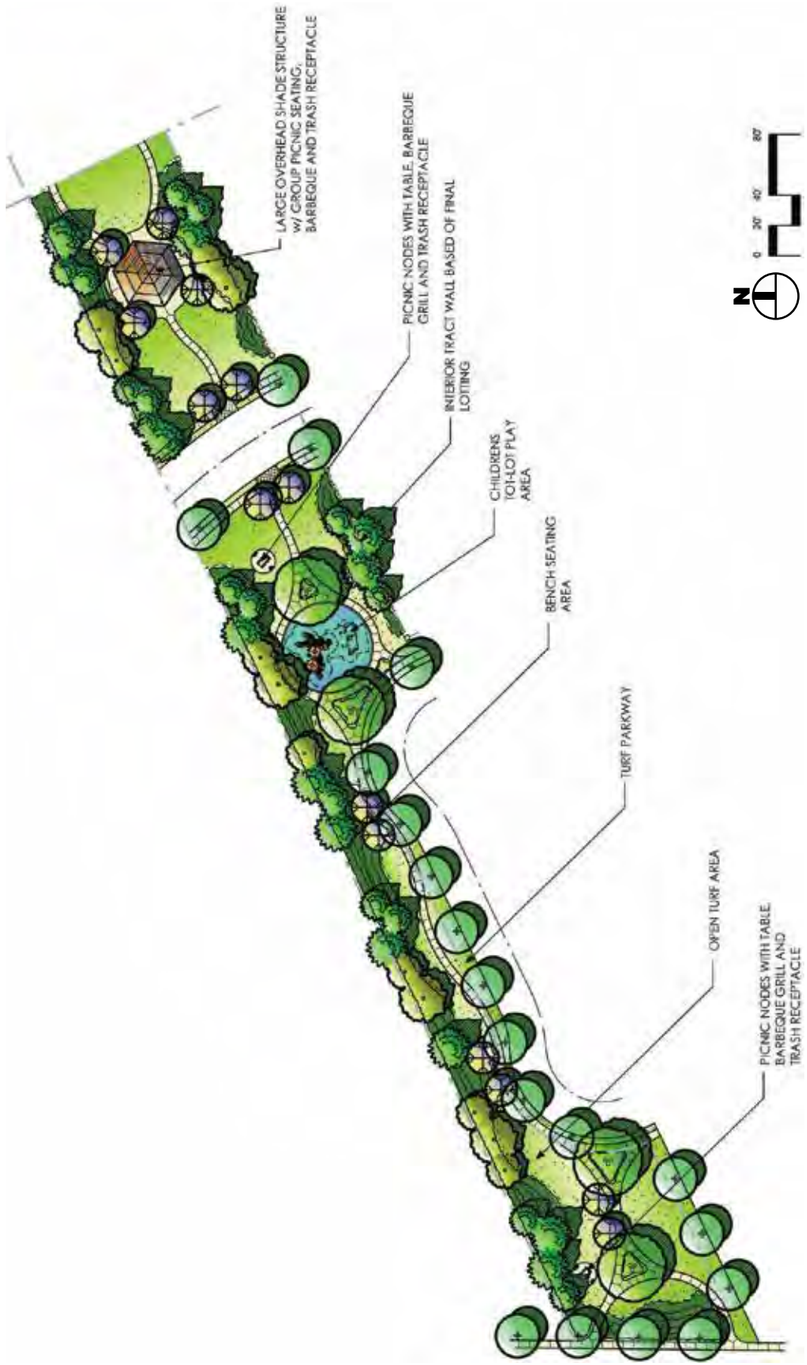


Exhibit 51
Mini Park Example (Park 5)

8.16 Community Walls and Fencing

Walls are a major component in achieving an overall community theme within the Ontario Esperanza Specific Plan. A strong cohesive appearance is achieved through the use of "community walls" and general overall wall guidelines as illustrated in Exhibit 52, "Master Walls and Fence Plan" and Exhibit 53, "Wall and Fence Details."

All walls that adjoin community street scenes (major streetscapes identified under Perimeter/ Interior Streetscapes) shall be deemed "community walls." All wall and fencing designs and layout shall be approved by the City of Ontario prior to construction.

8.16.1 Community Walls

Community walls shall be decorative in nature. Community walls shall incorporate the use of pilasters of a design consistent with the materials of the community walls. The location and spacing of pilasters shall be subject to Planning Department review and approval.

8.16.2 Solid Walls and Fencing

Solid walls shall be decorative. The use of vinyl fencing and wood fencing is prohibited. Reverse frontage walls and any wall return that is visible from public view, shall be constructed of split-face block or precision block that is veneered, burnished (using color other than common gray), plastered or stuccoed, and should complement color scheme dictated in Ontario Esperanza Specific Plan color palette. Decorative caps and the use of pilasters to help enhance the perimeter appeal of the walls are encouraged. Walls visible from the community streets may not be made of exposed or painted precision block or slumped block.

8.16.3 View Fencing

If applicable, view fences should be located in the rear yards of those properties abutting large slope areas where the adjacent property is a minimum of 15' above/below the house pad. These fences allow open views but not physical access; they shall be 5'-6" high and made of tubular steel or lexan glass panel construction. Areas where view fencing occurs will be subject to review by the City of Ontario. The use of tubular steel view fencing shall incorporate pilasters utilizing materials consistent with adjacent walls.

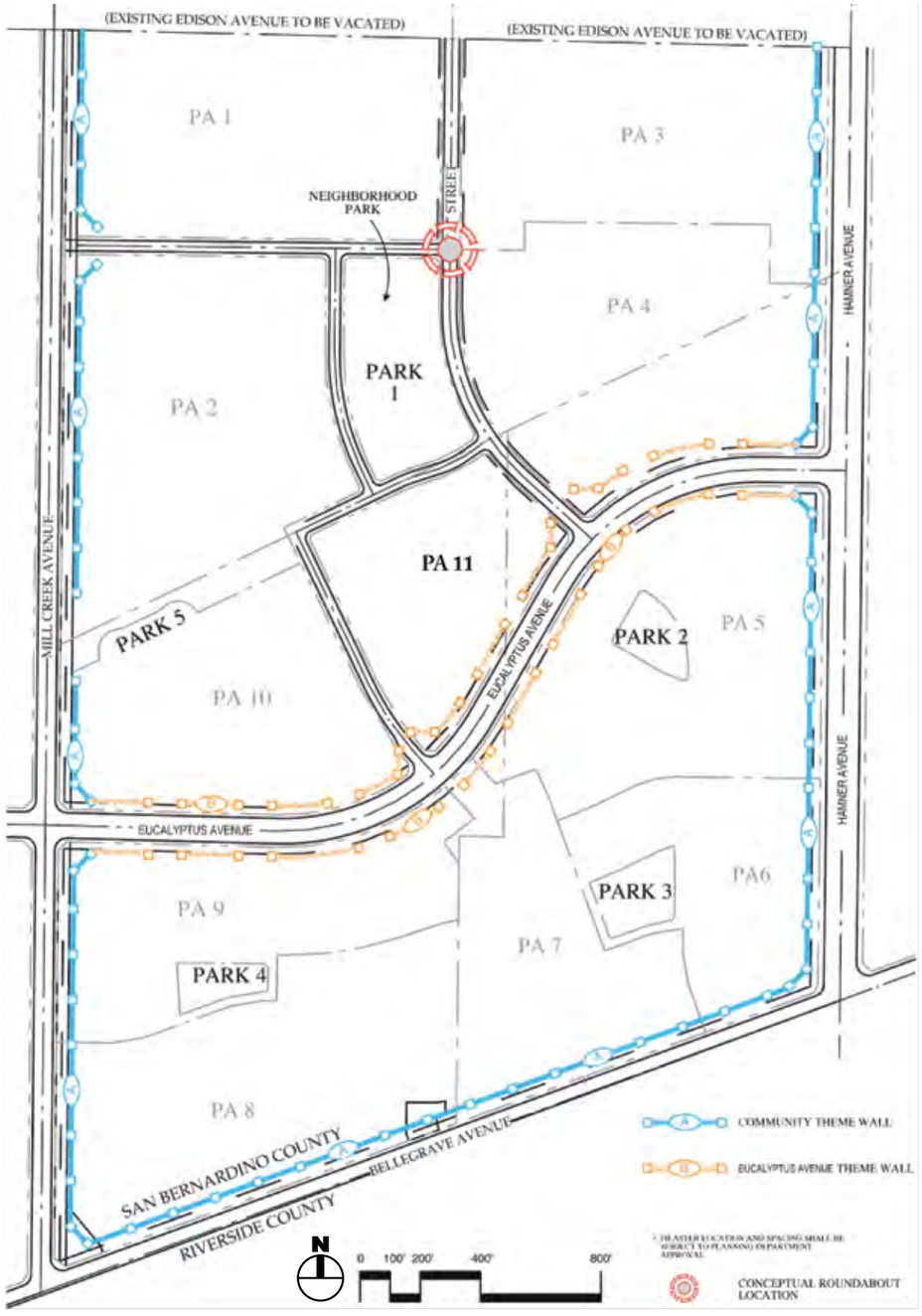
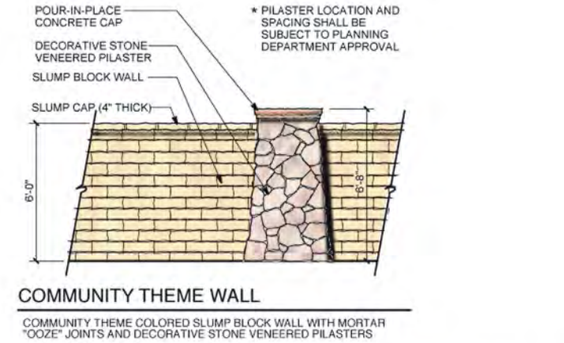
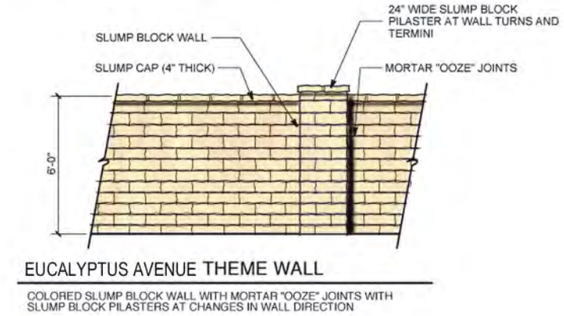
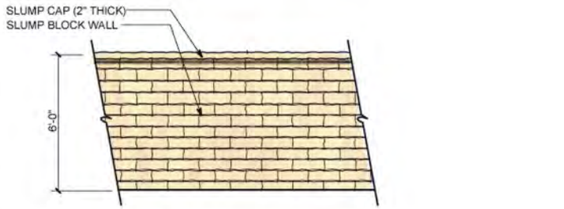


Exhibit 52
Master Walls and Fence Plan







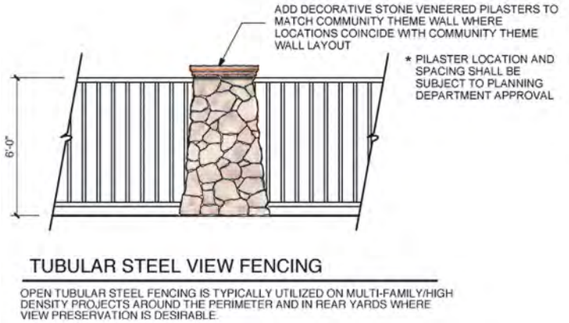


Exhibit 53
Wall and Fence Details

8.17 OUTDOOR LIGHTING

Lighting standards within the Ontario Esperanza community shall be consistent in style, color, and materials in order to maintain uniformity throughout. Lighting should be subtle, providing a soft wash of light over illuminated objects such as monumentation. Hierarchy shall be established by using a variety of lighting fixtures and illumination levels based off of lighting design intent. Lighting styles shall tie into architectural styles and provide sufficient illumination for the safety and well being of the community. Preservation of "Night-Sky" should be considered in lighting design layout and fixture selection. Use of "cutoff" or louvered lamps to preserve ambiance of "Night-Sky" is highly encouraged. Fixture locations should be designed so that light source is not visible by pedestrian or vehicular traffic. Frosted, louvered, or prismatic lens should be considered where decorative lighting fixtures are visible and part of the aesthetic lighting program. Accent lighting of landscape and monumentation shall be incorporated into the following areas:

8.17.1 Entry Monument Lighting:

Avoid intensely bright or "hot" lighting of monuments; rather, each should be lit to provide a soft wash of light across the monument signage. Specimen trees should be up-lit with several fixtures into the canopy to avoid creating dark sides of the trees.

8.17.2 Neighborhood Park/ Mini Parks/ Walkway Lighting

Lighting of the walkways, tot lots, restroom facility, and parking areas within the Parks should be considered for safety and security. All planned parking areas shall have a minimum maintained lighting level of one-foot candle (1 F.C.) or greater. The lighting shall be from sunset to sunrise and be operated by a photocell. The site plan shall be provided to the Police Department. It shall show all buildings, parking areas, walkways, detailed landscape areas and point-by-point photometry calculation of required light levels. Utilization of a traditional Globe/Acorn Post mounted light fixture should be considered for both the park open space areas as well as interior street lighting fixtures. Keeping with the character of traditional materials, (like those found in the "Model Colony" in Downtown Ontario) this will help to create a better sense of scale to the pedestrian. Fixtures shall be vandal resistant, not less than (8) eight feet from ground level. Luminaries of not less than (42") may be utilized to illuminate a walkway if adjacent landscaping is of a variety which does not mature higher than (2) two feet.

8.18 LANDSCAPE DESIGN

8.18.1 Public Landscapes

- Landscape plantings in public areas should reflect a commitment to both developing a "sense of place" and maintaining harmony with the Ontario Ranch.
- Community Facilities District (CFD) areas shall be separated with a 6" by 6" concrete mow strip when adjacent to private property.
- A landscape architect licensed in California shall be retained to prepare planting and irrigation plans for all public areas. Arrangement of plants should incorporate the concepts of mass planting; plants should be placed to allow them to grow to their natural sizes and forms, and sheared hedges should be kept to a minimum.

The plant matrix at the end of this section offers a suggested plant palette for Ontario Esperanza; while it is by no means all-inclusive, plantings in public areas should draw primarily from this palette for visual community continuity.

8.18.2 Front Yard Landscapes

Plantings in front yards may vary substantially from the Ontario Esperanza palette, but should retain some of the character and style of the public plantings. ~~No more than 25% of the total square footage of any front yard shall be lawn~~ Turf shall not exceed 25% of the landscape area in residential front yards; the balance shall be composed of shrubs and groundcovers, with an emphasis on drought tolerant plant species. No more than ~~55%~~ 45% of the front yard area shall be hardscape. Turf areas shall be sized and shaped to optimize irrigation efficiency. If turf is used in isolated areas such as driveway strips, subsurface irrigation or microspray heads shall be required to avoid overspraying of these areas. Irregular shapes that cannot be irrigated should be avoided.

- Each single-family lot shall be provided with front yard landscaping and a permanent automatic irrigation system. At a minimum, a seeded turf lawn, appropriate shrubs and trees shall be provided as landscaping materials. A variety of typical landscape designs shall be provided for use on each lot within the subdivision.
- Multiple family residential product areas shall be provided with full landscape improvements throughout the development. At a minimum, a seeded turf lawn, appropriate shrubs and trees, and a permanent irrigation system shall be provided.
- Landscape and irrigation drawings for each development shall be submitted in conjunction with house construction plans. The plans shall be approved by the Planning Department and the Landscape Planning Division prior to the issuance of building permits.
- Areas of a lot or site which are not used for drive entries, parking, or approved outdoor uses shall be fully landscaped; all unpaved areas shall be landscaped; and all future development phase areas shall be hydroseeded.

8.18.3 Soil Testing

Soil samples shall be taken from several locations after the completion of rough grading operations, and a reputable soil-testing laboratory shall perform an agronomic soils test. The test shall assess soil fertility needs for water-wise California native and Mediterranean plant types. No planting shall take place until the soil has been properly prepared based on the recommendations of the soils testing laboratory. Organic soils amendments shall be incorporated as necessary to achieve a recommended percolation rate of one inch per hour.

8.18.4 Slope Landscaping

All manufactured and cut/fill slopes which exceed 3' in height shall be planted with an effective mixture of groundcover, shrubs, trees, and include jute matting. Such slopes shall also be irrigated as necessary to ensure germination and establishment. Landscape slopes shall not exceed 3:1 or greater and shall include the installation of jute matting. Where 2:1 landscape slopes are unavoidable, erosion blankets shall be installed with a 3-year durability.

8.18.5 Interior Slopes: Residential Interior

- Interior slopes may be more ornamental in character than exterior slopes. They may have a somewhat broader range of plant materials than exterior slopes, but should still be chosen primarily from the Ontario Esperanza plant palette and are subject to the same fuel modification restrictions.
- All manufactured and cut/fill slopes which exceed 3' in height shall be planted with an effective mixture of groundcover, shrubs, and trees. Such slopes shall also be irrigated as necessary to ensure germination and establishment.

8.18.6 Streetscape Landscaping

Streetscape Development Standards

- Turf grass ~~shall only be used in areas with street side parking and shall be located adjacent to the sidewalk or curb line.~~ is only permitted within streetscapes where streetside parking is identified and recycled water is available.
- All new plantings within the Ontario Esperanza planned community shall draw substantially from the Ontario Esperanza Plant List included in this document.
- All streetscape landscaping within the Ontario Esperanza planned community will be implemented by the Developer in accordance with this Specific Plan.
- The Developer shall install all primary and secondary improvements concurrently with the construction of the roadway on which they front. Neighborhood intersections shall be constructed as each neighborhood street is built.
- The Developer shall provide site inspection of all construction and installation of entries and intersections in accordance the City of Ontario requirements.

8.18.7 Irrigation Design

Irrigation for both public and private landscapes should be designed to be as water-efficient as possible. All irrigation systems shall have automatic controllers designed to properly water plant materials given the site's soil conditions, and irrigation systems for all public landscapes shall have automatic rain shut-off devices. Drip irrigation is not permitted with CFD landscape areas. Spray systems shall have low volume (gpm) matched-precipitation heads. All CFD areas are to be controlled with a central control irrigation system and all trees are to be irrigated utilizing a flush grade bubbler system on a separate valve. All CFD areas shall be designed to City Standard Specifications.

All irrigation products specified shall achieve an irrigation operational distribution uniformity of ~~70%~~ 65% or greater in all turf areas and ~~80%~~ in all other landscaped areas. Turf areas shall be irrigated with equipment that has a precipitation rate of one inch or less per hour as specified by the manufacturer. Stream rotator heads or low volume spray heads are acceptable for turf areas. Use of standard spray heads shall be avoided. Non turf shrub areas shall be irrigated with low volume micro spray or point application devices, where manufacturer's specification indicates output measured and expressed in gallons per hour.

Botanical Name	Common Name	Eucalyptus Avenue (Per Ontario Ranch Streetscape Master Plan	Bellgrave Avenue (Per Ontario Ranch Streetscape Master Plan)	Mill Creek Avenue (Per Ontario Ranch Streetscape Master Plan)	Hamner Avenue (Per Ontario Ranch Streetscape Master Plan)	SCE Easement (Mill Creek Avenue)	Primary Community Entries	Secondary Community Entries	Neighborhood Entries	Neighborhood Park Open Space	Mini Parks	Alleys
~~*Arbutus unedo*~~	~~Strawberry Tree~~					•						•
Acacia cultriformis	Knife Acacia					•						
Brachychiton populneus	Bottle Tree									•	•	•
Callistemon viminalis	Weeping Bottlebrush											•
Cedrus deodara	Deodar Cedar									•		
Chionanthus retusus	Chinese Fringe Tree									•	•	
Cupressus sempervirens	Italian Cypress						•	•	•			
Dodonaea vicosa	Hopseed Bush					•						•
Cercis canadensis	Eastern Redubd					•						•
Juniperus chinensis 'Torulosa'	Hollywood Juniper											•
Lagerstroemia indica hybrids	Crape Myrtle								•	•	•	
~~*Liquidambar styraciflua*~~	~~American Sweet Gum~~									•		
Olea europea	Olive										•	
Olea europea	Olive									•	•	•
Melalueca linariifolia	Falxleaf Paperbark									•		
Melalueca nesophila	Pink Melalueca					•						•
Melalueca quinquinervia	Cajeput Tree									•		
Pinus canarensis	Canary Island Pine									•	•	
Platanus acerifolia	London Plane Tree									•	•	
Platanus racemosa	Western Sycamore						•			•		
Podocarpus gracilior	Yew Pine								•		•	
Tristania conferta	Brisbane Box									•	•	
Fraxinus uhdei	Ash								•		•	•
Quercus agrifolia	Coast Live Oak						•	•		•		
Quercus ilex	Holly Oak									•		
Rhus lancea	African Sumac											•
Schinus molle	California Pepper						•	•		•		
Tristania laurina	Water Gum											•

TABLE 6
Plant Matrix - Trees

Botanical Name	Common Name	Eucalyptus Avenue	Bellgrave Avenue	Mill Creek Avenue	Hamner Avenue	SCE Easement (Mill Creek Avenue)	Primary Community Entries	Secondary Community Entries	Neighborhood Entries	Community Park Open Space	Linear Park	Paseo Trail System	Alleys
Agapanthus species	Lily of the Nile											•	•
Anigozanthos species	Kangaroo Paws												
~~*Arbutus unedo 'Compacta'*~~	~~Compact Strawberry Tree~~					•							
Arctostaphylos d. 'Howard McMinn'	McMinn Manzanita					•				•	•		
Asparagus densiflorus 'Myers'	Myers Asparagus											•	•
Bergenia cordifolia	Bergenia					•							
Buxus japonica	Japanese Boxwood						•	•	•				
Calliandra haematocephala	Pink Powder Puff							•					•
Callistemon 'Little John'	Dwarf Callistemon					•						•	
Camellia species	Camellia												
Campanula poschcharskyana	Serbian Bellflower												
Carex tumulicola	Berkeley Sedge						•	•	•				
Cercis occidentalis	Western Redbud						•	•	•				
Salvia	Sage		•		•	•						•	
Salvia	Sage					•	•	•	•			•	
Correa pulchella 'Mission Bells'	Australian Fuchsia					•	•	•	•			•	•
Cotoneaster lacteus	Cotoneaster						•	•	•				
Deschampsia cespitosa	Hair Grass		•		•		•	•	•				
Dietes iridioides	Fortnight Lily	•		•						•	•	•	•
Dodonaea vicosa	Hopseed-Bush												
Echium fastuosum	Pride of Madiera	•				•							
Festuca mairei	*Atlas Fescue*		•		•		•	•	•				
Geranium incanum	Carpet Geranium												•
Geranium 'Johnson's Blue'	Johnson's Blue Geranium		•		•								
~~*Helictotrichon*~~	~~Oat Grass~~		•		•								
~~*Helictotrichon*~~	~~Oat Grass~~		•		•								
Helictotrichon sempervirens	Blue Oat Grass									•	•	•	•
Hemerocallis hybrids (evergreen)	Daylily - mixed colors		•		•		•	•	•	•	•	•	•
Heuchera sanguinea	Coral Bells						•	•	•				
Juniperus species	Juniper												
Kniphofia uvaria	Red Hot Poker											•	•
Lantana species	Lantana												
Lavatera maritima	Tree Mallow												
Leptospermum scoparium	New Zealand Tea Tree		•		•								
Ligustrum japonicum 'Texanum'	Japanese Privet	•											•
Mahonia aquifolium	Oregon Grape						•	•	•				
Mimulus species	Monkey Flower												
Muhlenbergia rigens	Deer Grass	•				•							
Myoporum parvifolium	Trailing Myoporum					•							
Myrtus communis 'Compacta'	Dwarf Myrtle												
Nandina domestica	Heavenly Bamboo			•			•	•	•	•	•	•	•
Nephrolepis cordifolia	Southern Sword Fern												
~~*Nessella tenuissima*~~	~~Mexican Feather Grass~~								•			•	
Penstemon species	Beard Tongue						•	•	•				
~~*Phormium hybrids*~~	~~Hybrid New Zealand Flax~~	•											
~~*Photinia x fraseri*~~	~~Photinia~~												
Plumbago auriculata	Cape Plumbago												
Prunus c. 'Bright 'n Tight'	Carolina Laurel Cherry												
Rosa species	Rose		•		•					•	•		
Rosmarinus officianalis and hybrids	Rosemary	•				•							
Salvia greggii and cultivars	Autumn Sage						•	•	•				
Sedum 'Autumn Joy'	Autumn Joy Stonecrop		•		•								
Tecomaria capensis	Cape Honeysuckle												
Teucrium x lucidrys	Bush Germander		•		•								
Xylosma congestum	Shiny Leaf Xylosma												
Viburnum tinus 'Spring Boquet'	Spring Boquet Laurustinus		•		•					•	•		

Table 7
Plant Matrix - Shrubs

Section 9. General Plan Consistency

California Government Code (Title 7, Division 1, Section 3, Article 8, Section 65440- 65457) permits the adoption and administration of Specific Plans as an implementation tool for elements contained within a jurisdiction's local General Plan. Specific plans must demonstrate consistency in regulations, guidelines, and programs with the goals and policies set forth in the general plan.

The Esperanza Specific Plan has been prepared in conformance with the goals and policies of the City of Ontario General Plan. The "~~City of Ontario New Model Colony~~ Ontario Ranch Specific Plan Policy Matrix" which follows, describes the manner in which the Specific Plan complies with the General Plan.

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The Ontario Plan 2050
Specific Plan Policy Matrix

Following are policies from the Ontario Plan 2050. The Ontario Plan establishes the direction and vision for the City of Ontario and provides a single comprehensive document to shape its future. The Ontario Plan provides for policies to accommodate change over its 30 year lifespan. The Ontario Plan consists of a six (6) part Component Framework: ***1) Vision, 2) Governance Manual, 3) Policy Plan, 4) City Council Priorities, 5) Implementation, and 6) Tracking and Feedback****. The following matrix is intended to determine the adequacy of the proposed Specific Plan in meeting the polices of the Ontario Plan. The checklist shall be completed and submitted with the Specific Plan application. Check if the Specific Plan fully complies or partially complies with each respective policy, or if not applicable.*

Policy		Fully Complies	Partially Complies	SP Sec. No.	N/A
LAND USE ELEMENT					
LU-1 Balance					
Goal	**A community that has a spectrum of housing types and price ranges that match the jobs in the City and that make it possible for people to live and work in Ontario and maintain a quality of life.**				
LU-1.1	**Strategic Growth.** We concentrate growth in strategic locations that help create place and identity, maximize available and planned infrastructure, foster the development of transit, and support the expansion of the active and multimodal transportation networks throughout the City.	X		4 and 7	
Comments:					
LU-1.2	**Sustainable Community Strategy.** We integrate state, regional, and local Sustainable Community/Smart Growth principles into the development and entitlement process.	X		7	
Comments:					
LU-1.3	**Adequate Capacity.** We require adequate infrastructure and services for all development.	X		5	
Comments:					

Policy		Fully Complies	Partially Complies	SP Sec. No.	N/A
LU-1.4	**Multimodal Mobility.** We require development and urban design, where appropriate, that reduces reliance on the automobile and capitalizes on active transportation, transit, electric vehicles, and multimodal transportation opportunities.	X		5	
Comments:					
LU-1.5	**Jobs-Housing Balance.** We coordinate land use, infrastructure, and transportation planning and analysis with regional, county, and other local agencies to further regional and subregional goals for jobs-housing balance.	X		4 and 7	
Comments:					
LU-1.6	**Complete Community.** We incorporate a variety of land uses and building types in our land use planning efforts that result in a complete community where residents at all stages of life, employers, workers, and visitors have a wide spectrum of choices of where they can live, work, shop and recreate within Ontario.	X		4 and 7	
Comments:					
LU-1.7	**Revenues and Costs.** We require future amendments to our Land Use Plan to be accompanied by analyses of fiscal impacts.	X		7	
Comments:					
LU-2 Compatibility					
Goal	**Compatibility between a wide range of uses and resultant urban patterns and forms.**				
LU-2.1	**Land Use Decisions.** We minimize adverse impacts on adjacent properties when considering land use and zoning requests.	X		3 and 4	
Comments:					
LU-2.2	**Buffers.** We require new uses to provide mitigation or buffers between existing uses where potential adverse impacts could occur. Additional mitigation is required when new uses could negatively impact environmental justice areas.	X		4 and 5	
Comments:					
LU-2.3	**Hazardous Uses.** We regulate the development of industrial and similar uses that use, store, produce, or transport toxic substances, air emissions, other pollutants, or hazardous materials.				X
Comments:	*The General Plan does not designate the Esperanza Specific Plan for industrial land uses.*				

Policy		Fully Complies	Partially Complies	SP Sec. No.	N/A
LU-2.4	**Regulation of Nuisances.** We regulate the location, concentration, and operation of potential nuisances.	X		4	
Comments:					
LU-2.5	**Regulation of Uses.** We regulate the location, concentration, and operation of uses that have impacts on surrounding land uses.	X		4	
Comments:					
LU-2.6	**Infrastructure Compatibility.** We require infrastructure to be aesthetically pleasing and in context with the community character.	X		4, 5 and 8	
Comments:					
LU-2.7	**Inter-jurisdictional Coordination.** We maintain an ongoing liaison with ONT, Caltrans, Public Utilities Commission, the railroads, and other agencies to help minimize impacts and improve the operations and aesthetics of their facilities.	X		7	
Comments:					
LU-2.8	**Transitional Areas.** We require development in transitional areas to protect the quality of life of current residents.	X		4	
Comments:					
LU-2.9	**Methane Gas Sites.** We require sensitive land uses and new uses on former dairy farms or other methane-producing sites be designed to minimize health risks.	X		4 and 7	
Comments:					
LU-2.10	**Sensitive Uses.** We monitor and share information with the community about stationary and non-stationary emission sources. We encourage siting and design of facilities to minimize health and safety risks on existing and proposed sensitive uses, especially in environmental justice areas.	X		7	
Comments:					
LU-2.11	**Context-Aware Transitions and Connections.** We require new development projects and land-planning efforts to provide context-aware and appropriate transitions and connections between existing and planned neighborhoods, blocks, sites, and buildings.	X		4	
Comments:					

Policy		Fully Complies	Partially Complies	SP Sec. No.	N/A
LU-3 Flexibility					
Goal	**Staff, regulations and processes that support and allow flexible response to conditions and circumstances in order to achieve the Vision.**				
LU-3.1	**Development Standards.** We maintain clear development standards which allow flexibility to achieve our Vision and provide objective standards that ensure predictability and deliver the intended physical outcomes.	X		6 and 7	
Comments:					
LU-3.2	**Design Incentives.** We offer design incentives to help projects achieve the Vision.	X		6, 7 and 8	
Comments:					
LU-3.3	**Land Use Flexibility.** We consider uses not typically permitted within a land use category if doing so improves livability, reduces vehicular trips, creates community gathering places and activity nodes, and helps create identity.	X		6 and 8	
Comments:					
LU-4 Phased Growth					
Goal	**Development that provides short-term value only when the opportunity to achieve our Vision can be preserved.**				
LU-4.1	**Commitment to Vision.** We are committed to achieving our Vision but realize that it may take time and several interim steps to get there.	X		4 and 7	
Comments:					
LU-4.2	**Interim Development.** We allow development in urban, mixed use, and transit-oriented Place Types that is not immediately reflective of our ultimate Vision for the Place Type, provided it can be modified or replaced when circumstances are right to support development aligned with the Place Type Vision. We will not allow development that impedes, precludes, or compromises our ability to achieve our Vision.				X
Comments:	*The plan does not include the development of urban, mixed use, or transit-oriented Place Types.*				

Policy		Fully Complies	Partially Complies	SP Sec. No.	N/A
LU-4.3	**Infrastructure Timing.** We require that the necessary infrastructure and services be in place prior to or concurrently with development.	X		4 and 5	
Comments:					
LU-4.4	**Shared Infrastructure.** We encourage and facilitate the use of shared infrastructure (including shared or managed parking) in urban, mixed use, and transit-oriented Place Types.	X		4 and 5	
Comments:					
LU-5 Airport Planning					
Goal	**Integrated airport systems and facilities that minimize negative impacts to the community and maximize economic benefits.**				
LU-5.1	**Coordination with Airport Authorities.** We collaborate with FAA, Caltrans Division of Aeronautics, airport owners, neighboring jurisdictions, and other shareholders in the preparation, update, and maintenance of airport-related plans.				X
Comments:	*The plan is not within the airport impact zone.*				
LU-5.2	**Airport Planning Consistency.** We coordinate with airport authorities to ensure The Ontario Plan is consistent with state law, federal regulations, and/or adopted master plans, and airport land use compatibility plans for ONT and Chino Airport.				X
Comments:	*The plan is not within the airport impact zone.*				
LU-5.3	**Airport Impacts.** We work with agencies to maximize resources to mitigate the impacts and hazards related to airport operations – their homes.				X
Comments:	*The plan is not within the airport impact zone.*				
LU-5.4	**ONT Growth Forecast.** We support and promote an ONT that accommodates 30 million annual passengers and 1.6 million tons of cargo per year, as long as the impacts associated with that level of operations are planned for and mitigated.				X
Comments:	*The plan is not within the airport impact zone.*				
LU-5.5	**Airport Compatibility Planning for ONT.** We create and maintain the Airport Land Use Compatibility Plan for ONT.				X
Comments:	*The plan is not within the airport impact zone.*				

Policy		Fully Complies	Partially Complies	SP Sec. No.	N/A
LU-5.6	**Alternative Process.** We fulfill our responsibilities and comply with state law with regard to the Alternative Process for proper airport land use compatibility planning.				X
Comments:	*The plan is not within the airport impact zone.*				
LU-5.7	**ALUCP Consistency with Land Use Regulations.** We comply with state law that requires general plans, specific plans, and all new development to be consistent with the policies and criteria set forth within an Airport Land Use Compatibility Plan for any public-use airport.				X
Comments:	*The plan is not within the airport impact zone.*				
LU-5.8	**Chino Airport.** We will support the creation and implementation of the Airport Land Use Compatibility Plan for Chino Airport.				X
Comments:	*The plan is not within the airport impact zone.*				
HOUSING ELEMENT					
H-1 Neighborhoods & Housing					
Goal	**Stable neighborhoods of quality housing, ample community services and public facilities, well-maintained infrastructure, and public safety that foster a positive sense of identity.**				
H-1.1	**Housing Rehabilitation.** We support the rehabilitation, maintenance, and improvement of single-family, multiple-family, and mobile homes through code compliance, removal of blight where necessary, and provision of rehabilitation assistance where feasible.	X		4 and 8	
Comments:					
H-1.2	**Neighborhood Conditions.** We direct efforts to improve the long-term sustainability of neighborhoods through comprehensive planning, provision of neighborhood amenities, rehabilitation and maintenance of housing, and community building efforts.	X		4 and 8	
Comments:					
H-1.3	**Community Amenities.** We shall provide adequate public services, infrastructure, open space, parking and traffic management, pedestrian, bicycle, and equestrian routes and public safety for neighborhoods consistent with City master plans and neighborhood plans.	X		4 and 8	
Comments:					

Policy		Fully Complies	Partially Complies	SP Sec. No.	N/A
H-1.4	**Historical Preservation.** We support the preservation and enhancement of residential structures, properties, street designs, lot configurations, and other reminders of Ontario's past that are considered to be local historical or cultural resources.	X		3	
Comments:					
H-1.5	**Neighborhood Identity.** We strengthen neighborhood identity through creating parks and recreational outlets, sponsoring neighborhood events, and encouraging resident participation in the planning and improvement of their neighborhoods.	X		4 and 8	
Comments:					
H-2 Housing Supply & Diversity					
Goal	**Diversity of types of quality housing that are affordable to a range of household income levels, accommodate changing demographics, and support and reinforce the economic sustainability of Ontario.**				
H-2.1	**Corridor Housing.** We revitalize transportation corridors by encouraging the production of higher density residential and mixed-uses that are architecturally, functionally, and aesthetically suited to corridors.	X		3 and 4	
Comments:					
H-2.2	**Historic Downtown.** We foster a vibrant historic downtown through facilitating a wide range of housing types and affordability levels for households of all ages, housing preferences, and income levels.				X
Comments:	*The plan does not include the development of a historic downtown.*				
H-2.3	**Ontario Airport Metro Center.** We foster a vibrant, urban, intense, and highly amenitized community in the Ontario Airport Metro Center Area through a mix of residential, entertainment, retail, and office-oriented uses.				X
Comments:	*The plan does not include the development of a Ontario airport metro center.*				
H-2.4	**Ontario Ranch.** We support a premier lifestyle community in the Ontario Ranch, distinguished by diverse housing, highest design quality, and cohesive and highly amenitized neighborhoods.	X		4 and 8	
Comments:					

Policy		Fully Complies	Partially Complies	SP Sec. No.	N/A
H-2.5	**Housing Design.** We require architectural excellence through adherence to City design guidelines, thoughtful site planning, environmentally sustainable practices, and other best practices.	X		6 and 8	
Comments:					
H-2.6	**Infill Development.** We support the revitalization of neighborhoods through the construction of higher-density residential developments on underutilized residential and commercial sites.	X		3 and 4	
Comments:					
H-3 Governmental Regulations					
Goal	**A City regulatory environment that balances the need for creativity and excellence in residential design, flexibility and predictability in the project approval process, and the provision of an adequate supply and prices of housing.**				
H-3.1	**Incentives.** We maintain incentive programs that can be offered to projects that provide benefits to the community such as exceptional design quality, economic advantages, environmental sustainability, or other benefits that would otherwise be unrealized.	X		7	
Comments:					
H-3.2	**Flexible Standards.** We allow flexibility in the application of residential and mixed-use development standards in order to gain benefits such as exceptional design quality, economic advantages, sustainability, or other benefits that would otherwise be unrealized.	X		6 and 8	
Comments:					
H-3.3	**Development Review.** We maintain a residential development review process that provides certainty and transparency for project stakeholders and the public, yet allows for the appropriate review to facilitate quality housing development.	X		4 and 7	
Comments:					
H-3.4	**Financial Incentives.** We consider financial incentives to facilitate and encourage the production, rehabilitation or improvement of housing, or provision of services where such activity furthers housing and community-wide goals.	X		7	
Comments:					

Policy		Fully Complies	Partially Complies	SP Sec. No.	N/A
H-4 Housing Assistance					
Goal	**Increased opportunities for low- and moderate-income households and families to afford and maintain quality ownership and rental housing opportunities, including move-up opportunities. Inclusive communities, racial equity, fair housing choice, and access to opportunity.**				
H-4.1	**Preservation of Affordable Apartments.** We strive to facilitate the preservation of the affordability of publicly assisted apartments for lower-income households through financial assistance, technical assistance, rehabilitation, and collaborative partnerships.				X
Comments:					
H-4.2	**Homeownership Opportunities.** We increase and expand homeownership rates for lower- and moderate-income households by offering financial assistance, low-interest loans, and educational resources, and by working in collaboration with partnerships.		X	4 and 7	
Comments:	*The plan provides a variety of homeowner ownership opportunities but does not include any affordable housing units.*				
H-4.3	**Rental Assistance.** We support the provision of rental assistance for individuals and families earning extremely low, very low, and low income with funding from the state and federal government.	X		7	
Comments:					
H-4.4	**Mixed-income Housing.** We encourage the integration of affordable housing in the Ontario Ranch, Ontario Airport Metro Center Area, and existing neighborhoods.	X		4 and 7	
Comments:					
H-4.5	**Collaborative Partnerships.** We support collaborative partnerships of nonprofit organizations, affordable housing developers, major employers, and for-profit developers to produce affordable housing.	X		7	
Comments:					
H-4.6	**Fair Housing.** We further fair housing by prohibiting discrimination in the housing market, lifting barriers that restrict access to housing, and providing education, support, and enforcement services to address discriminatory practices.	X		4 and 7	
Comments:					

Policy		Fully Complies	Partially Complies	SP Sec. No.	N/A
H-5 Special Needs					
Goal	**A full range of housing types and community services that meet the special housing needs for all individuals and families in Ontario, regardless of income level, age, or other status.**				
H-5.1	**Senior Housing.** We support the development of accessible and affordable senior housing and provide financial assistance for seniors to maintain and improve their homes.	X		4 and 7	
Comments:	*The plan does not include the development of senior housing.*				
H-5.2	**Family Housing.** We support the development of larger rental apartments that are appropriate for families with children, including, as feasible, the provision of services, recreation, and other amenities.				X
Comments:					
H-5.3	**Disabled People.** We increase the supply of permanent, affordable, and accessible housing for people with disabilities, and provide assistance to allow them to maintain and improve their homes.				X
Comments:	*The plan meets all current ADA requirements but does not include any affordable housing units.*				
H-5.4	**Homeless People.** We partner with nonprofit partners to provide emergency shelters, transitional housing, permanent supportive housing, and supportive services for people who are homeless.				X
Comments:	*The plan does not include any emergency or homeless shelters.*				
H-5.5	**Supportive Services.** We financially support organizations, as feasible, that provide support services that meet the needs of those with special needs and further the greatest level of independence.				X
Comments:					
H-5.6	**Partnerships.** We collaborate with nonprofit organizations, private developers, employers, government agencies, and other interested parties to develop affordable housing and provide support services.				X
Comments:					

Policy		Fully Complies	Partially Complies	SP Sec. No.	N/A
PARKS & RECREATION ELEMENT					
PR-1 Planning & Design					
Goal	**A system of safe and accessible parks that meets the needs of the community.**				
PR-1.1	**Access to Parks.** In all new residential development areas, we strive to provide a park and/or recreational facility within walking distance (¼ mile) of every residence and prioritize the establishment of parks in environmental justice areas that do not have adequate access to parks.	X		4 and 8	
Comments:					
PR-1.2	**Adjacency to Schools.** We examine locating parks adjacent to school sites to promote joint-use opportunities.				X
Comments:	*The plan no longer includes plans to develop a school site.*				
PR-1.3	**Funding.** We shall seek outside, one-time sources of funding for capital improvements and reserve ongoing City funds primarily for operations and maintenance.	X		7	
Comments:					
PR-1.4	**Joint-use Opportunities.** In areas where there is a need but no City recreational facility, we explore joint-use opportunities. (e.g., school sites).	X		7	
Comments:					
PR-1.5	**Acreage Standard.** We strive to provide 5 acres of parkland (public and private) per 1,000 residents.	X		4 and 7	
Comments:					
PR-1.6	**Private Parks.** We expect development to provide a minimum of 2 acres of developed private park space per 1,000 residents.	X		4 and 7	
Comments:	*The Project developers will participate in the development impact fee program a s required for park fees.*				
PR-1.7	**Special Needs/Universal Design.** We attempt to provide recreational opportunities at parks for people of all ages and abilities.	X		7 and 8	
Comments:					
PR-1.8	**Renovation.** We examine renovating existing facilities prior to building replacement facilities.	X		7	
Comments:					

Policy		Fully Complies	Partially Complies	SP Sec. No.	N/A
PR-1.9	**Phased Development. We require parks be built in new communities before a significant proportion of residents move in.**	X		4 and 7	
Comments:					
PR-1.10	**Master Plans for Individual Park Facilities.** We require an individual park master plan for parks in excess of 10 acres.				X
Comments:	*The plan does not include any parks in excess of 10 acres. The City of Ontario is the entity responsible for updating the Parks & Recreational Facilities Master Plan.*				
PR-1.11	**Environmental Function of Parks.** We require new parks to meet environmental management objectives.	X		4 and 7	
Comments:					
PR-1.12	**Trails.** We promote connections between parks and local trails including those managed by other public agencies.	X		4 and 7	
Comments:	*The plan includes parks and trails that connect to Citywide planned trails.*				
PR-1.13	**Equestrian Trails.** We require the design, construction, and maintenance of equestrian trails in Rural Residential designated areas.				X
Comments:	*The plan does not include any equestrian trails.*				
PR-1.14	**Multi-family Residential Developments.** We require that new multi-family residential developments of five or more units provide recreational facilities or open space, in addition to paying adopted impact fees.				X
Comments:	*The project developers will participate in the development impact fee program as required for park fees.*				
PR-1.15	**Trail Connectivity.** We strengthen and improve equestrian, bike, and multipurpose trail connections within the City and work to improve trail connections into adjacent jurisdictions.	X		4 and 7	
Comments:	*The plan includes multipurpose trails that connect to Citywide planned trails.*				
PR-1.16	**Equestrian Master Plan.** We use Homer Briggs Park as the primary focal point for the development of a Master Plan of Equestrian Trails in the Rural Residential area.				X
Comments:	*The plan does not include any equestrian trails.*				

Policy		Fully Complies	Partially Complies	SP Sec. No.	N/A
PR-2 Programming					
Goal	**A range of recreational programs provided by public, private, and nonprofit organizations that meet the needs of the community's varied interests, age groups, and abilities.**				
PR-2.1	**Participation.** We program park facilities to maximize utilization and participation, while considering park size, location, and population served.	X		4 and 8	
Comments:					
PR-2.2	**Needs Assessment.** We track the needs and priorities for recreational programming and look for ways to meet demand.	X		7	
Comments:					
PR-2.3	**Community Involvement.** We involve the local community in planning programs for neighborhood and community park facilities.	X		7	
Comments:					
PR-2.4	**Access to Programs.** We provide a range of recreational and physical exercise programs that are accessible to residents of all income levels throughout the community and prioritize establishing and maintaining equitable access for residents in environmental justice areas.	X		7	
Comments:					
PR-2.5	**Partnerships.** We partner with local and regional agencies, nonprofit organizations, and the private sector to provide a comprehensive range of recreational programs.	X		7	
Comments:					
PR-2.6	**Crime Deterrents.** We promote and participate in recreational programming as part of our crime prevention effort.	X		7	
Comments:					

Policy		Fully Complies	Partially Complies	SP Sec. No.	N/A
ENVIRONMENTAL RESOURCES ELEMENT					
ER-1 Water & Wasterwater					
Goal	**A reliable and cost-effective system that permits the City to manage its diverse water resources and needs.**				
ER-1.1	**Local Water Supply.** We increase local water supplies to reduce our dependence on imported water. New and redevelopment projects are aligned with our available water supply and/or to enhance our available water supply.	X		3 and 5	
Comments:	*The plan incorporates the City's Master Plan for water.*				
ER-1.2	**Matching Supply to Use.** We match water supply and quality to the appropriate use.	X		3 and 5	
Comments:					
ER-1.3	**Conservation and Sustainable Water Supply.** We work with regional water providers and users to conserve water and ensure sustainable local water supplies as more frequent droughts reduce long term local and regional water availability	X		3 and 5	
Comments:	*The plan incorporates the City's Master Plan for water.*				
ER-1.4	**Supply-Demand Balance.** We require that available water supply and demands be balanced.	X		3 and 5	
Comments:	*The plan incorporates the City's Master Plan for water.*				
ER-1.5	**Water Resource Management.** Environmental justice areas are prioritized as we coordinate with local agencies to protect water quality, prevent pollution, address existing contamination, and remediate contaminated surface water and groundwater.	X		3 and 5	
Comments:	*The plan incorporates the City's Master Plan for water.*				
ER-1.6	**Urban Run-off Quantity.** We encourage the use of low impact development strategies, including green infrastructure, to intercept run-off, slow the discharge rate, increase infiltration, and ultimately reduce discharge volumes to traditional storm drain systems.	X		3 and 5	
Comments:					
ER-1.7	**Urban Run-off Quality.** We require the control and management of urban run-off, consistent with Regional Water Quality Control Board regulations.	X		3 and 5	
Comments:	*The plan will comply with the City's Master Plan requirements for Wastewater management.*				

Policy		Fully Complies	Partially Complies	SP Sec. No.	N/A
ER-1.8	**Wastewater Management.** We require the management of wastewater discharge and collection consistent with waste discharge requirements adopted by the Regional Water Quality Control Board.	X		3 and 5	
Comments:	*The plan will comply with the City's Master Plan requirements for Wastewater management.*				
ER-2 Solid Waste & Recycling					
Goal	**A cost effective, integrated waste management system that meets or exceeds state and federal recycling and waste diversion mandates.**				
ER-2.1	**Waste Diversion.** We shall meet or exceed AB 939 requirements.	X		3 and 5	
Comments:					
ER-2.2	**Hazardous and Electronic Wastes.** We prohibit the disposal of hazardous and electronic waste into the municipal waste stream pursuant to state law.	X		3 and 5	
Comments:					
ER-2.3	**Purchase Products Made from Recycled Materials.** We purchase recycled-content products where it is cost effective.	X		3 and 5	
Comments:					
ER-3 Energy					
Goal	**Cost-effective and reliable energy system sustained through a combination of low impact buildings, site and neighborhood energy conservation, and diverse sources of energy generation that collectively helps to minimize the region's carbon footprint.**				
ER-3.1	**Conservation Strategy.** We require conservation as the first strategy to be employed to meet applicable energy-saving standards.	X		3 and 5	
Comments:					

Policy		Fully Complies	Partially Complies	SP Sec. No.	N/A
ER-3.2	**Green Development– Communities.** We encourage the use of the LEED Neighborhood Development rating system, or similar mechanism, to guide the planning and development of all new communities.	X		3 and 5	
Comments:					
ER-3.3	**Building and Site Design.** We require new construction to incorporate energy efficient building and site design strategies, which could include appropriate solar orientation, maximum use of natural daylight, passive solar, and natural ventilation.	X		3 and 5	
Comments:					
ER-3.4	**Green Development– Public Buildings.** We require all new and substantially renovated City buildings in excess of 10,000 square feet achieve a LEED Silver Certification standard, as determined by the U.S. Green Building Council.	X		3 and 5	
Comments:					
ER-3.5	**Fuel-Efficient and Alternative Energy Vehicles and Equipment.** We require purchase and use vehicles and equipment that are fuel efficient and meet or surpass state emissions requirements and/or use renewable sources of energy.	X		3 and 5	
Comments:					
ER-3.6	**Generation- Renewable Sources.** We promote the use of renewable energy sources (e.g., solar, wind, biomass) in public and private sector development.	X		3 and 5	
Comments:					
ER-4 Air Quality					
Goal	**Improved indoor and outdoor air quality and reduced locally generated pollutant emissions.**				
ER-4.1	**Land Use.** We reduce GHG and other local pollutant emissions through compact, mixed use, and transit-oriented development and development that improves the regional jobs-housing balance.	X		3 and 5	
Comments:					
ER-4.2	**Sensitive Land Uses.** We prohibit the future siting of sensitive land uses within the distances defined by the California Air Resources Board for specific source categories, without sufficient mitigation.	X		3 and 5	
Comments:					

Policy		Fully Complies	Partially Complies	SP Sec. No.	N/A
ER-4.3	**Greenhouse Gases (GHG) Emissions Reductions.** We will reduce GHG emissions in accordance with regional, state, and federal regulations.	X		3 and 5	
Comments:					
ER-4.4	**Indoor Air Quality.** We will comply with State Green Building Codes relative to indoor air quality. We seek funding to improve indoor air quality for households with poor indoor air quality, with priority for lower income households in environmental justice areas.	X		3 and 5	
Comments:					
ER-4.5	**Transportation.** We promote mass transit and non-motorized mobility options (walking, biking) to reduce air pollutant emissions.	X		3 and 5	
Comments:					
ER-4.6	**Particulate Matter.** We support efforts to reduce particulate matter to meet State and Federal Clean Air Standards.	X		3 and 5	
Comments:					
ER-4.7	**Other Agency Collaboration.** We collaborate with other agencies within the South Coast Air Basin to improve regional air quality at the emission source, with a particular focus on sources that affect environmental justice areas in Ontario.	X		3 and 5	
Comments:					
ER-4.8	**Tree Planting.** We protect healthy trees within the City and plant new trees to increase carbon sequestration and help the regional/local air quality. We expand the tree canopy in environmental justice areas to enhance air quality and reduce the "heat island" effect.	X		3 and 5	
Comments:					

Policy		Fully Complies	Partially Complies	SP Sec. No.	N/A
ER-4.9	**New Localized Air Pollution Sources Near Existing Sensitive Receptors.** We require new developments to conduct a Health Risk Assessment for land uses that generate more than 100 trucks per day or 40 trucks per day by trucks operating transportation refrigeration units (TRU's) within 1,000 feet from sensitive land uses (California Health and Safety Code § 42705.5(a)(5)). If the health risk assessment determines the new development poses health hazards that increase the incremental cancer risk above the threshold established by the South Coast Air Quality Management District (AQMD), we will only approve permits upon the condition that adequate mitigation measures are proposed and implemented for potential impacts on the sensitive uses around the site and along the route within Ontario taken by the trucks to and from freeways. We require new developments that must perform a health risk assessment to conduct additional public outreach by sending notifications in multiple languages to all residents living within 500 feet, and encourage hosting a public meeting.	X		3 and 5	
Comments:					
ER-5 Biological, Mineral & Agricultural Resources					
Goal	**Protected high value habitat and farming and mineral resource extraction activities that are compatible with adjacent development.**				
ER-5.1	**Habitat Conservation Areas.** We support the protection of biological resources through the establishment, restoration, and conservation of high-quality habitat areas.				X
Comments:	*The Plan area is not within or near any habitat conservation areas.*				
ER-5.2	**Entitlement and Permitting Process.** We comply with state and federal regulations regarding protected species.	X		3 and 5	
Comments:					
ER-5.3	**Right to Farm.** We support the right of existing farms to continue their operations within the Ontario Ranch.				X
Comments:					
ER-5.4	**Transition of Farms.** We protect both existing farms and sensitive uses around them as agricultural areas transition to urban uses.	X		3, 4, 5, 6 and 7	
Comments:					

Policy		Fully Complies	Partially Complies	SP Sec. No.	N/A
ER-5.5	**Mining Operations.** We prohibit future mining operations where the resource extraction activities are incompatible with existing or proposed adjacent land uses.	X		3 and 5	
Comments:					
COMMUNITY ECONOMICS ELEMENT					
CE-1 Complete Community					
Goal	**A complete community that provides for all incomes and stages of life.**				
CE-1.1	**Jobs-Housing Balance.** We pursue improvement to the Inland Empire's balance between jobs and housing by promoting job growth that reduces the regional economy's reliance on out-commuting.				X
Comments:					
CE-1.2	**Jobs and Workforce Skills.** We use our economic development resources to: 1. Attract jobs suited for the skills and education of current and future City residents; 2. Work with regional partners to provide opportunities for the labor force to improve its skills and education; and 3. Attract businesses that increase Ontario's stake and participation in growing sectors of the regional and global economy.				X
Comments:					
CE-1.3	**Regional Approach to Workforce Development.** We work with our partners to provide workforce training and development services throughout the region, recognizing that Ontario employers rely on workers living outside of the City.				X
Comments:					
CE-1.4	**Business Retention and Expansion.** We continuously improve two-way communication with the Ontario business community and emphasize customer service to existing businesses as part of our competitive advantage.				X
Comments:					

Policy		Fully Complies	Partially Complies	SP Sec. No.	N/A
CE-1.5	**Business Attraction.** We proactively attract new and expanding businesses to Ontario in order to increase the City's share of growing sectors of the regional and global economy.				X
Comments:					
CE-1.6	**Diversity of Housing.** We collaborate with residents, housing providers, and the development community to provide housing opportunities for every stage of life; we plan for a variety of housing types and price points to encourage the development of housing supportive of our efforts to attract business in growing sectors of the community while being respectful of existing viable uses.	X		4 and 7	
Comments:					
CE-1.7	**Retail Goods and Services.** We seek to ensure a mix of retail businesses that provide the full continuum of goods and services for the community.				X
Comments:					
CE-1.8	**Regional Attraction.** We encourage the development and programming of regional, cultural, and entertainment destinations in Ontario.				X
Comments:					
CE-1.9	**Regional Leadership.** We provide leadership for public, quasi-public, and private-sector partners that help Ontario and its residents and businesses realize our goals and achieve our Vision.				X
Comments:					
CE-1.10	**Life-Long Education.** We work with our partners who provide life-long learning to ensure that our residents and workforce have access to education at all stages of life.				X
Comments:					
CE-1.11	**Socioeconomic Trends.** We continuously monitor, plan for, and respond to changing socioeconomic trends.				X
Comments:					
CE-1.12	**Circulation.** We continuously plan and improve public transit and non-vehicular circulation for the mobility of all, including those with limited or no access to private automobiles.	X		4 and 7	
Comments:					

Policy		Fully Complies	Partially Complies	SP Sec. No.	N/A
CE-1.13	**Safety and Security.** We invest in public safety and communicate our successes because the perception and reality of safety and security are necessary prerequisites for private investment and economic growth.				X
Comments:					
CE-2 Placemaking					
Goal	**A City of distinctive neighborhoods, districts, corridors, and centers where people choose to be.**				
CE-2.1	**Development Projects.** We require new development and redevelopment to create unique, high-quality places that add value to the community.	X		6 and 8	
Comments:					
CE-2.2	**Development Review.** We require those proposing new development and redevelopment to demonstrate how their projects will create appropriately unique, functional, and sustainable places that will compete well with their competition within the region.	X		6 and 8	
Comments:					
CE-2.3	**Interim Development.** We require interim development that does not reflect the long-term Vision, be limited in scale of development so that the investment can be sufficiently amortized to make Vision-compatible redevelopment financially feasible.				X
Comments:					
CE-2.4	**Protection of Investment.** We require that new development and redevelopment protect existing investment by providing architecture and urban design of equal or greater quality.	X		6 and 8	
Comments:					
CE-2.5	**Private Maintenance.** We require adequate maintenance, upkeep, and investment in private property because proper maintenance on private property protects property values.	X		7	
Comments:					

Policy		Fully Complies	Partially Complies	SP Sec. No.	N/A
CE-2.5	**Public Maintenance.** We require the establishment and operation of maintenance districts or other vehicles to fund the long-term operation and maintenance of the public realm whether on private land, in rights-of-way, or on publicly-owned property.	X		7	
Comments:					
CE-3 Fiscal Decision-making					
Goal	**Decision-making deliberations that incorporate the full short-term and long-term economic and fiscal implications of proposed City Council actions.**				
CE-3.1	**Fiscal Impact Disclosure.** We require requests for City Council action to disclose the full fiscal impacts, including direct and indirect costs.				X
Comments:					
CE-3.2	**General Plan Amendments.** We require those proposing General Plan amendments to disclose reasonably foreseeable impacts through a fiscal analysis.				X
Comments:					
CE-3.3	**Long-Term Funding Disclosure.** We require those requesting City support or funding for projects or programs to disclose if and how they can be continued without further City support.				X
Comments:					
CE-3.4	**Improving Fiscal Decision-Making.** We periodically assess the accuracy of projections for staff time and City resources and use the assessment results to improve our fiscal decision-making process.				X
Comments:					
CE-3.5	**Sustainable Development.** We recognize impacts to municipal finances as an element of sustainability, and we require claims of sustainability to assess fiscal impacts.				X
Comments:					
CE-3.6	**Fully Funded Liability.** We require long-term liabilities, such as retiree medical benefits, employee accrued leave balances, and self-insured liability claims to be fully funded to ensure sound, long-term fiscal health.				X
Comments:					

Policy		Fully Complies	Partially Complies	SP Sec. No.	N/A
CE-3.7	**Programmatically Balanced Budget.** We require that the annual budget include appropriations allocated in a manner to meet the goal of the programmatically balanced budget.			7	X
Comments:					
CE-3.8	**Budget Margins.** We require that the adopted budget for revenue and expenditures reflect sufficient budget margins to minimize negative impacts to City services due to economic uncertainties.			7	X
Comments:					
SAFETY ELEMENT					
S-1 Seismic & Geologic Hazards					
Goal	**Minimized risk of injury, loss of life, property damage, and economic and social disruption caused by earthquake-induced and other geologic hazards.**				
S-1.1	**Implementation of Regulations and Standards.** We require that all new habitable structures be designed in accordance with the most recent California Building Code adopted by the City, including provisions regarding lateral forces and grading.	X		6 and 8	
Comments:					
S-1.2	**Entitlement and Permitting Process.** We follow state guidelines and the California Building Code to determine when development proposals must conduct geotechnical and geological investigations.	X		7	
Comments:					
S-1.3	**Continual Update of Technical Information.** We maintain up-to-date California Geological Survey seismic hazard maps.				X
Comments:					
S-1.4	**Seismically Vulnerable Structures.** We conform to state law regarding unreinforced masonry structures and coordinate with not-for-profits to facilitate seismic retrofits in environmental justice areas and for low-income households.				X
Comments:					

Policy		Fully Complies	Partially Complies	SP Sec. No.	N/A
S-2 Flood Hazards					
Goal	**Minimized risk of injury, loss of life, property damage and economic and social disruption caused by flooding and inundation hazards.**				
S-2.1	**Entitlement and Permitting Process.** We require hydrological studies prepared by a state-certified engineer when new development is located in a 100-year or 500-year floodplain to assess the impact that the new development will have on the flooding potential of existing development down-gradient.	X		7	
Comments:	*Per project EIR.*				
S-2.2	**Floodplain Mapping.** We require any new development partially or entirely in 100-year flood zones to provide detailed floodplain mapping for 100- and 200-year storm events as part of the development approval process.	X		7	
Comments:					
S-2.3	**Facilities that Use Hazardous Materials.** We comply with state and federal law and do not permit facilities using, storing, or otherwise involved with substantial quantities of onsite hazardous materials to be located in the 100-year flood zone or 500-year flood zone unless all standards of elevation, floodproofing, and storage have been implemented to the satisfaction of the Building Department.				X
Comments:					
S-2.4	**Prohibited Land Uses.** We prohibit the development of new essential and critical facilities in the 100-year floodplain and discourage the development of new essential and critical facilities in the 500-year floodplain unless all standards of elevation and flood proofing demonstrate that a facility can be safe and operational during a flood event, implemented to the satisfaction of the Building Department.				X
Comments:					
S-2.5	**Stormwater Management.** We maintain the storm drain system to convey a 100-year storm, when feasible, and encourage environmental site design practices to minimize flooding and increase groundwater recharge, including natural drainage, green infrastructure, and permeable ground surfaces.	X		5 and 7	
Comments:					

Policy		Fully Complies	Partially Complies	SP Sec. No.	N/A
S-2.6	**Use of Flood Control Facilities.** We encourage joint use of flood control facilities as open space or other types of recreational facilities.				X
Comments:					
S-2.7	**Collaboration Between Agencies.** Collaborate with the San Bernardino County Flood Control District and other state and federal agencies to maintain flood-control infrastructure to minimize flood damage.				X
Comments:					
S-3 Fire & Rescue Hazards					
Goal	**Reduced risk of death, injury, property damage and economic loss due to fires, accidents and normal everyday occurrences through prompt and capable emergency response.**				
S-3.1	**Prevention Services.** We proactively mitigate or reduce the negative effects of fire, hazardous materials release, and structural collapse by implementing the regularly adopted California Fire Code and California Building Code.	X		7	
Comments:					
S-3.2	**Community Outreach.** We provide education to local schools and community groups to promote personal and public safety.				X
Comments:					
S-3.3	**Fire and Emergency Medical Services.** We maintain sufficient fire stations, equipment and staffing to respond effectively to emergencies and meet the needs of the community and state requirements.				X
Comments:					
S-3.4	**Special Team Services.** We maintain effective special rescue services.				X
Comments:	*The City of Ontario is the entity responsible for maintaining effective special rescue services.*				
S-3.5	**Emergency Notifications.** We maintain a public alert notification system that efficiently conveys information about imminent, developing, ongoing, and concluding emergency events to residents and visitors, working with network providers that translate information into other languages.				X
Comments:					

Policy		Fully Complies	Partially Complies	SP Sec. No.	N/A
S-3.6	**Interagency Cooperation.** In order to back up and supplement our capabilities to respond to emergencies, we participate in the California Fire Rescue and Mutual Aid Plan.				X
Comments:					
S-3.7	**Water Supply and System Redundancy.** We monitor our water system to manage and ensure adequate firefighting water supplies.				X
Comments:					
S-3.8	**Fire Prevention through Environmental Design.** We require new development to incorporate fire prevention consideration in the design of streetscapes, sites, open spaces, and buildings.	X		4, 5, 6, 7 and 8	
Comments:					
S-3.9	**Resource Allocation.** We analyze fire data to evaluate the effectiveness of our fire prevention and reduction strategies and allocate resources accordingly.				X
Comments:					
S-4 Noise Hazards					
Goal	**An environment where noise does not adversely affect the public's health, safety, and welfare.**				
S-4.1	**Noise Mitigation.** We utilize the City's Noise Ordinance, building codes, and subdivision and development codes to mitigate noise impacts.	X		6, 7 and 8	
Comments:	*Per project EIR noise study.*				
S-4.2	**Coordination with Transportation Authorities.** We collaborate with airport owners, FAA, Caltrans, SBCTA, SCAG, neighboring jurisdictions, and other transportation providers in the preparation and maintenance of, and updates to transportation-related plans to minimize noise impacts and provide appropriate mitigation measures.				X
Comments:					
S-4.3	**Airport Noise Mitigation.** We aggressively pursue funding and utilize programs to reduce effects of aircraft noise in impacted areas of our community.				X
Comments:	*The plan is not within the airport impact zone.*				

Policy		Fully Complies	Partially Complies	SP Sec. No.	N/A
S-4.4	**Truck Traffic.** We manage truck traffic to minimize noise impacts on sensitive land uses.	X		3, 5 and 6	
Comments:					
S-4.5	**Roadway Design.** We design streets and highways to minimize noise impacts.	X		3, 5 and 6	
Comments:					
S-4.6	**Airport Noise Compatibility.** We utilize information from Airport Land Use Compatibility Plans to prevent the construction of new noise-sensitive land uses within airport noise impact zones.				X
Comments:	*The plan is not within the airport impact zone.*				
S-4.7	**Rail Noise Mitigation.** We require residential and mixed use development of vibration-sensitive uses in areas within 200 feet of rail to evaluate for indoor vibration levels and mitigate any exceedances of the Federal Transit Administration vibration-annoyance criteria.				X
Comments:	*The plan is not within 200 feet of any rail system.*				
S-5 Wind-Related Hazards					
Goal	**Minimize the risk of injury, property damage, and economic loss resulting from windstorms and wind-related hazards.**				
S-5.1	**Dust Control Measures.** We require the implementation of Best Management Practices for dust control at all excavation and grading projects.	X		7	
Comments:					
S-5.2	**Grading in High Winds.** We prohibit excavation and grading during strong wind conditions, as defined by the Building Code.	X		7	
Comments:					
S-5.3	**Public Safety Power Shutoffs.** We coordinate with utility companies to minimize service interruptions, such as Public Safety Power Shutoffs, before, during, and after windstorms and wind-related hazards.				X
Comments:					

Policy		Fully Complies	Partially Complies	SP Sec. No.	N/A
S-6 Hazardous Materials & Waste					
Goal	**Reduced potential for hazardous materials exposure and contamination.**				
S-6.1	**Disclosure and Notification.** We enforce disclosure laws that require all users, producers, and transporters of hazardous materials and wastes to clearly identify the materials that they store, use, or transport.				X
Comments:					
S-6.2	**Response to Hazardous Materials Releases.** We respond to hazardous materials incidents and coordinate these services with other jurisdictions.				X
Comments:					
S-6.3	**Safer Alternatives.** We minimize our use of pesticides and other hazardous materials by choosing non-toxic alternatives that do not pose a threat to the environment, especially when it could affect public park facilities and open spaces.	X		7	
Comments:					
S-6.4	**Safe Storage and Maintenance Practices.** We require that the users of hazardous materials be adequately prepared to prevent and mitigate hazardous materials releases.				X
Comments:					
S-6.5	**Location of Hazardous Material Facilities.** We regulate facilities that will be involved in the production, use, storage, or disposal of hazardous materials, pursuant to federal, state, county, and local regulations, so that impacts to the environment and sensitive land uses are mitigated. We prohibit new hazardous waste facilities in close proximity to sensitive land uses and environmental justice areas.				X
Comments:					
S-6.6	**Location of Sensitive Land Uses.** We prohibit new sensitive land uses from locating within airport safety zones and near existing sites that use, store, or generate large quantities of hazardous materials.				X
Comments:	*The plan does not have any sensitive land uses.*				
S-6.7	**Household Hazardous Waste.** We support the proper disposal of household hazardous substances.	X		7	
Comments:					

Policy		Fully Complies	Partially Complies	SP Sec. No.	N/A
S-6.8	**Mitigation and Remediation of Groundwater Contamination.** We actively participate in local and regional efforts directed at both mitigating environmental exposure to contaminated groundwater and taking action to clean up contaminated groundwater once exposure occurs.	X		7	
Comments:					
S-6.9	**Remediation of Methane.** We require development to assess and mitigate the presence of methane, per regulatory standards and guidelines.	X		7	
Comments:					
S-7 Law Enforcement					
Goal	**Residential neighborhoods, commercial areas, and industrial districts that are kept safe through a multi-faceted approach of prevention, suppression, and community involvement in public safety.**				
S-7.1	**Police Unit Response.** We respond to calls for service in a timely manner.				X
Comments:					
S-7.2	**Community Oriented Problem Solving (C.O.P.S.).** We support and maintain the mission of COPS to identify and resolve community problems.				X
Comments:					
S-7.3	**Prevention Services.** We provide crime prevention programs targeted to youth, parents, seniors, businesses, and neighborhoods.				X
Comments:	*The City of Ontario is the entity responsible for providing crime prevention programs.*				
S-7.4	**Crime Prevention through Environmental Design (CPTED).** We require new development to incorporate CPTED in the design of streetscapes, sites, open spaces, and buildings.	X		4, 6 and 8	
Comments:					
S-7.5	**Interdepartmental Coordination.** We utilize all City departments to help reduce crime and promote public safety.				X
Comments:					

Policy		Fully Complies	Partially Complies	SP Sec. No.	N/A
S-7.6	**Partnerships.** We partner with other local, state, and federal law enforcement agencies and private security providers to enhance public safety services in Ontario.				X
Comments:					
S-7.7	**Resource Allocation.** We analyze crime data to evaluate the effectiveness of crime prevention and reduction strategies and allocate resources accordingly.				X
Comments:					
S-7.8	**Social Services.** We support behavioral health and social services as part of the public safety solution.				X
Comments:					
S-8 Emergency Management					
Goal	**Disaster resilient, prepared community through effective emergency/disaster preparedness, response, mitigation, and recovery.**				
S-8.1	**State and Federal Mandates.** We maintain emergency management programs that meet the requirements of the State of California Standardized Emergency Management System (SEMS) and the National Incident Management System (NIMS).				X
Comments:					
S-8.2	**Emergency Management Plans.** We maintain, update, and adopt the Emergency Operations Plan (EOP) and incorporate, by reference the City's Hazard Mitigation Plan (HMP).				X
Comments:					
S-8.3	**Emergency/Disaster Training Exercises.** We conduct training and exercises to prepare for and evaluate emergency/disaster response and recovery procedures.				X
Comments:					
S-8.4	**Interagency Collaboration.** We maintain partnerships, including automatic aid agreements, with fire protection, police and sheriff departments, and emergency management agencies in San Bernardino and Riverside County to strengthen emergency response.				X
Comments:					

Policy		Fully Complies	Partially Complies	SP Sec. No.	N/A
S-8.5	**Interdepartmental Coordination.** We utilize all City departments to help support emergency/disaster preparedness, response, mitigation, and recovery.				X
Comments:	*The City of Ontario is the entity responsible for interdepartmental coordination to support emergency/disaster situations.*				
S-8.6	**Community Outreach.** We provide education to the community to promote personal, family, and community emergency preparedness to both natural and human-generated hazards.				X
Comments:	*The City of Ontario is the entity responsible for providing education to the community.*				
S-8.7	**Extreme Heat and Air Quality.** We work to ensure that all community members are informed about and have access to community cooling centers and clean air centers during extreme heat events or wildfires, with a focus on serving environmental justice communities. We support the development of extreme heat emergency response policies and practices to address these critical health risks in the community.				X
Comments:	*The City of Ontario is the entity responsible for providing the community with information and access to situations of extreme heat and air quality conditions.*				
S-8.8	**Regional Partnerships for Climate Adaptation.** We partner with local governments in San Bernardino County, Riverside County, and Inland Southern California Climate Collaborative to develop regional climate change adaptation strategies and programs.				X
Comments:	*The City of Ontario is the entity responsible for local and regional partnerships for climate change adaptation strategies and programs.*				
S-8.9	**Backup Power in Critical Facilities.** We require backup power be maintained in critical facilities. We encourage backup power solutions that include renewable energy components.				X
Comments:	*The City of Ontario is the entity responsible for maintaining/providing backup power in critical facilities.*				
S-9 Energy Resiliency					
Goal	**Incorporate energy efficient practices and renewable energy systems to improve air quality, comfort, and energy reliability during temporary power outages.**				
S-9.1	**Solar Energy.** We support and may incentivize the installation of residential and commercial solar panels and battery storage systems that can provide electricity during power outages.	X		7	
Comments:	*The City of Ontario is the entity responsible for supporting and incentivizing the installation and use of solar energy.*				

Policy		Fully Complies	Partially Complies	SP Sec. No.	N/A
S-9.2	**Renewable Energy.** Renovate existing city-owned facilities and plan future facilities to include renewable energy generation capacity and battery storage as part of an effort to make public facilities and services greener and more resilient to power outages.				X
Comments:					
S-9.3	**Energy Efficiency Retrofits.** We support and may incentivize retrofits to residential and commercial buildings that improve energy efficiency and insulation from extreme temperatures, giving priority towards low-income applicants.				X
Comments:					
MOBILITY ELEMENT					
M-1 Roadway System					
Goal	**A system of roadways that meets the mobility needs of a dynamic and prosperous Ontario.**				
M-1.1	**Roadway Design and Maintenance.** We require our roadways to: 1. Comply with federal, state, and local design and safety standards; 2. Meet the needs of multiple transportation modes and users; 3. Handle the capacity envisioned in the City of Ontario Master Plan of Streets and Highways; 4. Be maintained in accordance with best practices; 5. Be compatible with the streetscape and surrounding land uses; and 6. Promote the efficient flow of all modes of traffic through the implementation of intelligent transportation systems and travel demand management strategies.	X		5, 7 and 8	
Comments:	*Per project EIR traffic study.*				
M-1.2	**Mitigation of Impacts.** We require development to mitigate its traffic impacts.	X		5	
Comments:					

Policy		Fully Complies	Partially Complies	SP Sec. No.	N/A
M-1.3	**Agency Coordination on Roadway Improvements.** We work with Caltrans, SBCTA, and others to identify, fund, and implement needed improvements to roadways when necessary. We work with neighboring jurisdictions to promote regional connectivity, access, and meet operational level of service standards at the City limits.				X
Comments:					
M-1.4	**Complete Streets.** We work to provide a complete, balanced, context-aware, multimodal transportation network that meets the needs of all users of streets, roads, and highways, including motorists, pedestrians, bicyclists, children, persons with disabilities, seniors, movers of commercial goods, and users of public transportation. We prioritize implementation of complete streets improvements in environmental justice areas to facilitate opportunities for residents to use active transportation systems.	X		5 and 8	
Comments:					
M-1.5	**Level of Service.** Maintain a peak hour Level of Service (LOS) E or better at all intersections. Maintain Level of Service D or better on arterial streets in the City. Develop and maintain a list of locations where LOS E or LOS F are considered acceptable and would be exempt from this level of service policy. Considerations for LOS exemption include being restricted by environmental constraints, lacking available right-of-way, deterring an increase in VMT, or degrading other modes of travel (such as bicycle or pedestrian infrastructure).				X
Comments:					
M-1.6	**Reduce Vehicle Miles Traveled.** We will strive to reduce VMT through a combination of land use, transportation projects, travel demand management strategies, and other trip reduction measures in coordination with development projects and public capital improvement projects.				X
Comments:					

Policy		Fully Complies	Partially Complies	SP Sec. No.	N/A
M-2 Active Transportation					
Goal	A system of trails and corridors that facilitate and encourage active modes of transportation.				
M-2.1	**Active Transportation.** We maintain our Active Transportation Master Plan to create a comprehensive system of on- and off-street bikeways and pedestrian facilities that are safe, comfortable, and accessible and connect residential areas, businesses, schools, parks, and other key destination points.	X		5 and 8	
Comments:					
M-2.2	**Bicycle System.** We provide off-street multipurpose trails and Class II bikeways as our preferred paths of travel and use the Class III for connectivity in constrained circumstances. When truck routes and bicycle facilities share a right-of-way, we prefer Class I or Class IV bicycle facilities. We require new development to include bicycle facilities, such as bicycle parking and secure storage areas.	X		5 and 8	
Comments:					
M-2.3	**Pedestrian Walkways.** We require streets to include sidewalks and visible crosswalks at major intersections where necessary to promote safe and comfortable mobility between residential areas, businesses, schools, parks, recreation areas, and other key destination points.	X		5 and 8	
Comments:					
M-2.4	**Network Opportunities.** We use public rights-of-way and easements such as, utility easements, levees, drainage corridors, road rights-of-way, medians, and other potential options to maintain and expand our bicycle and pedestrian network. In urban, mixed- use, and transit-oriented Place Types, we encourage the use of underutilized public and private spaces to expand our public realm and improve pedestrian and bicycle connectivity.	X		5 and 8	
Comments:					

Policy		Fully Complies	Partially Complies	SP Sec. No.	N/A
M-3 Public Transit					
Goal	**A public transit system that is a viable alternative to automobile travel and meets basic transportation needs of the transit-dependent.**				
M-3.1	**Transit Partners.** We maintain a proactive working partnership with transit providers to ensure that adequate public transit service is available, cost-efficient, and convenient, particularly for residents in environmental justice areas.				X
Comments:					
M-3.2	**Alternative Transit Facilities at New Development.** We require new development adjacent to an existing or planned transit stop to contribute to the creation of transit facilities, such as bus shelters, transit bays and turnouts, and bicycle facilities, such as secure storage areas.				X
Comments:					
M-3.3	**Transit-Oriented Development.** We may provide additional development-related incentives to those inherent in the Land Use Plan for projects that promote transit use and reduce vehicle miles traveled.	X		4, 5, and 8	
Comments:					
M-3.4	**Bus Rapid Transit (BRT) Corridors.** We work with regional transit agencies to implement BRT service and reduce vehicle miles traveled by targeting destinations and corridors with the highest number of potential riders.				X
Comments:					
M-3.5	**Light Rail.** We support extension of the Metro Rail Gold Line to Ontario, and will work to secure station locations at the proposed multimodal transit center.				X
Comments:	*The plan is not within proximity of a light rail station location.*				
M-3.6	**Metrolink Expansion.** We advocate expansion of Metrolink service to include the Downtown and the multimodal transit center.				X
Comments:	*The plan is not within proximity of a multimodal transit center or Downtown.*				
M-3.7	**High Speed Rail.** We encourage the development of high-speed rail systems that would enhance regional mobility in Southern California and serve the City of Ontario.				X
Comments:	*The plan is not within proximity of the high speed rail system.*				

Policy		Fully Complies	Partially Complies	SP Sec. No.	N/A
M-3.8	**Feeder Systems.** We work with regional transit agencies to secure convenient feeder service from the Metrolink station and the proposed multimodal transit center to employment centers in Ontario.				X
Comments:					
M-3.9	**Ontario Airport Metro Center Circulator.** We will explore development of a convenient mobility system, including but not limited to shuttle service, people mover, and shared car system, for the Ontario Airport Metro Center.				X
Comments:	*The plan is not within proximity of the Ontario Airport.*				
M-3.10	**Multimodal Transportation Center.** We intend to ensure the development of a multimodal transportation center near ONT airport to serve as a transit hub with amenities for transit riders, pedestrians, and bicyclists transitioning to local buses, BRT, the Gold Line, high-speed rail, the proposed Ontario Airport Metro Center Circulator, and other future transit modes. We support locations for the multimodal transportation center that are north of ONT airport, between Vineyard Avenue and Interstate 15.				X
Comments:	*The plan is not within proximity of the ONT airport.*				
M-3.11	**Transit and Community Facilities.** We require the future development of community-wide serving facilities to be sited in transit-ready areas that can be served and made accessible by public transit. Conversely, we plan (and coordinate with other transit agencies to plan) future transit routes to serve existing community facilities.				X
Comments:					
M-4 Goods Movement					
Goal	**An efficient flow of goods through the City that maximizes economic benefits and minimizes negative impacts.**				
M-4.1	**Truck Routes.** We designate and maintain a network of City truck routes that provide for the safe and efficient transport of goods while minimizing negative impacts on local circulation and noise-sensitive land uses, as shown on Exhibit M-04, Truck Routes. We will minimize conflicts on truck routes through the design and implementation of buffers between travel lanes and pedestrian and bicycle facilities on designated truck routes.				X
Comments:					

Policy		Fully Complies	Partially Complies	SP Sec. No.	N/A
M-4.2	**Regional Participation.** We work with regional and subregional transportation agencies and adjacent cities to plan and implement goods movement strategies, including regional truck routes, plans and projects that improve mobility, support the efficient movement of goods, and minimize negative environmental impacts.				X
Comments:					
M-4.3	**Railroad Grade Separations.** We eliminate at-grade rail crossings identified on Exhibit M-01, Roadway Classifications.				X
Comments:	*The plan is not within proximity of a railroad.*				
M-4.4	**Environmental Considerations.** We support both local and regional efforts to reduce/ eliminate the negative environmental impacts of goods movement through the planning and implementation of truck routing and the development of a plan to evaluate the future needs of clean fueling/recharging and electrified truck parking.	X		5 and 7	
Comments:					
M-4.5	**Air Cargo.** We support and promote a ONT airport that accommodates 1.6 million tons of cargo per year, as long as the impacts associated with that level of operations are planned for and mitigated.				X
Comments:	*The plan is not within proximity of the ONT airport.*				
M-5 Regional Transportation					
Goal	**A proactive leadership role in helping identify and facilitate implementation of strategies that address regional transportation challenges.**				
M-5.1	**Regional Leadership.** We maintain a leadership role to help identify and implement potential solutions to long-term regional transportation problems.				X
Comments:					
M-5.2	**Land Use Compatibility with Regional Transportation Facilities.** We work with ONT, railroads, Caltrans, SBCTA, and other transportation agencies to minimize impacts.				X
Comments:					

Policy		Fully Complies	Partially Complies	SP Sec. No.	N/A
COMMUNITY DESIGN ELEMENT					
CD-1 Image & Identity					
Goal	**A dynamic, progressive city containing distinct and complete places that foster a positive sense of identity and belonging among residents, visitors, and businesses.**				
CD-1.1	**City Identity.** We take actions that are consistent with the City being a leading urban center in Southern California while recognizing, enhancing, and preserving the character of our existing viable neighborhoods.	X		7	
Comments:					
CD-1.2	**Place Types.** We establish Place Types in urban, mixed use, and transit-oriented areas to foster the City's identity as a premier community and require new development within each Place Type to incorporate prescribed urban patterns, forms, and placemaking priorities.				X
Comments:					
CD-1.3	**Existing Neighborhoods.** We require the existing character of viable residential and non-residential neighborhoods be preserved, protected, and enhanced.				X
Comments:					
CD-1.4	**Transportation Corridors.** We will enhance our major transportation corridors within the City through landscape, hardscape, signage and lighting. The extent of enhancement should be appropriate to the use, type, and context of each corridor.	X		7	
Comments:					
CD-1.5	**View Corridors.** We require all major north-south streets be designed and redeveloped to feature views of the San Gabriel Mountains, which are part of the City's visual identity and a key to geographic orientation. Such views should be free of visual clutter, including billboards and may be enhanced by framing with trees.				X
Comments:					

Policy		Fully Complies	Partially Complies	SP Sec. No.	N/A
CD-2 Design Quality					
Goal	**A high level of design quality resulting in neighborhoods, commercial areas, public spaces, parks, and streetscapes that are attractive, safe, functional, human- scale, and distinct.**				
CD-2.1	**Quality Building Design and Architecture.** We encourage all development projects to convey visual interest and character through: 1. Building volume, massing, and height to provide context-appropriate scale and proportion; 2. A true architectural style which is carried out in plan, section, and elevation through all aspects of the building and site design and appropriate for its setting; and 3. Exterior building materials that are articulated, high quality, durable, and appropriate for the architectural style.	X		6 and 8	
Comments:					
CD-2.2	**Neighborhood Design.** We create distinct residential neighborhoods that promote a sense of community and identity by emphasizing access, connectivity, livability, and social interaction through such elements as: 1. A pattern of smaller, walkable blocks that promote activity, safety, and access to nearby amenities and services; 2. Varied parcel sizes and lot configurations to accommodate a diversity of housing types; 3. Traffic calming measures to slow traffic and promote walkability while maintaining acceptable traffic flows and emergency evacuation access; 4. Floor plans that encourage views onto the street and de-emphasize the visual and physical dominance of garages (introducing the front porch as the "outdoor living room"), as appropriate; and 5. Landscaped parkways, with sidewalks separated from the curb and designed to maximize safety, comfort, and aesthetics for all users.	X		6 and 8	
Comments:					
CD-2.3	**Commercial Areas.** We desire commercial areas and centers to be distinctive, pedestrian friendly, functional, and vibrant with a range of businesses, places to gather, and connectivity to the neighborhoods they serve.				X
Comments:					

Policy		Fully Complies	Partially Complies	SP Sec. No.	N/A
CD-2.4	**Urban, Mixed Use, and Transit-oriented Areas.** We establish Place Types to require mixed use, urban, and transit-oriented areas to be designed and developed as pedestrian oriented areas that are integrated with adjacent neighborhoods and promote a vibrant, comfortable, and functional environment, as defined for each Place Type.				X
Comments:					
CD-2.5	**Streetscapes.** We design new and, when necessary, retrofit existing streets to improve walkability, bicycling and transit integration, strengthen connectivity, and enhance community identity through improvements to the public right-of-way such as sidewalks, street trees, parkways, curbs, street lighting and street furniture.	X		6 and 8	
Comments:					
CD-2.6	**Connectivity.** We promote development of local street patterns, multimodal networks, and connected public spaces that create and unify neighborhoods, rather than divide them, and create cohesive and continuous corridors, rather than independent "islands" through the following means: 1. Local street networks that provide access both between subdivisions and within neighborhoods and discourage through traffic; 2. A local street system that is logical and understandable for the user. A grid system is preferred to avoid circuitous and confusing travel paths between internal neighborhood areas and adjacent arterials and to provide adequate emergency and evacuation access; and 3. Pedestrian and bicycle networks that provide convenient access to neighborhoods and nearby destinations, such as schools, parks, other public spaces, commercial areas, and transit stops.	X		6 and 8	
Comments:					
CD-2.7	**Sustainability.** We collaborate with the development community to design and build neighborhoods, streetscapes, sites, outdoor spaces, landscaping, and buildings to reduce energy demand through solar orientation, maximum use of natural daylight, passive solar and natural ventilation, building form, mechanical and structural systems, building materials, and construction techniques.	X		6 and 8	
Comments:					

Policy		Fully Complies	Partially Complies	SP Sec. No.	N/A
CD-2.8	**Safe Design.** We incorporate defensible space design into new and existing developments to ensure the maximum safe travel and visibility on pathways, corridors, and open space and at building entrances and parking areas by avoiding physically and visually isolated spaces, maintaining visibility and accessibility, and using lighting.	X		6 and 8	
Comments:					
CD-2.9	**Landscape Design.** We encourage durable, sustainable, and drought-tolerant landscaping materials and designs that enhance the aesthetics of structures, create and define public and private spaces, and provide shade and environmental benefits.	X		6 and 8	
Comments:					
CD-2.10	**Parking Areas.** We require all development, including single-family residential, to minimize the visual impact of surface, structured, and garage parking areas visible from the public realm in an aesthetically pleasing, safe and environmentally sensitive manner. Examples include: 1. Surface parking: Shade trees, pervious surfaces, urban run-off capture and infiltration, and pedestrian paths to guide users through the parking field. 2. Structured parking: facade articulation, screening, appropriate lighting, and landscaping. 3. Garage parking: providing access to single-family residential garages through alley access, recessing garages from the frontage to emphasize front doors or active living spaces.	X		6 and 8	
Comments:					
CD-2.11	**Entry Statements.** We encourage the inclusion of amenities, signage, and landscaping at the entry to neighborhoods, commercial centers, mixed use areas, industrial developments, and public places that reinforce them as uniquely identifiable places.	X		6 and 8	
Comments:					
CD-2.12	**Site and Building Signage.** We encourage the use of sign programs that utilize complementary materials, colors, and themes. Project signage should be designed to effectively communicate and direct users to various aspects of the development and complement the character of the structures.	X		6 and 8	
Comments:					
CD-2.13	**Entitlement Process.** We work collaboratively with all stakeholders to ensure a high degree of certainty in the efficient review and timely processing of all development plans and permits.				X
Comments:					

Policy		Fully Complies	Partially Complies	SP Sec. No.	N/A
CD-2.14	**Availability of Information.** We provide easy access to information for developers, builders and the public about design quality, construction quality, and sustainable building practices.				X
Comments:					
CD-2.15	**Leverage Professional and Trade Organizations.** We support excellence in design and construction quality through collaboration with trade and professional organizations that provide expertise, resources and programs for developers, builders, and the public.				X
Comments:					
CD-2.16	**Transit Stops.** We require transit stops be conveniently located, well lit, safe, and clearly accessible to pedestrians, bicyclists, and people of all abilities.				X
Comments:					
CD-3 Urban, Mixed Use, and Transit-Oriented Place Types					
Goal	**Vibrant urban environments that are organized around intense buildings, pedestrian and transit areas, public plazas, and linkages between and within developments that are conveniently located, visually appealing and safe during all hours.**				
CD-3.1	**Unique Identity.** We promote development that heightens the unique character and identity of each Place Type by requiring compatible land uses and land planning, site design, and building design that promotes an active public realm.				X
Comments:					
CD-3.2	**Comfortable, Human-Scale Public Realm.** We require that public spaces, including streets, parks, and plazas on both public and private property be designed to maximize safety, comfort and aesthetics and connect to the citywide pedestrian, vehicular, and bicycle networks.				X
Comments:					

Policy		Fully Complies	Partially Complies	SP Sec. No.	N/A
CD-3.3	**Complete and Connected Network.** We require that pedestrian, vehicular, and bicycle circulation on both public and private property be coordinated to provide connections internally and externally to adjacent neighborhoods and properties (existing and planned) through a system of local roads and trails that promote walking and biking to nearby destinations (including existing and planned parks, commercial areas, and transit stops) and are designed to maximize safety, comfort, and aesthetics.	X		6 and 8	
Comments:					
CD-3.4	**Context-Aware and Appropriate Design.** We require appropriate building and site design that complements existing development, respects the intent and identity of the Place Type, and provides appropriate transitions and connections between adjacent uses to ensure compatibility of scale, maintain an appropriate level of privacy for each use, and minimize potential conflicts.	X		6 and 8	
Comments:					
CD-3.5	**Active Frontages.** We create lively pedestrian streetscapes by requiring primary building, business, and residential entrances, outdoor dining, and storefronts be located on ground floors adjacent to sidewalks or public spaces and designed to maximize safety, comfort, aesthetics, and the intended functionality (as defined by the Place Type).	X		6 and 8	
Comments:					
CD-3.6	**Managed Infrastructure.** We collaborate with developers and property owners to facilitate development that realizes the envisioned character and functionality of the Place Type through the use of green and shared infrastructure within each Place Type.	X		6 and 8	
Comments:					
CD-4 Historic Preservation					
Goal	**Historic buildings, streets, landscapes, and neighborhoods, as well as the story of Ontario's people, businesses, and social and community organizations, have been preserved and serve as a focal point for civic pride and identity.**				
CD-4.1	**Cultural Resource Management.** We update and maintain an inventory of historic sites and buildings, professional collections, artifacts, manuscripts, photographs, documents, maps, and other archives.				X
Comments:					

Policy		Fully Complies	Partially Complies	SP Sec. No.	N/A
CD-4.2	**Collaboration with Property Owners and Developers.** We educate and collaborate with property owners and developers to implement strategies and best practices that preserve the character of our historic buildings, streetscapes, and unique neighborhoods.				X
Comments:					
CD-4.3	**Collaboration with Outside Agencies.** We pursue opportunities to team with other agencies, local organizations, and nonprofits in order to preserve and promote Ontario's heritage.				X
Comments:					
CD-4.4	**Incentives.** We use the Mills Act and other federal, state, regional and local programs to assist property owners with the preservation of select properties and structures.				X
Comments:					
CD-4.5	**Adaptive Reuse.** We actively promote and support the adaptive reuse of historic sites and buildings to preserve and maintain their viability.				X
Comments:					
CD-4.6	**Promotion of Public Involvement in Preservation.** We engage in programs to publicize and promote the City's and the public's involvement in preservation efforts.				X
Comments:					
CD-4.7	**Public Outreach.** We provide opportunities for our residents to research and learn about the history of Ontario through the Planning Department, the Ontario Museum of History and Art, and the Robert E. Ellingwood Model Colony History Room.				X
Comments:					
CD-5 Protection of Investment					
Goal	**A sustained level of maintenance and improvement of properties, buildings, and infrastructure that protects the property values and encourages additional public and private investments.**				
CD-5.1	**Maintenance of Buildings and Property.** We require all public and privately-owned buildings and property (including trails and easements) to be properly and consistently maintained.				X
Comments:					

Policy		Fully Complies	Partially Complies	SP Sec. No.	N/A
CD-5.2	**Maintenance of Infrastructure.** We require the continual maintenance of infrastructure.				X
Comments:					
CD-5.3	**Improvements to Property & Infrastructure.** We provide programs to improve property and infrastructure.				X
Comments:					
CD-5.4	**Neighborhood Involvement.** We encourage active community involvement to implement programs aimed at the beautification and improvement of neighborhoods.				X
Comments:					
SOCIAL RESOURCES ELEMENT					
SR-1 Health					
Goal	**Residents have access to information, services and goods that improve their health and wellbeing.**				
SR-1.1	**Partnering for Healthcare.** We work with healthcare providers, and local, regional, state, and federal agencies to attract and retain a diversity of affordable, quality healthcare and facilities for the entire community.				X
Comments:					
SR-1.2	**Nutrition Choices.** We support the promotion of equitable access to affordable healthy food choices in the community, including community gardens, farmers markets, and cooking classes.				X
Comments:					
SR-1.3	**Health Education.** We promote equitable access to health education, including disease prevention, mental health, nutrition, and physical fitness.				X
Comments:					
SR-1.4	**Physical Activity.** We encourage activities and community design that improve the physical fitness of our community members, with an emphasis on the provision of activities and facilities in environmental justice areas.				X
Comments:					

Policy		Fully Complies	Partially Complies	SP Sec. No.	N/A
SR-2 Education					
Goal	**A range of educational and training opportunities for residents and workers of all ages and abilities that improves their life choices and provides a skilled workforce for our businesses.**				
SR-2.1	**Educational Partners.** We partner with educational institutions throughout the region in order to expand the range and quality of educational offerings available to the community.				X
Comments:					
SR-2.2	**Workforce Training.** We will work with industrial organizations, businesses, and educational institutions to create opportunities for workforce training.				X
Comments:					
SR-2.3	**Joint Use of Facilities.** We partner with public and private educational institutions to jointly use facilities for both City and educational purposes.				X
Comments:					
SR-2.4	**Access to Schools.** We work with local and regional partners to improve the safety in and around schools and to improve access for citizens of all ages and abilities to schools and community services, such as after school and other programs.				X
Comments:					
SR-2.5	**School Facilities.** We plan and coordinate with school districts for designing and locating school facilities to meet the City's goals, such as for health, walkability, and safety and to minimize impacts to existing neighborhoods.				X
Comments:					
SR-2.6	**Language.** We promote broad outreach in languages used by the community for proposed projects that could negatively affect environmental justice areas.				X
Comments:					
SR-2.7	**Community Engagement.** We promote targeted outreach and education to historically underrepresented groups to encourage meaningful participation in decision-making process for projects whose outcomes will affect land use in environmental justice areas.				X
Comments:					

Policy		Fully Complies	Partially Complies	SP Sec. No.	N/A
SR-3 Community & Leisure Activities					
Goal	**A range of community and leisure programs and activities provided by public, private, and nonprofit organizations that meet the needs of the community's varied interests, age groups and abilities.**				
SR-3.1	**Partnerships.** We partner with local and regional agencies, nonprofit organizations, and the private sector to provide a comprehensive range of community activities and events to citizens.				X
Comments:					
SR-3.2	**Needs Assessment.** We track the needs and priorities for community services and look for ways to meet demands and avoid duplication of offerings.				X
Comments:					
SR-3.3	**Program Outreach.** We promote information about leisure activities, classes, special events, and other services and activities to our community.				X
Comments:					
SR-3.4	**Community Events.** We plan and actively participate in regularly scheduled community events and seasonal or yearly citywide events.				X
Comments:					
SR-3.5	**Community Activities as Crime Deterrents.** We promote and participate in community activities as part of our crime prevention efforts.				X
Comments:					
SR-4 Library					
Goal	**City libraries that connect community members of all ages and abilities to a broad range of programs, communication, and informational resources.**				
SR-4.1	**Community Needs.** We identify and monitor community needs for library services, technology, and facilities, and tailor them to effectively meet those needs.				X
Comments:					

Policy		Fully Complies	Partially Complies	SP Sec. No.	N/A
SR-4.2	**Interagency Coordination.** We leverage relationships with outside agencies, educational institutions, and neighboring jurisdictions to share library resources to the benefit of Ontario residents.				X
Comments:					
SR-4.3	**Library Outreach.** We outreach to the community to increase the patronage of the library.				X
Comments:					
SR-4.4	**Coordination with Other Community Services.** We coordinate library programs with other recreational and community programs and facilities.				X
Comments:					
SR-4.5	**Focal Points of the Community.** We design and program Ontario's libraries as focal points of community engagement, including public outreach and community events.				X
Comments:					
SR-4.6	**Robert E. Ellingwood Model Colony History Room.** We work with the Ontario Museum of History and Art in order to collect, preserve, and display artifacts and images from Ontario's heritage and connect the City's past to the present through the History Room.				X
Comments:					
SR-5 Entertainment & Culture					
Goal	**Local heritage, entertainment, and cultural experiences that enrich the lives of Ontario's residents, workers, and visitors and serve to attract residents and businesses to the City.**				
SR-5.1	**Provision of Entertainment and Culture.** We support equitable access to a range of entertainment and cultural experiences such as public art, exhibitions, and performances.				X
Comments:					
SR-5.2	**Local Heritage Education.** We partner with educational providers to promote culture and heritage.				X
Comments:					

Policy		Fully Complies	Partially Complies	SP Sec. No.	N/A
SR-5.3	**Public Art.** We encourage public art in buildings, parks, open spaces, and other public and private spaces.				X
Comments:					
SR-5.4	**Private-Public Sector Events.** We partner with private and nonprofit sectors to provide and promote participation in cultural activities including fairs, festivals, and other events geared to neighborhoods, the City as a whole, and the region.				X
Comments:					
SR-5.5	**Promotion of Ontario Artists and Musicians.** We promote awareness of entertainment and culture produced in Ontario.				X
Comments:					

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JN 12182-001

MEMORANDUM

TO: Robert Morales, Associate Planner
City of Ontario

FROM: Amy Flores

DATE: April 24, 2025

RE: Esperanza PA-11 SPA Project

The following matrix presents all mitigation required within the Esperanza Specific Plan EIR and provides an applicability determination for the Esperanza PA-11 SPA Project (File Nos.: PPA24-0139, PGPA24-004, PSPA24-004, PDEV24-017, PMTT24-008, PDA25-003). Measures that are not applicable are noted in ~~strikeout~~ format.

Esperanza Measure	Project Applicability
Aesthetics	
None.	-
Agriculture and Forest Resources	
~~MM Ag 1: In order to minimize conflicts between urban and agricultural land uses, each Specific Plan developed for properties within the NMC must comply with the Agricultural Overlay District requirements for urban development in proximity to existing agricultural operations. The proposed project shall establish a minimum 100-foot separation between active agricultural operations and new, non-agricultural development, or an equivalent easement that is approved by the City of Ontario~~.	**Not Applicable.** Ag 1 was developed as part of the NMC General Plan Amendment. The Esperanza Specific Plan was developed pursuant to Ag 1. Additionally, there are no active agricultural operations adjacent to the Project site.
~~MM Ag 2: In order to minimize conflicts between urban and agricultural land uses, all residential units in the Subarea 29 Specific Plan shall be provided with a deed disclosure, or similar notice, approved by the City Attorney regarding the proximity and nature, including odors, of neighboring agricultural uses.~~	**Not Applicable.** The Project site is not located within Subarea 29, as referenced in Ag 2.
Air Quality	
~~MM Air 1: During all construction activities, construction contractors shall use low emission mobile construction~~	**Not Applicable.** Project construction would not exceed SCAQMD thresholds; further mitigation is not required.

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~~equipment where feasible to reduce the release of undesirable emissions.~~	
~~MM Air 2: During all construction activities, construction contractors shall encourage rideshare and transit programs for project construction personnel to reduce automobile emissions.~~	**Not Applicable.** Project construction would not exceed SCAQMD thresholds; further mitigation is not required.
~~MM Air 3: During all grading and site disturbance activities, construction contractors shall water active grading sites at least twice a day, and clean construction equipment in the morning and/or evening to reduce particulate emissions and fugitive dust.~~	**Not Applicable.** Project construction would not exceed SCAQMD thresholds; further mitigation is not required.
~~MM Air 4: During all construction activities, construction contractors shall, as necessary, wash truck tires leaving the site to reduce the amount of particulate matter transferred to paved streets as required by SCAQMD Rule 403.~~	**Not Applicable.** Project construction would not exceed SCAQMD thresholds; further mitigation is not required.
~~MM Air 5: During all construction activities, construction contractors shall sweep on and off site streets (recommend water sweepers with reclaimed water) if visible soil is carried over to adjacent public thoroughfares, as determined by the City Engineer to reduce the amount of particulate matter on public streets.~~	**Not Applicable.** Project construction would not exceed SCAQMD thresholds; further mitigation is not required.
~~MM Air 6: During all construction activities, construction contractors shall limit traffic speeds on all unpaved road surfaces to 15 miles per hour or less to reduce fugitive dust.~~	**Not Applicable.** Project construction would not exceed SCAQMD thresholds; further mitigation is not required.
~~MM Air 7: During grading and all site disturbances activities, construction contractors shall suspend all grading operations during first and second stage smog alerts to reduce fugitive dust and combustion related emissions.~~	**Not Applicable.** Project construction would not exceed SCAQMD thresholds; further mitigation is not required.
~~MM Air 8: During grading and all site disturbances activities, construction contractors shall suspend all grading operations when wind speeds (including instantaneous gusts) exceed 25 miles per hour to reduce fugitive dust.~~	**Not Applicable.** Project construction would not exceed SCAQMD thresholds; further mitigation is not required.
~~MM Air 9: During all construction activities, the construction contractors shall maintain construction~~	**Not Applicable.** Project construction would not exceed SCAQMD thresholds; further mitigation is not required.

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~~equipment engines by keeping them tuned according to manufacturers' specifications.~~	
~~MM Air 10: During construction, mobile construction equipment will be properly maintained at an off-site location, which includes proper tuning and timing of engines. Equipment maintenance records and equipment design specification data sheets shall be kept on-site during construction.~~	**Not Applicable.** Project construction would not exceed SCAQMD thresholds; further mitigation is not required.
~~MM Air 11: During construction, all contractors will be advised to prohibit all vehicles from idling in excess of five minutes, both on-site and off-site.~~	**Not Applicable.** Project construction would not exceed SCAQMD thresholds; further mitigation is not required.
~~MM Air 12: Configure construction parking to minimize traffic interference.~~	**Not Applicable.** Project construction would not exceed SCAQMD thresholds; further mitigation is not required.
~~MM Air 13: Contractors shall use high-pressure-low-volume (HPLV) paint applicators with a minimum transfer efficiency of at least 50% or other application techniques with equivalent or higher transfer efficiency, where feasible.~~	**Not Applicable.** Project construction would not exceed SCAQMD thresholds; further mitigation is not required.
~~MM Air 14: Use architectural coatings with a VOC content lower than required under Rule 1113, where feasible.~~	**Not Applicable.** Project construction would not exceed SCAQMD thresholds; further mitigation is not required.
~~MM Air 15: Construct/build with materials that do not require painting, where feasible.~~	**Not Applicable.** Project construction would not exceed SCAQMD thresholds; further mitigation is not required.
~~MM Air 16: Use pre-painted construction materials, where feasible.~~	**Not Applicable.** Project construction would not exceed SCAQMD thresholds; further mitigation is not required.
~~MM Air 17: The contractor shall provide truck drivers with materials showing where sensitive receptors, such as schools, are located, and when congestion can be expected so that the drivers can avoid these routes and/or times of day.~~	**Not Applicable.** Project construction would not exceed SCAQMD thresholds; further mitigation is not required.
~~MM Air 18: Require construction equipment that meet or exceed Tier 2 standards; use emulsified diesel fuels; and equip construction equipment with oxidation catalysts, particulate traps, or other verified/certified retrofit technologies, etc., where feasible.~~	**Not Applicable.** Project construction would not exceed SCAQMD thresholds; further mitigation is not required.
~~MM Air 19: Local transit agencies shall be contacted to determine bus routing in the project area that can accommodate bus stops at the project access points and the project shall provide bus passenger benches and shelters at these project access points.~~	**Not Applicable.** The Project area is already served by transit services; Omnitrans Route 87 serves the area, with a stop located at the corner of Eucalyptus Avenue and Hamner Avenue, less than 1,000 feet from the Project site. The Project would provide internal

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	driveways and pedestrian paths that connect to the existing street and sidewalk network surrounding the Project site.
Biological Resources	
MM Bio 1: There is a possibility of owl colonization within the project site prior to site grading. To ensure that no direct loss of individuals occurs, mitigation will be carried prior to initiation of on-site grading activities for each development phase. A pre-construction survey for resident burrowing owls shall be conducted by a qualified biologist. The survey shall be conducted 30 days prior to construction activities. If ground-disturbing activities are delayed or suspended for more than 30 days after the preconstruction survey, the site shall be resurveyed for owls. If owls are determined to be present within the construction footprint, they shall be captured and relocated. If non-breeding owls must be moved away from the disturbance area, passive relocation techniques will be used. The pre-construction survey and any relocation activity shall be conducted in accordance with the CDFG Report on Burrowing Owl Mitigation, 1995. According to CDFG guidelines, mitigation actions will be conducted from September 1 to January 31, which is prior to the nesting season. However, burrowing owl nesting activity is variable, and as such the time frame will be adjusted accordingly. Should eggs or fledglings be discovered in any owl burrow, the burrow cannot be disturbed (pursuant to CDFG guidelines) until the young have hatched and fledged (matured to a stage that they can leave the nest on their own). Occupied burrows shall not be disturbed during the nesting season (February 1 through August 31) unless a qualified biologist approved by the Department of Fish and Game verifies through non-invasive methods that either: a) the adult birds have not begun egg-laying and incubation; or b) the juveniles from the occupied	**Applicable.** The Project would conduct a pre-construction survey for resident burrowing owls, and follow the protocol set forth in this measure.

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burrows are foraging independently and are capable of independent survival. If a biologist is unable to verify one of the above conditions, then no disturbance shall occur within 300 feet of the burrowing owl's nest during the breeding season to avoid abandonment of the young. Passive relocation can be used to exclude owls from their burrows (outside the breeding season or once the young are able to leave the nest and fly) by installing one-way doors in burrow entrances. These one-way doors allow the owl to exit the burrow, but not enter it. These doors should be left in place 48 hours to ensure owls have left the burrow. Artificial burrows should be provided nearby. The project area should be monitored daily for one week to confirm owl use of burrows before excavating burrows in the impact area. Burrows should be excavated using hand tools and refilled to prevent reoccupation. Sections of flexible pipe should be inserted into the tunnels during excavation to maintain an escape route for any animals inside the burrow.	
MM Bio 2: The project proponent shall be required to pay City of Ontario open space mitigation fees. Fees collected will be used "to acquire and restore mitigation lands to offset impacts to species now living in the New Model Community and impacts to existing open space", according to the City of Ontario Development Impacts Fee Calculation Report and the Settlement and general Release Agreement.	**Applicable.** The Project would pay City of Ontario open space mitigation fees.
~~MM Bio 3: Construction and/or removal of windrow trees will occur outside of the nesting season (February 1 through August 31). If tree removal activities must occur during the breeding season, the mitigation measure in MM Bio 4 shall be implemented.~~	**Not Applicable.** The Project site has been graded, no windrow trees exist on the site.
~~MM Bio 4: If project construction activities involving heavy equipment and/or windrow tree removal are to occur during the nesting/breeding season (between February 1st and August 31st) of potentially occurring sensitive bird species, a pre-construction field survey shall be conducted by a qualified biologist to determine~~	**Not Applicable.** The Project site has been graded, no windrow trees exist of the site.

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~~if active nests of species protected by MBTA or CDFG are present in the construction zone or within a buffer of 500 feet. Pre-construction nesting/breeding surveys shall be conducted in all CDFG jurisdictional areas and within windrow trees. If no active nests are found during the survey, construction activities may proceed.~~ ~~If active nests are located during the pre-construction surveys, no grading, heavy equipment, or tree removal activities shall take place within at least 500 feet of an active listed species or raptor nest, 300 feet of other sensitive bird nests (non-listed), and 100 feet of most common songbird nests.~~	
Cultural Resources	
MM Cul 1: Should any cultural and/or archaeological resources be accidentally discovered during construction, construction activities shall be moved to other parts of the project site and a qualified archaeologist shall be contacted to determine the significance of these resources. If the find is determined to be a historical or unique archaeological resource, as defined in Section 15064.5 of the CEQA Guidelines, then procedures outlined in Section 15064.5 of the CEQA Guidelines shall be followed. Additionally, Ontario's Local CEQA Guidelines provide that curation may be an appropriate mitigation measure for an artifact that must be removed during project excavation or testing. (Local CEQA Guidelines, Section 5.13.)	**Applicable.** Although the site-specific Cultural Resources Study determined that no further archaeological study or mitigation would be required, this measure is directed at resources that may be inadvertantly found during Project construction. The Project would implement this measure.
MM Cul 2: If human remains are uncovered at any time, all activities in the area of the find shall be halted by the developer or its contractor and the County Coroner shall be notified immediately pursuant to CA Health & Safety Code Section 7050.5 and CA PRC Section 5097.98. If the Coroner determines that the remains are of Native American origin, the Coroner shall proceed as directed in Section 15064.5(e) of the CEQA Guidelines.	**Applicable.** The Project would be required to comply with all existing regulations, including the California Public Resources Code Section 5097.98, which would provide protection for any human remains discovered during development activities.
Energy	
None. (This topic was added to the CEQA Guidelines after the certification of the Esperanza Specific Plan DEIR.)	-

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Geology and Soils	
MM Geo 1: To address potential wind erosion effects, prior to construction, all grading and other construction activities will apply for and adhere to the permit given by the City of Ontario and enforced by the Building Official found in Title 6, Chapter 12, sections 6-12.01 – 6-12.07. The permit lasts for one (1) year, therefore, all construction lasting for a period of more than one calendar year from the date of issue will reapply for the permit and pay the current annual fee. At a minimum, the permit prohibits the disturbance of the surface or subsurface of more than one (1) acre of land without meeting permit requirements which can include such things as the application of soil stabilizers and limitations on grading activities during wind events.	**Applicable.** The Project would obtain all required permits prior to any construction activities.
~~MM Geo 2: To assure soils suitable for construction, site materials should be tested for organics and excavated to a minimum of 4 feet where soils generally become denser. Actual removal depths will be determined during grading when subsurface conditions are exposed. GeoSoils, Inc (10/12/01) also recommends that soft and compressible colluvial and alluvial soils be removed prior to grading.~~ ~~Per recommendations of GeoSoils Inc. in the Updated Geotechnical Study, partial to complete removal of manure will be required, as soils with high concentrations of cow manure are generally unsuitable to be used as fill. On-site soils may be used for fill if the organic matter content is diluted to less than 2 percent using underlying soils with no more than 1 percent of the organic content being from manure.~~	**Not Applicable.** As part of the site-specific Geotechnical Evaluation, soil samples throughout the site were tested to determine their organic content. The majority of samples ranged from approximately 1.2 percent to 2.7 percent, indicating relatively low organics. Two areas of the site indicated higher levels (8.8 percent and 4.8 percent). The Geotechnical Evaluation provides remedial grading recommendations in those areas with a higher percentage of organic content. Mandatory compliance with the recommendations of the site-specific Geotechnical Evaluation negates the need for this mitigation measure.
~~MM Geo 3: Any soil to be used as fill, whether currently on-site or imported, should be approved by the soil engineer or his/her representative prior to their placement. To properly assess and address the suitability of on-site soils to be used as fill, a geotechnical evaluation shall be performed by a qualified professional prior to the approval of the Tentative Tract map or site plan for a given phase of~~	**Not Applicable.** On-site soils were evaluated for suitability as part of the site-specific Geotechnical Evaluation. Mandatory compliance with the recommendations of the site-specific Geotechnical Evaluation negates the need for this mitigation measure.

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~~development. This evaluation will include an analysis of the organic matter content of soils on the site. If the organic matter content of the soils is greater than 2 percent when mixed with subsurface soils and/or imported fill, then manure will be removed from the site prior to grading operations.~~	
~~MM Geo 4: To reduce the risk of ground cracking, manure shall be removed from the site, such that the organic matter content of on-site soils shall not exceed 2 percent (a 2 percent total organic content is allowed, of which no more than 1 percent can be manure) in the building foundation areas when mixed with underlying clean soils and imported fill. On-site soils that will be used as on-site fill that contain organic contents will be diluted by mixing with underlying clean soils. The mix will be continuously sampled and tested during grading so that the fill does not exceed the recommended limit of 2 per cent of organics per total volume of fill. The soil engineer will observe the placement of all fill and take sufficient tests to monitor the moisture content and the uniformity and degree of compaction obtained.~~	**Not Applicable.** As part of the site-specific Geotechnical Evaluation, soil samples throughout the site were tested to determine their organic content. The majority of samples ranged from approximately 1.2 percent to 2.7 percent, indicating relatively low organics. Two areas of the site indicated higher levels (8.8 percent and 4.8 percent). The Geotechnical Evaluation provides remedial grading recommendations in those areas with a higher percentage of organic content. Mandatory compliance with the recommendations of the site-specific Geotechnical Evaluation negates the need for this mitigation measure.
~~MM Cul 3: Since grading plans have not yet been prepared to establish how deep excavation is needed, prior to the issuance of grading permits, and as recommended in the Phase I Cultural and Paleontological Resources Assessment for this site, a qualified paleontologist shall be retained to prepare a Paleontological Resources Survey of the project site, for approval by the City. Following City approval of the PRMTP, grading and construction activities may proceed in compliance with the provisions of the approved PRMTP.~~ ~~The PRMTP shall include the following measures:~~ ~~a. Identification of those locations within the project site where paleontological resources are likely to be uncovered during grading.~~ ~~b. A monitoring program specifying the procedures for the monitoring of grading activities by a qualified paleontologist or qualified designee.~~	**Not Applicable**. Consistent with the recommendations of the Project-specific Paleontological Resources Assessment, new Mitigation Measure 7-1 shall be implemented in place of MM Cul 3. Measure 7-1 requires the preparation of a PRIMP, as well as full-time paleontological monitoring starting at a depth of four feet below the surface during earth disturbance activities.

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~~c. If fossil remains large enough to be seen are uncovered by earth-moving activities, a qualified paleontologist or qualified designee shall temporarily divert earth-moving activities around the fossil site until the remains have been evaluated for significance and, if appropriate, have been recovered; and the paleontologist or qualified designee allows earth-moving activities to proceed through the site. If potentially significant resources are encountered, a letter of notification shall be provided in a timely manner to the City, in addition to the report (described below) that is filed at completion of grading.~~ ~~d. If a qualified paleontologist or qualified designee is not present when fossil remains are uncovered by earth-moving activities, these activities shall be stopped and a qualified paleontologist or qualified designee shall be called to the site immediately to evaluate the significance of the fossil remains.~~ ~~e. At a qualified paleontologist or qualified designee's discretion and to reduce any construction delay, a construction worker shall assist in removing fossiliferous rock samples to an adjacent location for temporary stockpiling pending eventual transport to a laboratory facility for processing.~~ ~~f. A qualified paleontologist or qualified designee shall collect all significant identifiable fossil remains. All fossil sites shall be plotted on a topographic map of the project site.~~ ~~g. If the qualified paleontologist or qualified designee determines that insufficient fossil remains have been found after fifty percent of earthmoving activities have been completed, monitoring can be reduced or discontinued.~~ ~~h. Any significant fossil remains recovered in the field as a result of monitoring or by processing rock samples shall be prepared, identified, catalogued, curated, and accessioned into the fossil collections of the San Bernardino County Museum, or another museum repository complying with the Society of Vertebrate Paleontology standard guidelines. Accompanying~~	

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~~specimen and site data, notes, maps, and photographs also shall be archived at the repository.~~ ~~i. Within 6 months following completion of the above tasks, a qualified paleontologist or qualified designee shall prepare a final report summarizing the results of the mitigation program and presenting an inventory and describing the scientific significance of any fossil remains accessioned into the museum repository. The report shall be submitted to the City Planning Department and the museum repository. The report shall comply with the Society of Vertebrate Paleontology standard guidelines for assessing and mitigating impacts on paleontological resources.~~	
Greenhouse Gases	
None. (This topic was added to the CEQA Guidelines after the certification of the Esperanza Specific Plan DEIR.)	-
Hazards and Hazardous Materials	
~~MM Haz 1: To the extent not previously prepared and to properly assess and address potential hazardous materials, including pesticide residues, within the specific plan area, a Phase I Environmental Site Assessment (ESA) shall be performed by a registered environmental assessor (REA) prior to the approval of a site plan for a given phase of development. Pursuant to mitigation measure HM-1 in the GPA for the NMC Final EIR, page 5.10-6, the Phase I ESA shall, at a minimum, meet with the requirements and current standards of investigation established by the American Society of Testing and Materials (ASTM Standard E 1527). If potential hazardous materials or conditions are identified in the Phase I report, an in-depth evaluation shall be performed including surficial sampling and chemical analysis within agricultural areas or where soil staining was observed. The Phase I ESA shall be provided to the City of Ontario and shall be included in any CEQA analysis prepared in connection with the consideration of the discretionary approval for development. All identified hazardous materials will be removed or remedial action taken prior to grading operations~~	**Not Applicable.** A Phase I ESA has been prepared for the Project site to evaluate the potential for on-site hazards. The Phase I determined that that no evidence of contamination or hazardous waste is located on the Project site. No further investigation was recommended.

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~~pursuant to the recommendations of the Phase I ESA and appropriate City, county, state and federal laws and guidelines under the oversight of the San Bernardino County Fire Department's Hazardous materials Division Site Remediation/Local Oversight Program.~~	
~~MM Haz 2: Much of the site located south of Eucalyptus Avenue has been covered by undocumented fill and used as a dump site by the local community. To address possible contamination and remove appropriately all previously identified and unidentified types of hazardous waste on site, clearing and grading activities in this area shall be monitored by a Registered Environmental Assessor (REA), or other professional personnel approved by the City, and any known items of concern and those not previously identified which are uncovered can be removed or remediated per the appropriate regulations (see MM Haz 3 and 4, below).~~	**Not Applicable.** See above.
~~MM Haz 3: If, while performing any excavation as part of project construction, material that is believed to be hazardous waste is discovered, as defined in Section 25117 of the California Health & Safety Code, the developer shall contact the City of Ontario Fire Department and the County of San Bernardino Fire Department Hazardous Materials Division. Excavation shall be stopped or redirected to another location on site until the material has been tested and the presence of hazardous waste has been confirmed. If no hazardous waste is present, excavation may continue. If hazardous waste is determined to be present, the California Department of Toxic Substances Control shall be contacted and the material shall be removed and disposed of pursuant to applicable provisions of California law under the oversight of the San Bernardino County Fire Department's Hazardous materials Division Site Remediation/Local Oversight Program. Fill material imported from other areas shall be tested prior to placement on-site to assess that it is suitable to be used as fill, including testing for unsafe levels of hazardous materials.~~	**Not Applicable.** See above.

Esperanza Measure	Project Applicability
~~MM Haz 4: The biologically active materials, such as animal carcasses, should be removed and legally disposed of prior to any clearing and grubbing.~~	**Not Applicable.** The recent site visit conducted as part of the Phase I verified that no biologically active materials, such as animal carcasses, are present on the Project site.
~~MM Haz 5: All on-site buildings and remaining foundations that were built before 1979 shall be tested for the presence of asbestos, mercury and lead-based paint and those materials shall be removed according to the applicable regulations and guidelines established by the South Coast Management District, Department of Toxic Substances Control, and the United States Environmental Protection Agency. As per HM-2 in the GPA for the NMC Final EIR, page 5.10-6, the developer shall submit documentation to the City Building Department that asbestos, mercury and lead based paint are not present on their site, or that the above removal process has occurred.~~	**Not Applicable.** The recent site visit conducted as part of the Phase I verified that no buildings or foundations are present on the Project site.
~~MM Haz 6: All septic tanks on the project site will be properly removed and disposed of, per City and State procedures, prior to site development. All water wells on the project site will be properly destroyed in accordance with MM Util 8 in Section 12, Utilities, of this EIR. These activities will occur subject to City of Ontario Building Safety requirements.~~	**Not Applicable.** No septic tanks were identified onsite as part of the Phase I ESA conducted for the Project.
~~MM Haz 7: Pursuant to the City of Ontario Municipal Code Section 9-2.0435 (L), "a methane gas assessment shall be prepared by a licensed professional with expertise in soil gas assessments for subdivisions proposed on former dairies, poultry ranches, hog ranches, livestock feed operations and similar facilities to determine the presence of methane gas within the project boundary. The methane gas assessment shall identify monitoring and mitigation strategies and approaches. All mitigation measures/plans and specifications shall be reviewed and approved by the City of Ontario."~~ ~~Such an "assessment" may take two steps. A preliminary assessment should be done prior to grading to determine exactly where dairies have existed in the past~~	**Not Applicable.** Due to the extensive soil stockpiling, grading, and blending that has taken place on the Project site as part of surrounding development, the Phase I determined that no further investigation is warranted.

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~~so that the post grading assessment/mitigation measures can be focused on the portions of the specific plan area that have included dairies. The second step may include actual testing of graded pads no sooner than 30 days after construction to determine if methane is detected above 5,000 ppm. If so, the types of mitigation measures described below, or those approved by the City, shall be implemented in the areas exceeding this limit. If the developer chooses not to do the post grading assessment, then mitigation as described below shall be required on all lots within former dairy areas of the specific plan.~~ ~~Mitigation shall include: 1) install a minimum 60-mil high density polyethylene (HDPE) membrane barrier (or equivalent), 2) install a subslab passive venting system, 3) seal utility or other penetrations through the membrane, 4) seal utility conduits where they enter a structure, and 4) construct a utility "dam" at the point where a "dry" utility trench approaches a structure. Liquid Boot, applied to a minimum 60-mil dry thickness per manufacturer's recommendations, may be substituted for the HDPE membrane.~~	
Hydrology and Water Quality	
~~MM Hydro 1: In order to ensure that construction activities associated with the Subarea 25 Esperanza Specific Plan will not cause a violation of any water quality standard or waste discharge requirements and to assure no substantial degradation of water quality occurs, and to implement the intent of mitigation measures included in the Final Environmental Impact Report for the NMC, the development within the project area shall comply with all applicable provisions of the State's General Permit for Construction Activities (Order No. 99-08-DWQ, or most recent version) during all phases of construction. A copy of evidence of the receipt of a Waste Discharge Identification Number from the State Regional Water Quality Control Board shall be filed with the City Engineer along with a copy of the Storm Water Pollution Prevention Plan (SWPPP) maps and~~	**Not Applicable.** The Esperanza Specific Plan EIR stated that measures Hydro 1 through 7 should be implemented, unless the Regional Water Quality Treatment Facility is complete and operational prior to project construction (p. III-7-21). The Regional Water Quality Facility referenced in the Esperanza SP DEIR (Regional Plant No. 5) was constructed in 2004. As such, these measures are not applicable to the Project.

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~~BMPs. According to Title 6, Chapter 6, Section 6 of the City's code, the City Engineer shall review and approve the provisions of the SWPPP prior to implementation of any SWPPP provision or starting any construction activity.~~	
~~MM Hydro 2: In order to ensure the development within the Subarea 25 Esperanza Specific Plan will not cause or contribute to violations of any water quality standard or waste discharge requirements, and to assure no substantial degradation of water quality occurs, the project will complete a Water Quality Management Plan (WQMP) pursuant to the MS4 permit (Order No. 2002-0012) under which the City of Ontario is a permitee. The City adopted storm water management code Section 6-6.101 et seq. to implement the provisions of the permit. The project shall incorporate Site Design BMPs and Source Control BMPs, and potentially Treatment Control BMPs. The following table (III-7-F) provides guidelines and possible BMPs that may be incorporated into the project design (on construction drawings) and/or project specifications. Prior to acceptance of the WQMP, the City shall assure that maintenance responsibilities of BMPs approved for the project are identified and enforceable. Table III-7-G correlates each BMP to the pollutants of concern which it removes/reduces and/or meets the design objectives for the BMP.~~	**Not Applicable.** See above.
~~MM Hydro 5: In order to conserve water and to mitigate for any potential unforeseen adverse impacts to a reduction in ground water recharge, the following measure has been recommended by the Chino Basin Water Conservation District: Landscaping within individual development projects will retain and percolate both applied irrigation water and storm water in vegetated areas of parking lots and other areas, where appropriate; "depressed" planted areas bordered by shrubbery screens will be implemented rather than "mounded" grass and shrubbery planted screens. Neighborhood Edges and parks will be irrigated via reclaimed water.~~	**Not Applicable.** See above.

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~~MM Hydro 3: In order to reduce the risk of flooding and to implement mitigation measures included in the Final Environmental Impact Report for the NMC prior to the issuance of a grading permit, the development within the Specific Plan, a final drainage plan for the proposed project shall be submitted for review and approval by the City Engineer and shall construct all necessary storm drain facilities internal to the development which are designed to connect with the City's master planned drainage system.~~	**Not Applicable.** See above.
~~MM Hydro 4: In order to reduce the risk of flooding and to implement mitigation measures included in the GPA for the NMC Final EIR, prior to issuance of grading permits, the City of Ontario shall coordinate with the San Bernardino County Flood Control District to ensure that the project meets County Flood Control requirements such as those established for encroachment permits.~~	**Not Applicable.** See above.
~~MM Hydro 6: In order to reduce pollutants in post construction run-off and to implement mitigation measures included in the Final Environmental Impact Report for the NMC, the individual project owners and operators (e.g., homeowner associations, parks department, etc.) shall ensure that all pest control, herbicide, insecticide and other similar substances used as part of maintenance of project features are handled, stored, applied and disposed of by those conducting facility maintenance in a manner consistent with all applicable federal, state and local regulations. According to Title 6, Chapter 6, Section 6 of the City's code, the City Engineer shall monitor and enforce this provision.~~	**Not Applicable.** See above.
~~MM Hydro: 7: To mitigate possible temporary run-off from undeveloped properties located north (up-gradient) of all or a portion of the project site, drainage from properties north of the developed portions of the project site shall be conveyed to appropriate drainage facilities, as approved by the City Engineer.~~	**Not Applicable.** See above.
Mineral Resources	
None.	-

Esperanza Measure	Project Applicability
Noise	
MM Noi 1: The construction activities of the proposed project shall comply with the City of Ontario Noise Ordinance that prohibits construction activities on Sundays, federal holidays, and other days between the hours of 7:00 p.m. and 7:00 a.m.	**Applicable.** The Project would comply with the permitted hours of construction, as set forth in the City of Ontario Noise Ordinance.
MM Noi 2: Construction staging areas shall not be located within 150 feet of existing sensitive receptors and construction equipment shall be fitted with properly operating and maintained mufflers.	**Applicable.** The Project would ensure that construction staging areas would not be located within 150 feet of existing sensitive receptors. Additionally, all construction equipment would be fitted with properly operating and maintained mufflers.
~~MM Noi 3: A sound wall at least 6 feet high shall be constructed along perimeter lots adjacent to Hamner/Milliken Avenue. If any residential structures are two stories high, then windows facing Hamner/Milliken Avenue would need upgraded sound-rated glazing products and the rooms would need supplemental ventilation. A final acoustical report shall be submitted to address wall heights based on final grading and site plans. The report shall be reviewed and approved by the Planning Department prior to building permit issuance to ensure that City standards are maintained (45 dB CNEL interior and 65 dB CNEL exterior).~~	**Not Applicable.** The Project site is not located adjacent to Hamner/Milliken Avenue.
~~MM Noi 4: A sound wall at least 6 feet high shall be constructed along perimeter lots adjacent to Bellegrave Avenue. If any residential structures are two stories high, then windows facing Bellegrave Avenue would need upgraded sound-rated glazing products and the rooms would need supplemental ventilation. A final acoustical report shall be submitted to address wall heights based on final grading and site plans. The report shall be reviewed and approved by the Planning Department prior to building permit issuance to ensure that City standards are maintained (45 dB CNEL interior and 65 dB CNEL exterior).~~	**Not Applicable.** The Project site is not located adjacent to Bellegrave Avenue.
~~MM Noi 5: A sound wall at least 6 feet high shall be constructed along perimeter lots adjacent to Merrill Avenue. If any residential structures are two stories high, then windows facing Merrill Avenue would need~~	**Not Applicable.** The Project site is not located adjacent to Merrill Avenue.

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~~upgraded sound-rated glazing products and the rooms would need supplemental ventilation. A final acoustical report shall be submitted to address wall heights based on final grading and site plans. The report shall be reviewed and approved by the Planning Department prior to building permit issuance to ensure that City standards are maintained (45 dB CNEL interior and 65 dB CNEL exterior).~~	
MM Noi 6: Architectural plans shall be submitted to the City of Ontario for an acoustical plan check prior to the issuance of building permits to assure that second story windows are upgraded for sound reduction and proper ventilation systems are incorporated. Plans shall include a final acoustical report to be reviewed and approved by the Planning Department prior to building permit issuance to ensure that City standards are maintained (45 dB CNEL interior and 65 dB CNEL exterior).	**Applicable.** The Project Noise Impact Analysis verifies that City standards would be maintained. The Project would submit architectural plans in this regard.
Public Services	
~~MM Serv 1: To reduce fire hazards, wood-shingled and shake-shingled roofs are prohibited.~~	**Not Applicable.** No wood-shingled or shake-shingled roofs are proposed.
MM Serv 2: To reduce fire hazards, adequate fire hydrant locations and water main sizes shall meet standards established by the City of Ontario Fire Department and reviewed and implemented by the Engineering Department.	**Applicable.** All fire water lines and hydrants would meet the standards established by the City of Ontario Fire Department, and reviewed and approved by the Engineering Department.
MM Serv 3: To reduce fire hazards, adequate fire flow pressure shall be provided for residential areas and non-residential projects in accordance with currently adopted City standards.	**Applicable.** Adequate fire flow pressure would be provided in accordance with currently adopted City standards.
MM Serv 4: To reduce fire hazards, adequate water supply shall be provided as approved by the Fire Department prior to the framing stages of construction.	**Applicable.** Adequate water supply would be provided, as approved by the Fire Department.
MM Serv 5: To reduce fire hazards, houses located on cul-de-sacs longer than 300 feet shall be constructed with residential fire sprinklers.	**Applicable.** Residential fire sprinklers would be installed, as appropriate.
MM Serv 6: To reduce fire hazards, access roadways designed in accordance with Fire Department standards to within 150' of all structures, shall be provided prior to the framing stages of construction. This access is to be	**Applicable.** Fire access roadways would be provided prior to framing, and remain unobstructed throughout construction.

Esperanza Measure	Project Applicability
maintained in an unobstructed manner throughout construction.	
MM Serv 7: To mitigate for potential impacts to library, police, and fire departments, the developer shall pay library, police, and fire service development impacts fees.	**Applicable.** The Project Applicant would pay all required development impact fees.
~~MM Serv 8: To reduce the risks associated with inadequate fire service, one of the two fire stations described above (Edison/Archibald or Edison/Mill Creek) shall be in operation prior to the issuance of the first certificate of occupancy within the Esperanza Specific Plan area. The details of where and how this will be accomplished shall be included in the development agreement between the City and the developer. Potential impacts associated with the construction of these stations is evaluated in the EIRs prepared for their respective GPA Subareas.~~	**Not Applicable.** This measure has already been implemented.
MM Serv 9: The developer shall pay school fees or otherwise meet project obligations to schools, as approved by Mountain View School and Chaffey Joint Union High School Districts.	**Applicable.** The Project would pay all required school fees, as directed by the City.
MM Serv 10: To adequately address the need for recreation within the City, park development impact fees, Quimby fees, and/or developed parkland shall be provided to the City commensurate with the requirements of the General Plan equivalent to 24 acres total. The park fees shall be paid on a pro-rata share as building permits are issued in accordance with the negotiated DIF agreement. (Note: parkland shall be provided to the City commensurate with the requirements of the General Plan equivalent to 25 acres, if 46 additional homes are built in lieu of the school.)	**Applicable.** The Project would pay all required park fees, as directed by the City.
~~MM Serv 11: To ensure adequate parks are built commensurate with development, the pocket park located within Planning Area 9 of the Esperanza Specific Plan shall be constructed no later than the issuance of certificates of occupancy for 50 percent of the units within Planning Areas 8, 9 and 10 combined; the pocket park located within Planning Area 7 of the Esperanza Specific Plan shall be constructed no later than the~~	**Not Applicable.** The Project site is located within Planning Area 11, which is not reflected in this measure.

Esperanza Measure	Project Applicability
~~issuance of certificates of occupancy for 50 percent of the units within Planning Areas 6 and 7 combined; the pocket park located within Planning Area 5 of the Esperanza Specific Plan shall be constructed no later than the issuance of certificates of occupancy for 50 percent of the units within Planning Areas 4b and 5 combined; the 5-acre Neighborhood Park shall be constructed no later than the issue of the certificates of occupancy for 50 percent of the units within Planning Areas 1, 2, 3, and 4a combined.~~	
Recreation	
See MM Serv 10 and 11, above.	See MM Serv 10 and 11, above.
Transportation/Traffic	
MM Trans 1: Install traffic signal at the intersection of Mill Creek Avenue/Merrill Avenue with the following geometrics: Northbound: One left-turn lane. One shared through and right-turn lane. Southbound: One left-turn lane. One shared through and right-turn lane. Eastbound: One left-turn lane. One shared through and right-turn lane. (These developments to be constructed by development located west of the Specific Plan.) Westbound: One left-turn lane. One shared through and right-turn lane.	**Applicable.** The Project would pay fair share fees towards the improvements listed in the Esperanza SP DEIR and requisite City Development Impact Fees, as determined by the City.
MM Trans 2: Install traffic signal at the intersection of Project Street (W)/Merrill Avenue with the following geometrics: Northbound: One shared left, through and right-turn lane. Southbound: One shared left, through and right-turn lane. Eastbound: One left-turn lane. One shared through and right-turn lane. Westbound: One left-turn lane. One shared through and right-turn lane.	**Applicable.** The Project would pay fair share fees towards the improvements listed in the Esperanza SP DEIR and requisite City Development Impact Fees, as determined by the City.
MM Trans 3: Install traffic signal at the intersection of Project Street (E)/Merrill Avenue with the following geometrics:	**Applicable.** The Project would pay fair share fees towards the improvements listed in the Esperanza SP DEIR and requisite City Development Impact Fees, as determined by the City.

Esperanza Measure	Project Applicability
Northbound: One shared left, through and right-turn lane. Southbound: One shared left, through and right-turn lane. Eastbound: One left-turn lane. One through lane. One shared through and right-turn lane. Westbound: One left-turn lane. One through lane. One shared through and right-turn lane.	
MM Trans 4: Install traffic signal at the intersection of Milliken/Hamner Avenue/Merrill Avenue with the following geometrics: Northbound: One left-turn lane. Two through lanes. One shared through and right-turn lane. Southbound: One left-turn lane. Three through lanes. One right-turn lane. Eastbound: Two left-turn lanes. One shared through and right-turn lane. Westbound: (This leg of the intersection to be constructed by development in Riverside County.) One left-turn lane. One shared through and right-turn lane.	**Applicable.** The Project would pay fair share fees towards the improvements listed in the Esperanza SP DEIR and requisite City Development Impact Fees, as determined by the City.
MM Trans 5: Install traffic signal at the intersection of Mill Creek Avenue/Bellegrave Avenue with the following geometrics (Note: Riverside County encroachment permits required for some improvements.): Northbound: One shared left, through and right-turn lane. Southbound: One shared left, through and right-turn lane. Eastbound: One left-turn lane. One shared through and right-turn lane. Westbound: Two left-turn lanes. One shared through and right-turn lane.	**Applicable.** The Project would pay fair share fees towards the improvements listed in the Esperanza SP DEIR and requisite City Development Impact Fees, as determined by the City.
MM Trans 6: Modify the intersection of Milliken/Hamner Avenue/Bellegrave Avenue to include the following geometrics (Note: Riverside County encroachment permits required for some improvements.): Northbound: One left-turn lane. Two through lanes. One shared through and right-turn lane.	**Applicable.** The Project would pay fair share fees towards the improvements listed in the Esperanza SP DEIR and requisite City Development Impact Fees, as determined by the City.

Esperanza Measure	Project Applicability
Southbound: Two left-turn lanes. Two through lanes. One shared through and right-turn lane. Eastbound: One left-turn lane. Two through lanes. One right-turn lane. Westbound: Two left-turn lanes. Two through lanes. One right-turn lane.	
MM Trans 7: Sight distance at the project entrance roadways should be reviewed with respect to the City of Ontario Standard Drawing for Sight Distance in effect at the time of preparation of final grading, landscape and street improvement plans.	**Applicable.** All proposed sight distances would be reviewed and approved by the City, consistent with current City of Ontario Standard Drawing for Sight Distance.
MM Trans 8: Signing/striping should be implemented in conjunction with detailed construction plans for the project site.	**Applicable.** All proposed signing and striping plans would be reviewed and approved by the City in conjunction with construction plans.
MM Trans 9: Intersection, median opening and traffic signal spacing shall be in accordance with the City of Ontario New Model Colony Access Guidelines.	**Applicable.** All roadway improvements would be implemented consistent with applicable City standards.
MM Trans 10: Construction of full width of internal roadways and part width of the following roadways shall comply with City of Ontario Standards: • Construct partial width improvements on the easterly side of Mill Creek Avenue at its ultimate cross-section as a collector street (88' right-of-way) adjacent to project boundary line. • Construct partial width improvements on the westerly of Milliken/Hamner Avenue at its ultimate cross-section as a divided arterial parkway 1 (140' or more right-of-way) adjacent to project boundary line. • Construct partial width improvements on the northerly side of Bellegrave Avenue at its ultimate cross-section as a standard arterial (100' right-of-way) adjacent to project boundary line.	**Applicable.** The Project would pay fair share fees towards the improvements listed in the Esperanza SP DEIR and requisite City Development Impact Fees, as determined by the City.
~~MM Trans 11: In order to provide alternative modes of transportation and reduce vehicle trips, the City shall work with Omnitrans to develop additional routes and service to the project area.~~	**Not Applicable.** Measure Trans 11 applies to City staff, not a specific project within the Specific Plan area.
~~MM Trans 12: In order to ease traffic flow, reduce trips, and implement GPA for the NMC Final EIR mitigation measures, the City shall establish a Transportation~~	**Not Applicable.** Measure Trans 12 applies to City staff, not a specific project within the Specific Plan area.

Esperanza Measure	Project Applicability
~~System Management (TSM) Program with the goal of reducing vehicle trips to and from land uses within the City, and particularly focusing on the reduction of drive-alone vehicle use in work commuting.~~	
MM Trans 13: The project will participate in the cost of off-site improvements through fairshare payment of the Development Impact fee as established by the City of Ontario. These fees should be collected and utilized by the City to construct the improvements necessary to maintain the required level of service.	**Applicable.** The Project would pay fair share fees towards the improvements listed in the Esperanza SP DEIR and requisite City Development Impact Fees, as determined by the City.
MM Trans 14: Reconfigure Milliken Avenue/SR 60 WB Ramps to include the following geometrics: Northbound: Two left turn lanes and two through lanes. Southbound: Two through lanes and one right-turn lane. Eastbound: NA Westbound: One left-turn lane. One shared left and through lane. One right-turn lane.	**Applicable.** The Project would pay fair share fees towards the improvements listed in the Esperanza SP DEIR and requisite City Development Impact Fees, as determined by the City.
MM Trans 15: Reconfigure Milliken Avenue/SR 60 EB Ramps to include the following geometrics: Northbound: Three through lanes. One right-turn lane. Southbound: One left turn lane. Three through lanes. Eastbound: One shared left and through lane. One through lane. Two right-turn lanes. Westbound: NA	**Applicable.** The Project would pay fair share fees towards the improvements listed in the Esperanza SP DEIR and requisite City Development Impact Fees, as determined by the City.
MM Trans 16: Reconfigure Milliken/Hamner Avenue/Riverside Avenue intersection to include the following geometrics: Northbound: One left-turn lane. Three through lanes. One shared right-turn and through lane. Southbound: Two left-turn lanes. Four through lanes. One right-turn lane. Eastbound: Two left-turn lanes. Two through lanes. One shared through and right-turn lane. Westbound: One left-turn lane. Two through lanes. One right-turn lane.	**Applicable.** The Project would pay fair share fees towards the improvements listed in the Esperanza SP DEIR and requisite City Development Impact Fees, as determined by the City.
MM Trans 17: Reconfigure Milliken/Hamner Avenue/Chino Avenue intersection to include the following geometrics: Northbound: Two left-turn lanes. Two through lanes. One shared right-turn and through lane.	**Applicable.** The Project would pay fair share fees towards the improvements listed in the Esperanza SP DEIR and requisite City Development Impact Fees, as determined by the City.

Esperanza Measure	Project Applicability
Southbound: One left-turn lane. Two through lanes. One shared through and right-turn lane. Eastbound: One left-turn lane. One through lane. One shared through and right-turn lane. Westbound: One left-turn lane. One through lane. One shared through and right-turn lane.	
MM Trans 18: Install traffic signal at the intersection of Archibald Avenue/Schaefer Avenue and configure with the following geometrics: Northbound: One left-turn lane. Two through lanes. One shared through and right-turn lane. Southbound: One left-turn lane. Two through lanes. One shared through and right-turn lane. Eastbound: One shared through and left-turn lane. One through lane. One shared through and right-turn lane. Westbound: One shared through and left-turn lane. One through lane. One shared through and right-turn lane.	**Applicable.** The Project would pay fair share fees towards the improvements listed in the Esperanza SP DEIR and requisite City Development Impact Fees, as determined by the City.
MM Trans 19: Reconfigure Archibald Avenue/Edison Avenue intersection to include the following geometrics: Northbound: Two left-turn lanes. Four through lanes. One right-turn lane. Southbound: Two left-turn lanes. Four through lanes. One right-turn lane. Eastbound: Two left-turn lanes. Three through lanes. Two shared right-turn/shared lanes. Westbound: Two left-turn lanes. Three through lanes. One right-turn lane.	**Applicable.** The Project would pay fair share fees towards the improvements listed in the Esperanza SP DEIR and requisite City Development Impact Fees, as determined by the City.
MM Trans 20: Install traffic signal at the intersection of Schaefer Avenue/Edison Avenue and reconfigure with the following geometrics: Northbound: NA Southbound: One shared left and right-turn lane. Eastbound: One left-turn lane. One through lane. Westbound: One through lane. One shared through and right-turn lane.	**Applicable.** The Project would pay fair share fees towards the improvements listed in the Esperanza SP DEIR and requisite City Development Impact Fees, as determined by the City.
MM Trans 21: Install traffic signal at the intersection of Haven Avenue/Edison Avenue and reconfigure with the following geometrics:	**Applicable.** The Project would pay fair share fees towards the improvements listed in the Esperanza SP DEIR and requisite City Development Impact Fees, as determined by the City.

Esperanza Measure	Project Applicability
Northbound: One left-turn lane. One through lane. One shared through and right-turn lane. Southbound: One left-turn lane. One through lane. One right-turn lane. Eastbound: Two left-turn lanes. One through lane. One shared through and right-turn lane. Westbound: One left-turn lane. One through lane. One shared through and right-turn lane.	
MM Trans 22: Install traffic signal at the intersection of Archibald Avenue/Merrill Avenue and reconfigure with the following geometrics: Northbound: One left-turn lane. Three through lanes. One shared through and right-turn lane. Southbound: Two left-turn lanes. Three through lanes. One shared through and right-turn lane. Eastbound: One left-turn lane. One through lane. One shared through and right-turn lane. Westbound: Two left-turn lanes. One through lane. One shared through and right-turn lane.	**Applicable.** The Project would pay fair share fees towards the improvements listed in the Esperanza SP DEIR and requisite City Development Impact Fees, as determined by the City.
MM Trans 23: Install traffic signal at the intersection of Haven Avenue/Merrill Avenue and reconfigure with the following geometrics: Northbound: One left-turn lane. One through lane. One shared through and right-turn lane. Southbound: One left-turn lane. One through lane. One shared through and right-turn lane. Eastbound: One left-turn lane. Two through lanes. One shared through and right-turn lane. Westbound: One left-turn lane. Two through lanes. One shared through and right-turn lane.	**Applicable.** The Project would pay fair share fees towards the improvements listed in the Esperanza SP DEIR and requisite City Development Impact Fees, as determined by the City.
MM Trans 24: Install traffic signal at the intersection of Mill Creek (Cleveland) Avenue/Merrill Avenue and reconfigure with the following geometrics: Northbound: One left-turn lane. One through lane. One shared through and right-turn lane. Southbound: One left-turn lane. One through lane. One shared through and right-turn lane. Eastbound: One left-turn lane. One through lane. One shared through and right-turn lane.	**Applicable.** The Project would pay fair share fees towards the improvements listed in the Esperanza SP DEIR and requisite City Development Impact Fees, as determined by the City.

Esperanza Measure	Project Applicability
Westbound: One left-turn lane. One through lane. One shared through and right-turn lane.	
MM Trans 25: Install traffic signal at the intersection of Project Street West/Merrill Avenue and reconfigure with the following geometrics: Northbound: One shared through and left-turn lane. One through lane. One shared through and right-turn lane. Southbound: One shared through and left-turn lane. One through lane. One shared through and right-turn lane. Eastbound: One left-turn lane. One through lane. One shared through and right-turn lane. Westbound: One left-turn lane. One through lane. One shared through and right-turn lane	**Applicable.** The Project would pay fair share fees towards the improvements listed in the Esperanza SP DEIR and requisite City Development Impact Fees, as determined by the City.
MM Trans 26: Install traffic signal at the intersection of Project Street East/Merrill Avenue and reconfigure with the following geometrics: Northbound: One shared through and left-turn lane. One through lane. One shared through and right-turn lane. Southbound: One left-turn lane. One through lane. One shared through and right-turn lane. Eastbound: One left-turn lane. One through lane. One shared through and right-turn lane. Westbound: One left-turn lane. One through lane. One shared through and right-turn lane.	**Applicable.** The Project would pay fair share fees towards the improvements listed in the Esperanza SP DEIR and requisite City Development Impact Fees, as determined by the City.
MM Trans 27: Install traffic signal at the intersection of Milliken/Hamner Avenue/Merrill Avenue and reconfigure with the following geometrics: Northbound: One left-turn lane. Three through lanes. One shared through and right-turn lane. Southbound: One left-turn lane. Three through lanes. One right-turn lane. Eastbound: Two left-turn lanes. One through lane. One shared through and right-turn lane. Westbound: One left-turn lane. One through lane. One shared through and right-turn lane.	**Applicable.** The Project would pay fair share fees towards the improvements listed in the Esperanza SP DEIR and requisite City Development Impact Fees, as determined by the City.

Esperanza Measure	Project Applicability
MM Trans 28: Install traffic signal at the intersection of Mill Creek (Cleveland) Avenue/Bellegrave Avenue and reconfigure with the following geometrics: Northbound: One shared left-turn lane. One through lane. One shared through and right-turn lane. Southbound: One shared through and left-turn lane. One through lane. One shared through and right-turn lane. Eastbound: One left-turn lane. One through lane. One shared through and right-turn lane. Westbound: Two left-turn lanes. One through lane. One shared through and right-turn lane.	**Applicable.** The Project would pay fair share fees towards the improvements listed in the Esperanza SP DEIR and requisite City Development Impact Fees, as determined by the City.
MM Trans 29: Reconfigure Milliken/Hamner Avenue/Bellegrave Avenue intersection to include the following geometrics: Northbound: One left-turn lane. Three through lanes. One shared through and right-turn lane. Southbound: Two left-turn lanes. Three through lanes. One shared through and right-turn lane. Eastbound: One left-turn lane. Two through lanes. One right-turn lane. Westbound: Two left-turn lanes. Two through lanes. One right-turn lane.	**Applicable.** The Project would pay fair share fees towards the improvements listed in the Esperanza SP DEIR and requisite City Development Impact Fees, as determined by the City.
MM Trans 30: Reconfigure Hamner Avenue/Limonite Avenue intersection to include the following geometrics: Northbound: Two left-turn lanes. Three through lanes. One right-turn lane. Southbound: Two left-turn lanes. Three through lanes. One right-turn lane. Eastbound: Two left-turn lanes. Three through lanes. One right-turn lane. Westbound: Two left-turn lanes. Three through lanes. One right-turn lane.	**Applicable.** The Project would pay fair share fees towards the improvements listed in the Esperanza SP DEIR and requisite City Development Impact Fees, as determined by the City.
MM Trans 31: Reconfigure I-15/Limonite SB Ramps to include the following geometrics: Northbound: NA Southbound: One left-turn lane. One shared left, through, and right-turn lane. One right-turn lane. Eastbound: Three through lanes. One right-turn lane.	**Applicable.** The Project would pay fair share fees towards the improvements listed in the Esperanza SP DEIR and requisite City Development Impact Fees, as determined by the City.

Esperanza Measure	Project Applicability
Westbound: Three through lanes. One free-right-turn lane.	
MM Trans 32: Reconfigure I-15/Limonite NB Ramps to include the following geometrics: Northbound: One left-turn lane. One shared left, through, and right-turn lane. One right-turn lane. Southbound: NA. Eastbound: Three through lanes. One free right-turn lane. Westbound: Three through lanes. One right-turn lane.	**Applicable.** The Project would pay fair share fees towards the improvements listed in the Esperanza SP DEIR and requisite City Development Impact Fees, as determined by the City.
Tribal Cultural Resources	
None.	-
Utilities & Service Systems	
MM Util 1: To provide adequate water and sewer service, all water and sewer pipelines within and adjacent to the project boundaries, as required and conditioned to serve the associated Tentative Tract Maps, shall be constructed by the developer based on the NMC Infrastructure Master Plans phased by tract and to the satisfaction of the City.	**Applicable.** All water and sewer improvements proposed by the Project would be reviewed and approved by the City, and implemented pursuant to current City infrastructure plans.
MM Util 2: To ensure that adequate sewer facilities are in place to serve the proposed project, the Archibald trunk sewer line off-site connection to the IEUA Kimbal Avenue interceptor shall be completed by IEUA and operational prior to the City of Ontario's issuance of the first certificates of occupancy. The applicant shall participate on a fair share basis in the development of the necessary sewer facilities.	**Applicable.** The Project would pay fair share fees towards the improvements listed in the Esperanza SP DEIR and requisite City Development Impact Fees, as determined by the City.
MM Util 3: To ensure adequate water service to the project, off-site water lines, tanks, interconnectors and other facilities required in the Water Master Plan for the Francis loop to provide water to the site shall be constructed by the City and be in place and operational prior to the City of Ontario's issuance of the first certificate of occupancy. The applicant shall participate on a fair share basis in the development of these off-site facilities.	**Applicable.** The Project would pay fair share fees towards the improvements listed in the Esperanza SP DEIR and requisite City Development Impact Fees, as determined by the City.
MM Util 4: To mitigate for possible conflicts with existing utilities, prior to obtaining grading permit(s), the project proponent shall coordinate with the applicable natural	**Applicable.** The Project Applicant would coordinate with affected purveyers to prevent potential impacts to existing utility facilities.

Esperanza Measure	Project Applicability
gas, electrical, and telephone utility providers for the project site to ensure that all existing underground and overhead lines are not damaged during project construction.	
MM Util 5: To reduce the quantity of energy used and to conserve water resources, the project developer and City of Ontario should work to include sustainable systems for use of water and energy within the project design. One source of assistance in this regard is Southern California Gas Company Commercial/ Industrial Support Center at 1-800-GAS-2000, which should be contacted at the time of development of the commercial center located within the project.	**Applicable.** As detailed within the Project Description, the Project includes design features aimed at reducing energy and water usage, such as water efficient fixtures and irrigation methods, and a lack of natural gas infrastructure.
~~MM Util 6: To reduce the need for potable water and ensure adequate water supply, the project applicant shall plan and construct a dual pipe system to supply recycled water when available in the future (GP Policy 5.1.4). An Engineer's Report approved by the City and the Department of Health Services is required prior to the use of recycled water.~~	**Not Applicable.** This measure has already been implemented/completed.
~~MM Util 7: To reduce risks associated with improperly abandoned wells and the potential need for temporary water supplies, all existing agricultural wells on the project site will be destroyed/ abandoned per the California Department of Water Resources Standards (Bulletin 74-90). A well use/destruction plan and schedule for all existing agricultural wells on the project site shall be prepared and submitted for approval, prior to the issuance of grading permits. This plan shall also include a temporary water supply plan, as applicable, in order to avoid potential significant temporary impacts resulting from the disruption of current water supply through the abandonment of on-site wells. Construction of any temporary pipes or facilities needed to provide water to the existing uses which are to temporarily remain shall be installed per City requirements at the developer's expense.~~	**Not Applicable.** No wells are located on the Project site.
Wildfire	
None. (This topic was added to the CEQA Guidelines after the certification of the Esperanza Specific Plan DEIR.)	-

MEMORANDUM

URBAN CROSSROADS

DATE: March 28, 2025
TO: Dave Waters, Genstar Development Company/GDCI-13
FROM: Haseeb Qureshi, Shannon Wong
JOB NO: 15662-05 AQ Assessment

ESPERANZA SPECIFIC PLAN AMENDMENT OPERATIONAL AIR QUALITY ASSESSMENT

Dave Waters,

Urban Crossroads, Inc. is pleased to submit the following Operational Air Quality Assessment for Esperanza Specific Plan Amendment development (referred to as **Project**) to support the proposed Specific Plan Amendment (**SPA**), which is located on the northeast corner of Eucalyptus Avenue and Amherst Avenue in the City of Ontario. The purpose of this work effort is to determine if the Project would result in new or substantially different Air Quality Impacts than those considered and addressed in the Esperanza Specific Plan (**Approved Specific Plan**) Environmental Impact Report (EIR) and The Ontario Plan 2050 Supplemental EIR (SEIR).

As required by *The Ontario Plan 2050 Final Supplemental Environmental Impact Report* (SCH No. 2021070364) (TOP Final SEIR) mitigation measure MM AQ-1, Urban Crossroads, Inc. is pleased to provide the following Operational Air Quality Assessment for the Esperanza Specific Plan Amendment (**Project**), located in the City of Ontario.

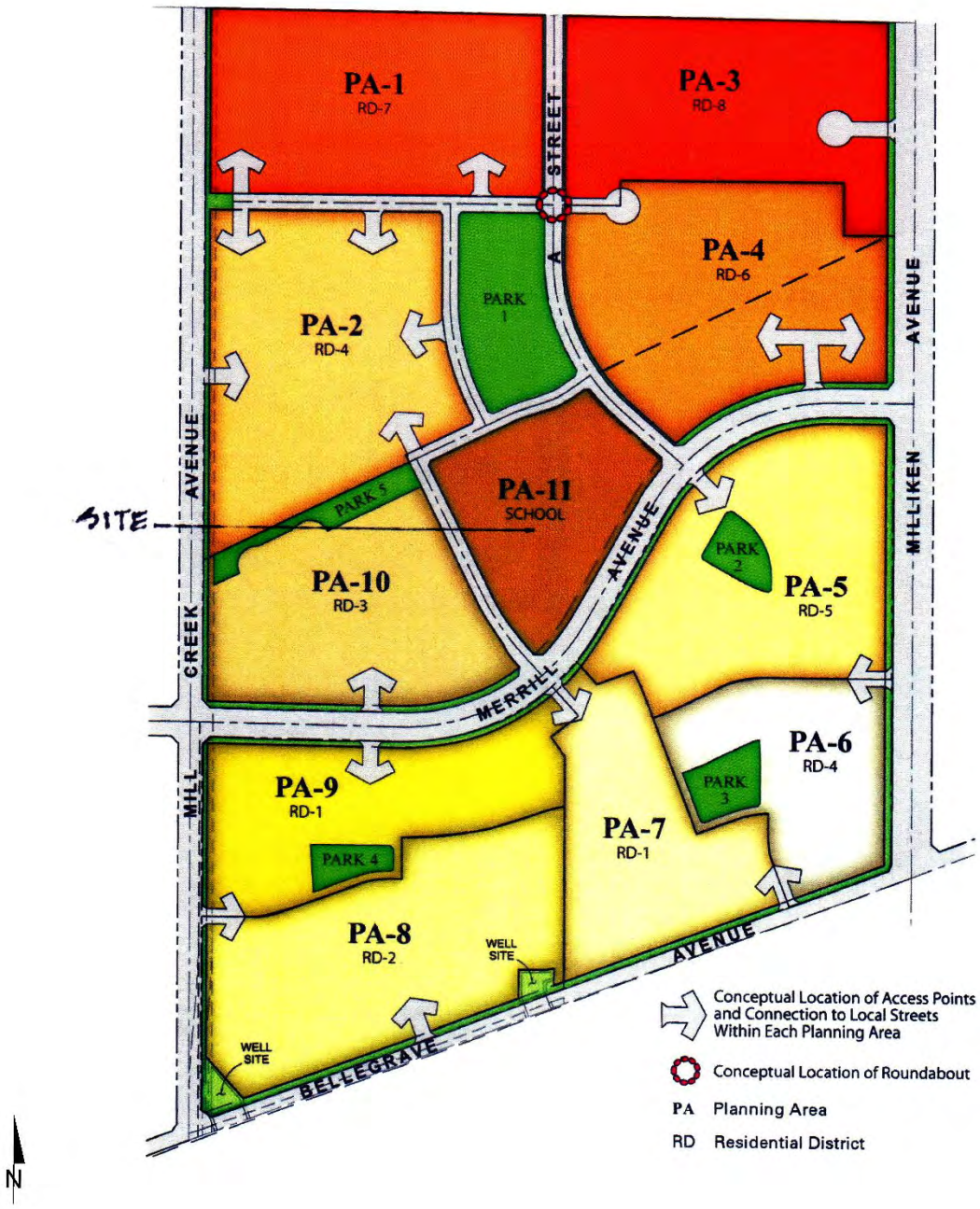
PROPOSED PROJECT

It is our understanding that the proposed Project is to consist of 161 multifamily residential dwelling units (with a density of approximately 16.1 dwelling units per net acre). The Project is located within the Esperanza Specific Plan. The original Specific Plan that was approved contemplated a 736-student elementary school within Planning Area 11. The land use will be updated from "School" to "MDR Medium Density Residential" consistent with the adjacent land use to the northeast. The Project is anticipated to be constructed in a single phase by the year 2029.

Exhibit 1 shows the preliminary site plan. For comparison purposes, Exhibit 2 shows the currently approved land use plan identifying Planning Area 11 with a school.

EXHIBIT 1: PRELIMINARY SITE PLAN

EXHIBIT 2: CURRENTLY APPROVED LAND USE PLAN



PROJECT AIR QUALITY EMISSIONS

METHODOLOGY

The California Air Pollution Control Officers Association (CAPCOA) in conjunction with other California air districts, including SCAQMD, released CalEEMod 2022 in May 2022. CalEEMod periodically releases updates, as such the latest version available at the time of this report has been utilized in this analysis. The purpose of this model is to calculate construction-source and operational-source criteria pollutant (VOCs, NO_X, SO_X, CO, PM_{10}, and $PM_{2.5}$) and GHG emissions from direct and indirect sources; and quantify applicable air quality and GHG reductions achieved from mitigation measures (1). Accordingly, the latest version of CalEEMod has been used for this Project to determine operational air quality emissions.

AIR QUALITY REGIONAL EMISSIONS THRESHOLDS

The SCAQMD has developed regional operational significance thresholds for criteria pollutants, as summarized at Table 1 (2). The SCAQMD's CEQA Air Quality Significance Thresholds (March 2023) indicate that any projects in the South Coast Air Basin (SCAB) with daily emissions that exceed any of the indicated thresholds should be considered as having an individually and cumulatively significant air quality impact.

TABLE 1: MAXIMUM DAILY REGIONAL EMISSIONS THRESHOLDS

Pollutant	Operations
NO_X	55 lbs/day
VOC	55 lbs/day
PM_{10}	150 lbs/day
$PM_{2.5}$	55 lbs/day
SO_X	150 lbs/day
CO	550 lbs/day

lbs/day – Pounds Per Day

AIR QUALITY LOCALIZED EMISSIONS THRESHOLDS

Sensitive Receptor Locations

Some people are especially sensitive to air pollution and are given special consideration when evaluating air quality impacts from projects. These groups of people include children, the elderly, and individuals with pre-existing respiratory or cardiovascular illness. Structures that house these persons or places where they gather are defined as "sensitive receptors". These structures typically include uses such as residences, hotels, and hospitals where an individual can remain for 24 hours. Consistent with the LST Methodology, the nearest land use where an individual could remain for 24 hours to the Project site has been used to determine construction and operational air quality impacts for emissions of PM_{10} and $PM_{2.5}$, since PM_{10} and $PM_{2.5}$ thresholds are based on a 24-hour averaging time.

Receptors in the Project study area are described below. All distances are measured from the Project site boundary to the outdoor living areas (e.g., backyards) or at the building façade, whichever is closer to the Project site. Receptors in the Project study area are shown on Exhibit 2 under the Localized Construction Emissions section later in the report.

- Receptor R1 represents the future residential area east of Clifton Avenue, approximately 83 feet east of the Project site.
- Receptor R2 represents the future residential area northeast of the intersection of Clifton Avenue and Chatham Street, approximately 106 feet northeast of the Project site.
- Receptor R3 represents the future park north of Chatham Street, approximately 66 feet north of the Project site.
- Receptor R4 represents the existing residence at 4508 S. Amherst Avenue, approximately 130 feet west of the Project site.
- Receptor R5 represents the 095 E. Amigos Privado, approximately 202 feet south of the Project site.
- Receptor R6 represents the existing residence at 4556 S. Afton Privado, approximately 143 feet southeast of the Project site.

For this Project, the appropriate SRA for the LST analysis is the SCAQMD Southwest San Bernardino Valley monitoring station (SRA 33). LSTs apply to CO, NO_2, PM_{10}, and $PM_{2.5}$. The SCAQMD produced look-up tables for projects less than or equal to 5 acres in size. The SCAQMD's screening look-up tables are utilized in determining localized impacts. It should be noted that since the look-up tables identify thresholds at only 1 acre, 2 acres, and 5 acres, linear regression has been utilized to determine localized significance thresholds. Consistent with SCAQMD guidance, the thresholds presented in Table 2 were calculated by interpolating the threshold values for the Project's disturbed acreage.

The acres disturbed is based on the equipment list and days in the site preparation and grading phase according to the anticipated maximum number of acres a given piece of equipment can pass over in an 8-hour workday. The equipment-specific grading rates are summarized in the CalEEMod user's guide, Appendix A: Calculation Details for CalEEMod (4). It should be noted that the disturbed area per day is representative of a piece of equipment making multiple passes over the same land area. In other words, one Rubber Tired Dozer can make multiple passes over the same land area totaling 0.5 acres in a given 8-hour day. Appendix A of the CalEEMod User Manual only identifies equipment-specific grading rates for Crawler Tractors, Graders, Rubber Tired Dozers, and Scrapers; therefore, Tractors/Loaders/Backhoes equipment that was included in the site preparation and grading phase was replaced with Crawler Tractors. For analytical purposes, emissions associated with peak site preparation and grading activities are considered for purposes of localized significance thresholds (LSTs) since this phase represents the maximum localized emissions that would occur. The Project's construction activities could disturb a maximum of approximately 3.5 acres per day for site preparation and 4 acres per day for grading activities. Any other construction phases of development would result in lesser emissions and consequently lesser impacts than what is disclosed herein. As such, Table 2 presents thresholds for localized construction and operational emissions.

TABLE 2: MAXIMUM DAILY LOCALIZED EMISSIONS THRESHOLDS

Source	Activity	Emissions (lbs/day)			
		VOC	NO_X	PM_{10}	$PM_{2.5}$
Construction	Site Preparation	220 lbs/day	1,713 lbs/day	11 lbs/day	7 lbs/day
	Grading	237 lbs/day	1,873 lbs/day	13 lbs/day	8 lbs/day

[1]Source of localized significance threshold (LSTs) is provided on page 7.

SENSITIVE RECEPTORS

The analysis uses the methodology included in the SCAQMD *Final Localized Significance Threshold Methodology* (LST Methodology) (6). The SCAQMD has established that impacts to air quality are significant if there is a potential to contribute or cause localized exceedances of the federal and/or state ambient air quality standards (NAAQS/CAAQS). Collectively, these are referred to as Localized Significance Thresholds (LSTs). The SCAQMD established LSTs in response to the SCAQMD Governing Board's Environmental Justice Initiative I-4[1]. LSTs represent the maximum emissions from a project that will not cause or contribute to an exceedance of the most stringent applicable federal or state ambient air quality standard at the sensitive receptor. The SCAQMD states that lead agencies can use the LSTs as another indicator of significance in its air quality impact analyses.

The SCAQMD recommends that the nearest sensitive receptor be considered when determining the Project's potential to cause an individual or cumulatively significant impact. The nearest land use where an individual could remain for 24 hours to the Project site has been used to determine localized construction and operational air quality impacts for emissions of PM_{10} and $PM_{2.5}$ (since PM_{10} and $PM_{2.5}$ thresholds are based on a 24-hour averaging time). The nearest receptor used for evaluation of localized impacts of PM_{10} and $PM_{2.5}$ is represented by the existing residence at 4516 Amherst Ave, approximately 52 feet (16 meters) west of the Project site.

As previously stated, and consistent with LST Methodology, the nearest industrial/commercial use to the Project site is used to determine construction and operational LST air impacts for emissions of NO_X and CO as the averaging periods for these pollutants are shorter (8 hours or less) and it is reasonable to assume that an individual could be present at these sites for periods of one to 8 hours. It should be noted that the existing residence is located at a closer distance than the nearest industrial/commercial use. As such, the same receptor will be used for evaluation of localized NO_x and CO.

It should be noted that the *LST Methodology* explicitly states that "*It is possible that a project may have receptors closer than 25 meters. Projects with boundaries located closer than 25 meters to the*

1 The purpose of SCAQMD's Environmental Justice program is to ensure that everyone has the right to equal protection from air pollution and fair access to the decision-making process that works to improve the quality of air within their communities. Further, the SCAQMD defines Environmental Justice as "…equitable environmental policymaking and enforcement to protect the health of all residents, regardless of age, culture, ethnicity, gender, race, socioeconomic status, or geographic location, from the health effects of air pollution."

nearest receptor should use the LSTs for receptors located at 25 meters (18)." As such, for evaluation of localized PM_{10}, $PM_{2.5}$, NO_X, and CO, a 25-meter distance will be used.

LOCALIZED CONSTRUCTION EMISSIONS

Table 3 identifies the localized impacts at the nearest receptor location in the vicinity of Project construction activities. Outputs from the model runs for construction LSTs are provided in Attachment A. For analytical purposes, emissions associated with peak site preparation and grading activities are considered for purposes of LSTs since these phases represent the maximum localized emissions that would occur. As shown in Table 3, emissions resulting from construction activity will not exceed the numerical thresholds of significance established by the SCAQMD for any criteria pollutant. Thus, a less than significant impact would occur for localized construction-source emissions and no mitigation is required.

TABLE 3: LOCALIZED CONSTRUCTION IMPACTS

On-Site Emissions	Emissions (lbs/day)			
	NO_X	CO	PM_{10}	$PM_{2.5}$
Site Preparation				
Maximum Daily Emissions	34.61	31.01	7.43	4.31
SCAQMD Localized Threshold	220	1,713	11	7
Threshold Exceeded?	NO	NO	NO	NO
Grading				
Maximum Daily Emissions	29.95	28.67	4.05	2.25
SCAQMD Localized Threshold	237	1,873	13	8
Threshold Exceeded?	NO	NO	NO	NO

REGIONAL CONSTRUCTION EMISSIONS

The proposed Project is to consist of 161 multifamily residential dwelling units (with a density of approximately 16.1 dwelling units per net acre) on 10.5 acres.

The estimated maximum daily construction emissions without mitigation are summarized in Table 4. Detailed construction model outputs are presented in Attachment A. Under the assumed scenarios, emissions resulting from the Project construction will not exceed thresholds established by the SCAQMD for emissions of any criteria pollutant.

TABLE 4: REGIONAL CONSTRUCTION EMISSIONS SUMMARY

Source	Emissions (lbs/day)					
	VOC	NO_X	CO	SO_X	PM_{10}	$PM_{2.5}$
Summer						
2026	3.91	34.72	32.28	0.06	23.78	12.01
2027	1.60	11.05	22.06	0.03	2.01	0.73
2028	1.54	10.51	21.48	0.03	1.98	0.69
Winter						
2026	3.47	30.11	29.79	0.06	11.93	5.11
2027	1.57	11.12	20.15	0.03	2.01	0.73
2028	1.51	10.54	19.70	0.03	1.98	0.69
2029	29.05	17.78	32.37	0.05	2.70	1.02
Maximum Daily Emissions	**29.05**	**34.72**	**32.37**	**0.06**	**23.78**	**12.01**
SCAQMD Regional Threshold	75	100	550	150	150	55
Threshold Exceeded?	NO	NO	NO	NO	NO	NO

REGIONAL OPERATIONAL EMISSIONS

Operational activities associated with the Project would result in emissions of CO, VOCs, NO_X, SO_X, PM_{10}, and $PM_{2.5}$. Operational related emissions are expected from the following primary sources: area source emissions, energy source emissions, and mobile source emissions.

The Project related operational air quality impacts derive primarily from vehicle trips generated by buildout associated with the net increase in residential units. Trip characteristics available from the *Esperanza Specific Plan Amendment Trip Generation* were utilized in this analysis (3).

The estimated operation-source emissions associated with the net increase of 161 multifamily residential dwelling units, and reduction in a 736-student elementary school are summarized on Table 5. Detailed operational model outputs are presented in Attachments A and B. As shown on Table 5, operational-source emissions would not exceed the applicable SCAQMD regional thresholds for emissions of any criteria pollutant and no mitigation is required.

TABLE 5: OPERATIONAL EMISSIONS COMPARISON

Source	Emissions (lbs/day)					
	VOC	NO_X	CO	SO_X	PM_{10}	$PM_{2.5}$
Summer						
Proposed Project: Multifamily Residential	8.44	7.52	53.35	0.14	11.69	3.22
Esperanza SP: Elementary School	6.21	5.76	55.04	0.13	11.43	2.99
Net Emissions	**2.24**	**1.76**	**-1.68**	**0.01**	**0.26**	**0.23**
SCAQMD Regional Threshold	55	55	550	150	150	55
Threshold Exceeded?	NO	NO	NO	NO	NO	NO
Winter						
Proposed Project: Multifamily Residential	7.45	7.74	36.28	0.14	11.68	3.22
Esperanza SP: Elementary School	5.48	6.15	42.64	0.13	11.42	2.98
Net Emissions	**1.97**	**1.59**	**-6.37**	**0.01**	**0.26**	**0.23**
SCAQMD Regional Threshold	55	55	550	150	150	55
Threshold Exceeded?	NO	NO	NO	NO	NO	NO

REFERENCES

1. **California Air Pollution Control Officers Association (CAPCOA).** California Emissions Estimator Model (CalEEMod). [Online] May 2022. www.caleemod.com.
2. **South Coast Air Quality Management District (SCAQMD).** SCAQMD Air Quality Significance Thresholds. [Online] https://www.aqmd.gov/docs/default-source/ceqa/handbook/south-coast-aqmd-air-quality-significance-thresholds.pdf.
3. **Urban Crossroads, Inc.** *Esperanza Specific Plan Amendment Trip Generation .* 2024.

ATTACHMENT A

CALEEMOD PROPOSED EMISSIONS MODEL OUTPUTS

15662 - Esperanza Specific Plan Amendment (Proposed) Detailed Report

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1.1. Basic Project Information

Data Field	Value
Project Name	15662 - Esperanza Specific Plan Amendment (Proposed)
Construction Start Date	8/3/2026
Operational Year	2029
Lead Agency	—
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	2.60
Precipitation (days)	18.8
Location	33.992352, -117.563101
County	San Bernardino-South Coast
City	Ontario
Air District	South Coast AQMD
Air Basin	South Coast
TAZ	5260
EDFZ	10
Electric Utility	Southern California Edison
Gas Utility	Southern California Gas
App Version	2022.1.1.29

1.2. Land Use Types

Land Use Subtype	Size	Unit	Lot Acreage	Building Area (sq ft)	Landscape Area (sq ft)	Special Landscape Area (sq ft)	Population	Description
Apartments Low Rise	161	Dwelling Unit	10.5	170,660	98,516	—	533	—

1.3. User-Selected Emission Reduction Measures by Emissions Sector

No measures selected

2. Emissions Summary

2.1. Construction Emissions Compared Against Thresholds

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Un/Mit.	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	4.65	3.91	34.7	32.3	0.06	1.77	5.90	7.67	1.62	2.74	4.37	—	7,052	7,052	0.29	0.14	6.00	7,082
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	29.5	29.0	30.1	32.4	0.06	1.38	2.95	4.33	1.27	1.05	2.32	—	7,029	7,029	0.28	0.17	0.17	7,058
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	3.27	3.22	7.98	14.6	0.02	0.36	1.16	1.43	0.33	0.35	0.68	—	3,239	3,239	0.11	0.10	1.85	3,274
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.60	0.59	1.46	2.66	< 0.005	0.06	0.21	0.26	0.06	0.06	0.12	—	536	536	0.02	0.02	0.31	542

2.2. Construction Emissions by Year, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Year	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily - Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2026	4.65	3.91	34.7	32.3	0.06	1.77	5.90	7.67	1.62	2.74	4.37	—	7,052	7,052	0.29	0.07	1.10	7,082

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2027	1.90	1.60	11.0	22.1	0.03	0.37	1.64	2.01	0.34	0.39	0.73	—	4,644	4,644	0.16	0.14	6.00	4,697
2028	1.79	1.54	10.5	21.5	0.03	0.33	1.64	1.98	0.30	0.39	0.69	—	4,604	4,604	0.15	0.14	5.37	4,656
Daily - Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2026	4.13	3.47	30.1	29.8	0.06	1.38	2.95	4.33	1.27	1.05	2.32	—	7,029	7,029	0.28	0.15	0.17	7,058
2027	1.87	1.57	11.1	20.1	0.03	0.37	1.64	2.01	0.34	0.39	0.73	—	4,515	4,515	0.16	0.14	0.16	4,561
2028	1.76	1.51	10.5	19.7	0.03	0.33	1.64	1.98	0.30	0.39	0.69	—	4,478	4,478	0.16	0.14	0.14	4,524
2029	29.5	29.0	17.8	32.4	0.05	0.56	2.14	2.70	0.51	0.51	1.02	—	6,585	6,585	0.23	0.17	0.16	6,642
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2026	1.08	0.91	7.75	8.26	0.02	0.36	0.93	1.29	0.33	0.35	0.68	—	1,822	1,822	0.07	0.03	0.32	1,832
2027	1.34	1.12	7.98	14.6	0.02	0.27	1.16	1.43	0.24	0.28	0.52	—	3,239	3,239	0.11	0.10	1.85	3,274
2028	1.26	1.08	7.58	14.3	0.02	0.24	1.16	1.40	0.22	0.28	0.49	—	3,221	3,221	0.11	0.10	1.66	3,256
2029	3.27	3.22	2.19	4.05	0.01	0.07	0.27	0.34	0.06	0.06	0.13	—	829	829	0.03	0.02	0.34	837
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2026	0.20	0.17	1.41	1.51	< 0.005	0.06	0.17	0.23	0.06	0.06	0.12	—	302	302	0.01	< 0.005	0.05	303
2027	0.24	0.20	1.46	2.66	< 0.005	0.05	0.21	0.26	0.04	0.05	0.09	—	536	536	0.02	0.02	0.31	542
2028	0.23	0.20	1.38	2.62	< 0.005	0.04	0.21	0.26	0.04	0.05	0.09	—	533	533	0.02	0.02	0.28	539
2029	0.60	0.59	0.40	0.74	< 0.005	0.01	0.05	0.06	0.01	0.01	0.02	—	137	137	< 0.005	< 0.005	0.06	139

2.4. Operations Emissions Compared Against Thresholds

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Un/Mit.	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	9.18	8.44	7.52	53.4	0.14	0.35	11.3	11.7	0.34	2.88	3.22	77.0	17,534	17,611	8.40	0.57	33.0	18,023
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

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Unmit.	8.14	7.45	7.74	36.3	0.14	0.34	11.3	11.7	0.34	2.88	3.22	77.0	16,726	16,803	8.41	0.58	1.92	17,189
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	8.09	7.56	5.03	40.0	0.11	0.14	10.3	10.4	0.14	2.62	2.75	77.0	12,752	12,829	8.31	0.54	13.7	13,211
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	1.48	1.38	0.92	7.29	0.02	0.03	1.88	1.90	0.02	0.48	0.50	12.8	2,111	2,124	1.38	0.09	2.28	2,187

2.5. Operations Emissions by Sector, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Sector	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	4.00	3.51	4.09	42.8	0.12	0.07	11.3	11.4	0.07	2.88	2.95	—	12,491	12,491	0.46	0.52	31.9	12,689
Area	5.09	4.89	2.76	10.3	0.02	0.22	—	0.22	0.22	—	0.22	0.00	3,414	3,414	0.06	0.01	—	3,418
Energy	0.08	0.04	0.68	0.29	< 0.005	0.05	—	0.05	0.05	—	0.05	—	1,575	1,575	0.14	0.01	—	1,582
Water	—	—	—	—	—	—	—	—	—	—	—	12.9	53.1	65.9	1.32	0.03	—	109
Waste	—	—	—	—	—	—	—	—	—	—	—	64.2	0.00	64.2	6.41	0.00	—	225
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1.09	1.09
Total	9.18	8.44	7.52	53.4	0.14	0.35	11.3	11.7	0.34	2.88	3.22	77.0	17,534	17,611	8.40	0.57	33.0	18,023
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	3.80	3.31	4.39	34.9	0.11	0.07	11.3	11.4	0.07	2.88	2.95	—	11,708	11,708	0.46	0.54	0.83	11,880
Area	4.26	4.10	2.67	1.14	0.02	0.22	—	0.22	0.22	—	0.22	0.00	3,390	3,390	0.06	0.01	—	3,393
Energy	0.08	0.04	0.68	0.29	< 0.005	0.05	—	0.05	0.05	—	0.05	—	1,575	1,575	0.14	0.01	—	1,582
Water	—	—	—	—	—	—	—	—	—	—	—	12.9	53.1	65.9	1.32	0.03	—	109
Waste	—	—	—	—	—	—	—	—	—	—	—	64.2	0.00	64.2	6.41	0.00	—	225
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1.09	2592

Total	8.14	7.45	7.74	36.3	0.14	0.34	11.3	11.7	0.34	2.88	3.22	77.0	16,726	16,803	8.41	0.58	1.92	17,189
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	3.47	3.02	4.11	33.3	0.11	0.07	10.3	10.4	0.06	2.62	2.68	—	10,875	10,875	0.43	0.50	12.6	11,046
Area	4.54	4.50	0.24	6.35	< 0.005	0.02	—	0.02	0.02	—	0.02	0.00	249	249	0.01	< 0.005	—	249
Energy	0.08	0.04	0.68	0.29	< 0.005	0.05	—	0.05	0.05	—	0.05	—	1,575	1,575	0.14	0.01	—	1,582
Water	—	—	—	—	—	—	—	—	—	—	—	12.9	53.1	65.9	1.32	0.03	—	109
Waste	—	—	—	—	—	—	—	—	—	—	—	64.2	0.00	64.2	6.41	0.00	—	225
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1.09	1.09
Total	8.09	7.56	5.03	40.0	0.11	0.14	10.3	10.4	0.14	2.62	2.75	77.0	12,752	12,829	8.31	0.54	13.7	13,211
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.63	0.55	0.75	6.08	0.02	0.01	1.88	1.89	0.01	0.48	0.49	—	1,800	1,800	0.07	0.08	2.09	1,829
Area	0.83	0.82	0.04	1.16	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	0.00	41.2	41.2	< 0.005	< 0.005	—	41.3
Energy	0.01	0.01	0.12	0.05	< 0.005	0.01	—	0.01	0.01	—	0.01	—	261	261	0.02	< 0.005	—	262
Water	—	—	—	—	—	—	—	—	—	—	—	2.13	8.78	10.9	0.22	0.01	—	18.0
Waste	—	—	—	—	—	—	—	—	—	—	—	10.6	0.00	10.6	1.06	0.00	—	37.2
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.18	0.18
Total	1.48	1.38	0.92	7.29	0.02	0.03	1.88	1.90	0.02	0.48	0.50	12.8	2,111	2,124	1.38	0.09	2.28	2,187

3. Construction Emissions Details

3.1. Site Preparation (2026) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road	4.56	3.83	34.6	31.0	0.05	1.77	—	1.77	1.62	—	1.62	—	5,532	5,532	0.22	0.04	—	5,551
Dust From Material Movement	—	—	—	—	—	—	5.66	5.66	—	2.69	2.69	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.25	0.21	1.90	1.70	< 0.005	0.10	—	0.10	0.09	—	0.09	—	303	303	0.01	< 0.005	—	304
Dust From Material Movement	—	—	—	—	—	—	0.31	0.31	—	0.15	0.15	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.05	0.04	0.35	0.31	< 0.005	0.02	—	0.02	0.02	—	0.02	—	50.2	50.2	< 0.005	< 0.005	—	50.4
Dust From Material Movement	—	—	—	—	—	—	0.06	0.06	—	0.03	0.03	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.08	0.08	0.07	1.26	0.00	0.00	0.23	0.23	0.00	0.05	0.05	—	242	242	0.01	0.01	0.83	245
Vendor	< 0.005	< 0.005	0.03	0.02	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	30.3	30.3	< 0.005	< 0.005	0.08	31.9
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.05	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	12.3	12.3	< 0.005	< 0.005	0.02	12.5
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	1.66	1.66	< 0.005	< 0.005	< 0.005	1.74
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	2.04	2.04	< 0.005	< 0.005	< 0.005	2.07
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.28	0.28	< 0.005	< 0.005	< 0.005	0.29
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.3. Grading (2026) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	4.03	3.39	30.0	28.7	0.06	1.38	—	1.38	1.27	—	1.27	—	6,715	6,715	0.27	0.05	—	6,738

Dust From Material Movement	—	—	—	—	—	—	2.67	2.67	—	0.98	0.98	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	4.03	3.39	30.0	28.7	0.06	1.38	—	1.38	1.27	—	1.27	—	6,715	6,715	0.27	0.05	—	6,738
Dust From Material Movement	—	—	—	—	—	—	2.67	2.67	—	0.98	0.98	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.66	0.56	4.92	4.71	0.01	0.23	—	0.23	0.21	—	0.21	—	1,104	1,104	0.04	0.01	—	1,108
Dust From Material Movement	—	—	—	—	—	—	0.44	0.44	—	0.16	0.16	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.12	0.10	0.90	0.86	< 0.005	0.04	—	0.04	0.04	—	0.04	—	183	183	0.01	< 0.005	—	183

Dust From Material Movement	—	—	—	—	—	—	0.08	0.08	—	0.03	0.03	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.10	0.09	0.08	1.44	0.00	0.00	0.26	0.26	0.00	0.06	0.06	—	276	276	0.01	0.01	0.94	280
Vendor	0.01	< 0.005	0.07	0.04	< 0.005	< 0.005	0.02	0.02	< 0.005	< 0.005	0.01	—	60.7	60.7	< 0.005	0.01	0.16	63.7
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.09	0.08	0.09	1.09	0.00	0.00	0.26	0.26	0.00	0.06	0.06	—	253	253	< 0.005	0.01	0.02	256
Vendor	0.01	< 0.005	0.07	0.04	< 0.005	< 0.005	0.02	0.02	< 0.005	< 0.005	0.01	—	60.7	60.7	< 0.005	0.01	< 0.005	63.6
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.02	0.19	0.00	0.00	0.04	0.04	0.00	0.01	0.01	—	42.2	42.2	< 0.005	< 0.005	0.07	42.8
Vendor	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	9.97	9.97	< 0.005	< 0.005	0.01	10.5
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.03	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	6.99	6.99	< 0.005	< 0.005	0.01	7.08
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	1.65	1.65	< 0.005	< 0.005	< 0.005	1.73
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.5. Building Construction (2026) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.38	1.16	10.7	14.1	0.03	0.41	—	0.41	0.38	—	0.38	—	2,630	2,630	0.11	0.02	—	2,639
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.11	0.09	0.81	1.07	< 0.005	0.03	—	0.03	0.03	—	0.03	—	201	201	0.01	< 0.005	—	201
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.02	0.15	0.20	< 0.005	0.01	—	0.01	0.01	—	0.01	—	33.2	33.2	< 0.005	< 0.005	—	33.3
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	0.53	0.47	0.51	6.30	0.00	0.00	1.52	1.52	0.00	0.36	0.36	—	1,467	1,467	0.02	0.06	0.14	1,485
Vendor	0.04	0.01	0.51	0.27	< 0.005	0.01	0.13	0.14	0.01	0.04	0.04	—	455	455	0.03	0.07	0.03	477
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.04	0.04	0.04	0.51	0.00	0.00	0.11	0.11	0.00	0.03	0.03	—	114	114	< 0.005	< 0.005	0.18	115
Vendor	< 0.005	< 0.005	0.04	0.02	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	34.7	34.7	< 0.005	0.01	0.04	36.4
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.09	0.00	0.00	0.02	0.02	0.00	< 0.005	< 0.005	—	18.8	18.8	< 0.005	< 0.005	0.03	19.1
Vendor	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	5.75	5.75	< 0.005	< 0.005	0.01	6.03
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.7. Building Construction (2027) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.33	1.11	10.2	14.0	0.03	0.36	—	0.36	0.34	—	0.34	—	2,630	2,630	0.11	0.02	—	2,639
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	1.33	1.11	10.2	14.0	0.03	0.36	—	0.36	0.34	—	0.34	—	2,630	2,630	0.11	0.02	—	2,639
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.95	0.79	7.27	10.0	0.02	0.26	—	0.26	0.24	—	0.24	—	1,878	1,878	0.08	0.02	—	1,885
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.17	0.14	1.33	1.83	< 0.005	0.05	—	0.05	0.04	—	0.04	—	311	311	0.01	< 0.005	—	312
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.53	0.48	0.41	7.77	0.00	0.00	1.52	1.52	0.00	0.36	0.36	—	1,568	1,568	0.02	0.05	4.93	1,590
Vendor	0.04	0.01	0.47	0.26	< 0.005	0.01	0.13	0.14	0.01	0.04	0.04	—	446	446	0.03	0.07	1.07	468
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.50	0.45	0.46	5.85	0.00	0.00	1.52	1.52	0.00	0.36	0.36	—	1,438	1,438	0.02	0.05	0.13	1,455
Vendor	0.04	0.01	0.49	0.26	< 0.005	0.01	0.13	0.14	0.01	0.04	0.04	—	447	447	0.03	0.07	0.03	467
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

2600

Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.36	0.32	0.36	4.38	0.00	0.00	1.07	1.07	0.00	0.25	0.25	—	1,042	1,042	0.01	0.04	1.52	1,055
Vendor	0.03	0.01	0.35	0.18	< 0.005	< 0.005	0.09	0.10	< 0.005	0.03	0.03	—	319	319	0.02	0.05	0.33	334
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.07	0.06	0.07	0.80	0.00	0.00	0.20	0.20	0.00	0.05	0.05	—	172	172	< 0.005	0.01	0.25	175
Vendor	0.01	< 0.005	0.06	0.03	< 0.005	< 0.005	0.02	0.02	< 0.005	< 0.005	0.01	—	52.8	52.8	< 0.005	0.01	0.05	55.3
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.9. Building Construction (2028) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.28	1.07	9.66	14.0	0.03	0.33	—	0.33	0.30	—	0.30	—	2,630	2,630	0.11	0.02	—	2,639
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.28	1.07	9.66	14.0	0.03	0.33	—	0.33	0.30	—	0.30	—	2,630	2,630	0.11	0.02	—	2,639
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.92	0.77	6.92	10.1	0.02	0.23	—	0.23	0.21	—	0.21	—	1,884	1,884	0.08	0.02	—	1,890
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.17	0.14	1.26	1.83	< 0.005	0.04	—	0.04	0.04	—	0.04	—	312	312	0.01	< 0.005	—	313
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.47	0.46	0.40	7.20	0.00	0.00	1.52	1.52	0.00	0.36	0.36	—	1,538	1,538	0.02	0.05	4.42	1,559
Vendor	0.04	0.01	0.45	0.25	< 0.005	0.01	0.13	0.14	< 0.005	0.04	0.04	—	436	436	0.03	0.07	0.95	458
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.44	0.43	0.41	5.41	0.00	0.00	1.52	1.52	0.00	0.36	0.36	—	1,411	1,411	0.02	0.05	0.11	1,428
Vendor	0.04	0.01	0.47	0.25	< 0.005	0.01	0.13	0.14	< 0.005	0.04	0.04	—	436	436	0.03	0.07	0.02	457
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.31	0.31	0.32	4.11	0.00	0.00	1.07	1.07	0.00	0.25	0.25	—	1,025	1,025	0.01	0.04	1.37	1,038
Vendor	0.03	0.01	0.34	0.18	< 0.005	< 0.005	0.09	0.10	< 0.005	0.03	0.03	—	313	313	0.02	0.05	0.29	328
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	0.06	0.06	0.06	0.75	0.00	0.00	0.20	0.20	0.00	0.05	0.05	—	170	170	< 0.005	0.01	0.23	172
Vendor	0.01	< 0.005	0.06	0.03	< 0.005	< 0.005	0.02	0.02	< 0.005	< 0.005	0.01	—	51.7	51.7	< 0.005	0.01	0.05	54.2
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.11. Building Construction (2029) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.25	1.04	9.28	14.0	0.03	0.30	—	0.30	0.28	—	0.28	—	2,629	2,629	0.11	0.02	—	2,638
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.17	0.14	1.24	1.86	< 0.005	0.04	—	0.04	0.04	—	0.04	—	350	350	0.01	< 0.005	—	351
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.03	0.03	0.23	0.34	< 0.005	0.01	—	0.01	0.01	—	0.01	—	57.9	57.9	< 0.005	< 0.005	—	58.1

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.42	0.36	0.40	5.07	0.00	0.00	1.52	1.52	0.00	0.36	0.36	—	1,386	1,386	0.02	0.05	0.10	1,403
Vendor	0.04	0.01	0.45	0.24	< 0.005	< 0.005	0.13	0.13	< 0.005	0.04	0.04	—	425	425	0.03	0.06	0.02	445
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.06	0.05	0.05	0.71	0.00	0.00	0.20	0.20	0.00	0.05	0.05	—	187	187	< 0.005	0.01	0.23	189
Vendor	< 0.005	< 0.005	0.06	0.03	< 0.005	< 0.005	0.02	0.02	< 0.005	< 0.005	0.01	—	56.5	56.5	< 0.005	0.01	0.05	59.2
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.13	0.00	0.00	0.04	0.04	0.00	0.01	0.01	—	31.0	31.0	< 0.005	< 0.005	0.04	31.4
Vendor	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	9.36	9.36	< 0.005	< 0.005	0.01	9.80
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.13. Paving (2029) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Roa Equipment	0.80	0.67	6.46	9.92	0.01	0.24	—	0.24	0.22	—	0.22	—	1,511	1,511	0.06	0.01	—	1,516
Paving	0.00	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Roa d Equipm ent	0.09	0.07	0.71	1.09	< 0.005	0.03	—	0.03	0.02	—	0.02	—	166	166	0.01	< 0.005	—	166
Paving	0.00	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Roa d Equipm ent	0.02	0.01	0.13	0.20	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	27.4	27.4	< 0.005	< 0.005	—	27.5
Paving	0.00	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05	0.05	0.05	0.66	0.00	0.00	0.20	0.20	0.00	0.05	0.05	—	179	179	< 0.005	0.01	0.01	182
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

2605

Worker	0.01	0.01	0.01	0.08	0.00	0.00	0.02	0.02	0.00	< 0.005	< 0.005	—	19.9	19.9	< 0.005	< 0.005	0.02	20.2
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	3.30	3.30	< 0.005	< 0.005	< 0.005	3.34
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.15. Architectural Coating (2029) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.17	0.14	1.06	1.48	< 0.005	0.02	—	0.02	0.02	—	0.02	—	178	178	0.01	< 0.005	—	179
Architectural Coatings	26.7	26.7	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.01	0.12	0.16	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	19.5	19.5	< 0.005	< 0.005	—	19.6

Architect Coatings	2.93	2.93	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.02	0.03	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	3.23	3.23	< 0.005	< 0.005	—	3.24
Architectural Coatings	0.53	0.53	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.08	0.07	0.08	1.01	0.00	0.00	0.30	0.30	0.00	0.07	0.07	—	277	277	< 0.005	0.01	0.02	281
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.12	0.00	0.00	0.03	0.03	0.00	0.01	0.01	—	30.8	30.8	< 0.005	< 0.005	0.04	31.2
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.02	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	5.10	5.10	< 0.005	< 0.005	0.01	5.17
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0

4. Operations Emissions Details

4.1. Mobile Emissions by Land Use

4.1.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Low Rise	4.00	3.51	4.09	42.8	0.12	0.07	11.3	11.4	0.07	2.88	2.95	—	12,491	12,491	0.46	0.52	31.9	12,689
Total	4.00	3.51	4.09	42.8	0.12	0.07	11.3	11.4	0.07	2.88	2.95	—	12,491	12,491	0.46	0.52	31.9	12,689
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Low Rise	3.80	3.31	4.39	34.9	0.11	0.07	11.3	11.4	0.07	2.88	2.95	—	11,708	11,708	0.46	0.54	0.83	11,880
Total	3.80	3.31	4.39	34.9	0.11	0.07	11.3	11.4	0.07	2.88	2.95	—	11,708	11,708	0.46	0.54	0.83	11,880
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Low Rise	0.63	0.55	0.75	6.08	0.02	0.01	1.88	1.89	0.01	0.48	0.49	—	1,800	1,800	0.07	0.08	2.09	1,829
Total	0.63	0.55	0.75	6.08	0.02	0.01	1.88	1.89	0.01	0.48	0.49	—	1,800	1,800	0.07	0.08	2.09	1,829

4.2. Energy

4.2.1. Electricity Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Low Rise	—	—	—	—	—	—	—	—	—	—	—	—	716	716	0.07	0.01	—	720
Total	—	—	—	—	—	—	—	—	—	—	—	—	716	716	0.07	0.01	—	720
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Low Rise	—	—	—	—	—	—	—	—	—	—	—	—	716	716	0.07	0.01	—	720
Total	—	—	—	—	—	—	—	—	—	—	—	—	716	716	0.07	0.01	—	720
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Low Rise	—	—	—	—	—	—	—	—	—	—	—	—	118	118	0.01	< 0.005	—	119
Total	—	—	—	—	—	—	—	—	—	—	—	—	118	118	0.01	< 0.005	—	119

4.2.3. Natural Gas Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Low Rise	0.08	0.04	0.68	0.29	< 0.005	0.05	—	0.05	0.05	—	0.05	—	859	859	0.08	< 0.005	—	862
Total	0.08	0.04	0.68	0.29	< 0.005	0.05	—	0.05	0.05	—	0.05	—	859	859	0.08	< 0.005	—	862

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Low Rise	0.08	0.04	0.68	0.29	< 0.005	0.05	—	0.05	0.05	—	0.05	—	859	859	0.08	< 0.005	—	862
Total	0.08	0.04	0.68	0.29	< 0.005	0.05	—	0.05	0.05	—	0.05	—	859	859	0.08	< 0.005	—	862
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Low Rise	0.01	0.01	0.12	0.05	< 0.005	0.01	—	0.01	0.01	—	0.01	—	142	142	0.01	< 0.005	—	143
Total	0.01	0.01	0.12	0.05	< 0.005	0.01	—	0.01	0.01	—	0.01	—	142	142	0.01	< 0.005	—	143

4.3. Area Emissions by Source

4.3.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Source	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hearths	0.31	0.16	2.67	1.14	0.02	0.22	—	0.22	0.22	—	0.22	0.00	3,390	3,390	0.06	0.01	—	3,393
Consumer Products	3.65	3.65	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.29	0.29	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	0.84	0.79	0.09	9.16	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	24.4	24.4	< 0.005	< 0.005	—	24.5
Total	5.09	4.89	2.76	10.3	0.02	0.22	—	0.22	0.22	—	0.22	0.00	3,414	3,414	0.06	0.01	—	

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hearths	0.31	0.16	2.67	1.14	0.02	0.22	—	0.22	0.22	—	0.22	0.00	3,390	3,390	0.06	0.01	—	3,393
Consumer Products	3.65	3.65	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.29	0.29	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	4.26	4.10	2.67	1.14	0.02	0.22	—	0.22	0.22	—	0.22	0.00	3,390	3,390	0.06	0.01	—	3,393
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hearths	< 0.005	< 0.005	0.03	0.01	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	0.00	38.4	38.4	< 0.005	< 0.005	—	38.5
Consumer Products	0.67	0.67	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.05	0.05	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	0.10	0.10	0.01	1.14	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	2.77	2.77	< 0.005	< 0.005	—	2.78
Total	0.83	0.82	0.04	1.16	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	0.00	41.2	41.2	< 0.005	< 0.005	—	41.3

4.4. Water Emissions by Land Use

4.4.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Low Rise	—	—	—	—	—	—	—	—	—	—	—	12.9	53.1	65.9	1.32	0.03	—	109
Total	—	—	—	—	—	—	—	—	—	—	—	12.9	53.1	65.9	1.32	0.03	—	109
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Low Rise	—	—	—	—	—	—	—	—	—	—	—	12.9	53.1	65.9	1.32	0.03	—	109
Total	—	—	—	—	—	—	—	—	—	—	—	12.9	53.1	65.9	1.32	0.03	—	109
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Low Rise	—	—	—	—	—	—	—	—	—	—	—	2.13	8.78	10.9	0.22	0.01	—	18.0
Total	—	—	—	—	—	—	—	—	—	—	—	2.13	8.78	10.9	0.22	0.01	—	18.0

4.5. Waste Emissions by Land Use

4.5.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Low Rise	—	—	—	—	—	—	—	—	—	—	—	64.2	0.00	64.2	6.41	0.00	—	225
Total	—	—	—	—	—	—	—	—	—	—	—	64.2	0.00	64.2	6.41	0.00	—	225

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Low Rise	—	—	—	—	—	—	—	—	—	—	—	64.2	0.00	64.2	6.41	0.00	—	225
Total	—	—	—	—	—	—	—	—	—	—	—	64.2	0.00	64.2	6.41	0.00	—	225
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Low Rise	—	—	—	—	—	—	—	—	—	—	—	10.6	0.00	10.6	1.06	0.00	—	37.2
Total	—	—	—	—	—	—	—	—	—	—	—	10.6	0.00	10.6	1.06	0.00	—	37.2

4.6. Refrigerant Emissions by Land Use

4.6.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Low Rise	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1.09	1.09
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1.09	1.09
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Low Rise	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1.09	1.09
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1.09	1.09
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Apartme Low Rise	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.18	0.18
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.18	0.18

4.7. Offroad Emissions By Equipment Type

4.7.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.8. Stationary Emissions By Equipment Type

4.8.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.9. User Defined Emissions By Equipment Type

4.9.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Vegetation	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
																		2615

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.2. Above and Belowground Carbon Accumulation by Land Use Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Species	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

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5. Activity Data

5.1. Construction Schedule

Phase Name	Phase Type	Start Date	End Date	Days Per Week	Work Days per Phase	Phase Description
Site Preparation	Site Preparation	8/3/2026	8/28/2026	5.00	20.0	10
Grading	Grading	8/31/2026	11/20/2026	5.00	60.0	30
Building Construction	Building Construction	11/23/2026	3/9/2029	5.00	600	300
Paving	Paving	1/15/2029	3/9/2029	5.00	40.0	20
Architectural Coating	Architectural Coating	1/15/2029	3/9/2029	5.00	40.0	20

5.2. Off-Road Equipment

5.2.1. Unmitigated

Phase Name	Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor
Site Preparation	Rubber Tired Dozers	Diesel	Average	3.00	8.00	367	0.40
Site Preparation	Crawler Tractors	Diesel	Average	4.00	8.00	87.0	0.43
Grading	Excavators	Diesel	Average	2.00	8.00	36.0	0.38
Grading	Graders	Diesel	Average	1.00	8.00	148	0.41
Grading	Rubber Tired Dozers	Diesel	Average	1.00	8.00	367	0.40
Grading	Scrapers	Diesel	Average	2.00	8.00	423	0.48
Grading	Crawler Tractors	Diesel	Average	2.00	8.00	87.0	0.43
Building Construction	Cranes	Diesel	Average	1.00	8.00	367	0.29
Building Construction	Forklifts	Diesel	Average	3.00	8.00	82.0	0.20
Building Construction	Generator Sets	Diesel	Average	1.00	8.00	14.0	0.74
Building Construction	Tractors/Loaders/Backhoes	Diesel	Average	3.00	8.00	84.0	0.37
Building Construction	Welders	Diesel	Average	1.00	8.00	46.0	0.45
Paving	Pavers	Diesel	Average	2.00	8.00	81.0	0.42

Paving	Paving Equipment	Diesel	Average	2.00	8.00	89.0	0.36
Paving	Rollers	Diesel	Average	2.00	8.00	36.0	0.38
Architectural Coating	Air Compressors	Diesel	Average	1.00	8.00	37.0	0.48

5.3. Construction Vehicles

5.3.1. Unmitigated

Phase Name	Trip Type	One-Way Trips per Day	Miles per Trip	Vehicle Mix
Site Preparation	—	—	—	—
Site Preparation	Worker	17.5	18.5	LDA,LDT1,LDT2
Site Preparation	Vendor	1.00	10.2	HHDT,MHDT
Site Preparation	Hauling	0.00	20.0	HHDT
Site Preparation	Onsite truck	—	—	HHDT
Grading	—	—	—	—
Grading	Worker	20.0	18.5	LDA,LDT1,LDT2
Grading	Vendor	2.00	10.2	HHDT,MHDT
Grading	Hauling	0.00	20.0	HHDT
Grading	Onsite truck	—	—	HHDT
Building Construction	—	—	—	—
Building Construction	Worker	116	18.5	LDA,LDT1,LDT2
Building Construction	Vendor	15.0	10.2	HHDT,MHDT
Building Construction	Hauling	0.00	20.0	HHDT
Building Construction	Onsite truck	—	—	HHDT
Paving	—	—	—	—
Paving	Worker	15.0	18.5	LDA,LDT1,LDT2
Paving	Vendor	—	10.2	HHDT,MHDT
Paving	Hauling	0.00	20.0	HHDT
Paving	Onsite truck	—	—	HHDT

Architectural Coating	—	—	—	—
Architectural Coating	Worker	23.2	18.5	LDA,LDT1,LDT2
Architectural Coating	Vendor	—	10.2	HHDT,MHDT
Architectural Coating	Hauling	0.00	20.0	HHDT
Architectural Coating	Onsite truck	—	—	HHDT

5.4. Vehicles

5.4.1. Construction Vehicle Control Strategies

Non-applicable. No control strategies activated by user.

5.5. Architectural Coatings

Phase Name	Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
Architectural Coating	345,587	115,196	0.00	0.00	—

5.6. Dust Mitigation

5.6.1. Construction Earthmoving Activities

Phase Name	Material Imported (cy)	Material Exported (cy)	Acres Graded (acres)	Material Demolished (sq. ft.)	Acres Paved (acres)
Site Preparation	—	—	70.0	0.00	—
Grading	—	—	240	0.00	—
Paving	0.00	0.00	0.00	0.00	—

5.6.2. Construction Earthmoving Control Strategies

Control Strategies Applied	Frequency (per day)	PM10 Reduction	PM2.5 Reduction
Water Exposed Area	3	74%	74%

5.7. Construction Paving

Land Use	Area Paved (acres)	% Asphalt
Apartments Low Rise	—	0%

5.8. Construction Electricity Consumption and Emissions Factors

kWh per Year and Emission Factor (lb/MWh)

Year	kWh per Year	CO2	CH4	N2O
2026	0.00	346	0.03	< 0.005
2027	0.00	346	0.03	< 0.005
2028	0.00	346	0.03	< 0.005
2029	0.00	346	0.03	< 0.005

5.9. Operational Mobile Sources

5.9.1. Unmitigated

Land Use Type	Trips/Weekday	Trips/Saturday	Trips/Sunday	Trips/Year	VMT/Weekday	VMT/Saturday	VMT/Sunday	VMT/Year
Apartments Low Rise	943	733	621	316,575	15,986	12,412	10,530	5,363,927

5.10. Operational Area Sources

5.10.1. Hearths

5.10.1.1. Unmitigated

Hearth Type	Unmitigated (number)
Apartments Low Rise	—
Wood Fireplaces	0
Gas Fireplaces	161

Propane Fireplaces	0
Electric Fireplaces	0
No Fireplaces	0

5.10.2. Architectural Coatings

Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
345586.5	115,196	0.00	0.00	—

5.10.3. Landscape Equipment

Season	Unit	Value
Snow Days	day/yr	0.00
Summer Days	day/yr	250

5.11. Operational Energy Consumption

5.11.1. Unmitigated

Electricity (kWh/yr) and CO2 and CH4 and N2O and Natural Gas (kBTU/yr)

Land Use	Electricity (kWh/yr)	CO2	CH4	N2O	Natural Gas (kBTU/yr)
Apartments Low Rise	754,406	346	0.0330	0.0040	2,681,706

5.12. Operational Water and Wastewater Consumption

5.12.1. Unmitigated

Land Use	Indoor Water (gal/year)	Outdoor Water (gal/year)
Apartments Low Rise	6,710,669	1,933,654

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5.13. Operational Waste Generation

5.13.1. Unmitigated

Land Use	Waste (ton/year)	Cogeneration (kWh/year)
Apartments Low Rise	119	—

5.14. Operational Refrigeration and Air Conditioning Equipment

5.14.1. Unmitigated

Land Use Type	Equipment Type	Refrigerant	GWP	Quantity (kg)	Operations Leak Rate	Service Leak Rate	Times Serviced
Apartments Low Rise	Average room A/C & Other residential A/C and heat pumps	User Defined	750	< 0.005	2.50	2.50	10.0
Apartments Low Rise	Household refrigerators and/or freezers	R-134a	1,430	0.12	0.60	0.00	1.00

5.15. Operational Off-Road Equipment

5.15.1. Unmitigated

Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor

5.16. Stationary Sources

5.16.1. Emergency Generators and Fire Pumps

Equipment Type	Fuel Type	Number per Day	Hours per Day	Hours per Year	Horsepower	Load Factor

5.16.2. Process Boilers

Equipment Type	Fuel Type	Number	Boiler Rating (MMBtu/hr)	Daily Heat Input (MMBtu/day)	Annual Heat Input (MM

5.17. User Defined

Equipment Type	Fuel Type

5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres

5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

Biomass Cover Type	Initial Acres	Final Acres

5.18.2. Sequestration

5.18.2.1. Unmitigated

Tree Type	Number	Electricity Saved (kWh/year)	Natural Gas Saved (btu/year)

6. Climate Risk Detailed Report

6.1. Climate Risk Summary

Cal-Adapt midcentury 2040–2059 average projections for four hazards are reported below for your project location. These are under Representation Concentration Pathway (RCP) 8.5 which assumes GHG emissions will continue to rise strongly through 2050 and then plateau around 2100.

Climate Hazard	Result for Project Location	Unit
Temperature and Extreme Heat	19.8	annual days of extreme heat
Extreme Precipitation	3.10	annual days with precipitation above 20 mm

Sea Level Rise	—	meters of inundation depth
Wildfire	6.78	annual hectares burned

Temperature and Extreme Heat data are for grid cell in which your project are located. The projection is based on the 98th historical percentile of daily maximum/minimum temperatures from observed historical data (32 climate model ensemble from Cal-Adapt, 2040–2059 average under RCP 8.5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Extreme Precipitation data are for the grid cell in which your project are located. The threshold of 20 mm is equivalent to about ¾ an inch of rain, which would be light to moderate rainfall if received over a full day or heavy rain if received over a period of 2 to 4 hours. Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Sea Level Rise data are for the grid cell in which your project are located. The projections are from Radke et al. (2017), as reported in Cal-Adapt (Radke et al., 2017, CEC-500-2017-008), and consider inundation location and depth for the San Francisco Bay, the Sacramento-San Joaquin River Delta and California coast resulting different increments of sea level rise coupled with extreme storm events. Users may select from four scenarios to view the range in potential inundation depth for the grid cell. The four scenarios are: No rise, 0.5 meter, 1.0 meter, 1.41 meters
Wildfire data are for the grid cell in which your project are located. The projections are from UC Davis, as reported in Cal-Adapt (2040–2059 average under RCP 8.5), and consider historical data of climate, vegetation, population density, and large (> 400 ha) fire history. Users may select from four model simulations to view the range in potential wildfire probabilities for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warmer/drier (HadGEM2-ES), Cooler/wetter (CNRM-CM5), Average conditions (CanESM2), Range of different rainfall and temperature possibilities (MIROC5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

6.2. Initial Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	2	0	0	N/A
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	1	0	0	N/A
Wildfire	1	0	0	N/A
Flooding	N/A	N/A	N/A	N/A
Drought	N/A	N/A	N/A	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	0	0	0	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores do not include implementation of climate risk reduction measures.

6.3. Adjusted Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	2	1	1	3

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Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	1	1	1	2
Wildfire	1	1	1	2
Flooding	N/A	N/A	N/A	N/A
Drought	N/A	N/A	N/A	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	1	1	1	2

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores include implementation of climate risk reduction measures.

6.4. Climate Risk Reduction Measures

7. Health and Equity Details

7.1. CalEnviroScreen 4.0 Scores

The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Exposure Indicators	—
AQ-Ozone	77.1
AQ-PM	93.4
AQ-DPM	57.1
Drinking Water	100.0
Lead Risk Housing	17.5
Pesticides	84.9
Toxic Releases	67.6
Traffic	18.1
Effect Indicators	—

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CleanUp Sites	80.3
Groundwater	98.1
Haz Waste Facilities/Generators	86.6
Impaired Water Bodies	87.0
Solid Waste	98.9
Sensitive Population	—
Asthma	16.5
Cardio-vascular	29.1
Low Birth Weights	49.0
Socioeconomic Factor Indicators	—
Education	52.9
Housing	59.3
Linguistic	68.9
Poverty	35.4
Unemployment	36.4

7.2. Healthy Places Index Scores

The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Economic	—
Above Poverty	73.60451687
Employed	6.274862056
Median HI	76.55588349
Education	—
Bachelor's or higher	64.85307327
High school enrollment	100
Preschool enrollment	66.93186193
Transportation	—

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Auto Access	63.41588605
Active commuting	24.5989991
Social	—
2-parent households	66.95752598
Voting	70.69164635
Neighborhood	—
Alcohol availability	97.0101373
Park access	52.77813422
Retail density	10.02181445
Supermarket access	6.557166688
Tree canopy	8.238162453
Housing	—
Homeownership	60.78532016
Housing habitability	61.41408957
Low-inc homeowner severe housing cost burden	71.53856025
Low-inc renter severe housing cost burden	18.38829719
Uncrowded housing	64.30129603
Health Outcomes	—
Insured adults	73.78416528
Arthritis	95.7
Asthma ER Admissions	84.6
High Blood Pressure	97.7
Cancer (excluding skin)	89.7
Asthma	34.7
Coronary Heart Disease	98.7
Chronic Obstructive Pulmonary Disease	94.6
Diagnosed Diabetes	96.0
Life Expectancy at Birth	75.7

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Cognitively Disabled	56.3
Physically Disabled	69.8
Heart Attack ER Admissions	68.4
Mental Health Not Good	54.9
Chronic Kidney Disease	97.1
Obesity	68.0
Pedestrian Injuries	19.6
Physical Health Not Good	86.2
Stroke	97.8
Health Risk Behaviors	—
Binge Drinking	28.2
Current Smoker	59.6
No Leisure Time for Physical Activity	76.7
Climate Change Exposures	—
Wildfire Risk	0.0
SLR Inundation Area	0.0
Children	9.0
Elderly	91.7
English Speaking	35.1
Foreign-born	48.1
Outdoor Workers	88.5
Climate Change Adaptive Capacity	—
Impervious Surface Cover	78.1
Traffic Density	21.6
Traffic Access	23.0
Other Indices	—
Hardship	45.2
Other Decision Support	—

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2016 Voting	74.7

7.3. Overall Health & Equity Scores

Metric	Result for Project Census Tract
CalEnviroScreen 4.0 Score for Project Location (a)	72.0
Healthy Places Index Score for Project Location (b)	55.0
Project Located in a Designated Disadvantaged Community (Senate Bill 535)	No
Project Located in a Low-Income Community (Assembly Bill 1550)	No
Project Located in a Community Air Protection Program Community (Assembly Bill 617)	No

a: The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.
b: The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

7.4. Health & Equity Measures

No Health & Equity Measures selected.

7.5. Evaluation Scorecard

Health & Equity Evaluation Scorecard not completed.

7.6. Health & Equity Custom Measures

No Health & Equity Custom Measures created.

8. User Changes to Default Data

Screen	Justification
Land Use	Taken from site plan
Operations: Vehicle Data	Trip characteristics based on information provided in the Traffic Analysis
Operations: Hearths	SCAQMD Rule 445 no wood burning devices. Wood burning devices added to gas devices.
Operations: Refrigerants	Beginning 1 January 2025, all new air conditioning equipment may not use refrigerants with a GWP of 750 or greater.

Construction: Construction Phases	Based on client provided data, construction schedule to begin Q3 2026 and completed Q1 2029 Building Construction, Paving, and Architectural Coating overlap to present a conservative analysis
Construction: Off-Road Equipment	T/L/B replaced with Crawler Tractor to accurately calculate disturbance for Site Preparation and Grading phases. Standard 8 hours work days
Construction: Trips and VMT	Vendor Trips adjusted based on CalEEMod defaults for Building Construction and number of days for Site Preparation, Grading, and Building Construction

ATTACHMENT B

CALEEMOD APPROVED EMISSIONS MODEL OUTPUTS

15662 - Esperanza Specific Plan Amendment (Approved) Detailed Report

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1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	15662 - Esperanza Specific Plan Amendment (Approved)
Operational Year	2025
Lead Agency	—
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	2.60
Precipitation (days)	18.8
Location	33.992322, -117.563353
County	San Bernardino-South Coast
City	Ontario
Air District	South Coast AQMD
Air Basin	South Coast
TAZ	5260
EDFZ	10
Electric Utility	Southern California Edison
Gas Utility	Southern California Gas
App Version	2022.1.1.20

1.2. Land Use Types

Land Use Subtype	Size	Unit	Lot Acreage	Building Area (sq ft)	Landscape Area (sq ft)	Special Landscape Area (sq ft)	Population	Description
Elementary School	736	Student	13.2	61,532	0.00	0.00	—	—

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1.3. User-Selected Emission Reduction Measures by Emissions Sector

No measures selected

2. Emissions Summary

2.4. Operations Emissions Compared Against Thresholds

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Un/Mit.	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	5.47	6.21	5.76	55.0	0.13	0.12	11.3	11.4	0.12	2.87	2.99	75.8	14,363	14,438	8.21	0.59	50.6	14,869
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	4.70	5.48	6.15	42.6	0.13	0.12	11.3	11.4	0.11	2.87	2.98	75.8	13,496	13,572	8.22	0.61	1.36	13,960
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	3.68	4.60	4.60	33.6	0.09	0.10	7.98	8.07	0.09	2.03	2.12	75.8	9,991	10,066	8.06	0.44	15.6	10,415
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.67	0.84	0.84	6.14	0.02	0.02	1.46	1.47	0.02	0.37	0.39	12.6	1,654	1,667	1.33	0.07	2.59	1,724

2.5. Operations Emissions by Sector, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Sector	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Mobile	4.95	4.35	5.34	52.0	0.13	0.09	11.3	11.4	0.08	2.87	2.95	—	13,484	13,484	0.54	0.57	50.6	13,719
Area	0.48	1.83	0.02	2.68	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	11.0	11.0	< 0.005	< 0.005	—	11.0
Energy	0.04	0.02	0.40	0.33	< 0.005	0.03	—	0.03	0.03	—	0.03	—	856	856	0.08	0.01	—	859
Water	—	—	—	—	—	—	—	—	—	—	—	3.42	11.6	15.0	0.35	0.01	—	26.3
Waste	—	—	—	—	—	—	—	—	—	—	—	72.4	0.00	72.4	7.24	0.00	—	253
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.04	0.04
Total	5.47	6.21	5.76	55.0	0.13	0.12	11.3	11.4	0.12	2.87	2.99	75.8	14,363	14,438	8.21	0.59	50.6	14,869
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	4.66	4.06	5.75	42.3	0.12	0.09	11.3	11.4	0.08	2.87	2.95	—	12,629	12,629	0.55	0.59	1.31	12,820
Area	—	1.39	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Energy	0.04	0.02	0.40	0.33	< 0.005	0.03	—	0.03	0.03	—	0.03	—	856	856	0.08	0.01	—	859
Water	—	—	—	—	—	—	—	—	—	—	—	3.42	11.6	15.0	0.35	0.01	—	26.3
Waste	—	—	—	—	—	—	—	—	—	—	—	72.4	0.00	72.4	7.24	0.00	—	253
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.04	0.04
Total	4.70	5.48	6.15	42.6	0.13	0.12	11.3	11.4	0.11	2.87	2.98	75.8	13,496	13,572	8.22	0.61	1.36	13,960
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	3.31	2.88	4.19	31.5	0.09	0.06	7.98	8.04	0.06	2.03	2.09	—	9,116	9,116	0.40	0.43	15.6	9,268
Area	0.33	1.70	0.02	1.83	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	7.54	7.54	< 0.005	< 0.005	—	7.56
Energy	0.04	0.02	0.40	0.33	< 0.005	0.03	—	0.03	0.03	—	0.03	—	856	856	0.08	0.01	—	859
Water	—	—	—	—	—	—	—	—	—	—	—	3.42	11.6	15.0	0.35	0.01	—	26.3
Waste	—	—	—	—	—	—	—	—	—	—	—	72.4	0.00	72.4	7.24	0.00	—	253
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.04	0.04
Total	3.68	4.60	4.60	33.6	0.09	0.10	7.98	8.07	0.09	2.03	2.12	75.8	9,991	10,066	8.06	0.44	15.6	10,415
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.60	0.53	0.76	5.74	0.02	0.01	1.46	1.47	0.01	0.37	0.38	—	1,509	1,509	0.07	0.07	2.58	1,534
Area	0.06	0.31	< 0.005	0.33	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	1.25	1.25	< 0.005	< 0.005	—	1

Energy	0.01	< 0.005	0.07	0.06	< 0.005	0.01	—	0.01	0.01	—	0.01	—	142	142	0.01	< 0.005	—	142
Water	—	—	—	—	—	—	—	—	—	—	—	0.57	1.92	2.49	0.06	< 0.005	—	4.36
Waste	—	—	—	—	—	—	—	—	—	—	—	12.0	0.00	12.0	1.20	0.00	—	41.9
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.01	0.01
Total	0.67	0.84	0.84	6.14	0.02	0.02	1.46	1.47	0.02	0.37	0.39	12.6	1,654	1,667	1.33	0.07	2.59	1,724

4. Operations Emissions Details

4.1. Mobile Emissions by Land Use

4.1.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Elementary School	4.95	4.35	5.34	52.0	0.13	0.09	11.3	11.4	0.08	2.87	2.95	—	13,484	13,484	0.54	0.57	50.6	13,719
Total	4.95	4.35	5.34	52.0	0.13	0.09	11.3	11.4	0.08	2.87	2.95	—	13,484	13,484	0.54	0.57	50.6	13,719
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Elementary School	4.66	4.06	5.75	42.3	0.12	0.09	11.3	11.4	0.08	2.87	2.95	—	12,629	12,629	0.55	0.59	1.31	12,820
Total	4.66	4.06	5.75	42.3	0.12	0.09	11.3	11.4	0.08	2.87	2.95	—	12,629	12,629	0.55	0.59	1.31	12,820
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Elementary School	0.60	0.53	0.76	5.74	0.02	0.01	1.46	1.47	0.01	0.37	0.38	—	1,509	1,509	0.07	0.07	2.58	1,534

Total	0.60	0.53	0.76	5.74	0.02	0.01	1.46	1.47	0.01	0.37	0.38	—	1,509	1,509	0.07	0.07	2.58	1,534

4.2. Energy

4.2.1. Electricity Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Elementary School	—	—	—	—	—	—	—	—	—	—	—	—	381	381	0.04	< 0.005	—	383
Total	—	—	—	—	—	—	—	—	—	—	—	—	381	381	0.04	< 0.005	—	383
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Elementary School	—	—	—	—	—	—	—	—	—	—	—	—	381	381	0.04	< 0.005	—	383
Total	—	—	—	—	—	—	—	—	—	—	—	—	381	381	0.04	< 0.005	—	383
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Elementary School	—	—	—	—	—	—	—	—	—	—	—	—	63.1	63.1	0.01	< 0.005	—	63.5
Total	—	—	—	—	—	—	—	—	—	—	—	—	63.1	63.1	0.01	< 0.005	—	63.5

4.2.3. Natural Gas Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Elementary School	0.04	0.02	0.40	0.33	< 0.005	0.03	—	0.03	0.03	—	0.03	—	475	475	0.04	< 0.005	—	476
Total	0.04	0.02	0.40	0.33	< 0.005	0.03	—	0.03	0.03	—	0.03	—	475	475	0.04	< 0.005	—	476
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Elementary School	0.04	0.02	0.40	0.33	< 0.005	0.03	—	0.03	0.03	—	0.03	—	475	475	0.04	< 0.005	—	476
Total	0.04	0.02	0.40	0.33	< 0.005	0.03	—	0.03	0.03	—	0.03	—	475	475	0.04	< 0.005	—	476
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Elementary School	0.01	< 0.005	0.07	0.06	< 0.005	0.01	—	0.01	0.01	—	0.01	—	78.6	78.6	0.01	< 0.005	—	78.8
Total	0.01	< 0.005	0.07	0.06	< 0.005	0.01	—	0.01	0.01	—	0.01	—	78.6	78.6	0.01	< 0.005	—	78.8

4.3. Area Emissions by Source

4.3.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Source	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	—	1.32	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Architectural Coatings	—	0.08	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	0.48	0.44	0.02	2.68	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	11.0	11.0	< 0.005	< 0.005	—	11.0
Total	0.48	1.83	0.02	2.68	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	11.0	11.0	< 0.005	< 0.005	—	11.0
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	—	1.32	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	—	0.08	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	1.39	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	—	0.24	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	—	0.01	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	0.06	0.05	< 0.005	0.33	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	1.25	1.25	< 0.005	< 0.005	—	1.25
Total	0.06	0.31	< 0.005	0.33	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	1.25	1.25	< 0.005	< 0.005	—	1.25

4.4. Water Emissions by Land Use

4.4.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Elementary School	—	—	—	—	—	—	—	—	—	—	—	3.42	11.6	15.0	0.35	0.01	—	26.3
Total	—	—	—	—	—	—	—	—	—	—	—	3.42	11.6	15.0	0.35	0.01	—	26.3
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Elementary School	—	—	—	—	—	—	—	—	—	—	—	3.42	11.6	15.0	0.35	0.01	—	26.3
Total	—	—	—	—	—	—	—	—	—	—	—	3.42	11.6	15.0	0.35	0.01	—	26.3
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Elementary School	—	—	—	—	—	—	—	—	—	—	—	0.57	1.92	2.49	0.06	< 0.005	—	4.36
Total	—	—	—	—	—	—	—	—	—	—	—	0.57	1.92	2.49	0.06	< 0.005	—	4.36

4.5. Waste Emissions by Land Use

4.5.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Elementary	—	—	—	—	—	—	—	—	—	—	—	72.4	0.00	72.4	7.24	0.00	—	253
Total	—	—	—	—	—	—	—	—	—	—	—	72.4	0.00	72.4	7.24	0.00	—	253
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Elementary School	—	—	—	—	—	—	—	—	—	—	—	72.4	0.00	72.4	7.24	0.00	—	253
Total	—	—	—	—	—	—	—	—	—	—	—	72.4	0.00	72.4	7.24	0.00	—	253
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Elementary School	—	—	—	—	—	—	—	—	—	—	—	12.0	0.00	12.0	1.20	0.00	—	41.9
Total	—	—	—	—	—	—	—	—	—	—	—	12.0	0.00	12.0	1.20	0.00	—	41.9

4.6. Refrigerant Emissions by Land Use

4.6.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Elementary School	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.04	0.04
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.04	0.04
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Elementary	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.04	0.04
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.04	0.04
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Elementary School	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.01	0.01
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.01	0.01

4.7. Offroad Emissions By Equipment Type

4.7.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.8. Stationary Emissions By Equipment Type

4.8.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.9. User Defined Emissions By Equipment Type

4.9.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Vegetation	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.2. Above and Belowground Carbon Accumulation by Land Use Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Species	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Sequest	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

5. Activity Data

5.9. Operational Mobile Sources

5.9.1. Unmitigated

Land Use Type	Trips/Weekday	Trips/Saturday	Trips/Sunday	Trips/Year	VMT/Weekday	VMT/Saturday	VMT/Sunday	VMT/Year
Elementary School	949	0.00	0.00	247,533	15,936	0.00	0.00	4,154,618

5.10. Operational Area Sources

5.10.1. Hearths

5.10.1.1. Unmitigated

5.10.2. Architectural Coatings

Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
0	0.00	92,298	30,766	—

5.10.3. Landscape Equipment

Season	Unit	Value

Snow Days	day/yr	0.00
Summer Days	day/yr	250

5.11. Operational Energy Consumption

5.11.1. Unmitigated

Electricity (kWh/yr) and CO2 and CH4 and N2O and Natural Gas (kBTU/yr)

Land Use	Electricity (kWh/yr)	CO2	CH4	N2O	Natural Gas (kBTU/yr)
Elementary School	399,129	349	0.0330	0.0040	1,481,239

5.12. Operational Water and Wastewater Consumption

5.12.1. Unmitigated

Land Use	Indoor Water (gal/year)	Outdoor Water (gal/year)
Elementary School	1,784,241	0.00

5.13. Operational Waste Generation

5.13.1. Unmitigated

Land Use	Waste (ton/year)	Cogeneration (kWh/year)
Elementary School	134	—

5.14. Operational Refrigeration and Air Conditioning Equipment

5.14.1. Unmitigated

Land Use Type	Equipment Type	Refrigerant	GWP	Quantity (kg)	Operations Leak Rate	Service Leak Rate	Times Serviced

Elementary School	Household refrigerators and/or freezers	User Defined	150	0.02	0.60	0.00	1.00
Elementary School	Other commercial A/C and heat pumps	User Defined	750	< 0.005	4.00	4.00	18.0
Elementary School	Stand-alone retail refrigerators and freezers	User Defined	150	< 0.005	1.00	0.00	1.00
Elementary School	Walk-in refrigerators and freezers	User Defined	150	< 0.005	7.50	7.50	20.0

5.15. Operational Off-Road Equipment

5.15.1. Unmitigated

Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor

5.16. Stationary Sources

5.16.1. Emergency Generators and Fire Pumps

Equipment Type	Fuel Type	Number per Day	Hours per Day	Hours per Year	Horsepower	Load Factor

5.16.2. Process Boilers

Equipment Type	Fuel Type	Number	Boiler Rating (MMBtu/hr)	Daily Heat Input (MMBtu/day)	Annual Heat Input (MMBtu/yr)

5.17. User Defined

Equipment Type	Fuel Type

5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres

5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

Biomass Cover Type	Initial Acres	Final Acres

5.18.2. Sequestration

5.18.2.1. Unmitigated

Tree Type	Number	Electricity Saved (kWh/year)	Natural Gas Saved (btu/year)

6. Climate Risk Detailed Report

6.1. Climate Risk Summary

Cal-Adapt midcentury 2040–2059 average projections for four hazards are reported below for your project location. These are under Representation Concentration Pathway (RCP) 8.5 which assumes GHG emissions will continue to rise strongly through 2050 and then plateau around 2100.

Climate Hazard	Result for Project Location	Unit
Temperature and Extreme Heat	19.8	annual days of extreme heat
Extreme Precipitation	3.10	annual days with precipitation above 20 mm
Sea Level Rise	—	meters of inundation depth
Wildfire	6.78	annual hectares burned

Temperature and Extreme Heat data are for grid cell in which your project are located. The projection is based on the 98th historical percentile of daily maximum/minimum temperatures from observed historical data (32 climate model ensemble from Cal-Adapt, 2040–2059 average under RCP 8.5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

Extreme Precipitation data are for the grid cell in which your project are located. The threshold of 20 mm is equivalent to about ¾ an inch of rain, which would be light to moderate rainfall if received over a full day or heavy rain if received over a period of 2 to 4 hours. Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Sea Level Rise data are for the grid cell in which your project are located. The projections are from Radke et al. (2017), as reported in Cal-Adapt (Radke et al., 2017, CEC-500-2017-008), and consider inundation location and depth for the San Francisco Bay, the Sacramento-San Joaquin River Delta and California coast resulting different increments of sea level rise coupled with extreme storm events. Users may select from four scenarios to view the range in potential inundation depth for the grid cell. The four scenarios are: No rise, 0.5 meter, 1.0 meter, 1.41 meters
Wildfire data are for the grid cell in which your project are located. The projections are from UC Davis, as reported in Cal-Adapt (2040–2059 average under RCP 8.5), and consider historical data of climate, vegetation, population density, and large (> 400 ha) fire history. Users may select from four model simulations to view the range in potential wildfire probabilities for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warmer/drier (HadGEM2-ES), Cooler/wetter (CNRM-CM5), Average conditions (CanESM2), Range of different rainfall and temperature possibilities (MIROC5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

6.2. Initial Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	2	0	0	N/A
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	1	0	0	N/A
Wildfire	1	0	0	N/A
Flooding	N/A	N/A	N/A	N/A
Drought	N/A	N/A	N/A	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	0	0	0	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores do not include implementation of climate risk reduction measures.

6.3. Adjusted Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	2	1	1	3
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	1	1	1	2
Wildfire	1	1	1	2

Flooding	N/A	N/A	N/A	N/A
Drought	N/A	N/A	N/A	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	1	1	1	2

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores include implementation of climate risk reduction measures.

6.4. Climate Risk Reduction Measures

7. Health and Equity Details

7.1. CalEnviroScreen 4.0 Scores

The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Exposure Indicators	—
AQ-Ozone	77.1
AQ-PM	93.4
AQ-DPM	57.1
Drinking Water	100.0
Lead Risk Housing	17.5
Pesticides	84.9
Toxic Releases	67.6
Traffic	18.1
Effect Indicators	—
CleanUp Sites	80.3
Groundwater	98.1

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Haz Waste Facilities/Generators	86.6
Impaired Water Bodies	87.0
Solid Waste	98.9
Sensitive Population	—
Asthma	16.5
Cardio-vascular	29.1
Low Birth Weights	49.0
Socioeconomic Factor Indicators	—
Education	52.9
Housing	59.3
Linguistic	68.9
Poverty	35.4
Unemployment	36.4

7.2. Healthy Places Index Scores

The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Economic	—
Above Poverty	73.60451687
Employed	6.274862056
Median HI	76.55588349
Education	—
Bachelor's or higher	64.85307327
High school enrollment	100
Preschool enrollment	66.93186193
Transportation	—
Auto Access	63.41588605

Active commuting	24.5989991
Social	—
2-parent households	66.95752598
Voting	70.69164635
Neighborhood	—
Alcohol availability	97.0101373
Park access	52.77813422
Retail density	10.02181445
Supermarket access	6.557166688
Tree canopy	8.238162453
Housing	—
Homeownership	60.78532016
Housing habitability	61.41408957
Low-inc homeowner severe housing cost burden	71.53856025
Low-inc renter severe housing cost burden	18.38829719
Uncrowded housing	64.30129603
Health Outcomes	—
Insured adults	73.78416528
Arthritis	95.7
Asthma ER Admissions	84.6
High Blood Pressure	97.7
Cancer (excluding skin)	89.7
Asthma	34.7
Coronary Heart Disease	98.7
Chronic Obstructive Pulmonary Disease	94.6
Diagnosed Diabetes	96.0
Life Expectancy at Birth	75.7

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Cognitively Disabled	56.3
Physically Disabled	69.8
Heart Attack ER Admissions	68.4
Mental Health Not Good	54.9
Chronic Kidney Disease	97.1
Obesity	68.0
Pedestrian Injuries	19.6
Physical Health Not Good	86.2
Stroke	97.8
Health Risk Behaviors	—
Binge Drinking	28.2
Current Smoker	59.6
No Leisure Time for Physical Activity	76.7
Climate Change Exposures	—
Wildfire Risk	0.0
SLR Inundation Area	0.0
Children	9.0
Elderly	91.7
English Speaking	35.1
Foreign-born	48.1
Outdoor Workers	88.5
Climate Change Adaptive Capacity	—
Impervious Surface Cover	78.1
Traffic Density	21.6
Traffic Access	23.0
Other Indices	—
Hardship	45.2

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Other Decision Support	—
2016 Voting	74.7

7.3. Overall Health & Equity Scores

Metric	Result for Project Census Tract
CalEnviroScreen 4.0 Score for Project Location (a)	72.0
Healthy Places Index Score for Project Location (b)	55.0
Project Located in a Designated Disadvantaged Community (Senate Bill 535)	No
Project Located in a Low-Income Community (Assembly Bill 1550)	No
Project Located in a Community Air Protection Program Community (Assembly Bill 617)	No

a: The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.
b: The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

7.4. Health & Equity Measures

No Health & Equity Measures selected.

7.5. Evaluation Scorecard

Health & Equity Evaluation Scorecard not completed.

7.6. Health & Equity Custom Measures

No Health & Equity Custom Measures created.

8. User Changes to Default Data

Screen	Justification
Land Use	Taken from site plan
Operations: Vehicle Data	Trip characteristics based on information provided in the Traffic Analysis
Operations: Architectural Coatings	SCAQMD Rule 1113

Operations: Refrigerants	As of 1 January 2022, new commercial refrigeration equipment may not use refrigerants with a GWP of 150 or greater. Further, R-404A (the CalEEMod default) is unacceptable for new supermarket and cold storage systems as of 1 January 2019 and 2023, respectively. Beginning 1 January 2025, all new air conditioning equipment may not use refrigerants with a GWP of 750 or greater.

CULTURAL RESOURCES STUDY FOR THE EUCALYPTUS AND AMHERST AVENUES PROJECT

CITY OF ONTARIO, SAN BERNARDINO COUNTY, CALIFORNIA

APN 1073-101-05

Lead Agency:

City of Ontario
303 East B Street
Ontario, California 91764

Preparer:

BFSA Environmental Services,
a Perennial Company
14010 Poway Road, Suite A
Poway, California 92064

Project Proponent:

Moser Ventures, Inc.
45478 Blackfoot Way
Indian Wells, California 92210

April 1, 2025

BFSA Environmental Services
A Perennial Company

Archaeological Database Information

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Client/Project Proponent:	Moser Ventures, Inc. 45478 Blackfoot Way Indian Wells, California 92210
Report Date:	April 1, 2025
Report Title:	Cultural Resources Study for the Eucalyptus and Amherst Avenue Project, City of Ontario, San Bernardino County, California
Type of Study:	Phase I Cultural Resources Survey
USGS Quadrangle:	Section 13, Township 2 South, Range 7 West of the *Corona North* (7.5-minute) USGS Quadrangle
Acreage:	10.02 acres
Key Words:	Survey; no cultural resources identified; *Corona North, California* USGS topographic quadrangle; no further archaeological study recommended.

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**Deleted for public review and bound separately in the Confidential Appendix*

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MANAGEMENT SUMMARY/ABSTRACT

In response to a request from the project applicant, a cultural resources study was conducted by BFSA Environmental Services, a Perennial Company (BFSA), for the proposed Eucalyptus and Amherst Avenues Project bound by Chatham Street, Clifton Avenue, South Amherst Avenue, and East Eucalyptus Avenue, within the city of Ontario, in San Bernardino County, California. The 10.02-acre property (Assessor's Parcel Number 1073-101-05) is situated within Section 13, Township 2 South, Range 7 West of the San Bernardino Baseline and Meridian on the United States Geological Survey (USGS) (7.5-minute) *Corona North* topographic quadrangle maps. As designed, the applicant proposes to clear the property for the construction of a multi-family residential development with associated landscape, hardscape, and infrastructure.

The purpose of this investigation was to locate and record cultural resources present within the project and subsequently evaluate any resources that will be impacted by the development as part of the City of Ontario's environmental review process conducted in compliance with California Environmental Quality Act (CEQA). The cultural resources investigation included the review of an archaeological records search conducted at the South Central Coastal Information Center (SCCIC) at California State University, Fullerton (CSU Fullerton), in order to assess previous archaeological studies and identify any recorded archaeological sites within the project. The records search identified 11 resources within one mile of the proposed project, none of which are located within the subject property. The records search also identified 38 previous studies conducted within one mile of the project, one of which overlaps the subject property (Dice 2002). A review of historic maps and aerial photographs illustrate that the subject property was utilized for agricultural purposes as early as 1938. Additionally, the property was entirely graded in 2018 resulting in the development of a water catchment basin and a graded pad. A Sacred Lands File (SLF) search was requested from the Native American Heritage Commission (NAHC). The SLF search results were negative for recorded Native American sacred sites or locations of religious or ceremonial importance within the project vicinity.

BFSA archaeologist Parker Sheriff conducted the archaeological survey of the project on February 27, 2025. The cultural resources survey did not identify any cultural resources within the project. Due to the previous ground-disturbing activities and the absence of identified cultural resources within the project boundaries, the potential for any significant resources to be present or impacted by the proposed project is minimal. Given that no archaeological sites, features, or artifacts have been identified within or directly adjacent to the project, no potential impacts to cultural resources associated with the proposed development are anticipated. Based upon the results of this study, no further archaeological study or mitigation measures are recommended.

A copy of this report will be permanently filed with the SCCIC at CSU Fullerton. All notes, photographs, and other materials related to this project will be curated at the BFSA archaeological laboratory in Poway, California.

1.0 INTRODUCTION

1.1 Project Description

The archaeological survey program for the proposed Eucalyptus and Amherst Avenues Project was conducted in order to comply with CEQA regulatory requirements and City of Ontario environmental requirements. The proposed project is bound by Chatham Street, Clifton Avenue, South Amherst Avenue, and East Eucalyptus Avenue, within the city of Ontario, in San Bernardino County, California (Figure 1.1–1). The 10.02-acre property (APN 1073-101-05) is located within Section 13, Township 2 South, Range 7 West as shown on the USGS 1:24,000-scale (7.5-minute) *Corona North* topographic quadrangle maps (Figure 1.1–2). As designed, the applicant proposes to clear the property for the construction of a multi-family residential development with associated landscape, hardscape, and infrastructure (Figures 1.1–3).

The decision to request this investigation was based upon the cultural resource sensitivity of the locality as suggested by known site density and predictive modeling. Sensitivity for prehistoric cultural resources in a given area is usually indicated by known settlement patterns, which, in southwestern San Bernardino County, were focused around freshwater resources and a food supply. Within the city of Ontario, historic resources tend to be associated with the historic agricultural, industrial, or residential development of the region.

1.2 Environmental Setting

The Eucalyptus and Amherst Avenues Project is situated in the Peninsular Ranges Geologic Province of southern California. The Peninsular Ranges are a series of northwest- to southeast-trending mountain ranges separated by similarly trending valleys, which make up the southernmost segment of a chain of North American Mesozoic batholiths that extend from Alaska to the southern tip of Baja California. Geologically, the project is mapped as Holocene and late Pleistocene-aged young eolian deposits (Morton et al. 2002). These surficial sediments are described as "chiefly unconsolidated, moderately well sorted, fine- to medium-grained sand" (Morton et al. 2002). The specific soil types found within the project are mapped as Delhi fine sand (Db) and Hilmar loamy fine sand (NRCS 2023). The average elevation within the project is approximately 700 feet above mean sea level.

The proposed project is situated approximately three miles north of the Santa Ana River. Historically, the property was utilized for agriculture. In 2018, the property was completely graded. The vegetation found within the property consists of non-native weeds and grasses.

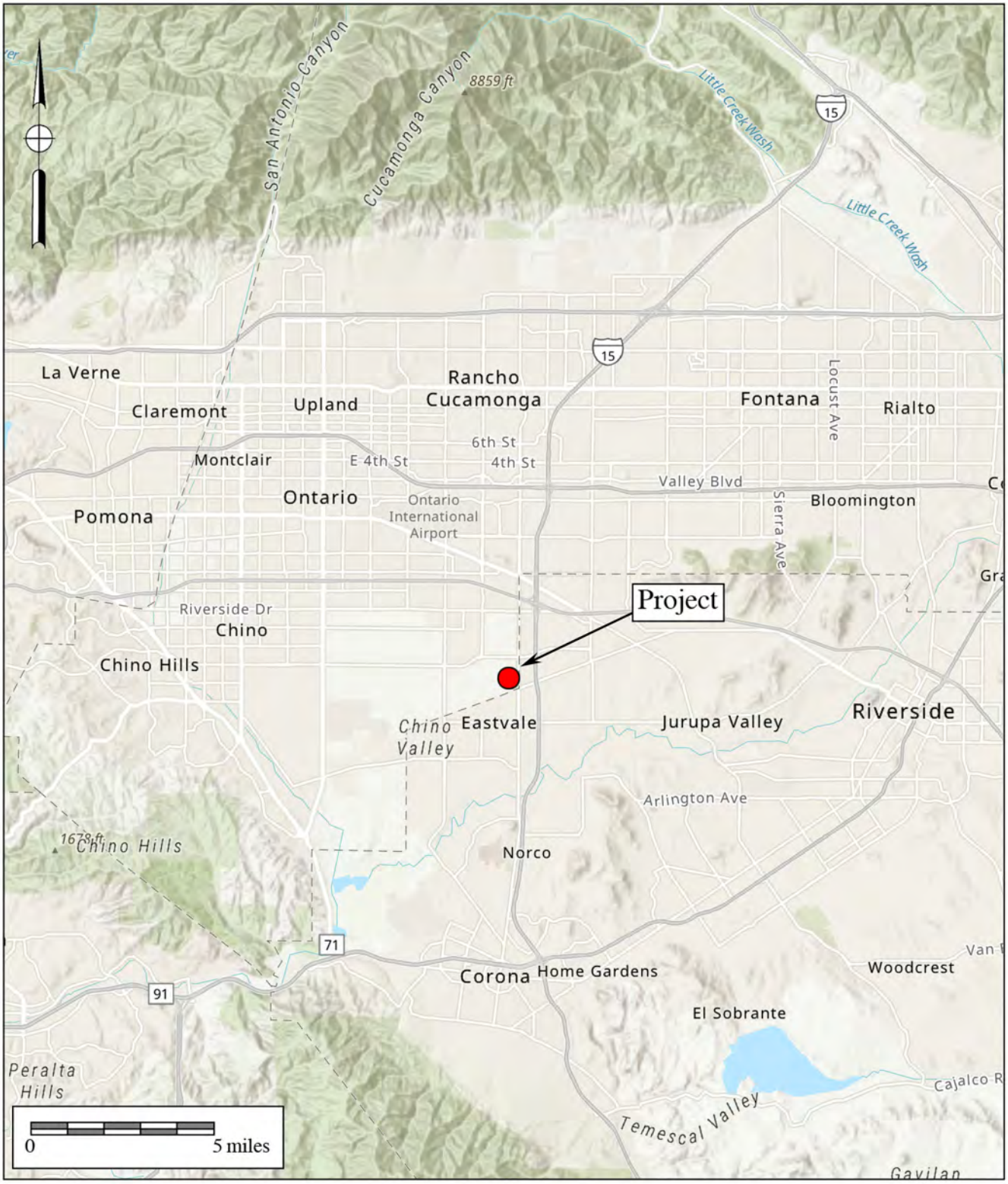

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Figure 1.1–1
General Location Map

The Eucalyptus and Amherst Avenues Project

Esri (1:250,000 series)

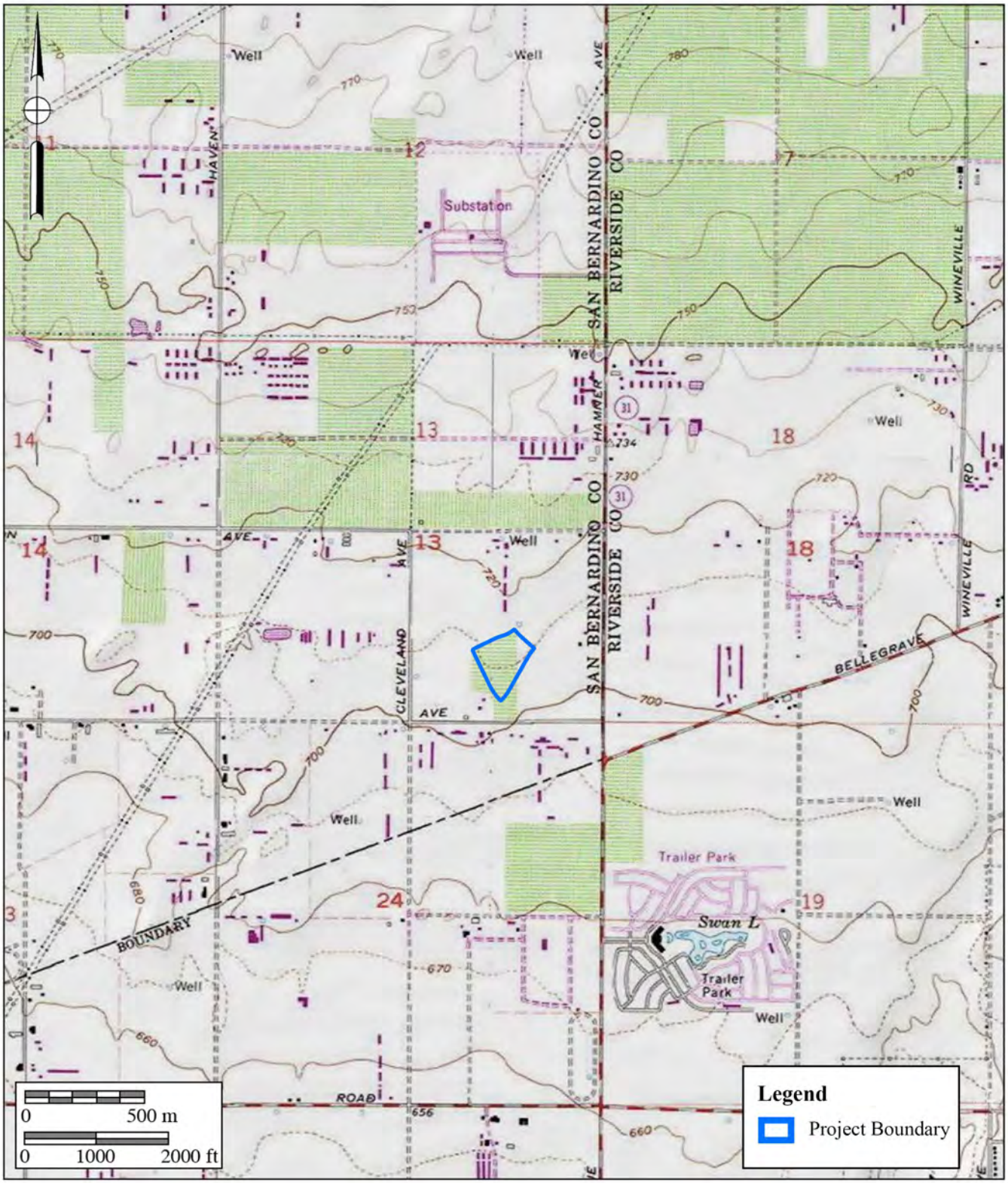

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Figure 1.1–2
Project Location Map

The Eucalyptus and Amhert Avenues Project

USGS *Corona North* Quadrangle (7.5-minute series)

1.0-4

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Figure 3
Project Development Map
The Eucalytpus and Amherst Avenues Project

1.3 Cultural Setting

1.3.1 Prehistoric Period

Paleo Indian, Archaic Period Milling Stone Horizon, and the Late Prehistoric Shoshonean groups are the three general cultural periods represented in San Bernardino County. The following discussion of the cultural history of San Bernardino County references the San Dieguito Complex, the Encinitas Tradition, the Milling Stone Horizon, the La Jolla Complex, the Pauma Complex, and the San Luis Rey Complex, since these culture sequences have been used to describe archaeological manifestations in the region. The Late Prehistoric component in the southwestern area of San Bernardino County was represented by the Gabrielino and Serrano Indians. According to Kroeber (1976), the Serrano probably owned a stretch of the Sierra Madre from Cucamonga east to above Mentone and halfway up to San Timoteo Canyon, including the San Bernardino Valley and just missing Riverside County. However, Kroeber (1976) also states that this area has been assigned to the Gabrielino, "which would be a more natural division of topography, since it would leave the Serrano pure mountaineers."

Absolute chronological information, where possible, will be incorporated into this discussion to examine the effectiveness of continuing to use these terms interchangeably. Reference will be made to the geologic framework that divides the culture chronology of the area into four segments: late Pleistocene (20,000 to 10,000 years before the present [YBP]), early Holocene (10,000 to 6,650 YBP), middle Holocene (6,650 to 3,350 YBP), and late Holocene (3,350 to 200 YBP).

Paleo Indian Period (Late Pleistocene: 11,500 to circa 9,000 YBP)

The Paleo Indian Period is associated with the terminus of the late Pleistocene (12,000 to 10,000 YBP). The environment during the late Pleistocene was cool and moist, which allowed for glaciation in the mountains and the formation of deep, pluvial lakes in the deserts and basin lands (Moratto 1984). However, by the terminus of the late Pleistocene, the climate became warmer, which caused glaciers to melt, sea levels to rise, greater coastal erosion, large lakes to recede and evaporate, extinction of Pleistocene megafauna, and major vegetation changes (Moratto 1984; Martin 1967, 1973; Fagan 1991). The coastal shoreline at 10,000 YBP, depending upon the particular area of the coast, was near the 30-meter isobath, or two to six kilometers further west than its present location (Masters 1983).

Paleo Indians were likely attracted to multiple habitat types, including mountains, marshlands, estuaries, and lakeshores. These people likely subsisted using a more generalized hunting, gathering, and collecting adaptation, utilizing a variety of resources including birds, mollusks, and both large and small mammals (Erlandson and Colten 1991; Moratto 1984; Moss and Erlandson 1995).

Archaic Period (Early and Middle Holocene: circa 9000 to 1300 YBP)

The Archaic Period of prehistory began with the onset of the Holocene around 9,000 YBP. The transition from the Pleistocene to the Holocene was a period of major environmental change

throughout North America (Antevs 1953; Van Devender and Spaulding 1979). The general warming trend caused sea levels to rise, lakes to evaporate, and drainage patterns to change. In southern California, the general climate at the beginning of the early Holocene was marked by cool/moist periods and an increase in warm/dry periods and sea levels. The coastal shoreline at 8,000 YBP, depending upon the particular area of the coast, was near the 20-meter isobath, or one to four kilometers further west than its present location (Masters 1983).

The rising sea level during the early Holocene created rocky shorelines and bays along the coast by flooding valley floors and eroding the coastline (Curray 1965; Inman 1983). Shorelines were primarily rocky with small littoral cells, as sediments were deposited at bay edges but rarely discharged into the ocean (Reddy 2000). These bays eventually evolved into lagoons and estuaries, which provided a rich habitat for mollusks and fish. The warming trend and rising sea levels generally continued until the late Holocene (4,000 to 3,500 YBP).

At the beginning of the late Holocene, sea levels stabilized, rocky shores declined, lagoons filled with sediment, and sandy beaches became established (Gallegos 1985; Inman 1983; Masters 1994; Miller 1966; Warren and Pavesic 1963). Many former lagoons became saltwater marshes surrounded by coastal sage scrub by the late Holocene (Gallegos 2002). The sedimentation of the lagoons was significant in that it had profound effects upon the types of resources available to prehistoric peoples. Habitat was lost for certain large mollusks, namely *Chione* and *Argopecten,* but habitat was gained for other small mollusks, particularly *Donax* (Gallegos 1985; Reddy 2000). The changing lagoon habitats resulted in the decline of larger shellfish, the loss of drinking water, and the loss of Torrey Pine nuts, causing a major depopulation of the coast as people shifted inland to reliable freshwater sources and intensified their exploitation of terrestrial small game and plants, including acorns (originally proposed by Rogers 1929; Gallegos 2002).

The Archaic Period in southern California is associated with a number of different cultures, complexes, traditions, and horizons, including San Dieguito, La Jolla, Encinitas, Milling Stone, and Pauma, as well as the Intermediate Period.

Late Prehistoric Period (Late Holocene: 1,300 YBP to 1790)

Approximately 1,350 YBP, a Shoshonean-speaking group from the Great Basin region moved into San Bernardino County, marking the transition to the Late Prehistoric Period. This period has been characterized by higher population densities and elaborations in social, political, and technological systems. Economic systems diversified and intensified during this period, with the continued elaboration of trade networks, the use of shell-bead currency, and the appearance of more labor-intensive, yet effective, technological innovations. Technological developments during this period included the introduction of the bow and arrow between A.D. 400 and 600 and the introduction of ceramics. Atlatl darts were replaced by smaller arrow darts, including the Cottonwood series points. Other hallmarks of the Late Prehistoric Period include extensive trade networks as far reaching as the Colorado River Basin and cremation of the dead.

Protohistoric Period (Late Holocene: 1790 to Present)

Gabrielino

At the time of Spanish contact, the territory of the Gabrielino, also known ethnographically as the Tongva, covered much of present-day Los Angeles and Orange counties. The southern extent of this culture area is bounded by Aliso Creek, the eastern extent is located east of present-day San Bernardino along the Santa Ana River, the northern extent includes the San Fernando Valley, and the western extent includes portions of the Santa Monica Mountains. The Gabrielino also occupied several Channel Islands including Santa Barbara Island, Santa Catalina Island, San Nicholas Island, and San Clemente Island. Because of their access to certain resources, including a steatite source from Santa Catalina Island, this group was among the wealthiest and most populous aboriginal groups in all of southern California. Trade of materials and resources controlled by the Gabrielino extended as far north as the San Joaquin Valley, as far east as the Colorado River, and as far south as Baja California (Bean and Smith 1978a; Kroeber 1976).

The Gabrielino lived in permanent villages and smaller resource gathering camps occupied at various times of the year depending upon the seasonality of the resource. Larger villages were comprised of several families or clans, while smaller, seasonal camps typically housed smaller family units. The coastal area between San Pedro and Topanga Canyon was the location of primary subsistence villages, while secondary sites were located near inland sage stands, oak groves, and pine forests. Permanent villages were located along rivers and streams, as well as in sheltered areas along the coast. As previously mentioned, the Channel Islands were also the locations of relatively large settlements (Bean and Smith 1978a; Kroeber 1976).

Resources procured along the coast and on the islands were primarily marine in nature and included tuna, swordfish, ray, shark, California sea lion, Stellar sea lion, harbor seal, northern elephant seal, sea otter, dolphin, porpoise, various waterfowl species, numerous fish species, purple sea urchin, and mollusks such as rock scallop, California mussel, and limpet. Inland resources included oak acorn, pine nut, Mohave yucca, cacti, sage, grass nut, deer, rabbit, hare, rodent, quail, duck, and a variety of reptiles such as western pond turtle and several different species of snakes (Bean and Smith 1978a; Kroeber 1976).

Little is known about the social structure of the Gabrielino; however, there appears to have been at least three social classes: 1) the elite, which included the rich, chiefs, and their immediate family; 2) a middle class, which included people of relatively high economic status or long-established lineages; and 3) a class of people that included most other individuals in the society. Villages were politically autonomous units comprised of several lineages. During times of the year when certain seasonal resources were available, the village would divide into lineage groups and move out to exploit them, returning to the village between forays (Bean and Smith 1978a; Kroeber 1976).

Each lineage had its own leader, with the village chief coming from the dominant lineage. Several villages might be allied under a paramount chief. Chiefly positions were of an ascribed status, most often passed to the eldest son. Chiefly duties included providing village cohesion, leading warfare and peace negotiations with other groups, collecting village tributes, and arbitrating disputes within the village(s). The status of the chief was legitimized by safekeeping of the sacred bundle, a representation of the link between the material and spiritual realms and the embodiment of power (Bean and Smith 1978a; Kroeber 1976).

Shamans were leaders in the spirit realm. The duties of the shaman included conducting healing and curing ceremonies, guarding the sacred bundle, locating lost items, identifying and collecting poisons for arrows, and making rain (Bean and Smith 1978a; Kroeber 1976).

Marriages were made between individuals of equal social status and, in the case of powerful lineages, marriages were arranged to establish political ties between the lineages (Bean and Smith 1978a; Kroeber 1976).

Men conducted the majority of the heavy labor, hunting, fishing, and trading with other groups. Women's duties included gathering and preparing plant and animal resources, and making baskets, pots, and clothing (Bean and Smith 1978a; Kroeber 1976).

Gabrielino houses were domed, circular structures made of thatched vegetation. Houses varied in size and could house from one to several families. Sweathouses (semicircular, earth-covered buildings) were public structures used in male social ceremonies. Other structures included menstrual huts and a yuvar, an open-air, ceremonial structure built near the chief's house (Bean and Smith 1978a; Kroeber 1976).

Clothing was minimal; men and children most often went naked, while women wore deerskin or bark aprons. In cold weather, deerskin, rabbit fur, or bird skin (with feathers intact) cloaks were worn. Island and coastal groups used sea otter fur for cloaks. In areas of rough terrain, yucca fiber sandals were worn. Women often used red ochre on their faces and skin for adornment or protection from the sun. Adornment items included feathers, fur, shells, and beads (Bean and Smith 1978a; Kroeber 1976).

Hunting implements included wood clubs, sinew-backed bows, slings, and throwing clubs. Maritime implements included rafts, harpoons, spears, hooks and lines, and nets. A variety of other tools included deer scapulae saws, bone and shell needles, bone awls, scrapers, bone or shell flakers, wedges, stone knives and drills, metates, mullers, manos, shell spoons, bark platters, and wooden paddles and bowls. Baskets were made from rush, deer grass, and skunkbush. Baskets were fashioned for hoppers, plates, trays, and winnowers for leaching, straining, and gathering. Baskets were also used for storing, preparing, and serving food, and for keeping personal and ceremonial items (Bean and Smith 1978a; Kroeber 1976).

The Gabrielino had exclusive access to soapstone, or steatite, procured from Santa Catalina Island quarries. This highly prized material was used for making pipes, animal carvings, ritual objects, ornaments, and cooking utensils. The Gabrielino profited well from trading steatite since it was valued so much by groups throughout southern California (Bean and Smith 1978a; Kroeber 1976).

Serrano

Aboriginally, the Serrano occupied an area east of present-day Los Angeles. According to Bean and Smith (1978b), definitive boundaries are difficult to place for the Serrano due to their sociopolitical organization and a lack of reliable data:

> The Serrano were organized into autonomous localized lineages occupying definite, favored territories, but rarely claiming any territory far removed from the lineage's home base. Since the entire dialectical group was neither politically united nor amalgamated into supralineage groups, as many of their neighbors were, one must speak in terms of generalized areas of usage rather than pan-tribal holdings. (Strong [1971] in Bean and Smith 1978b)

However, researchers place the Serrano in the San Bernardino Mountains east of Cajon Pass and at the base of and north of the mountains near Victorville, east to Twentynine Palms, and south to the Yucaipa Valley (Bean and Smith 1978b). Serrano has been used broadly for languages in the Takic family including Serrano, Kitanemuk, Vanyume, and Tataviam.

The Serrano were part of "exogamous clans, which in turn were affiliated with one of two exogamous moieties, *tuk^{w}utam* (Wildcat) and *wahiʔiam* (Coyote)" (Bean and Smith 1978b). According to Strong (1971), details such as number, structure, and function of the clans are unknown. Instead, he states that clans were not political, but were rather structured based upon "economic, marital, or ceremonial reciprocity, a pattern common throughout Southern California" (Bean and Smith 1978b). The Serrano formed alliances amongst their own clans and with Cahuilla, Chemehuevi, Gabrielino, and Cupeño clans (Bean and Smith 1978b). Clans were large, autonomous political and landholding units formed patrilineally, with all males descending from a common male ancestor, including all wives and descendants of the males. However, even after marriage, women would still keep their original lineage and would still participate in those ceremonies (Bean and Smith 1978b).

According to Bean and Smith (1978b), the cosmogony and cosmography of the Serrano are very similar to those of the Cahuilla:

> There are twin creator gods, a creation myth told in "epic poem" style, each local group having its own origin story, water babies whose crying foretells death, supernatural beings of various kinds and on various hierarchically arranged power-access levels, an Orpheus-like myth, mythical deer that no one can kill, and tales relating the adventures (and misadventures) of Coyote, a tragicomic trickster-transformer culture hero. (Bean [1962-1972] and Benedict [1924] in Bean and Smith 1978b)

The Serrano had a shaman who acquired powers through dreams, which were induced through ingestion of the hallucinogen datura. The shaman was mostly a curer/healer, using herbal remedies and "sucking out the disease-causing agents" (Bean and Smith 1978b).

Serrano village locations were typically located near water sources. Individual family dwellings were likely circular, domed structures. Daily household activities would either take place outside of the house out in the open, or under a ramada constructed of a thatched willow pole roof held up by four or more poles inserted into the ground. Families could consist of a husband, wife/wives, unmarried female children, married male children, the husband's parents, and/or widowed aunts and uncles. Rarely, an individual would occupy his own house, typically in the mountains. Serrano villages also included a large ceremonial house where the lineage leader would live, which served as the religious center for lineages or lineage-sets, granaries, and sweathouses (Bean and Smith 1978b).

The Serrano were primarily hunter/gatherers. Vegetal staples varied with locality. Acorns and piñon nuts were found in the foothills, and mesquite, yucca roots, cacti fruits, and piñon nuts were found in or near the desert regions. Diets were supplemented with other roots, bulbs, shoots, and seeds (Heizer 1978). Deer, mountain sheep, antelopes, rabbits, and other small rodents were among the principal food packages. Various game birds, especially quail, were also hunted. The bow and arrow was used for large game, while smaller game and birds were killed with curved throwing sticks, traps, and snares. Occasionally, game was hunted communally, often during mourning ceremonies (Benedict 1924; Drucker 1937; Heizer 1978). Earth ovens were used to cook meat, bones were boiled to extract marrow, and blood was either drunk cold or cooked to a thicker consistency and then eaten. Some meat and vegetables were sun-dried and stored. Food acquisition and processing required the manufacture of additional items such as knives, stone or bone scrapers, pottery trays and bowls, bone or horn spoons, and stirrers. Mortars, made of either stone or wood, and metates were also manufactured (Strong 1971; Drucker 1937; Benedict 1924).

The Serrano were very similar technologically to the Cahuilla. In general, manufactured goods included baskets, some pottery, rabbit-skin blankets, awls, arrow straighteners, sinew-backed bows, arrows, fire drills, stone pipes, musical instruments (rattles, rasps, whistles, bull-roarers, and flutes), feathered costumes, mats for floor and wall coverings, bags, storage pouches, cordage (usually comprised of yucca fiber), and nets (Heizer 1978).

1.3.2 Historic Period

Traditionally, the history of the state of California has been divided into three general periods: the Spanish Period (1769 to 1821), the Mexican Period (1822 to 1846), and the American Period (1848 to present) (Caughey 1970). The American Period is often further subdivided into additional phases: the nineteenth century (1848 to 1900), the early twentieth century (1900 to 1950), and the Modern Period (1950 to present). From an archaeological standpoint, all of these phases can be referred to together as the Ethnohistoric Period. This provides a valuable tool for archaeologists, as ethnohistory is directly concerned with the study of indigenous or non-Western peoples from a combined historical/anthropological viewpoint, which employs written documents,

oral narrative, material culture, and ethnographic data for analysis.

European exploration along the California coast began in 1542 with the landing of Juan Rodríguez Cabrillo and his men at San Diego Bay. Sixty years after the Cabrillo expeditions, an expedition under Sebastián Vizcaíno made an extensive and thorough exploration of the Pacific coast. Although the voyage did not extend beyond the northern limits of the Cabrillo track, Vizcaíno had the most lasting effect upon the nomenclature of the coast. Many of his place names have survived, whereas practically every one of the names created by Cabrillo have faded from use. For instance, Cabrillo named the first (now) United States port he stopped at "San Miguel"; 60 years later, Vizcaíno changed it to "San Diego" (Rolle 1969). The early European voyages observed Native Americans living in villages along the coast but did not make any substantial, long-lasting impact. At the time of contact, the Luiseño population was estimated to have ranged from 4,000 to as many as 10,000 individuals (Bean and Shipek 1978; Kroeber 1976).

The historic background of the project area began with the Spanish colonization of Alta California. The first Spanish colonizing expedition reached southern California in 1769 with the intention of converting and civilizing the indigenous populations, as well as expanding the knowledge of and access to new resources in the region (Brigandi 1998). As a result, by the late eighteenth century, a large portion of southern California was overseen by Mission San Luis Rey (San Diego County), Mission San Juan Capistrano (Orange County), and Mission San Gabriel (Los Angeles County), who began colonizing the region and surrounding areas (Chapman 1921).

Native Californians may have first coalesced with Europeans around 1769 when the first Spanish mission was established in San Diego. In 1771, Father Francisco Garcés first searched the Californian desert for potential mission sites. Interactions between local tribes and Franciscan priests occurred by 1774 when Juan Bautista de Anza made an exploration of Alta California.

Serrano contact with the Europeans may have occurred as early as 1771 or 1772, but it was not until approximately 1819 that the Spanish directly influenced the culture. The Spanish established asistencias in San Bernardino, Pala, and Santa Ysabel. Between the founding of the asistencia and secularization in 1834, most of the Serranos in the San Bernardino Mountains were moved to the nearby missions (Beattie and Beattie 1939:366) while the Cahuilla maintained a high level of autonomy from Spain (Bean 1978).

Each mission gained power through the support of a large, subjugated Native American workforce. As the missions grew, livestock holdings increased and became increasingly vulnerable to theft. In order to protect their interests, the southern California missions began to expand inland to try and provide additional security (Beattie and Beattie 1939; Caughey 1970). In order to meet their needs, the Spaniards embarked upon a formal expedition in 1806 to find potential locations within what is now the San Bernardino Valley. As a result, by 1810, Father Francisco Dumetz of Mission San Gabriel had succeeded in establishing a religious site, or capilla, at a Cahuilla rancheria called Guachama (Beattie and Beattie 1939). San Bernardino Valley received its name from this site, which was dedicated to San Bernardino de Siena by Father Dumetz. The Guachama rancheria was located in present-day Bryn Mawr in San Bernardino County.

These early colonization efforts were followed by the establishment of estancias at Puente (circa 1816) and San Bernardino (circa 1819) near Guachama (Beattie and Beattie 1939). These efforts were soon mirrored by the Spaniards from Mission San Luis Rey, who in turn established a presence in what is now Lake Elsinore, Temecula, and Murrieta (Chapman 1921). The indigenous groups who occupied these lands were recruited by missionaries, converted, and put to work in the missions (Pourade 1961). Throughout this period, the Native American populations were decimated by introduced diseases, a drastic shift in diet resulting in poor nutrition, and social conflicts due to the introduction of an entirely new social order (Cook 1976).

Mexico achieved independence from Spain in 1822 and became a federal republic in 1824. As a result, both Baja and Alta California became classified as territories (Rolle 1969). Shortly thereafter, the Mexican Republic sought to grant large tracts of private land to its citizens to begin to encourage immigration to California and to establish its presence in the region. Part of the establishment of power and control included the desecularization of the missions circa 1832. These same missions were also located on some of the most fertile land in California and, as a result, were considered highly valuable. The resulting land grants, known as "ranchos," covered expansive portions of California and, by 1846, more than 600 land grants had been issued by the Mexican government. Rancho Jurupa was the first rancho to be established and was issued to Juan Bandini in 1838. Although Bandini primarily resided in San Diego, Rancho Jurupa was located in what is now Riverside County (Pourade 1963). A review of Riverside County place names quickly illustrates that many of the ranchos in Riverside County lent their names to present-day locations, including Jurupa, El Rincon, La Sierra, El Sobrante de San Jacinto, La Laguna (Lake Elsinore), Santa Rosa, Temecula, Pauba, San Jacinto Nuevo y Potrero, and San Jacinto Viejo (Gunther 1984). As was typical of many ranchos, these were all located in the valley environments within western Riverside County.

The treatment of Native Americans grew worse during the Rancho Period. Most of the Native Americans were forced off of their land or put to work on the now privately-owned ranchos, most often as slave labor. In light of the brutal ranchos, the degree to which Native Americans had become dependent upon the mission system is evident when, in 1838, a group of Native Americans from Mission San Luis Rey petitioned government officials in San Diego to relieve suffering at the hands of the rancheros:

> We have suffered incalculable losses, for some of which we are in part to be blamed for because many of us have abandoned the Mission … We plead and beseech you … to grant us a Rev. Father for this place. We have been accustomed to the Rev. Fathers and to their manner of managing the duties. We labored under their intelligent directions, and we were obedient to the Fathers according to the regulations, because we considered it as good for us. (Brigandi 1998:21)

Native American culture had been disrupted to the point where they could no longer rely upon prehistoric subsistence and social patterns. Not only does this illustrate how dependent the Native Americans had become upon the missionaries, but it also indicates a marked contrast in the way the Spanish treated the Native Americans as compared to the Mexican and United States ranchers. Spanish colonialism (missions) is based upon utilizing human resources while integrating them into their society. The ranchers, both Mexican and American, did not accept Native Americans into their social order and used them specifically for the extraction of labor, resources, and profit. Rather than being incorporated, they were either subjugated or exterminated (Cook 1976).

By 1846, tensions between the United States and Mexico had escalated to the point of war (Rolle 1969). In order to reach a peaceful agreement, the Treaty of Guadalupe Hidalgo was put into effect in 1848, which resulted in the annexation of California to the United States. Once California opened to the United States, waves of settlers moved in searching for gold mines, business opportunities, political opportunities, religious freedom, and adventure (Rolle 1969; Caughey 1970). By 1850, California had become a state and was eventually divided into 27 separate counties. While a much larger population was now settling in California, this was primarily in the central valley, San Francisco, and the Gold Rush region of the Sierra Nevada mountain range (Rolle 1969; Caughey 1970). During this time, southern California grew at a much slower pace than northern California and was still dominated by the cattle industry that was established during the earlier rancho period.

Although the first orange trees were planted in Riverside County circa 1871, it was not until a few years later when a small number of Brazilian navel orange trees were established that the citrus industry truly began in the region (Patterson 1971). The Brazilian navel orange was well suited to the climate of Riverside County and thrived with assistance from several extensive irrigation projects. At the close of 1882, an estimated half a million citrus trees were present in California, nearly half of which were estimated to be in Riverside County. Population growth and 1880s tax revenue from the booming citrus industry prompted the official formation of Riverside County in 1893 out of portions of what was once San Bernardino County (Patterson 1971).

General History of the City of Ontario

In late 1881, Canadian brothers George and William Chaffey (Plates 1.3–1 and 1.3–2) purchased 6,218 acres of land in the Cucamonga Desert known as the "San Antonio lands." The Chaffey brothers soon expanded to the Southern Pacific Railroad tracks on the south and into the San Antonio Canyon to the north (City of Ontario n.d.). The Chaffey brothers intended to establish a "model colony" for migrants coming to the region and named the area "Ontario" after their hometown. Before the land could be used, however, water had to be found and brought into the town. Because of this, George laid miles of cement pipe leading from San Antonio Canyon, which was later tapped into by the San Antonio Water Company. The need for electric power to lift the water from the deep wells in San Antonio Canyon led to the establishment of the first commercially successful hydroelectric plant in the country, the Ontario Power Company (City of Ontario n.d.).

During the late nineteenth century, anyone purchasing land within the Ontario Colony automatically received shares in the water company, which ensured that water would be pumped to their property. This development aided in establishing agricultural properties, primarily citrus groves, within Ontario (Plate 1.3–3). The Ontario Colony was officially incorporated as a city in 1891 and continued to grow throughout the twentieth century (City of Ontario n.d.). The city became known for air flight after Judge Archie Mitchell, Waldo Waterman, and other airplane enthusiasts established Latimer Field in 1923. Urban growth pushed the airfield further and further east until it reached its present location, which currently functions as the Ontario International Airport. During World War II, the airport served as a busy training center for fighter jet pilots (City of Ontario n.d.).

Plate 1.3–1: George Chaffey. ***(Photograph courtesy of Ontario City Library, Robert E. Ellingwood Model Colony History Room n.d.)***

Agriculture played a vital role in the development of the region. The area surrounding the subject property was historically tied to wine production. The most notable wine producer in the area was Secundo Guasti, an Italian immigrant who planted vineyards in the area in 1902. Guasti purchased a town site called Zucker in 1900, which had begun to grow around the 1875 Southern Pacific Railroad's South Cucamonga Station. Guasti established the Italian Vineyard Company and "His innovations in dry cultivation and processing techniques made the winemaking very productive" (Thirtieth Street Architects, Inc. 2011). Guasti organized the emigration of "experienced workers, coopers and craftsmen" and their families from Italy to work and live at his winery; by 1910, the Guasti vineyards consisted of 5,000 acres, which extended from the foothills of the San Gabriel Mountains to the valley floor, and Zucker was renamed Guasti (Thirtieth Street Architects, Inc. 2011). The vineyard cultivated a large variety of grapes specifically suited for wine, particularly for sherry and port varietals and "In spite of Prohibition and two World Wars, Guasti Winery remained in production until about 1962 when wine-making operations were relocated" (Thirtieth Street Architects, Inc. 2011). In 1975, the Guasti Winery was designated a California Point of Historical Interest (Meighan 1975).

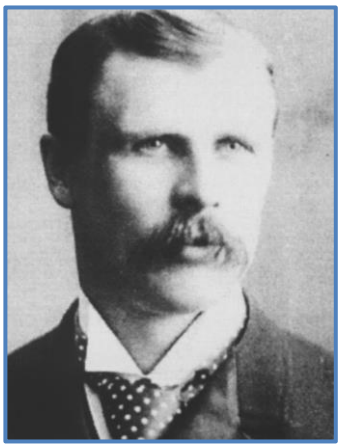

Plate 1.3–2: William Chaffey. ***(Photograph courtesy of the City of Ontario 2013)***

Between the 1950s and 1980s, the dairy industry flourished in other agricultural areas surrounding Ontario. Concerned with what many viewed as a decline in suitable agricultural land, the San Bernardino County Board of Supervisors designated 14,000 acres of agricultural land south and west of the city of Ontario as an "agricultural preserve" (City of Ontario 2006). With the dairy-friendly zoning in the southwest corner of San Bernardino County, many Dutch, Basque,

and Portuguese families relocated to the region and became the cornerstone of the dairy industry. By the 1980s, the area was recognized as having more cows per acre and higher milk yields than anywhere else in the world (City of Ontario 2006). Starting in the late twentieth century, much of the preserve began to be annexed by neighboring cities due to a housing boom and increased operating costs for dairies. In 1999, 8,200 acres were annexed by the City of Ontario with the remaining land annexed by either the City of Chino or Chino Hills. The portion annexed by the City of Ontario was labeled the "New Model Colony," creating a connection with the Chaffey brothers' original "Model Colony of Ontario" (Galvin and Associates 2004; City of Ontario 2006).

Plate 1.3–3: 1887 view of the town of Ontario drawn by H.S. Crocker Co.
(Illustration courtesy of Vintage City Maps 1887)

1.4 Results of the Archaeological Records Search

An archaeological records search was conducted by BFSA at the SCCIC (Appendix B). The records search identified 11 resources within one mile of the project, none of which are located within the subject property (Table 1.4–1). All of the recorded resources are historic and are primarily associated with the historic occupation and agricultural use of the project vicinity. These resources include four farm and single-family properties, two farms, one single-family property, one trash scatter, two transmission lines, and one site containing a trash scatter, water conveyance system, utility pole stumps, a cistern, and a possible well.

Table 1.4–1
Cultural Resources Located Within One Mile of the Project

Site Number(s)/Name	Resource Type
RIV-1848	Historic trash scatter
P-33-023815 and P-36-023626	Historic farm
RIV-12,624	Historic trash scatter, water conveyance system, utility pole stumps, cistern, and possible well
P-36-012622, P-36-012623, P-36-023625, and P-36-023627	Historic farm and single-family property
P-36-025440 and P-36-026051	Historic transmission line
11111 Edison Avenue	Historic single-family property

The records search also identified 38 previous studies which have been conducted within one mile of the proposed project, one of which overlaps the subject property (Dice 2002). The Dice (2002) study conducted an archaeological survey and records search that covered the western half of the subject property and did not identify any cultural resources within the subject property.

The following historic sources were also reviewed by BFSA:

- Historic USGS topographic maps (1942 to 1975)
- Historic aerial photographs (1938 to2025)
- The NRHP Index
- The Office of Historic Preservation (OHP), Archaeological Determinations of Eligibility (ADOE)
- The OHP, Built Environment Resources Directory (BERD)

Additionally, a review of historic maps and aerial photographs for the project illustrates that the subject property was developed for agricultural uses as early as 1938. Between 1938 and 2014, the subject property primarily consisted of cultivated fields. By 2018, the entire subject

property was graded during the development of the surrounding area which resulted in the creation of a water catchment basin in the northwest portion of the project. Subsequent aerial photographs demonstrate that as the surrounding neighborhood transitioned to residential development, the subject property remained vacant but at times was cleared of vegetation.

BFSA also requested a SLF search from the NAHC. This request is not part of any Assembly Bill 52 Native American consultation. The SLF search results were negative for recorded Native American sacred sites or locations of religious or ceremonial importance within the project vicinity. All correspondence with the NAHC is provided in Appendix C.

1.5 Applicable Regulations

Resource importance is assigned to districts, sites, buildings, structures, and objects that possess exceptional value or quality illustrating or interpreting the heritage of San Bernardino County in history, architecture, archaeology, engineering, and culture. A number of criteria are used in demonstrating resource importance. Specifically, the criteria outlined in CEQA provide the guidance for making such a determination. The following sections detail the criteria that a resource must meet in order to be determined important.

1.5.1 California Environmental Quality Act

According to CEQA (§ 15064.5a), the term "historical resource" includes the following:

1) A resource listed in or determined to be eligible by the State Historical Resources Commission for listing in the CRHR (Public Resources Code SS5024.1, Title 14 CCR [California Code of Regulations]. Section 4850 et seq.).
2) A resource included in a local register of historical resources, as defined in Section 5020.1(k) of the Public Resources Code, or identified as significant in a historical resource survey meeting the requirements of Section 5024.1(g) of the Public Resources Code, shall be presumed to be historically or culturally significant. Public agencies must treat any such resource as significant unless the preponderance of evidence demonstrates that it is not historically or culturally significant.
3) Any object, building, structure, site, area, place, record, or manuscript, which a lead agency determines to be historically significant or significant in the architectural, engineering, scientific, economic, agricultural, educational, social, political, military, or cultural annals of California may be considered a historical resource, provided the lead agency's determination is supported by substantial evidence in light of the whole record. Generally, a resource shall be considered by the lead agency to be "historically significant" if the resource meets the criteria for listing on the CRHR (Public Resources Code SS5024.1, Title 14, Section 4852) including the following:

    a) Is associated with events that have made a significant contribution to the broad patterns of California's history and cultural heritage;

b) Is associated with the lives of persons important in our past;
c) Embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of an important creative individual, or possesses high artistic values; or
d) Has yielded, or may be likely to yield, information important in prehistory or history.

4) The fact that a resource is not listed in, or determined eligible for listing in the CRHR, not included in a local register of historical resources (pursuant to Section 5020.1[k] of the Public Resources Code), or identified in a historical resources survey (meeting the criteria in Section 5024.1(g) of the Public Resources Code) does not preclude a lead agency from determining that the resource may be a historical resource as defined in Public Resources Code Section 5020.1(j) or 5024.1.

According to CEQA (§ 15064.5b), a project with an effect that may cause a substantial adverse change in the significance of a historical resource is a project that may have a significant effect on the environment. CEQA defines a substantial adverse change as:

1) Substantial adverse change in the significance of a historical resource means physical demolition, destruction, relocation, or alteration of the resource or its immediate surroundings such that the significance of a historical resource would be materially impaired.
2) The significance of a historical resource is materially impaired when a project:

a) Demolishes or materially alters in an adverse manner those physical characteristics of a historical resource that convey its historical significance and that justify its inclusion in, or eligibility for inclusion in the CRHR; or
b) Demolishes or materially alters in an adverse manner those physical characteristics that account for its inclusion in a local register of historical resources pursuant to Section 5020.1(k) of the Public Resources Code or its identification in a historical resources survey meeting the requirements of Section 5024.1(g) of the Public Resources Code, unless the public agency reviewing the effects of the project establishes by a preponderance of evidence that the resource is not historically or culturally significant; or,
c) Demolishes or materially alters in an adverse manner those physical characteristics of a historical resource that convey its historical significance and that justify its eligibility for inclusion in the CRHR as determined by a lead agency for purposes of CEQA.

Section 15064.5(c) of CEQA applies to effects on archaeological sites and contains the following additional provisions regarding archaeological sites:

1) When a project will impact an archaeological site, a lead agency shall first determine whether the site is a historical resource, as defined in subsection (a).
2) If a lead agency determines that the archaeological site is a historical resource, it shall refer to the provisions of Section 21084.1 of the Public Resources Code, Section 15126.4 of the guidelines, and the limits contained in Section 21083.2 of the Public Resources Code do not apply.
3) If an archaeological site does not meet the criteria defined in subsection (a) but does meet the definition of a unique archaeological resource in Section 21083.2 of the Public Resources Code, the site shall be treated in accordance with the provisions of Section 21083.2. The time and cost limitations described in Public Resources Code Section 21083.2(c-f) do not apply to surveys and site evaluation activities intended to determine whether the project location contains unique archaeological resources.
4) If an archaeological resource is neither a unique archaeological nor historical resource, the effects of the project on those resources shall not be considered a significant effect on the environment. It shall be sufficient that both the resource and the effect on it are noted in the Initial Study or Environmental Impact Report, if one is prepared to address impacts on other resources, but they need not be considered further in the CEQA process.

Section 15064.5(d) and 15064.5(e) contain additional provisions regarding human remains. Regarding Native American human remains, paragraph (d) states:

(d) When an Initial Study identifies the existence of, or the probable likelihood of, Native American human remains within the project, a lead agency shall work with the appropriate Native Americans as identified by the NAHC as provided in Public Resources Code SS5097.98. The applicant may develop an agreement for treating or disposing of, with appropriate dignity, the human remains and any items associated with Native American burials with the appropriate Native Americans as identified by the NAHC. Action implementing such an agreement is exempt from:

    1) The general prohibition on disinterring, disturbing, or removing human remains from any location other than a dedicated cemetery (Health and Safety Code Section 7050.5).
    2) The requirements of CEQA and the Coastal Act.

2.0 RESEARCH DESIGN

The primary goal of the research design is to attempt to understand the way in which humans have used the land and resources within the project through time, as well as to aid in the determination of resource significance. For the current project, the study area under investigation is southwestern San Bernardino County. The scope of work for the cultural resources study conducted for the Eucalyptus and Amherst Avenues Project included the survey of a 10.02-acre property. Given the area involved, the research design for this project was focused upon realistic study options. Since the main objective of the investigation was to identify the presence of and potential impacts to cultural resources, the goal here is not necessarily to answer wide-reaching theories regarding the development of early southern California, but to investigate the role and importance of identified resources. The assessment of the significance of a resource must take into consideration a variety of factors, as well as the ability of a resource to address regional research topics and issues.

Although elementary resource evaluation programs are limited in terms of the amount of information available, several specific research questions were developed that could be used to guide the initial investigations of any observed cultural resources. The following research questions consider the small size and location of the project discussed above.

Research Questions:

- Can located cultural resources be associated with a specific time period, population, or individual?
- Do the types of any located cultural resources allow a site activity/function to be determined from a preliminary investigation? What are the site activities? What is the site function? What resources were exploited?
- How do located sites compare to others reported from different surveys conducted in the area?
- How do located sites fit existing models of settlement and subsistence for mountainous environments of the region?

Data Needs

At the survey level, the principal research objective is a generalized investigation of changing settlement patterns in both the prehistoric and historic periods within the study area. The overall goal is to understand settlement and resource procurement patterns of the project occupants. Therefore, adequate information on site function, context, and chronology from an archaeological perspective is essential for the investigation. The fieldwork and archival research were undertaken with the following primary research goals in mind:

1) To identify cultural resources occurring within the project;
2) To determine, if possible, site type and function, context of the resource(s), and chronological placement of each cultural resource identified;
3) To place each cultural resource identified within a regional perspective; and
4) To provide recommendations for the treatment of each cultural resources identified.

3.0 ANALYSIS OF PROJECT EFFECTS

The cultural resources study of the project consisted of an institutional records search, archival research, and an intensive cultural resources survey of the 10.02-acre property, along with the preparation of this technical report. This study was conducted in conformance with Section 21083.2 of the California Public Resources Code and CEQA. Regulatory requirements of CEQA (Section 15064.5) were followed for the identification and evaluation of resources. Specific definitions for archaeological resource type(s) used in this report are those established by the State Historic Preservation Office (SHPO 1995).

3.1 Survey Methods

The survey methodology employed during the current investigation followed standard archaeological field procedures and was sufficient to accomplish a thorough assessment of the project. The field methodology employed for the project included walking evenly spaced survey transects set approximately 15 meters apart when not obstructed by the current development within the property. Photographs documenting survey areas and overall survey conditions were taken frequently.

3.2 Results of the Field Survey

BFSA archaeologist Parker Sheriff conducted the archaeological survey of the project and off-site infrastructure improvement areas on February 27, 2025. Visibility of the natural ground surface was characterized as moderate to good (Plates 3.2–1 to 3.2–3). The vegetation within the property is dominated by non-native grasses and weeds. The survey confirmed that the entire property has been previsouly graded. Grading resulted in the devlopment of a water catchment basin within the northwest portion of the property and a pad within the southern half of the property (Plates 3.2–4 to 3.2–5). Additionally, within the southern corner of the project, a modern storm drain is present (Plate 3.2–6). No cultural resources were identified during the survey.

Plate 3.2–1: Overview of the project from the eastern corner, facing west.

Plate 3.2–2: Overview of the project from the southern corner, facing north.

Plate 3.2–3: Overview of the project from the northern corner, facing south.

Plate 3.2–4: Overview of the water catchment basin from the western corner of the project, facing east.

Plate 3.2–5: Western overview of the water catchment basin and graded pad, facing northeast.

Plate 3.2–6: Overview of the modern storm drain in the southern corner of the project, facing southeast.

4.0 RECOMMENDATIONS

The archaeological study for the Eucalyptus and Amherst Avenues Project was completed in accordance with City of Ontario environmental policies and CEQA regulatory requirements. No cultural resources were identified within the project during the survey. Further, no natural resources associated with archaeological sites such as natural water sources or bedrock outcroppings were present within the project. A review of historic aerial photographs demonstrate that the subject property was developed for agricultural uses as early as 1938. Further, in 2018, the entire subject property was graded resulting in the development of a water catchment basin and a graded pad.

Due to the prior ground disturbance and the absence of identified cultural resources within the project vicinity, the potential for any significant resources to be present or impacted by the proposed project is minimal. Given that no archaeological sites, features, or artifacts have been identified within or directly adjacent to the project, no potential impacts to cultural resources associated with the proposed development are anticipated. Based upon the results of this study, no further archaeological study or mitigation measures are recommended. A copy of this report will be submitted to the SCCIC at CSU Fullerton.

5.0 LIST OF PREPARERS AND ORGANIZATIONS CONTACTED

The archaeological survey program for the Eucalyptus and Amherst Avenues Project was directed by Principal Investigator Tracy A. Stropes, M.A., RPA. The archaeological fieldwork was conducted by BFSA archaeologists Parker Sheriff. The report text was prepared by Kathleen Krogh and Tracy A. Stropes. Graphics were created by Kathleen Krogh. Technical editing and report production was conducted by Payton Swanson. The archaeological records search was conducted by Emily Soong at the SCCIC at CSU Fullerton.

6.0 CERTIFICATION

I hereby certify that the statements furnished above and in the attached exhibits present the data and information required for this archaeological report, and that the facts, statements, and information presented are true and correct to the best of my knowledge and belief.

April 1, 2025

Tracy A. Stropes, M.A, RPA
Principal Investigator

Date

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Bean, Lowell John and Charles R. Smith
1978a Gabrielino. In *California,* edited by R.F. Heizer. Handbook of North American Indians, Vol. 8. William C. Sturtevant, general editor, Smithsonian Institution, Washington, D.C.

1978b Serrano. In *California,* edited by R.F. Heizer, pp. 570–574. Handbook of North American Indians, Vol. 8. William C. Sturtevant, general editor, Smithsonian Institution, Washington, D.C.

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APPENDIX A

Resumes of Key Personnel

Tracy A. Stropes, MA, RPA

Vice President of Cultural Resources/ Principal Archaeologist
BFSA Environmental Services, a Perennial Company
14010 Poway Road • Suite A •
Phone: (858) 484-0915 • Fax: (858) 679-9896 • Email: tstropes@bfsa.perennialenv.com

Education

Master of Arts, Anthropology, San Diego State University, California **2007**

Bachelor of Science, Anthropology, University of California, Riverside **2000**

Professional Memberships

Register of Professional Archaeologists
Society for California Archaeology
Archaeological Institute of America
Association of Oregon Archaeologists

Experience

Vice President of Cultural Resources/Principal Archaeologist **March 2009–Present**
BFSA Environmental Services, a Perennial Company
Poway, California

Tracy A. Stropes has over 33 years of experience in cultural resource management, with experience in project management, report authorship, lithic analysis, laboratory management, Native American consultation, and technical report editing for numerous projects throughout the western United States. Mr. Stropes has conducted cultural resource surveys, archaeological site testing and evaluations for National Register eligibility and CEQA compliance, mitigation of resources through data recovery for archaeological sites, budget and report preparation, and direction of crews of all sizes for projects ranging in duration from a single-day site visit to multiple years. Mr. Stropes is a Registered Professional Archaeologist (RPA) and is on the list of archaeological consultants qualified to conduct archaeological investigations in the city and county of San Diego, county of Riverside, State of Oregon, State of Arizona, and on Arizona and California BLM lands. He has served as project archaeologist for hundreds of projects and composed data recovery and preservation programs for sites throughout the western United States for both CEQA- and NEPA-level compliance.

Archaeological Principal Investigator **June 2008–February 2009**
TRC Solutions **Irvine, California**

Cultural resource segment of Natural Sciences and Permitting Division; management of archaeological investigations for private companies and local, state, and federal agencies, personnel management, field and laboratory supervision, lithic analysis, Native American consultation and reporting, NRHP and CEQA site evaluations, and authoring/coauthoring cultural resource management reports.

Principal Investigator and Project Archaeologist **June 2006–May 2008**
Archaeological Resource Analysts **Oceanside, California**

As a sub consultant, served as Principal Investigator and Project Archaeologist for several projects for SRS Inc., including field direction, project and personnel management, lab analysis, and authorship of company reports.

Project Archaeologist **September 1996–June 2006**
Gallegos & Associates **Carlsbad, California**

Project management, laboratory management, lithic analysis, field direction, Native American consultation, report authorship/technical editing, and composition of several data recovery/preservation programs for both CEQA and NEPA level compliance.

Project Archaeologist **September 1993–September 1996**
Macko Inc. **Santa Ana, California**

Project management, laboratory management, lithic analysis, field supervision, and report authorship/technical editing.

Archaeological Field Technician **January 1993–September 1993**
Chambers Group Inc. **Irvine, California**

Archaeological excavation, surveying, monitoring, wet screen facilities management, and project logistics.

Archaeological Field Technician **May 1992–September 1992**
John Minch and Associates **San Juan Capistrano, California**

Archaeological excavation, surveying, monitoring, wet screen facilities management, and project logistics.

Selected Reports/Papers

Principal Author

2023 A Section 106 (NHPA) Historic Resource Study for the Oak Creek Canyon Project, City of Wildomar, Riverside County, California. Prepared for Ambient Pacific OCC, LLC.

2023 A Section 106 (NHPA) Historic Resource Study for The Questhaven 76 Project, San Diego County, California (APNs 223-070-007, 223-070-008, and 223-080-046). Prepared for ColRich.

2023 A Phase I Cultural Resources Survey for the Bermuda Dunes Self Storage Project, PAR220053, Riverside County, California. Prepared for FAMA Dairy.

2023 A Cultural Resources Study for 4846 Pacifica Drive, City of San Diego. Prepared for Colliers International.

2023 A Section 106 (NHPA) Historical Resources Study for the Maison's Sierra Project, City of Lancaster, California (Tract No. 27099). Prepared for Ravello Holdings, Inc.

2023 Cultural Resource Survey and Evaluation Program for the Omni Hotel Driving Range/Parking Lot Project, City of Carlsbad, California. Prepared for TRT Holdings, Inc.

2022 A Class III Historic Resources Study for the Anna Avenue Project for Section 106 Compliance, City of San Diego, California. Prepared for John Smith Earthworks, Inc.

2022 A Section 106 (NHPA) Historic Resource Study for the Grand Avenue Project, Riverside County, California (APN 379-060-005). Prepared for TriPointe Homes

2022 A Section 106 (NHPA) Historic Resources Study for the Boulder Springs North Project, Riverside County, California (TTMs 31243, 31244, and 31245; APNs 321-020-027, -028, -029, and -030 and 321-130-047 and -048). Prepared for KB Home.

2022 A Section 106 (NHPA) Historical Resources Study for the Alpine Rancho Palo Verde Project, San Diego County, California (SPL-219-00698-CJA). Prepared for Schindler Real Estate Services, Inc.

2022 A Section 106 (NHPA) Historic Resource Study for the Cumming Ranch Project, San Diego County, California (APNs 282-010-08, -30, -34, and -43; 283-011-06; 283-021-01 and -02; 283-022-02; 283-041-25 and -26; and 283-051-01). Prepared for 805 Properties.

2021 A Section 106 (NHPA) Historic Resources Study for the Gatchell Road Project, San Diego County, California (Project No. 100203). Prepared for the National Park Service.

2021 A Section 106 (NHPA) Historic Resources Study for Site CA-SDI-11,934/H, San Diego County, California (APN 532-520-15). Prepared for the National Park Service.

2021 A Section 106 (NHPA) Historical Resources Study for the Renaissance Ranch Project, Riverside County, California (SPL-2004-01431-JPL). Prepared for Richland Developers, Inc.

2021 A Phase I Cultural Resource Survey for the Coppel Remodel & Addition Project, La Jolla, California. Prepared for Marengo Morton Architects, Inc.

2021 A Section 106 (NHPA) Historic Resources Study for CAB-20-1, San Diego County, California (APN 532-520-15). Prepared for the National Park Service.

2021 Cultural Resources Study for 7951 Paseo Del Ocaso, La Jolla, California. Prepared for Aidlin Darling Design.

2021 Cultural Resources Study for the Secret Hills Ranch Project, San Diego County, California (PDS2020-LDGRMJ-30253, APN 520-060-18)

2021 Cultural Resources Study for the UCLA Cedar Suites and Willow Creek Staff Housing Project, Lake Arrowhead, San Bernardino County, California. Prepared for T&B Planning, Inc.

2021 A Section 106 (NHPA) Historic Resources Study for CA-SDI-13,884, San Diego County, California (APN 532-520-13). Prepared for the National Park Service.

2021 A Cultural Resources Study for the UCLA Glamping Facility Project, Lake Arrowhead, San Bernardino County, California. Prepared for UCLA Capital Programs.

2021 Archaeological Test Results for 2596 Chalcedony Street, San Diego, California. Prepared for Colliers International.

2021 Cultural Resources Study for the 12247 Elliott Avenue Project, Los Angeles County, California. Prepared for EPD Solutions.

2021 A Section 106 (NHPA) Historic Resources Study for the Roquet Ranch Project, City of Colton, San Bernardino County, California (Tentative Tract Map No. 19983; APNs 116-701-101, -102, 116-702-101, -105, -121, -122, -123, and 116-703-118). Prepared for Sunmeadows, LLC.

2020 A Section 106 (NHPA) Historical Resources Study for the Ocean Breeze Ranch Project, Bonsall, San Diego County, California (SPL-2020-00176). Prepared for Ocean Breeze Ranch, LLC.

2020 Cultural Resource Monitoring Report for the Encinitas Beach Hotel Project, Encinitas, California. Prepared for JMI Realty, LLC

2020 A Section 106 (NHPA) Historic Resources Study for the Pacifica Estates Project, Fallbrook, San Diego County, California. Prepared for Jose Islas.

2020 A Section 106 (NHPA) Historic Resources Study for the Hidden Valley Ranch Project, SPL-2004-01124, City of Poway, California. Prepared for Barbara Malone.

2020 A Section 106 (NHPA) Historic Resource Study for The Farms in Poway Project, Poway, San Diego County, California (APNs 273-110-070, -080, and -180). Prepared for Kevin McNamara.

2020 A Phase I and II Cultural Resources Assessment for the Hansen Lot Split Project, TPM 37655, Riverside County, California. Prepared for Forest Hansen.

2020 Cultural Resources Study for the West Coast Cold Storage Project, City of Jurupa Valley, County of Riverside (APNs 178-140-010 and -018). Prepared for

2020 Cultural Resources Study for the 340 East Bradley Avenue Project, San Diego County, California (PDS2021-LDGRMJ-30346). Prepared for A N1-Mart, LLC.

2019 Archaeological Monitoring Report for the Atwell Phase 1A Project (formerly Butterfield Specific Plan), City of Banning, Riverside County, California. Prepared for Pardee Homes.

2019 A Cultural Resource Assessment for the Glen Circle Project, Poway, California. Prepared for MDD Homes.

2019 Cultural Resources Survey for the Highlands at Warner Springs and Off-Site Fire Access Road Project, Warner Springs, San Diego County, California. Prepared for Warner Springs Estates, LLC.

2019 A Cultural Resources Assessment for the 8801 East Marginal Way Project, City of Tukwila, King County, Washington. Prepared for CenterPoint Properties Trust.

2019 Cultural Resource Monitoring Report for the 7980 Park Village Road Emergency Repair Project, San Diego, California. Prepared for Orion Construction Corporation.

2019 Mitigation Monitoring and Reporting Program for the Harmony Grove Village, San Diego County, California. Prepared for Lennar – San Diego Division.

2019 Cultural Resource Monitoring Report for the Price-Cohen Residence Project, 2045 Lowry Place, La Jolla, California 92037. Prepared for Lena Price and Thomas Cohen.

2019 A Section 106 (NHPA) Historic Resources Study for the Melrose Drive Widening Project, City of Oceanside, California. Prepared for California West Communities.

2019 A Cultural Resources Study for the Majestic Chino Heritage Project, City of Chino, San Bernardino County, California. Prepared for T&B Planning, Inc.

2019 Cultural Resources Study for the Ocean Breeze Ranch Project, Bonsall, San Diego County, California. Prepared for Ocean Breeze Ranch, LLC.

2019 Mitigation Monitoring and Reporting Program for the Arthofer Residence Project, 1890 Viking Way, La Jolla, California. Prepared for Frank and Sharon Arthofer.

2019 A Phase I and II Cultural Resources Assessment for the Greentree Ranch Project, Riverside County, California. Prepared for T&B Planning, Inc.

2018 A Section 106 (NHPA) Historic Resources Study for the Escondido Country Club Project, SPL-2018-00135-CJA, City of Escondido, California. Prepared for New Urban West, Inc.

2018 A Phase I Cultural Resources Study for the North County Plaza Project, Carlsbad, California. Prepared for Planning Systems, Inc.

2018 Cultural Resources Addendum Report for the Ivey Palms Project, Thousand Palms, Riverside, California. Prepared for T&B Planning, Inc.

2017 Cultural Resource Monitoring Report for the Altman Residence Project, 9696 La Jolla Farms Road, La Jolla, California 92037. Prepared for Steve and Lisa Altman.

2017 Cultural Resources Study for the Escondido Country Club Project, City of Escondido, California. Prepared for New Urban West, Inc.

2017 A Class III Archaeological Study for the Tract 28859 Project for Section 106 Compliance. Prepared for Menifee 28859, LLC.

2016 A Section 106 (NHPA) Historic Resources Study for the Lake Ranch Project, TR 36730, Riverside County, California.

2016 Mitigation Monitoring and Reporting Program for the Imperial Beach Bikeway Village Project, 536 13th Street and 535 Florence Street, Imperial Beach, California. Prepared for Bikeway Village, LLC.

2015 Cultural Resource Data Recovery and Mitigation Monitoring Program for Site SDI-10,237 Locus F, Everly Subdivision Project, El Cajon, California. Prepared for Shea Homes.

2015 A Class III Historic Resource Study for the Miramar Clearwell Improvements Project, San Diego, California. Prepared for Global Environmental Permitting, Inc.

2015 A Class III Historic Resource Study for the College Boulevard Project, Carlsbad, California. Prepared for Bent West, LLC.

2015 A Class III Archaeological Study for the Parkside Project for Section 106 Compliance, Riverside County, California. Prepared for Lennar Corporation.

2015 A Cultural Resource Assessment for the Zhao Residence Project, Poway, California (275-240-66). Prepared for Pacific Sotheby's International Realty.

2014 Phase I Cultural Resources Survey for the Utah Trail Project, County of San Bernardino, California (APNs 621-281-22 through 621-281-25). Prepared for Ecos Energy, LLC.

2014 Phase I Archaeological Assessment for the Sky Canyon Project (PP25309), Riverside County, California. Prepared for Rocky Snider California Project Management Office.

2014 Phase I Cultural Resources Survey for the Shoshone Valley Road Project, County of San Bernardino, California (APNs 613-233-01, -02, -03, -04, -27, -28, -29, and -30). Prepared for Ecos Energy, LLC.

2014 Phase I Cultural Resources Survey for the Nuevo 055 Project, Community of Nuevo, County of Riverside. Prepared for Ecos Energy, LLC.

2014 A Phase I Cultural Resource Study for the Bourgeoios Project, Poway, California. Prepared for Bill Yen & Associates, Inc.

2014 A Cultural Resources Survey for the Aliso Canyon Major Subdivision Project, Rancho Santa Fe, San Diego County, California. Prepared for Zephyr Partners.

2014 Cultural Resource Monitoring Report for the Sewer Group 723 Project, San Diego, California. Prepared for
Ortiz Corporation.

2013 A Phase I Cultural Resource Study for the Rogers Tierra Bonita Project, Poway, California. Prepared for John D. Fitch & Associates.

2013 A Cultural Resource Assessment Update for the Girard Townhome Project, TR 35477, Riverside County, California. Prepared for G8 Development, Inc.

2013 Phase I Archaeological Assessment for the Ridge Park Project, City of Temecula, California. Prepared for Ambient Communities.

2013 A Phase I and Phase II Cultural Resource Study for the Citrus Heights/Fairway Drive Project, Riverside County, California. Prepared for CV Communities.

2013 Phase I Archaeological Assessment for the Bixby Highgrove Project (TTM 36437), Riverside County, California. Prepared for T&B Planning, Inc.

2013 A Class III Cultural Resources Study for the Ramona Ranch Affordable Housing Project for Section 106 Compliance, San Diego County, California. Prepared for AMCAL Multi-Housing, Inc.

2013 Phase I Archaeological Assessment for the Yates Road Project (TTM 36437), Riverside County, California. Prepared for CV Communities, LLC.

2013 A Cultural Resources Survey and Evaluation Program for the Warner Ranch Project, San Diego County, California. Prepared for HP Warner Ranch, LP.

2013 A Phase I Cultural Resource Assessment for TPM 36585, Riverside County, California. Prepared for GF Real Estate Services.

2013 A Class III Cultural Resources Study for TR 31597 and TR 32627, Riverside County, California. Prepared for Standard Pacific Homes.

2013 Phase I Cultural Resources Survey for the Sunny Cal Project, City of Beaumont, County of Riverside. Prepared for CV Communities, LLC.

2013 A Class III Cultural Resources Study for The Sierra Bella Project for Section 106 Compliance, Riverside County, California. Prepared for Forestar Corona, LLC.

2013 A Class III Cultural Resources Study for the Moosa Creek Mitigation Bank Project. Prepared for a Creek LLC.

2013 Archaeological Survey of the Rohmiller Residence for a Bulletin 560 Permit Application, 2350 Calle De La Garza, La Jolla, California 92037 (APN 346-180-22). Prepared for Architect Mark D. Lyon, Inc.

2013 Cultural Resources Survey and Evaluation Program for the Oak Creek Project, City of Escondido, California. Prepared for New Urban West, Inc.

2013 Phase I Cultural Resources Survey for the Hope Harbor Project, Riverside County, California. Prepared for Medhat Rofael.

2013 Archaeological Survey of the Liske Residence, La Jolla, California. Prepared for ECEGC Inc.

2013 An Updated Phase I Cultural Resources Assessment for Tentative Tract Maps Nos. 36484 and 36485, Audie Murphy Ranch. Prepared for Brookfield Residential.

2013 A Phase I Cultural Resources Study For the 401 West Ash Street Project San Diego, California. Prepared for PierPoint Legacy Holdings, LLC.

2013 Cultural Resource Test Plan for the Ten on Columbia Project, San Diego, California. Prepared for InDev, Inc.

2013 Phase I Cultural Resources Survey for the Washington Avenue Project, City of Murrieta, California. Prepared for Coastal Land Solutions.

2012 Phase I Cultural Resources Survey for the Wildomar 23 Project, Riverside County, California. Prepared for Lennar.

2012 A Class III Cultural Resources Study for the USGS Creepmeter Project. Prepared for Bureau of Land Management, El Centro Office.

2012 Mitigation Monitoring Report for the for the Johnston Residence Project, La Jolla, California. Prepared for Heather Johnston.

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APPENDIX B

Archaeological Records Search Results

(Deleted for Public Review; Bound Separately)

APPENDIX C

NAHC Sacred Lands File Search Results

(Deleted for Public Review; Bound Separately)

April 18, 2025 Project No. 25040-01

Mr. Dave Waters
Genstar Development Company
12770 El Camino Real, Ste. 220
San Diego, CA 92130

Subject: ***Geotechnical Evaluation of Mass Graded Site and Grading Plan Review of Proposed 10-Acre "Esperanza Townhomes" Residential Development, Buildings 1 through 28, Tentative Tract No. 20730, located North of Eucalyptus & Amherst Avenues, City of Ontario, County of San Bernardino, California***

In accordance with your request, LGC Geotechnical, Inc. has performed a geotechnical site evaluation of the mass graded site and grading plan review for the proposed "Esperanza Townhomes" multi-family residential development, Buildings 1 through 28, 161 unit, Tentative Tract No. 20730, located north of the intersection of Eucalyptus and Amherst Avenues in the City of Ontario, County of San Bernardino, California. This report summarizes the current geotechnical conditions and presents our findings, conclusions, and preliminary recommendations with regards to the proposed development.

If you should have any questions regarding this report, please do not hesitate to contact our office. We appreciate this opportunity to be of service.

Respectfully Submitted,

LGC Geotechnical, Inc.

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Sheet

Sheet 1 – Geotechnical Map (In Pocket)

1.0 INTRODUCTION

1.1 Purpose and Scope of Services

This report presents the results of our geotechnical evaluation for the proposed multi-family residential site, Buildings 1 through 28 and associated improvements of Tract 18380, located in the City of Ontario, California. The approximately 10-acre site is bound by residential development and existing streets including Eucalyptus and Amherst Avenues to the south and Chatham and Clifton to the north. Refer to the Site Location Map (Figure 1).

The purpose of our study was to provide a preliminary geotechnical evaluation of the mass graded pad conditions relative to the proposed residential development. As part of our scope of work, we have: 1) reviewed available geotechnical background information including in-house regional geologic maps and published geotechnical literature pertinent to the site (Appendix A); 2) performed excavation, testing, and sampling of regular-spaced test pits with backhoe across the site for evaluation of mass graded conditions; 3) nuclear gauge testing of in-situ graded fill placed under observation and testing by others; 4) laboratory testing of samples for design parameters and organic content testing of the compacted fill soils; and 5) prepared this geotechnical summary report presenting our findings and preliminary conclusions and recommendations for the proposed development.

1.2 Background

The subject site was originally part of the larger overall proposed "Esperanza West" residential development that covered areas north and south of a previous alignment of Eucalyptus Avenue. The northern portion of the area, encompassing the subject site, was reportedly used for agriculture since 1938, specifically "row crops", while the offsite southern portion was utilized as a dairy farm. Previous uses of the overall area were reviewed as part of the referenced methane site assessment by LGC Geo-Environmental (2014). The methane site assessment concluded that the subject parcel was not impacted by previous dairy farm uses and is not within the limits of a Methane Gas Potential Area.

As the surrounding areas have been developed over time, it is our understanding that the southern portion of the subject site was utilized as a borrow area for the surrounding developments. The site was eventually entitled for development with the referenced Updated Geotechnical Report and Manure Evaluation by LGC Geo-Environmental (2017) for the larger "Esperanza West" and "Esperanza East" proposed development. The report further confirmed that the subject parcel was not a part of previous dairy uses in the region. Recommendations were provided for earthwork of the site, aka Lot 1 (School Site) of Tract 18380, to a mass grade design with drainage to the southmost corner.

Mass grading of the site commenced during approximately 2020 as documented in the referenced Reliance Letter by LGC Geo-Environmental (2020). The mass grading operations reportedly included remedial grading to elevations between 695 feet and 698 feet and placement of compacted fill to existing grades, with exception of the northwest quadrant left low for intermittent soils import. Excess soils from specifically identified nearby development sites were reportedly end-dumped in the area left low, and presumably properly compacted over time. No as-graded report was available for review, therefore LGC Geotechnical's site

evaluation presented herein was focused on quality of the removals, quality of the fill to the existing grades, and verification of organics percentage within the compacted fill.

1.3 Project Description

The site is currently vacant, with a generally tightly compacted surface throughout, with light grasses. Drainage across the mass graded pad area flows from the northeast at elevation 708 to a low of approximately 700 at the southwest, to an existing storm drain inlet on-site. Based on the Preliminary Grading Plan by Walden & Associates dated January 24, 2025, the proposed development will consist of 161 units within 28 multi-family buildings, associated streets, recreation center, pool, and park.

Design grades for the proposed development are relatively close to existing mass graded elevations and will be achieved with minor cut-fill grading and import of soils for low areas.

PROJECT NAME	Genstar, Ontario
PROJECT NO.	25040-01
ENG. / GEOL.	RLD / KTM
SCALE	Not to Scale
DATE	April 2025

LGC Geotechnical, Inc.

FIGURE 1
Site Location Map

1.4 Subsurface Geotechnical Evaluation

A subsurface evaluation was performed by LGC Geo-Environmental for a larger overall area prior to mass grading of the subject site (2017). Their investigation included excavation of test pits and a boring on-site and two closely adjacent. The boring logs are provided in Appendix B, approximate locations provided on the Geotechnical Map (Sheet 1).

The recent site evaluation by LGC Geotechnical consisted of excavation of a total of 16 test pits in an approximate grid formation throughout the site by a project geologist, using a Caterpillar backhoe with a three-feet wide bucket to expose the compacted fill and the contact with native soils. Existing fill soils were visually evaluated and probed, and a soil technician took intermittent field density tests with a nuclear gauge to gain an opinion about fill compaction. Numerous samples were collected at vertical intervals within test pits in order to perform laboratory testing for moisture content and organic content. Results of field density testing are presented in Appendix C along with laboratory test results, and moisture and organic content testing results are presented on the test pit logs, Appendix B. Recommendations for remedial measures during future rough grading to project design grades were determined based on a combination of observations during test pit evaluation and results of field and laboratory testing.

Test pits were backfilled and compacted back to existing grades at completion of the field evaluation.

1.5 Laboratory Testing

Laboratory testing on samples collected during the recent subsurface investigation was performed including organic percentage, expansion index, maximum density and optimum moisture, and corrosion testing.

The following is a summary of the laboratory test results:

- Forty-eight organic content tests were performed in an approximate grid pattern within compacted fill soils. Results are presented on test pit logs, Appendix B. The average organic testing percentage for the total of 48 tests performed was approximately 2 percent.
- Three expansion potential tests were performed on finished grade soils and indicated an expansion index value ranged approximately 2 to 5, corresponding to “Very Low” expansion potential.
- Maximum density tests on three bulk samples indicated maximum densities of previously placed compacted fill soils ranges from 125.5 to 129.5 pcf, with optimum moistures from 8.5 to 11.5 percent.
- Corrosion testing of finished grade soils indicated soluble sulfate content less than approximately 0.01 percent by weight or less and a chloride content of 0.006 percent by weight or less.

A summary of the laboratory test results is presented in Appendix C.

2.0 GEOTECHNICAL CONDITIONS

2.1 Geologic Conditions

The subject site is located south of the San Gabriel Mountains within the broad alluvial plain of the Santa Ana River Basin, within the Peninsular Ranges Geomorphic Province. Specifically, the site is located within the northern portion of the Perris Block, a geologic zone consisting of granitics overlain by sedimentary deposits that are bounded by active faults including the northwest-trending Whittier-Elsinore Fault Zone at the southwest and the northwest-trending San Jacinto Fault Zone at the northeast (Morton, 2002). The roughly rectangular Perris Block is transected by the southwest-trending Santa Ana River that passes several miles south of the subject site.

2.2 Site-Specific Geology & Generalized Subsurface Conditions

The site generally consists of engineered fill placed over alluvial deposits. Mass grading of the site was performed under observation and testing by LGC Geo-Environmental (2020). Based on previous reports and regional mapping (Morton, 2002), the subject site is underlain by Holocene- to Pleistocene-age eolian (wind-blown) sedimentary deposits over young alluvium. The material is described on-site as sand and silty sand, with some sandy silt, generally fine to medium grained, yellowish brown, gray, and olive, dry to damp, medium dense to dense. The materials below the eolian deposits are young alluvial fan deposits, described on-site as sand, silty sand and sandy silt, generally fine-grained, yellowish to orangish brown, gray, olive, dry to very moist, medium dense to very dense and stiff to very stiff.

During rough grading, the upper, potentially compressible soils were recommended to be removed to competent alluvium (LGC Geo-Environmental, 2017), as was generally confirmed/observed in our test pits. As indicated on our field exploration logs, compacted fill soils generally consist of silty sand with localized areas of clayey to gravelly sand, medium dense to very dense, slightly moist. The thickness of existing engineered fill was encountered at depths of approximately 3.5 feet to greater than 10 feet within the mass graded pad.

2.3 Groundwater

Groundwater was not encountered during the site investigation to 51 feet below ground (LGC Geo-Environmental, 2017). Groundwater was reportedly estimated to be at a depth of 120 to 130 feet below ground based on available water well data compiled by LGC Geo-Environmental, 2017.

Seasonal fluctuations of groundwater elevations should be expected over time. In general, groundwater levels fluctuate with the seasons and local zones of perched groundwater may be present due to local seepage caused by irrigation and/or recent precipitation. Local perched groundwater conditions or surface seepage may develop once site development is completed.

2.3 Seismic Design Criteria

The site seismic characteristics were evaluated per the guidelines set forth in Chapter 16, Section 1613 of the 2022 California Building Code (CBC) and applicable portions of ASCE 7-16 which has been adopted by the CBC. **Please note that the following seismic parameters are only applicable for code-based acceleration response spectra and are not applicable for where site-specific ground motion procedures are required by ASCE 7-16.** Representative site coordinates of latitude 33.9908 degrees north and longitude -117.5629 degrees west were utilized in our analyses. The maximum considered earthquake (MCE) spectral response accelerations (S_{MS} and S_{M1}) and adjusted design spectral response acceleration parameters (S_{DS} and S_{D1}) for Site Class D are provided in Table 1 on the following page. Since site soils are Site Class D, additional adjustments are required to code acceleration response spectrums as outlined below and provided in ASCE 7-16. The structural designer should contact the geotechnical consultant if structural conditions (e.g., number of stories, seismically isolated structures, etc.) require site-specific ground motions.

A deaggregation of the PGA based on a 2,475-year average return period (MCE) indicates that an earthquake magnitude of 6.68 at a distance of 13.60 km from the site would contribute the most to this ground motion. A deaggregation of the PGA based on a 475-year average return period (Design Earthquake) indicates that an earthquake magnitude of 6.70 at a distance of 17.23 km from the site would contribute the most to this ground motion (USGS, 2014).

Section 1803.5.12 of the 2022 CBC (per Section 11.8.3 of ASCE 7) states that the maximum considered earthquake geometric mean (MCE_G) Peak Ground Acceleration (PGA) should be used for liquefaction potential. The PGA_M for the site is equal to 0.735g (SEAOC, 2025). The design PGA is equal to 0.490g (2/3 of PGA_M).

TABLE 1

Seismic Design Parameters

Selected Parameters from 2022 CBC, Section 1613 - Earthquake Loads	Seismic Design Values	Notes/Exceptions
Distance to applicable faults classifies the site as a "Near-Fault" site.		Section 11.4.1 of ASCE 7
Site Class	D*	Chapter 20 of ASCE 7
Ss (Risk-Targeted Spectral Acceleration for Short Periods)	1.614g	From SEAOC, 2025
S_1 (Risk-Targeted Spectral Accelerations for 1-Second Periods)	0.582g	From SEAOC, 2025
F_a (per Table 1613.2.3(1))	1.000	For Simplified Design Procedure of Section 12.14 of ASCE 7, F_a shall be taken as 1.4 (Section 12.14.8.1)
F_v (per Table 1613.2.3(2))	1.718	Value is only applicable per requirements/exceptions per Section 11.4.8 of ASCE 7
S_{MS} for Site Class D [Note: $S_{MS} = F_aS_S$]	1.614g	-
S_{M1} for Site Class D [Note: $S_{M1} = F_vS_1$]	0.999g	Value is only applicable per requirements/exceptions per Section 11.4.8 of ASCE 7
S_{DS} for Site Class D [Note: $S_{DS} = (^2/_3)S_{MS}$]	1.076g	-
S_{D1} for Site Class D [Note: $S_{D1} = (^2/_3)S_{M1}$]	0.666g	Value is only applicable per requirements/exceptions per Section 11.4.8 of ASCE 7
C_{RS} (Mapped Risk Coefficient at 0.2 sec)	0.941	ASCE 7 Chapter 22
C_{R1} (Mapped Risk Coefficient at 1 sec)	0.918	ASCE 7 Chapter 22
*Since site soils are Site Class D and S_1 is greater than or equal to 0.2, the seismic response coefficient Cs is determined by Eq. 12.8-2 for values of $T \leq 1.5T_s$ and taken equal to 1.5 times the value calculated in accordance with either Eq. 12.8-3 for $T_L \geq T > T_s$, or Eq. 12.8-4 for $T > T_L$. Refer to ASCE 7-16.		

2.4 Faulting

Prompted by damaging earthquakes in Northern and Southern California, State legislation and policies concerning the classification and land-use criteria associated with faults have been developed. Their purpose was to prevent the construction of urban developments across the trace of active faults, resulting in the Alquist-Priolo Earthquake Fault Zoning Act. Earthquake Fault Zones have been delineated along the traces of active faults within California. Where developments for human occupation are proposed within these zones, the state requires detailed fault evaluations be performed so that engineering geologists can mitigate the hazards

associated with active faulting by identifying the location of active faults and allowing for a setback from the zone of previous ground rupture.

The subject site is not located within a State of California Earthquake Fault Zone (Alquist-Priolo) and no faults are identified on the site (CGS, 2025). The possibility of damage due to ground rupture is considered low since no active faults are known to cross the site. The closest known active faults that may impact the site include the Whittier-Elsinore, Cucamonga, San Jacinto, and San Andreas Fault Zones, among others.

Secondary effects of seismic shaking resulting from large earthquakes on the major faults in the Southern California region, which may affect the site, include ground lurching and shallow ground rupture, soil liquefaction, and dynamic settlement. These secondary effects of seismic shaking are a possibility throughout the Southern California region and are dependent on the distance between the site and causative fault and the onsite geology. A discussion of these secondary effects is provided in the following sections.

2.4.1 Liquefaction and Dynamic Settlement

Liquefaction is a seismic phenomenon in which loose, saturated, granular soils behave similarly to a fluid when subject to high-intensity ground shaking. Liquefaction occurs when three general conditions coexist: 1) shallow groundwater; 2) low density non-cohesive (granular) soils; and 3) high-intensity ground motion. Studies indicate that saturated, loose near surface cohesionless soils exhibit the highest liquefaction potential, while dry, dense, cohesionless soils and cohesive soils exhibit low to negligible liquefaction potential. In general, cohesive soils are not considered susceptible to liquefaction, depending on their plasticity and moisture content. Effects of liquefaction on level ground include settlement, sand boils, and bearing capacity failures below structures. Dynamic settlement of dry loose sands can occur as the sand particles tend to settle and densify as a result of a seismic event.

Based on the previous field evaluation data performed by others (references), the site soils are generally not susceptible to liquefaction due to a lack of groundwater and the relatively dense native soils in the upper 50 feet; therefore, liquefaction potential is considered very low.

2.4.2 Lateral Spreading

Lateral spreading is a type of liquefaction-induced ground failure associated with the lateral displacement of surficial blocks of sediment resulting from liquefaction in a subsurface layer. Once liquefaction transforms the subsurface layer into a fluid mass, gravity plus the earthquake inertial forces may cause the mass to move downslope towards a free face (such as a river channel or an embankment). Lateral spreading may cause large horizontal displacements and such movement typically damages pipelines, utilities, bridges, and structures.

Due to the lack of groundwater in the upper 50 feet, very low potential for liquefaction, and lack of a nearby "free face" condition, the potential for lateral spreading is considered very low.

2.5 Oversized Material

Oversized materials (material larger than 8 inches in maximum dimension) are not expected to be encountered during the minor site grading. If encountered, recommendations are provided for appropriate handling of oversized materials in Appendix D. If feasible, exporting oversized materials may be considered. Incorporating oversized materials into "rock fills" (windrows, rock blankets or individual rock burial) is not feasible due to the limited depth of rough grading.

2.6 Expansion Potential

Based on the results of previous laboratory testing (LGC Geo-Environmental, 2017), our experience in the area, and results of recent expansion index testing presented herein, site soils are anticipated to have a "Very Low" expansion potential. Final expansion potential of site soils should be confirmed at the completion of grading. Results of expansion testing at finish grades should be utilized to confirm final foundation design.

2.7 Organic Rich Soils

Based on our review of the geotechnical design report (LGC Geo-Environmental, 2017), the consultant who graded the site recommended that the high and low organic "soils" be blended and mixed to achieve 2 percent organics or less in the compacted fill. To verify the results of the mass grading operation, we collected a total of 48 soil samples throughout the existing on-site fill to determine their organic content (based on ASTM 2974). Organic percentage is indicated on test pit logs at the depths of collection, presented in Appendix B. The organic content of the majority of samples ranged from approximately 1.2 percent to 2.7 percent, indicating relatively low organics, with locally higher organic contents of 8.8 percent within TP-13 and 4.8 percent within TP-11. Remedial grading is recommended for field evaluation of the two locally high percentage of organic content (Refer to Geotechnical Map), and the upper two inches of existing grasses and rootlets that have accumulated over time are recommended to be cleared and removed from the site prior to future rough grading operations in order to avoid blending additional organics into future fill. Refer to Section 4.1.1 for recommendations.

3.0 CONCLUSIONS

Based on the results of our geotechnical evaluation, it is our opinion that the proposed development is feasible from a geotechnical standpoint, provided the following conclusions and recommendations are implemented.

The following is a summary of the primary geotechnical factors that may affect future development of the site:

- On site soils consist of engineered fill placed over alluvial deposits under observation and testing by LGC Geo-Environmental, as nominally reported in the referenced letter (2020). Compacted fill materials observed by LGC Geotechnical generally consist of silty sand with localized areas of clayey to gravelly sand, medium dense to very dense, slightly moist.
- Based on the previously mass-graded condition of the site, recommended remedial measures are limited to removal and recompaction of weathered, near-surface, previously placed engineered fill, and few localized areas of removal as deep as 6 feet. Locally deeper removals were determined based on field observations, field density testing, and laboratory test results.
- The subject site is not located within a State of California Earthquake Fault Zone (aka "AP Zone"); and no "Holocene-active" faults have been identified to cross the site. The main seismic hazard that may affect the site is ground shaking from one of the active regional faults. The subject site will likely experience strong seismic ground shaking during its design life.
- From a geotechnical perspective, onsite soils are anticipated to be suitable for use as general compacted fill provided, they are screened of organic materials, construction debris and oversized material (8 inches in greatest dimension).
- Groundwater was not encountered during previous subsurface evaluations and was estimated to be a depth of more than 120 feet below existing grade.
- Based on the previous field evaluation data performed by others (references), the site soils are generally not susceptible to liquefaction due to a lack of groundwater and the relatively dense native soils in the upper 50 feet; therefore, liquefaction potential is considered very low.
- Based on the results of preliminary laboratory testing, site soils are anticipated to have "Very Low" expansion potential. Final design expansion potential must be confirmed at the completion of rough/precise grading.

4.0 PRELIMINARY RECOMMENDATIONS

The following recommendations are to be considered preliminary and should be confirmed upon completion of grading and earthwork operations. In addition, they should be considered minimal from a geotechnical viewpoint, as there may be more restrictive requirements from the architect, structural engineer, building codes, governing agencies, or the owner.

It should be noted that the following geotechnical recommendations are intended to provide sufficient information to develop the site in general accordance with the 2022 CBC requirements. With regard to the potential occurrence of potentially catastrophic geotechnical hazards such as fault rupture, earthquake-induced landslides, liquefaction, etc. the following geotechnical recommendations should provide adequate protection for the proposed development to the extent required to reduce seismic risk to an "acceptable level." The "acceptable level" of risk is defined by the California Code of Regulations as "that level that provides reasonable protection of the public safety, though it does not necessarily ensure continued structural integrity and functionality of the project" [Section 3721(a)]. Therefore, repair and remedial work of the proposed improvements may be required after a significant seismic event. With regards to the potential for less significant geologic hazards to the proposed development, the recommendations contained herein are intended as a reasonable protection against the potential damaging effects of geotechnical phenomena such as expansive soils, fill settlement, groundwater seepage, etc. It should be understood, however, that although our recommendations are intended to maintain the structural integrity of the proposed development and structures given the site geotechnical conditions, they cannot preclude the potential for some cosmetic distress or nuisance issues to develop as a result of the site geotechnical conditions.

The geotechnical recommendations contained herein must be confirmed to be suitable or modified based on the actual as-graded conditions.

4.1 Site Earthwork

We anticipate that earthwork at the subject site will consist of minor grading, import of soils, utility installation, street improvements, and foundation construction. We recommend that earthwork onsite be performed in accordance with the following recommendations, the City of Ontario grading requirements, and the 2022 CBC. In case of conflict, the following recommendations shall supersede previous recommendations.

4.1.1 Site Preparation, Remedial Grading, and Fill Processing

Because the subject site was already mass graded as nominally reported in LGC Geo-Environmental, 2020, and generally verified with our recent site investigation, it is our opinion that the majority of fill placed to the current mass grade design remains acceptable for the intended uses with exception of specific localized areas of recommended removals as follows.

The site has undergone near-surface weathering and limited vegetation growth over the last five years of vacancy. In general, we recommend that the upper, organic-rich couple of inches (vegetation and dense rootlets) should be fully cleared and removed/exported

from the site. Additionally, soils with organic contents higher than 3 percent are recommended to be temporarily removed, mixed and blended with "clean" soils, and placed as compacted fill with an organic content of approximately 2 percent or less. Several areas have been identified as high concentrations of organics including the soils in the vicinity of test pits TP-11 and TP-13, refer to our Test Pit Logs (Appendix B) and our Geotechnical Map (Sheet 1) for recommendations. Import should consist of "clean" soils with organic contents 2 percent or less. We recommend the geotechnical consultant be present during grading to observe the mixing of the onsite soils and perform periodic testing of the compacted fill. Organic materials shall be thoroughly mixed such that no nesting of organic materials occurs.

Based on near-surface weathering, a minimum of 1 foot of the existing grades on-site will require temporary removal and re-compaction to achieve design grades. Areas of recommended removal depths greater 1 feet were identified from our field observations within test pits, results of field density testing, and results of organic content and moisture content testing. Therefore, temporary removal and recompaction is recommended to range from approximately 1 to 6 feet below existing grades, refer to Geotechnical Map (Sheet 1) for recommended depths. Alternatively, if the design cut is determined to exceed the removal of unsuitable weathered near-surface older fill materials, the cut may be left at grade. The temporary removal and recompaction depths will need to be confirmed by the geotechnical consultant during rough/precise grading based on the observed field conditions.

Removal bottoms and/or reprocessing of acceptable near-surface soils should be observed and accepted by the geotechnical consultant prior to fill placement or construction. Areas prepared to receive structural fill and/or other surface improvements should be scarified to a minimum of 6 to 8 inches, brought to at least optimum-moisture content, and recompacted to at least 90 percent relative compaction (based on ASTM Test Method D1557). Deeper reprocessing of the previously placed compacted fill may be required based on the conditions observed during post-grading.

4.1.2 Material for Fill

From a geotechnical perspective, the onsite soils are generally suitable for use as compacted fill, provided they are screened of organic materials, construction debris and oversized materials (material greater than 8 inches in maximum dimension).

From a geotechnical viewpoint, any required import soils should consist of clean, free draining, relatively granular soils of very low expansion potential (expansion index 20 or less based on ASTM D4829) and no particles larger than 3 inches in greatest dimension. Source samples of planned importation should be provided to the geotechnical consultant for laboratory testing a minimum of 4 working days prior to any planned importation for required laboratory testing.

Retaining wall backfill should consist of imported sandy soils with a maximum of 35 percent fines (passing the No. 200 sieve) per ASTM Test Method D1140 (or ASTM D6913/D422) and a "Very Low" expansion potential (EI of 20 or less per ASTM D4829). Soils should also be screened of organic materials, construction debris, and any material

greater than 3 inches in maximum dimension. Portions of the onsite soil may not be suitable for retaining wall backfill due to their fines content (i.e., silt and clay content). Therefore, either select grading and stockpiling and/or import of suitable sandy soils meeting the criteria outlined above will be required.

Aggregate base should conform to the requirements of Section 200-2 of the Standard Specifications for Public Works Construction ("Greenbook") for untreated base materials, Caltrans Class 2 aggregate base and/or the City of Ontario/County of San Bernardino requirements.

4.1.3 Placement and Compaction of Fills

Material to be placed as fill should be brought to near-optimum moisture content (generally within optimum and 2 percent above optimum moisture content) and recompacted to at least 90 percent relative compaction (per ASTM D1557). Moisture conditioning of site soils will be required in order to achieve adequate compaction. Soils are present that will require additional moisture in order to achieve the required compaction. Drying and/or mixing the very moist soils may also be required prior to reusing the materials in compacted fills.

The optimum lift thickness to produce a uniformly compacted fill will depend on the type and size of compaction equipment used. In general, fill should be placed in uniform lifts not exceeding 8 inches in compacted thickness. Each lift should be thoroughly compacted and accepted prior to subsequent lifts. Generally, placement and compaction of fill should be performed in accordance with local grading ordinances and with observation and testing performed by the geotechnical consultant. Oversized material as previously defined should be removed from site fills.

Fill placed on any slopes greater than 5:1 (horizontal to vertical) should be properly keyed and benched into firm and competent soils as it is placed in lifts. During backfill of temporary excavations, fill should be properly benched into firm and competent soils as it is placed in lifts and compacted.

Aggregate base material should be compacted to a minimum of 95 percent relative compaction at or slightly above optimum moisture content per ASTM D1557. Subgrade below aggregate base should be compacted to a minimum of 90 percent relative compaction (or per the city requirements, whichever is higher) at or slightly above optimum moisture content per ASTM D1557.

If gap-graded ¾-inch rock is used for backfill (around storm drain storage chambers, retaining wall backfill, etc.) it will require compaction. Rock shall be placed in thin lifts (typically not exceeding 6 inches) and mechanically compacted with observation by geotechnical consultant. Backfill rock shall meet the requirements of ASTM D2321. Gap-graded rock is required to be entirely wrapped in filter fabric (Mirafi 140N or approved alternative) or at the very minimum to be vertically separated from the trench backfill with filter fabric to prevent the migration of fines into the rock backfill.

4.1.4 Trench and Conventional Retaining Wall Backfill and Compaction

The onsite materials may generally be suitable as trench backfill provided the soils are screened of organic matter, rocks greater than 6 inches in diameter and construction debris. Trench backfill should be compacted in uniform lifts (generally not exceeding 12 inches in compacted thickness) by mechanical means to at least 90 percent relative compaction (per ASTM Test Method D1557). A representative from LGC Geotechnical should observe and test the backfill to verify compliance with the project recommendations.

If trenches are shallow or the use of conventional equipment may result in damage to the utilities, sand having a sand equivalent (SE) of 20 or greater (per California Test Method [CTM] 217) may be used to bed and shade the pipes. Sand backfill within the pipe bedding zone may be densified by jetting or flooding and then tamped to ensure adequate compaction. Sand grains should be from a natural source with rounded shape. Manufactured sand from crushed rock or recycled material is not suitable for jetting/flooding as the grains are typically angular in shape and do not densify well enough with these methods. Manufactured sand can be used as shading material when mechanical compaction efforts are used. Subsequent trench backfill should be compacted in uniform thin lifts by mechanical means to at least a minimum 90 percent relative compaction (per ASTM D1557). If any ¾-inch rock is used for backfill, see Section 4.1.3 for filter fabric requirements.

Retaining wall backfill should consist of sandy soils as outlined in preceding Section 4.1.2. The limits of select sandy backfill should extend at minimum ½ the height of the retaining wall or the width of the heel (if applicable), whichever is greater (Figure 2). Retaining wall backfill soils should be compacted in relatively uniform thin lifts to at least 90 percent relative compaction (per ASTM D1557). Jetting or flooding of retaining wall backfill materials should not be permitted.

In backfill areas where mechanical compaction of soil backfill is impractical due to space constraints, typically sand-cement slurry may be substituted for compacted backfill. The slurry should contain about one sack of cement per cubic yard. When set, such a mix typically has the consistency of compacted soil. Sand cement slurry placed near the surface within landscape areas should be evaluated for potential impacts on planned improvements.

A representative from LGC Geotechnical should observe, probe, and test the backfill to verify compliance with the project recommendations.

4.1.5 Temporary Excavations

Temporary excavations should be performed in accordance with project plans, specifications, and all Occupational Safety and Health Administration (OSHA) requirements. Excavations should be laid back or shored in accordance with OSHA requirements before personnel or equipment are allowed to enter. Based on the reference geotechnical reports, site soils are anticipated to be OSHA Type "B" soils. Sandy soils are present and should be considered susceptible to caving. Soil conditions should

be regularly evaluated during construction to verify conditions are as anticipated. The contractor shall be responsible for providing the "competent person," required by OSHA standards, to evaluate soil conditions. Close coordination with the geotechnical consultant should be maintained to facilitate construction while providing safe excavations. Excavation safety is the sole responsibility of the contractor.

Vehicular traffic, stockpiles, and equipment storage should be set back from the perimeter of excavations a distance equivalent to a 1:1 projection from the bottom of the excavation. Once an excavation has been initiated, it should be backfilled as soon as practical. Prolonged exposure of temporary excavations may result in some localized instability. Excavations should be planned so that they are not initiated without sufficient time to shore/fill them prior to weekends, holidays, or forecasted rain.

It should be noted that any excavation that extends below a 1:1 (horizontal to vertical) projection of an existing foundation will remove existing support of the structure foundation. If requested, temporary shoring and/or ABC slot cut parameters will be provided.

4.2 Preliminary Foundation Recommendations

Provided that the remedial grading recommendations provided herein are implemented, the site may be considered suitable for the support of the residential structures using a conventional or post-tensioned foundation system. Laboratory testing indicates that the site soils have a "Very Low" expansion potential (EI of 20 or less per ASTM D4829), however, the foundation designer should take into consideration the total and differential settlement in his/her design. Please note that the following foundation recommendations are preliminary and must be confirmed by LGC Geotechnical at the completion of grading.

Preliminary foundation recommendations are provided in the following sections. Recommended soil bearing and estimated settlement due to structural loads are provided in Section 4.4.

4.2.1 Provisional Conventional Foundation Design Parameters

Due to the very low expansion potential of the onsite soils, the foundation/structural engineer may design a conventional foundation system that is tied together based upon the anticipated dead and live loads (wind, seismic) that will be imparted by the structure. The recommendations provided in the "Soil Bearing and Lateral Resistance" section may be utilized in the design of a rigid slab-on-grade conventional foundation designed in accordance with Section 1808 of the 2022 C.B.C.

4.2.2 Provisional Post-Tensioned Foundation Design Parameters

The geotechnical parameters provided herein may be used for post-tensioned slab foundations. These parameters have been determined in general accordance with the Post-Tensioning Institute (PTI, 2012) Standard Requirements (PTI DC 10.5), referenced in Chapter 18 of the 2022 CBC. In utilizing these parameters, the foundation engineer

should design the foundation system in accordance with the allowable deflection criteria of applicable codes and the requirements of the structural designer/architect. Other types of stiff slabs may be used in place of the CBC post-tensioned slab design provided that, in the opinion of the foundation structural designer, the alternative type of slab is at least as stiff and strong as that designed by the CBC/PTI method to resist expansive soils.

Our design parameters are based on our experience with similar residential projects and the anticipated nature of the soil (with respect to expansion potential). Please note that implementation of our recommendations will not eliminate foundation movement (and related distress) should the moisture content of the subgrade soils fluctuate. It is the intent of these recommendations to help maintain the integrity of the proposed structures and reduce (not eliminate) movement, based upon the anticipated site soil conditions. Should future owners not properly maintain the areas surrounding the foundation, for example by overwatering, then we anticipate for expansive soils the maximum differential movement of the perimeter of the foundation to the center of the foundation to be on the order of a couple of inches. Soils of lower expansion potential are anticipated to show less movement.

TABLE 2

Provisional Geotechnical Parameters for Post-Tensioned Foundation Slab Design

Parameter	PT Slab with Perimeter Footing	PT Mat with Thickened Edge
Expansion Index	Very Low[1]	Very Low[1]
Thornthwaite Moisture Index	-20	-20
Constant Soil Suction	PF 3.9	PF 3.9
Center Lift Edge moisture variation distance, e_m Center lift, y_m	 9.0 feet < 0.25 inch	 9.0 feet 0.25 inch
Edge Lift Edge moisture variation distance, e_m Edge lift, y_m	 6.1 feet 0.25 inch	 6.1 feet 0.25 inch
Modulus of Subgrade Reaction, k (assuming presoaking as indicated below)	200 pci	200 pci
Minimum perimeter footing/thickened edge embedment below finish grade	12 inches	6 inches
Perimeter foundation reinforcement	N/A[2]	N/A[2]
Presoak (moisture conditioning)	100% of Optimum to 12 inches	100% of Optimum to 12 inches

1. Assumed for preliminary design purposes. Further evaluation is needed at the completion of grading.
2. Recommendations for foundation reinforcement and slab thickness are ultimately the purview of the foundation engineer/structural engineer based upon geotechnical criteria and structural engineering considerations.
3. Recommendations for sand below slabs have traditionally been included with geotechnical foundation recommendations, although they are not the purview of the geotechnical consultant. The sand layer requirements are the purview of the foundation engineer/structural engineer, and should be provided in accordance with ACI Publication 302 "Guide for Concrete Floor and Slab Construction".
4. Recommendations for vapor retarders below slabs are also the purview of the foundation engineer/structural engineer and should be provided in accordance with applicable code requirements.

4.2.3 Foundation Subgrade Preparation and Maintenance

Moisture conditioning of the subgrade soils is recommended prior to trenching the foundation. The duration of this process varies greatly based on the chosen method and is also dependent on factors such as soil type and weather conditions. Time duration for presoaking from completion of rough grading to trenching of foundations should be accounted for in the construction schedule (typically a few days for Very Low expansion soils). The recommendations specific to the anticipated site soil conditions, including recommended presoak, are presented in Table 2. The subgrade moisture condition of

the building pad soils should be maintained at near-optimum moisture content up to the time of concrete placement. This moisture content should be maintained around the immediate perimeter of the slab during construction and up to occupancy of the homes.

The geotechnical parameters provided herein assume that if the areas adjacent to the foundation are planted and irrigated, these areas will be designed with proper drainage and adequately maintained so that ponding, which causes significant moisture changes below the foundation, does not occur. Our recommendations do not account for excessive irrigation and/or incorrect landscape design. Plants should only be provided with sufficient irrigation for life and not overwatered to saturate subgrade soils. Sunken planters placed adjacent to the foundation should either be designed with an efficient drainage system or liners to prevent moisture infiltration below the foundation. Some lifting of the perimeter foundation beam should be expected even with properly constructed planters.

In addition to the factors mentioned above, future owners/property management personnel should be made aware of the potential negative influences of trees and/or other large vegetation. Roots that extend near the vicinity of foundations can cause distress to foundations. Future owners (and the owner's landscape architect) should not plant trees/large shrubs closer to the foundations than a distance equal to half the mature height of the tree or 20 feet, whichever is more conservative unless specifically provided with root barriers to prevent root growth below the building foundation.

It is the owner's responsibility to perform periodic maintenance during hot and dry periods to ensure that adequate watering has been provided to keep soil from separating or pulling back from the foundation. Future owners and property management personnel should be informed and educated regarding the importance of maintaining a constant level of soil-moisture. The owners should be made aware of the potential negative consequences of both excessive watering, as well as allowing potentially expansive soils to become too dry. Expansive soils can undergo shrinkage during drying, and swelling during the rainy winter season, or when irrigation is resumed. This can result in distress to building structures and hardscape improvements. The builder should provide these recommendations to future owners and property management personnel.

4.2.4 Slab Underlayment Guidelines

The following recommendations are for informational purposes since they are unrelated to the geotechnical performance of the foundation. Some post-construction moisture migration should be expected below the foundation; the foundation engineer must assume soil moisture to be present below the slab. The following recommendations may be superseded by the foundation engineer and/or owner.

In general, interior floor slabs with moisture sensitive floor coverings should be underlain by a minimum 10-15 mil thick vapor retarder, which has a water vapor transmission rate (permeance) of less than 0.3 perms, as determined by ASTM E 96, and meets the applicable code requirements (ASTM E 1745).

It is the responsibility of the contractor to ensure that the moisture/vapor retarder systems are properly installed in accordance with the project plans and manufacturer's specifications, and that the moisture/vapor retarder materials are free of tears and punctures prior to and as a result of concrete placement. Additional moisture reduction and/or prevention measures may be needed, depending on the performance requirements of future interior floor coverings.

The foundation engineer/architect should determine whether the use of a capillary break (sand or gravel layer) in conjunction with the vapor retarder is necessary or required by code. Sand layer thickness and location (above and/or below vapor retarder) should also be determined by the foundation engineer/architect. However, we often observe the membrane to be sandwiched between a layer of sand, 1-inch above and 1-inch below. Sand layers should be installed, where applicable, in accordance with ACI Publication 302 – "Guide for Concrete Floor and Slab Construction."

4.3 Soil Bearing and Lateral Resistance

Provided our earthwork recommendations are implemented, an allowable soil bearing pressure of 2,000 pounds per square foot (psf) may be used for the design of footings having a minimum width of 12 inches and minimum embedment of 12 inches below lowest adjacent ground surface. This value may be increased by 300 psf for each additional foot of embedment and 150 psf for each additional foot of foundation width to a maximum value of 3,000 psf. A post-tensioned mat foundation a minimum of 6 inches below lowest adjacent grade may be designed for an allowable soil bearing pressure of 1,200 psf. These allowable bearing pressures are applicable for level (ground slope equal to or flatter than 5H:1V) conditions only. Bearing values indicated are for total dead loads and frequently applied live loads and may be increased by ⅓ for short duration loading (i.e., wind or seismic loads).

In utilizing the above-mentioned allowable bearing capacity and provided our earthwork recommendations are implemented, foundation settlement due to structural loads is anticipated to be 1-inch or less. Differential static settlement may be taken as half of the static settlement (i.e., ½-inch over a horizontal span of 40 feet).

Resistance to lateral loads can be provided by friction acting at the base of foundations and by passive earth pressure. For concrete/soil frictional resistance, an allowable coefficient of friction of 0.35 may be assumed with dead-load forces. For slabs constructed over a moisture retarder, the allowable friction coefficient should be provided by the manufacturer. An allowable passive lateral earth pressure of 250 psf per foot of depth (or pcf) to a maximum of 2,500 psf may be used for the sides of footings poured against properly compacted fill. Allowable passive pressure may be increased to 340 pcf (maximum of 3,400 psf) for short duration seismic loading. This passive pressure is applicable for level (ground slope equal to or flatter than 5H:1V) conditions only. For a 2:1 sloping condition an allowable passive lateral earth pressure of 100 psf per foot of depth (or pcf) to a maximum of 1,000 psf may be used for lateral resistance. Allowable passive pressure may be increased to 130 pcf to a maximum of 1,300 psf for short duration seismic or wind loading. Frictional resistance and passive pressure may be used in combination without reduction. We recommend that the upper foot of passive resistance be neglected if finished grade will not be covered with concrete or asphalt. The provided allowable passive pressures are based on a factor of safety of 1.5 and 1.1 for static and seismic loading conditions,

respectively. The structural designer should incorporate appropriate factors of safety and/or load factors in their design.

4.4 Lateral Earth Pressures for Retaining Walls

Lateral earth pressures for approved sandy soils meeting indicated project recommendations (Section 4.1.2) are provided below. Lateral earth pressures are provided as equivalent fluid unit weights, in psf per foot of depth (or pcf). These values do not contain an appreciable factor of safety, so the retaining wall designer should apply the applicable factors of safety and/or load factors during design. A soil unit weight of 120 pcf may be assumed for calculating the actual weight of soil over the wall footing.

The following lateral earth pressures are presented on Table 3 are for backfilled retaining walls using approved select granular soils with a maximum of 35 percent fines (passing the No. 200 sieve per ASTM D-421/422) and a maximum Expansion Index of 20 (per ASTM D-4829). Portions of the onsite soil may not be suitable for retaining wall backfill due to their fines content (i.e., silt and clay content). Therefore, either select grading and stockpiling and/or import of suitable sandy soils meeting the criteria outlined above will be required. The retaining wall designer should clearly indicate on the retaining wall plans the required sandy soil backfill criteria.

TABLE 3

Lateral Earth Pressures – Approved On-site or Imported Sandy Soils

Conditions	Equivalent Fluid Weight (pcf)	Equivalent Fluid Weight (pcf)
	Level Backfill	2:1 Sloped Backfill
	Approved Sandy Soils	Approved Sandy Soils
Active	35	55
At-Rest	55	70

If the wall can yield enough to mobilize the full shear strength of the soil, it can be designed for "active" pressure. If the wall cannot yield under the applied load, the earth pressure will be higher. This would include 90-degree corners of retaining walls. Such walls should be designed for "at-rest." The equivalent fluid pressure values assume free-draining conditions. If conditions other than those assumed above are anticipated, the equivalent fluid pressure values should be provided on an individual-case basis by the geotechnical engineer.

Surcharge loading effects from any adjacent structures should be evaluated by the retaining wall designer. In general, structural loads within a 1:1 (horizontal to vertical) upward projection from the bottom of the proposed retaining wall footing will surcharge the proposed retaining wall. In addition to the recommended earth pressure, retaining walls adjacent to streets should be designed to resist a uniform lateral pressure of 85 pounds per square foot (psf) due to normal street vehicle traffic, if applicable. The retaining wall designer should contact the geotechnical consultant for any required geotechnical input in estimating surcharge

loads.

Retaining wall structures should be provided with appropriate drainage and appropriately waterproofed. To reduce, but not eliminate, saturation of near-surface (upper approximate 1-foot) soils in front of the retaining walls, the perforated subdrain pipe should be located as low as possible behind the retaining wall. The outlet pipe should be sloped to drain to a suitable outlet. In general, we do not recommend retaining wall outlet pipes be connected to area drains. If subdrains are connected to area drains, special care and information should be provided to homeowners to maintain these drains. Typical retaining wall drainage is illustrated in Figure 3. It should be noted that the recommended subdrain does not provide protection against seepage through the face of the wall and/or efflorescence. Efflorescence is generally a white crystalline powder (discoloration) that results when water containing soluble salts migrates over a period of time through the face of a retaining wall and evaporates. If such seepage or efflorescence is undesirable, retaining walls should be waterproofed to reduce this potential.

If retaining walls greater than 6 feet in height are proposed, the retaining wall designer should contact LGC Geotechnical for specific seismic lateral earth pressure increments based on the configuration and height of the planned retaining wall structures.

Soil bearing and lateral resistance (friction coefficient and passive resistance) are provided in Section 4.4. Earthwork considerations (temporary backcuts, backfill, compaction, etc.) for retaining walls are provided in Section 4.1 (Site Earthwork) and the subsequent earthwork related sub-sections.

4.5 Soil Corrosivity

Although not corrosion engineers (LGC Geotechnical is not a corrosion consultant), several governing agencies in Southern California require the geotechnical consultant to determine the corrosion potential of soils to buried concrete and metal facilities. We therefore present the results of our testing with regard to corrosion for the use of the client and other consultants, as they determine necessary.

Corrosion testing of near-surface bulk samples indicated a soluble sulfate content ranging from approximately 0.006 to 0.010 percent and chloride content ranging from approximately 37 to 60 parts per million (ppm). Based on Caltrans Corrosion Guidelines (Caltrans, 2021), soils are considered corrosive to structural elements if the chloride concentration is 500 ppm or greater, or the sulfate concentration is 2,000 ppm (0.2 percent) or greater. Based on test results, soils are not considered corrosive using Caltrans criteria. Note that based on minimum resistivity the soils are considered corrosive to metallic improvements. If improvements that may be susceptible to corrosion are proposed, it is recommended that further evaluation by a corrosion engineer be performed.

Based on laboratory sulfate test results, the near surface soils are designated to a class “S0” per ACI 318, Table 19.3.1.1 with respect to sulfates. Concrete in direct contact with the onsite soils can be designed according to ACI 318, Table 19.3.2.1 using the “S0” sulfate classification.

Laboratory testing may need to be performed at the completion of grading by the project corrosion engineer to further evaluate the as-graded soil corrosivity characteristics including sulfate, chloride, pH, minimum resistivity, etc. and provide design level recommendations. Accordingly, revision of the corrosion potential may be needed, should future test results differ substantially from the conditions reported herein. The client and/or other members of the development team should consider this during the design and planning phase of the project and formulate an appropriate course of action.

4.6 Control of Surface Water and Drainage Control

From a geotechnical perspective, positive drainage of surface water away from structures is very important. Water should not be allowed to pond adjacent to buildings or to flow freely down a graded slope. Per section 1804.4 of the 2022 CBC, positive drainage may be accomplished by providing drainage away from buildings at a gradient of at least 5 percent for earthen surfaces for a distance of at least 10 feet away from the face of wall. If a distance of 10 feet cannot be achieved, an alternative of a gradient of at least 5 percent to an area drain or swale having a gradient of 2 percent is acceptable. Where necessary, drainage paths may be shortened by use of area drains and collector pipes. Eave gutters are recommended and should reduce water infiltration into the subgrade soils if the downspouts are properly connected to appropriate outlets. Ultimately surface drainage and code compliance are the purview of the project civil engineer.

Planters with open bottoms adjacent to buildings should be avoided. Planters should not be designed adjacent to buildings unless provisions for drainage, such as catch basins, liners, and/or area drains, are made. Overwatering must be avoided.

Planters adjacent to a building or structure should be avoided wherever possible or be properly designed (e.g., lined with a membrane), to reduce the penetration of water into the adjacent footing subgrades and thereby reduce moisture related damage to the foundation. Planting areas at grade should be provided with appropriate positive drainage. Wherever possible, exposed soil areas should be above adjacent paved grades to facilitate drainage. Planters should not be depressed below adjacent paved grades unless provisions for drainage, such as multiple depressed area drains, are constructed. Adequate drainage gradients, devices, and curbing should be provided to prevent runoff from adjacent pavement or walks into the planting areas. Irrigation methods should promote uniformity of moisture in planters and beneath adjacent concrete flatwork. Overwatering and underwatering of landscape areas must be avoided.

Area drain inlets should be maintained and kept clear of debris in order to properly function. Homeowners should also be made aware that excessive irrigation of neighboring properties can cause seepage and moisture conditions on adjacent lots. Homeowners should be furnished with these recommendations communicating the importance of maintaining positive drainage away from structures, towards streets, when they design their improvements.

The impact of heavy irrigation or inadequate runoff gradients can create perched water conditions. This may result in seepage or shallow groundwater conditions where previously none existed. Maintaining adequate surface drainage and controlled irrigation will significantly reduce the potential for nuisance-type moisture problems. To reduce differential earth

movements such as heaving and shrinkage due to the change in moisture content of foundation soils, which may cause distress to a residential structure and associated improvements, moisture content of the soils surrounding the structure should be kept as relatively constant as possible.

Subdrains and v-ditches must be properly maintained, and their outlets kept free draining and clear of any potential obstructions. Routine maintenance should be performed, especially prior to and during the rainy season. Failure to properly maintain these elements may result in slope failures, slumps, excessive erosion, localized saturated zones, nuisance type water issues, etc.

Any future trenches excavated on a slope face for utility or irrigation lines and/or for any purpose should be properly backfilled and compacted to the slope face. Observation/testing and acceptance by the geotechnical consultant during trench backfill are recommended.

A program for the elimination of burrowing animals in both native and graded slope areas must be established and properly maintained to protect slope stability by reducing the potential for surface water to penetrate into the soil. Continuous erosion control, rodent control, and maintenance are essential to the long-term stability of all slopes.

4.7 Preliminary Asphalt Concrete Pavement Sections

The following provisional minimum asphalt concrete (AC) street sections are provided in Table 4 on the following page for Traffic Indices (TI) of 5.5 (or less) and 8.0. These sections are based on an assumed R-value of 40. These recommendations must be confirmed with R-value testing of representative near-surface soils at the completion of grading and after underground utilities have been installed and backfilled. Final pavement sections should be confirmed by the project civil engineer based upon the final design Traffic Index. The final Traffic Index is determined by the Civil Engineer or City Engineer. We are not responsible for selecting a design Traffic Index. If requested, LGC Geotechnical will provide sections for alternate TI values. The city of Ontario minimum pavement sections have been incorporated into our preliminary recommendations.

TABLE 4

Preliminary Asphalt Concrete Pavement Section Options

Assumed Traffic Index	5.5 (or less)	8.0
R -Value Subgrade	40	40
AC Thickness	4.0 inches	6.0 inches
Aggregate Base Thickness	6.0 inches	8.0 inches

Due to anticipated heavy construction traffic during installation of utilities and home construction, we recommend that the total thickness (base course and capping course) of AC be placed at essentially the same time. Allowing heavy construction traffic loading on only the base course of the AC will increase the potential for pavement distress. It should be noted that construction traffic such as concrete trucks will likely exceed traffic loading after completion of construction.

The pavement section thicknesses provided above are considered minimum thicknesses. Increasing the thickness of any of the above layers will reduce the likelihood of the pavement experiencing distress during its service life. The above recommendations assume that proper maintenance and irrigation of the areas adjacent to the roadway will occur throughout the design life of the pavement. Failure to maintain a proper maintenance and/or irrigation program may jeopardize the integrity of the pavement.

Earthwork recommendations regarding aggregate base and subgrade are provided in Section 4.1 "Site Earthwork" and the related sub-sections of this report.

4.8 Nonstructural Concrete Flatwork

Nonstructural concrete flatwork (such as walkways, private drives, patio slabs, etc.) has a potential for cracking due to changes in soil volume related to soil-moisture fluctuations. To reduce the potential for excessive cracking and lifting, concrete may be designed in accordance with the minimum guidelines outlined in Table 5. These guidelines will reduce the potential for irregular cracking and promote cracking along construction joints but will not eliminate all cracking or lifting. Thickening the concrete and/or adding additional reinforcement will further reduce cosmetic distress.

TABLE 5

Nonstructural Concrete Flatwork Guidelines for Very Low Expansion Potential

	Community Sidewalks (≤4 feet wide)	**Patios/ Walkways** (adjacent to homes or flatwork >4 feet wide)	**Private Vehicular Driveways**	**City Sidewalk Curb and Gutters**
Minimum Thickness (in.)	4 (full)	4 (full)	4 (full)	City/Agency Standard
Presoaking	Wet down prior to placing	Wet down prior to placing	Wet down prior to placing	City/Agency Standard
Reinforcement	—	No. 3 at 36 inches on centers	No. 3 at 36 inches on centers	City/Agency Standard
Thickened Edge (in.)	—	—	8 x 8	City/Agency Standard
Crack Control Joints	Saw cut or deep open tool joint to a minimum of $^1/_3$ the concrete thickness	Saw cut or deep open tool joint to a minimum of $^1/_3$ the concrete thickness	Saw cut or deep open tool joint to a minimum of $^1/_3$ the concrete thickness	City/Agency Standard
Maximum Joint Spacing	5 feet	6 feet	10 feet or quarter cut whichever is closer	City/Agency Standard

To reduce the potential for driveways to separate from the garage slab, the builder may elect to install dowels to tie these two elements together. Similarly, future homeowners should consider the use of dowels to connect flatwork to the foundation.

4.9 Geotechnical Plan Review

When available, grading, retaining wall and foundation plans should be reviewed by LGC Geotechnical in order to verify our geotechnical recommendations are implemented. Updated recommendations and/or additional fieldwork may be necessary.

4.10 Geotechnical Observation and Testing During Construction

The recommendations provided in this report are based on limited subsurface observations and geotechnical analysis. The interpolated subsurface conditions should be checked in the field during construction by a representative of LGC Geotechnical. Geotechnical observation and testing is required per Section 1705 of the 2022 California Building Code (CBC).

Geotechnical observation and/or testing should be performed by LGC Geotechnical at the following stages:

- During grading (removal bottoms, fill placement, etc.);
- During retaining wall backfill and compaction;
- During utility trench backfill and compaction;
- After presoaking building pads and other concrete-flatwork subgrades, and prior to placement of aggregate base or concrete;
- Preparation of pavement subgrade and placement of aggregate base;
- After building and wall footing excavation and prior to placing steel reinforcement and/or concrete; and
- When any unusual soil conditions are encountered during any construction operation subsequent to issuance of this report.

5.0 LIMITATIONS

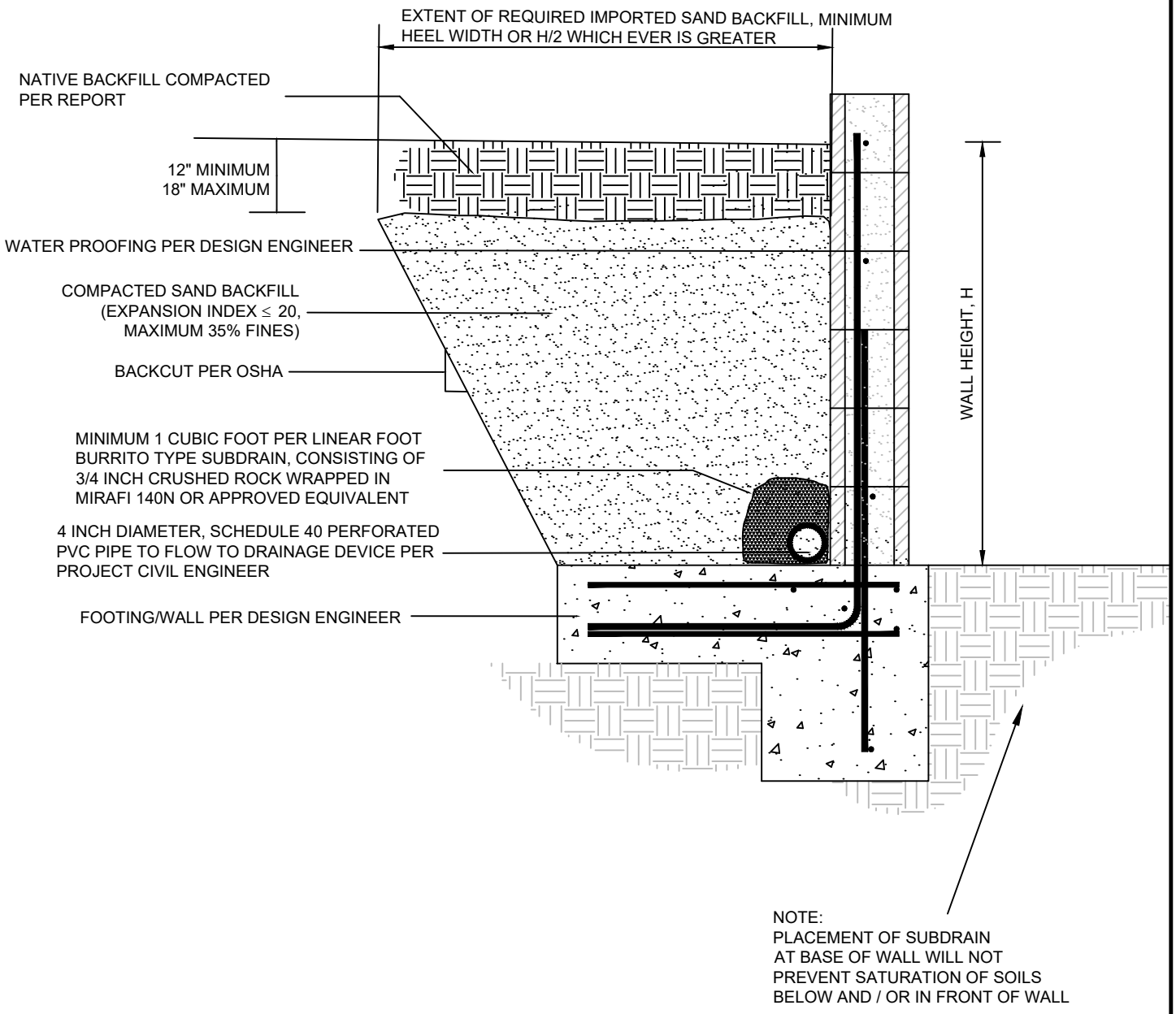
Our services were performed using the degree of care and skill ordinarily exercised, under similar circumstances, by reputable soils engineers and geologists practicing in this or similar localities. No other warranty, expressed or implied, is made as to the conclusions and professional advice included in this report.

This report is based on data obtained from limited observations of the site, which have been extrapolated to characterize the site. While the scope of services performed is considered suitable to adequately characterize the site geotechnical conditions relative to the proposed development, no practical evaluation can completely eliminate uncertainty regarding the anticipated geotechnical conditions in connection with a subject site. Variations may exist and conditions not observed or described in this report may be encountered during grading and construction.

This report is issued with the understanding that it is the responsibility of the owner, or of his/her representative, to ensure that the information and recommendations contained herein are brought to the attention of the other consultants (at a minimum the civil engineer, structural engineer, landscape architect) and incorporated into their plans. The contractor should properly implement the recommendations during construction and notify the owner if they consider any of the recommendations presented herein to be unsafe, or unsuitable.

The findings of this report are valid as of the present date. However, changes in the conditions of a site can and do occur with the passage of time, whether they be due to natural processes or the works of man on this or adjacent properties. The findings, conclusions, and recommendations presented in this report can be relied upon only if LGC Geotechnical has the opportunity to observe the subsurface conditions during grading and construction of the project, in order to confirm that our preliminary findings are representative for the site. This report is intended exclusively for use by the client, any use of or reliance on this report by a third party shall be at such party's sole risk.

In addition, changes in applicable or appropriate standards may occur, whether they result from legislation or the broadening of knowledge. Accordingly, the findings of this report may be invalidated wholly or partially by changes outside our control. Therefore, this report is subject to review and modification.



LGC Geotechnical, Inc.

FIGURE 2
Retaining Wall Backfill Detail

PROJECT NAME	Genstar, Ontario
PROJECT NO.	25040-01
ENG. / GEOL.	RLD / KTM
SCALE	Not to Scale
DATE	April 2025

Appendix A
References

APPENDIX A

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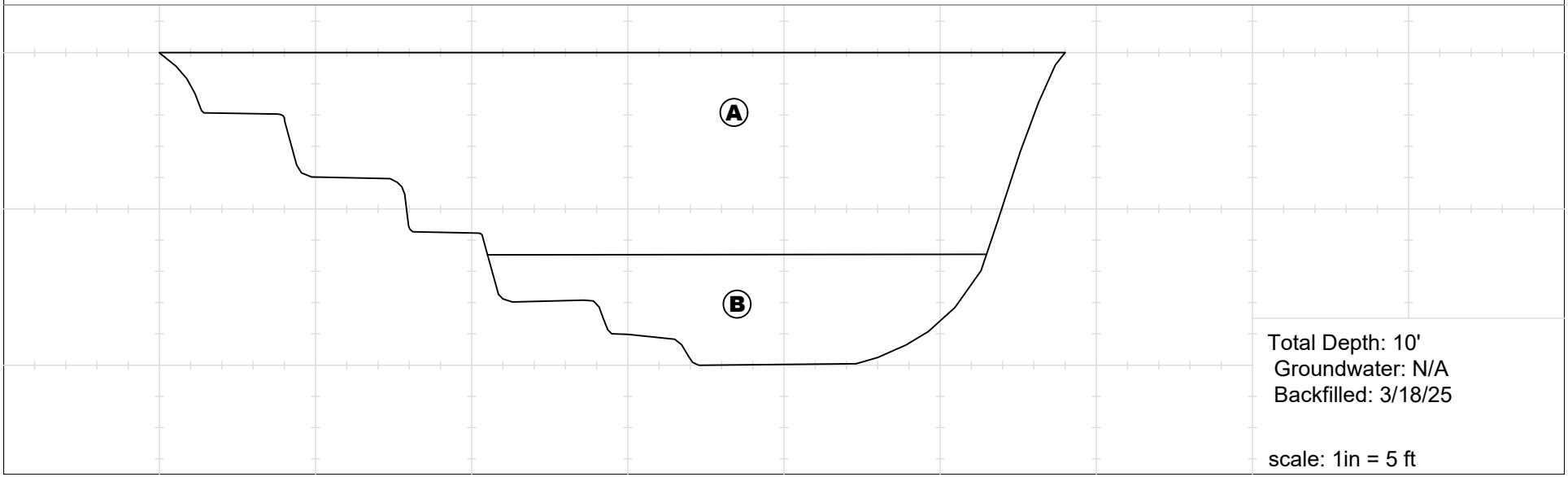
Appendix B
Subsurface Exploration Logs

2754

Project Name: Genstar, Ontario	Logged By: MJG	Trench No.: TP-1	LGC Geotechnical, Inc.
Project Number: 25040-01	Date: 3/18/2025	Engineering Properties:	
Equipment: Backhoe	Location: See Geotechnical Map		

Geologic Attitudes	Unit	SOIL DESCRIPTION:	GEOLOGIC UNIT	USCS	SAMPLE No	MOISTURE (%)	ORGANICS (%)
	A	**Artificial Fill By Others (afo)** @ 0' to 6.5' - Sandy SILT to Silty SAND with some Clayey SAND: gray with some brownish gray to olive gray, generally mottled, moist, medium dense to dense (probes firm throughout), minor detritus in upper 3', some fill lifts are visible, ~6"-8" thick, ~6" topsoil & vegetation	afo	SM	B-1 @0'-10'		
					G-1 @0'-1'	9.8	2.3
					G-2 @1'-3'	7.5	2.0
	B	**Quaternary Alluvium (Qal)** @ 6.5' to 8' - SAND: off white, slightly moist, medium dense, iron oxides stains -----Gradational contact ----- @ 8' to 10' Sandy SILT to SILT: light gray with orange mottling, slightly moist, dense (probed firm), minor porosity (pinhole) some caliche	Qal		G-3 @3'-5'	7.6	1.6

GRAPHICAL REPRESENTATION BELOW: **Elevation: 708' MSL** **Surface Slope: 0 deg.** **Trend: N-S**

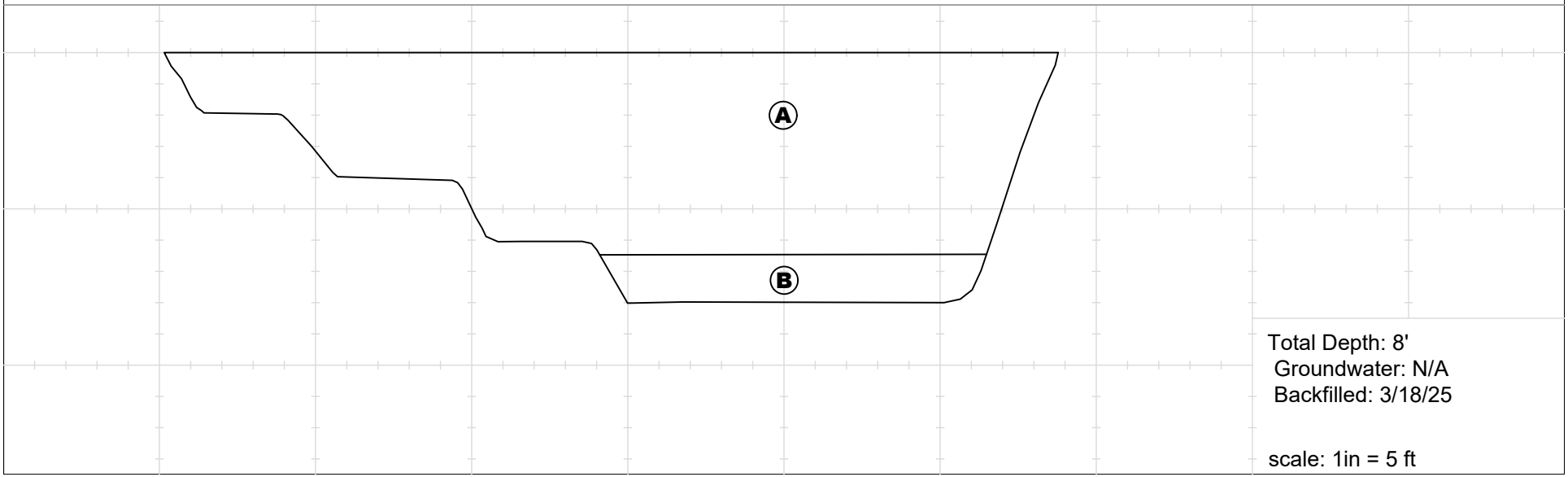


Project Name: Genstar, Ontario	Logged By: MJG	Trench No.: TP-2
Project Number: 25040-01	Date: 3/18/2025	Engineering Properties:
Equipment: Backhoe	Location: See Geotechnical Map	

LGC Geotechnical, Inc.

Geologic Attitudes	Unit	SOIL DESCRIPTION:	GEOLOGIC UNIT	USCS	SAMPLE No	MOISTURE (%)	ORGANICS (%)
	A	**Artificial Fill By Others (afo)** @ 0' to 6.5' - Silty SAND with trace Clay: light gray to brownish gray, moist, slightly moist and some dry areas; dense, probes <1" (firm and unyielding), misc gravel <¾", minor detritus, few granitic cobbles	afo	SM	G-1 @0'-2'	6.9	2.2
					G-2 @2'-4'	6.4	2.1
	B	**Quaternary Alluvium (Qal)** @ 6.5' to 8' - Sandy SILT: gray and orange mottled, slightly moist, dense, probes firm, minor pinhole porosity, some subrounded gravel	Qal		G-3 @4'-6'	3.7	1.8
					G-4 @6'-6.5	7.5	1.9

GRAPHICAL REPRESENTATION BELOW: **Elevation: 707' MSL** **Surface Slope: 0 deg.** **Trend: N-S**

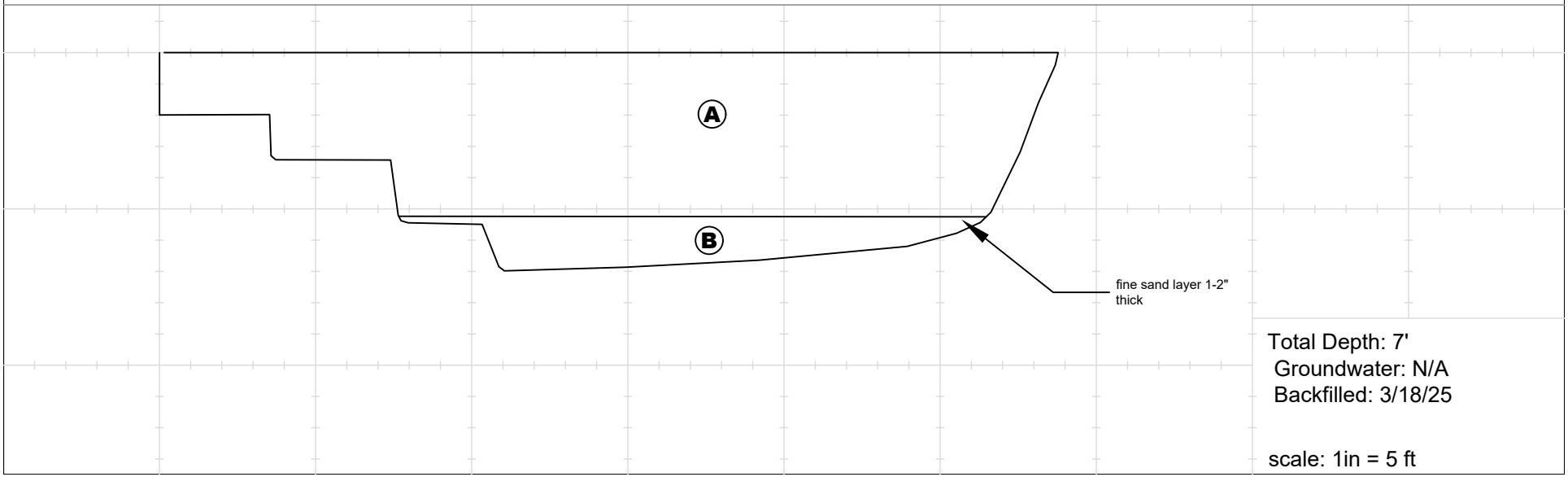


2756

Project Name: Genstar, Ontario	Logged By: MJG	Trench No.: TP-3	LGC Geotechnical, Inc.
Project Number: 25040-01	Date: 3/18/2025	Engineering Properties:	
Equipment: Backhoe	Location: See Geotechnical Map		

Geologic Attitudes	Unit	SOIL DESCRIPTION:	GEOLOGIC UNIT	USCS	SAMPLE No	MOISTURE (%)	ORGANICS (%)
	A	**Artificial Fill By Others (afo)** @ 0' to 5.25' - Silty Clayey SAND: Gray to grayish brown, slightly moist to moist, medium dense in upper 2' then dense below, probes firm, minor detritus, scattered gravel ($\frac{3}{4}$" to 2")	afo	SM	B-1 @0'-7'		
					G-1 @0'-1'	8.3	1.8
				SC/SM	G-2 @1'-2'	9.7	1.9
	B	**Quaternary Alluvium (Qal)** @ 5.25' to 7' - Poorly Graded SAND to Sandy SILT: gray, slightly moist, dense, probes firm, some iron oxide	Qal	SM	G-3 @2'-3'	9.0	1.8
					G-4 @3'-5.25'	7.3	1.6

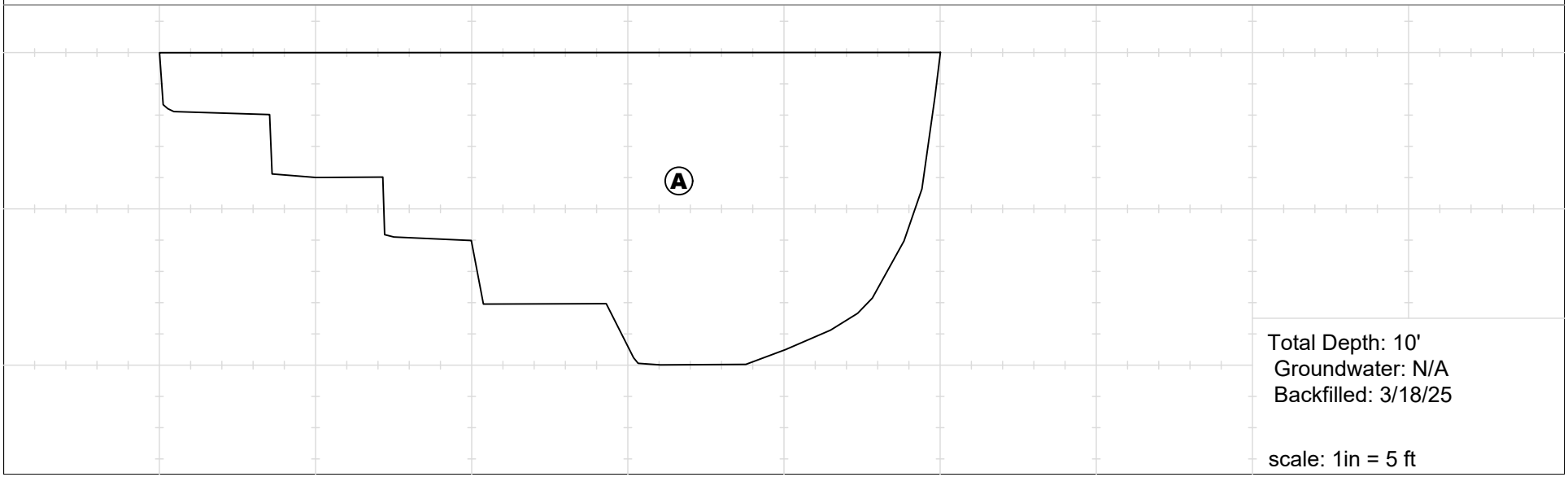
GRAPHICAL REPRESENTATION BELOW: **Elevation: 704' MSL** **Surface Slope: 0 deg.** **Trend: W-E**



Project Name: Genstar, Ontario	Logged By: MJG	Trench No.: TP-4
Project Number: 25040-01	Date: 3/18/2025	Engineering Properties:
Equipment: Backhoe	Location: See Geotechnical Map	

Geologic Attitudes	Unit	SOIL DESCRIPTION:	GEOLOGIC UNIT	USCS	SAMPLE No	MOISTURE (%)	ORGANICS (%)
	A	**Artificial Fill By Others (afo)** @ 0' to 10' - Silty SAND with some Sandy SILT: brownish gray, slightly moist, dense to very dense (can barely probe) misc gravel, minor detritus	afo	SM	B-1 @0'-10'		
					G-1 @0'-2'	7.8	1.5
					G-2 @2'-4'	4.9	1.6
					G-3 @4'-8'	7.2	2.3
					G-4 @8'-10'	6.2	1.7

GRAPHICAL REPRESENTATION BELOW: **Elevation: 706' MSL** **Surface Slope: 0 deg.** **Trend: E-W**



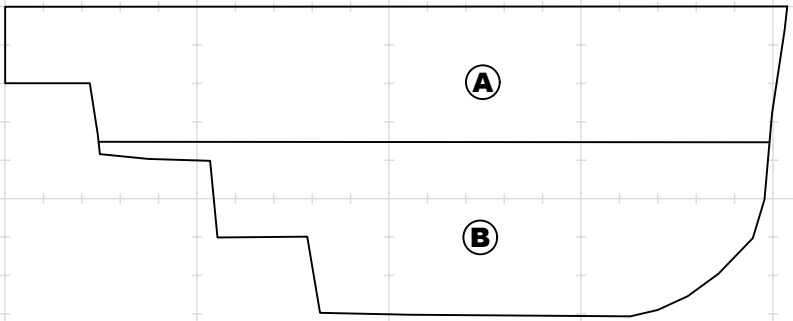
2758

Project Name: Genstar, Ontario	Logged By: MJG	Trench No.: TP-5
Project Number: 25040-01	Date: 3/18/2025	Engineering Properties:
Equipment: Backhoe	Location: See Geotechnical Map	

LGC Geotechnical, Inc.

Geologic Attitudes	Unit	SOIL DESCRIPTION:	GEOLOGIC UNIT	USCS	SAMPLE No	MOISTURE (%)	ORGANICS (%)
	A	**Artificial Fill By Others (afo)** @ 0' to 3.5' - Silty SAND with Sandy SILT: brownish gray, moist to wet, medium dense (probes 2" to 3")	afo	SM	G-1 @0'-2'	8.5	2.1
					G-2 @2'-3.5'	15.7	2.2
	B	**Quaternary Alluvium (Qal)** @ 3.5' to 8' - Silty SAND: gray with orange mottled, slightly moist, medium dense (probes 2" to 3")	Qal				

GRAPHICAL REPRESENTATION BELOW: **Elevation: 701' MSL** **Surface Slope: 0 deg.** **Trend: E-W**



Total Depth: 8'
Groundwater: N/A
Backfilled: 3/18/25

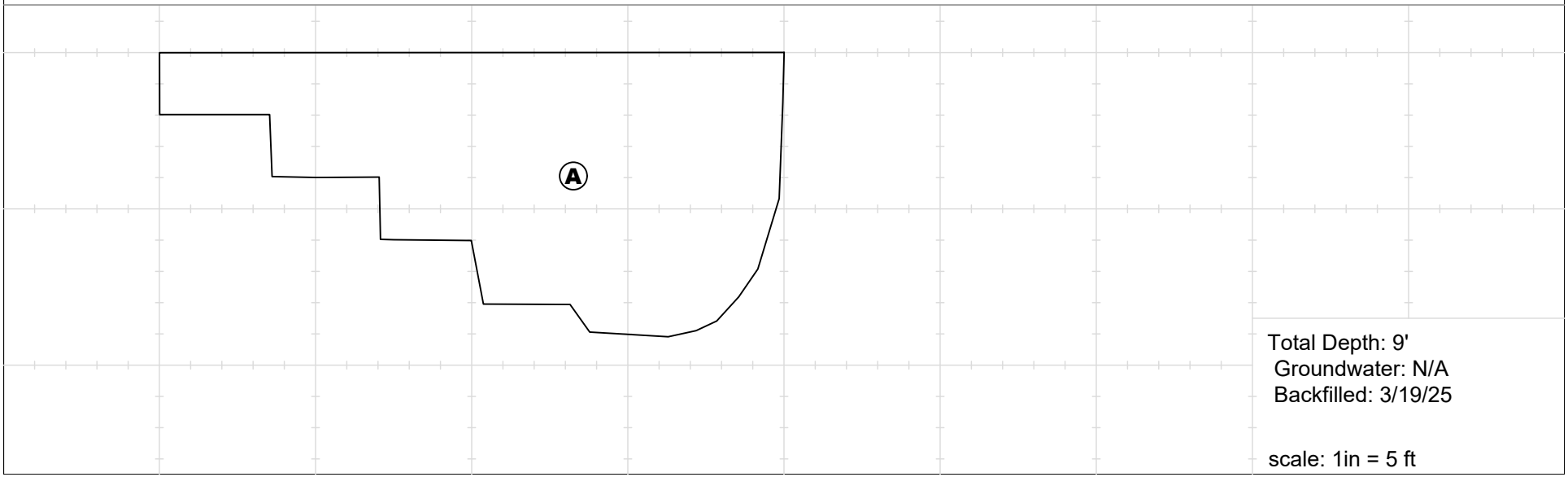
scale: 1in = 5 ft

2759

Project Name: Genstar, Ontario	Logged By: MJG	Trench No.: TP-6	LGC Geotechnical, Inc.
Project Number: 25040-01	Date: 3/19/2025	Engineering Properties:	
Equipment: Backhoe	Location: See Geotechnical Map		

Geologic Attitudes	Unit	SOIL DESCRIPTION:	GEOLOGIC UNIT	USCS	SAMPLE No	MOISTURE (%)	ORGANICS (%)
	A	**Artificial Fill By Others (afo)** @ 0' to 9' - Silty SAND with some Clayey SAND: brownish gray, slightly moist, dense, probes firm & unyielding, scattered gravel, minor detritus	afo	SM	G-1 @0'-2'	6.0	1.6
					G-2 @2'-4'	4.4	2.0
					G-3 @4'-6'	6.7	1.6
				SC	G-4 @6'-9'	6.7	1.5

GRAPHICAL REPRESENTATION BELOW: **Elevation: 705' MSL** **Surface Slope: 0 deg.** **Trend: W-E**

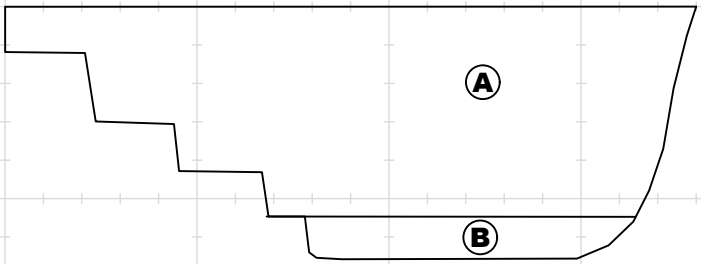


2760

Project Name: Genstar, Ontario	Logged By: MJG	Trench No.: TP-7	LGC Geotechnical, Inc.
Project Number: 25040-01	Date: 3/19/2025	Engineering Properties:	
Equipment: Backhoe	Location: See Geotechnical Map		

Geologic Attitudes	Unit	SOIL DESCRIPTION:	GEOLOGIC UNIT	USCS	SAMPLE No	MOISTURE (%)	ORGANICS (%)
	A	**Artificial Fill By Others (afo)** @ 0' to 5.5' - Silty to Clayey SAND: brownish gray, slightly moist, dense probes firm & unyielding, minor detritus, scattered fine gravel	afo	SC	G-1 @0'-2'	7.9	1.9
				SM	G-2 @2'-4'	5.1	1.9
	B	**Quaternary Alluvium (Qal)** @ 5.5' to 6.5' - Sandy SILT: gray with iron oxide mottled, slightly moist, dense/very dense (probes firm & unyielding), indurated, minor pinhole porosity	Qal	SC/SM	G-3 @4'-5.5'	6.0	1.4

GRAPHICAL REPRESENTATION BELOW: **Elevation: 701' MSL** **Surface Slope: 0 deg.** **Trend: W-E**



Total Depth: 6.5'
Groundwater: N/A
Backfilled: 3/19/25

scale: 1in = 5 ft

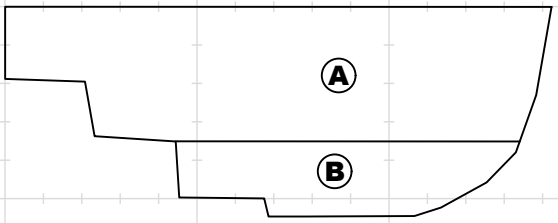
2761

Project Name: Genstar, Ontario	Logged By: MJG	Trench No.: TP-8
Project Number: 25040-01	Date: 3/19/2025	Engineering Properties:
Equipment: Backhoe	Location: See Geotechnical Map	

LGC Geotechnical, Inc.

Geologic Attitudes	Unit	SOIL DESCRIPTION:	GEOLOGIC UNIT	USCS	SAMPLE No	MOISTURE (%)	ORGANICS (%)
	A	**Artificial Fill By Others (afo)** @ 0' to 3.5' - Silty SAND: brownish gray, slightly moist, dense (probes firm), scattered gravel, upper 6" is topsoil, rootlets & grass vegetation	afo	SM	G-1 @0'-2'	6.9	1.5
					G-2 @2'-3.5'	6.2	1.4
	B	**Quaternary Alluvium (Qal)** @ 3.5' to 5.5' - Silty SAND to Sandy SILT: gray with orange mottled, slightly moist, dense (probes firm)	Qal	SM/ML			

GRAPHICAL REPRESENTATION BELOW: **Elevation: 701' MSL** **Surface Slope: 0 deg.** **Trend: E-W**



Total Depth: 5.5'
Groundwater: N/A
Backfilled: 3/19/25

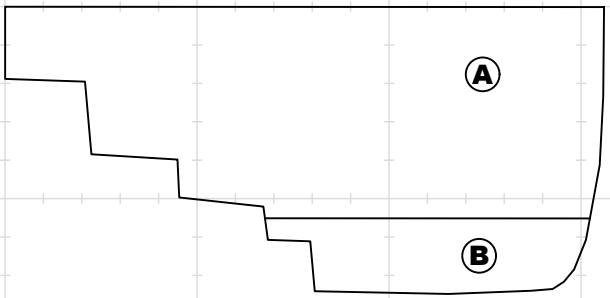
scale: 1in = 5 ft

2762

Project Name: Genstar, Ontario	Logged By: MJG	Trench No.: TP-9	LGC Geotechnical, Inc.
Project Number: 25040-01	Date: 3/19/2025	Engineering Properties:	
Equipment: Backhoe	Location: See Geotechnical Map		

Geologic Attitudes	Unit	SOIL DESCRIPTION:	GEOLOGIC UNIT	USCS	SAMPLE No	MOISTURE (%)	ORGANICS (%)
	A	**Artificial Fill By Others (afo)** @ 0' to 5.5' - Silty SAND with some Sandy SILT: light brownish gray, slightly moist, dense (probes firm), scattered gravel, minor detritus	afo	SM	G-1 @0'-2'	6.8	2.0
					G-2 @2'-4'	4.9	2.1
					G-3 @4'-5.5'	6.3	1.9
	B	**Quaternary Alluvium (Qal)** @ 5.5' to 7.5' - Gravelly SAND: gray, loose to medium dense (probes ~3" to 6"), rounded to subrounded, friable, fine sand & gravel, up to 3", moderate to poor sorting	Qal	GM			

GRAPHICAL REPRESENTATION BELOW: **Elevation: 699' MSL** **Surface Slope: 0 deg.** **Trend: E-W**



Total Depth: 7.5'
Groundwater: N/A
Backfilled: 3/19/25

scale: 1in = 5 ft

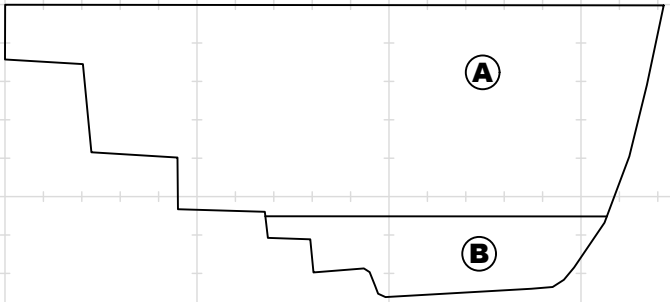
2763

Project Name: Genstar, Ontario	Logged By: MJG	Trench No.: TP-10
Project Number: 25040-01	Date: 3/19/2025	Engineering Properties:
Equipment: Backhoe	Location: See Geotechnical Map	

LGC Geotechnical, Inc.

Geologic Attitudes	Unit	SOIL DESCRIPTION:	GEOLOGIC UNIT	USCS	SAMPLE No	MOISTURE (%)	ORGANICS (%)
	A	**Artificial Fill By Others (afo)** @ 0' to 5.5' - Silty SAND: light brownish gray, slightly moist to wet, dense (probes firm & unyielding), scattered gravel, minor detritus	afo	SM	G-1 @0'-2'	30.3	1.9
					G-2 @2'-4'	4.8	1.8
					G-3 @4'-5.5'	5.8	2.5
	B	**Quaternary Alluvium (Qal)** @ 5.5' to 7.5' - Gravelly SAND: gray, slightly moist, medium dense ,friable, rounded to subrounded, moderate to poor sorting, scattered cobbles up to 4"	Qal	GM			

GRAPHICAL REPRESENTATION BELOW: **Elevation: 701' MSL** **Surface Slope: 0 deg.** **Trend: W-E**



Total Depth: 7.5'
Groundwater: N/A
Backfilled: 3/19/25

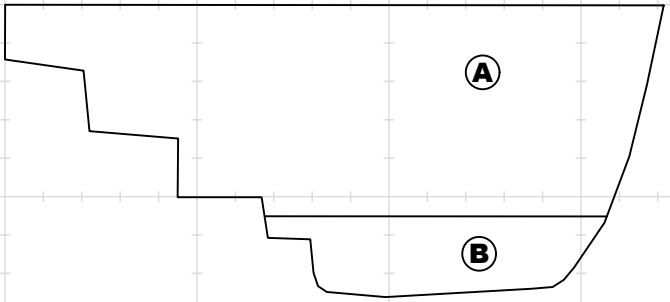
scale: 1in = 5 ft

2764

Project Name: Genstar, Ontario	Logged By: MJG	Trench No.: TP-11	LGC Geotechnical, Inc.
Project Number: 25040-01	Date: 3/19/2025	Engineering Properties:	
Equipment: Backhoe	Location: See Geotechnical Map		

Geologic Attitudes	Unit	SOIL DESCRIPTION:	GEOLOGIC UNIT	USCS	SAMPLE No	MOISTURE (%)	ORGANICS (%)
	A	Artificial Fill By Others (afo) @ 0' to 5.5' - Silty SAND: brownish gray, slightly moist to moist, dense, lenses of gravel & sand (gray)	afo	SM	G-1 @0'-2'	5.9	1.9
					G-2 @2'-4'	9.6	4.8*
					G-3 @4'-5.5'	13.2	1.8
	B	Quaternary Alluvium (Qal) @ 5.5' to 7.5' - Gravelly SAND: gray, slightly moist, medium dense (friable), moderate to poor sorting	Qal	GM			
		*Material to be evaluated during future rough grading					

GRAPHICAL REPRESENTATION BELOW: **Elevation: 704' MSL** **Surface Slope: 0 deg.** **Trend: N-S**



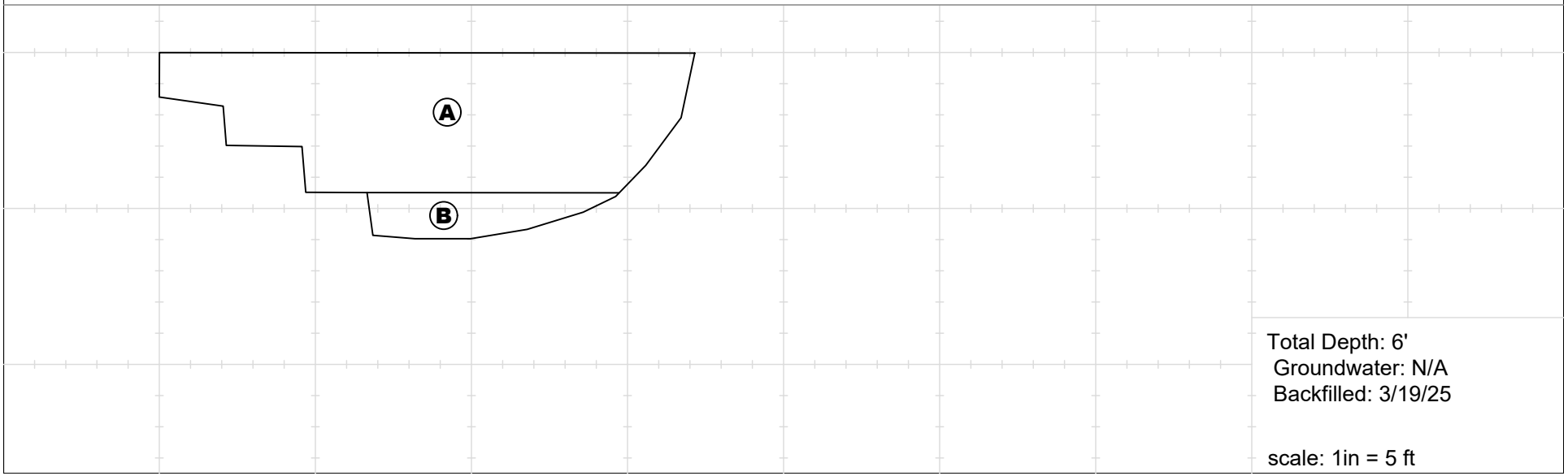
Total Depth: 7.5'
Groundwater: N/A
Backfilled: 3/19/25

scale: 1in = 5 ft

Project Name: Genstar, Ontario	Logged By: MJG	Trench No.: TP-12	LGC Geotechnical, Inc.
Project Number: 25040-01	Date: 3/19/2025	Engineering Properties:	
Equipment: Backhoe	Location: See Geotechnical Map		

Geologic Attitudes	Unit	SOIL DESCRIPTION:	GEOLOGIC UNIT	USCS	SAMPLE No	MOISTURE (%)	ORGANICS (%)
	A	**Artificial Fill By Others (afo)** @ 0' to 4.5' - Silty SAND: light brownish gray, slightly moist to dry, dense (probes firm & unyielding), minor detritus, upper 6" is topsoil & vegetation, rootlets	afo	SM	B-1 @0'-6'		
					G-1 @0'-2'	5.1	1.8
					G-2 @2'-4.5'	3.8	2.2
	B	**Quaternary Alluvium (Qal)** @ 4.5' to 6' - Gravelly SAND: gray, slightly moist, medium dense (friable) probes ~5", rounded to subrounded, moderate to poor sorting	Qal	GM			

GRAPHICAL REPRESENTATION BELOW: **Elevation: 699' MSL** **Surface Slope: 0 deg.** **Trend: W-E**

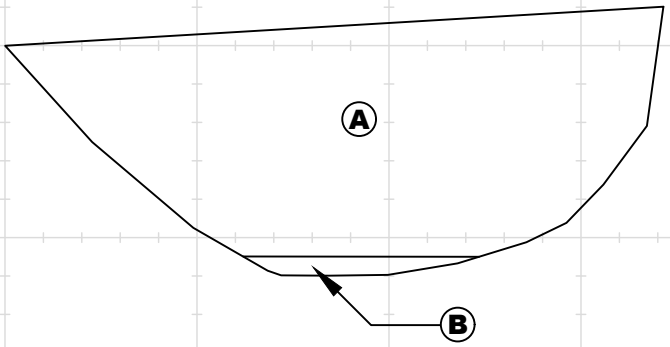


2766

Project Name: Genstar, Ontario	Logged By: MJG	Trench No.: TP-13	LGC Geotechnical, Inc.
Project Number: 25040-01	Date: 3/20/2025	Engineering Properties:	
Equipment: Backhoe	Location: See Geotechnical Map		

Geologic Attitudes	Unit	SOIL DESCRIPTION:	GEOLOGIC UNIT	USCS	SAMPLE No	MOISTURE (%)	ORGANICS (%)
	A	**Artificial Fill By Others (afo)** @ 0' to 5.5' - Silty SAND: light gray, slightly moist with wet and dry, loose in upper 3', probes easily, below 3' fill becomes medium dense, mottled brown to dark brown, fill quality is poor, possible mottled organics in sample G-3	afo	SM	B-1 @0'-5'		
					G-1 @0'-2'	4.4	2.2
					G-2 @2'-4'	5.9	2.7
				CL/ML	G-3 @4'-5'	17.5	8.8*
	B	**Quaternary Alluvium (Qal)** @ 5.5' to 6' - Gravelly SAND: gray, slightly moist, medium dense, rounded to subrounded, some coarse sand	Qal	GM			
		*Material to be evaluated during future rough grading					

GRAPHICAL REPRESENTATION BELOW: **Elevation: 706' MSL** **Surface Slope: 11 deg.** **Trend: N-S**



Total Depth: 6'
Groundwater: N/A
Backfilled: 3/20/25

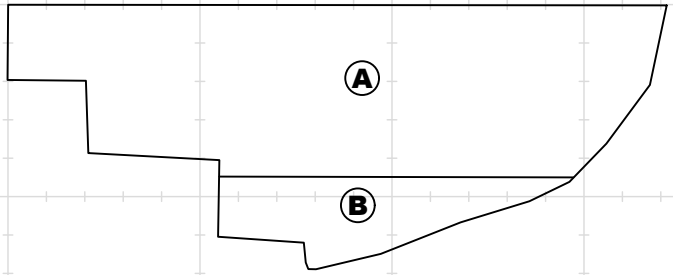
scale: 1in = 5 ft

Project Name: Genstar, Ontario	**Logged By: MJG**	**Trench No.: TP-14**
Project Number: 25040-01	**Date: 3/20/2025**	**Engineering Properties:**
Equipment: Backhoe	**Location: See Geotechnical Map**	

LGC Geotechnical, Inc.

Geologic Attitudes	Unit	SOIL DESCRIPTION:	GEOLOGIC UNIT	USCS	SAMPLE No	MOISTURE (%)	ORGANICS (%)
	A	**Artificial Fill By Others (afo)** **@ 0' to 4.5' - Silty SAND: light gray to light gray brown, dry to slightly moist, medium dense to dense (probes firm <2"), minor detritus, some gravel**	afo	SM	G-1 @0'-2'	4.1	2.1
					G-2 @2'-4.5'	6.4	1.5
	B	**Quaternary Alluvium (Qal)** **@ 4.5' to 7' - Sandy SILT to Silty SAND: gray with orange mottling, slightly moist, dense (probes firm), white mineralization, pinhole porosity**	Qal	ML/SM			

GRAPHICAL REPRESENTATION BELOW: **Elevation: 703' MSL** **Surface Slope: ~2.5-5 deg.** **Trend: W-E**



Total Depth: 7'
Groundwater: N/A
Backfilled: 3/20/25

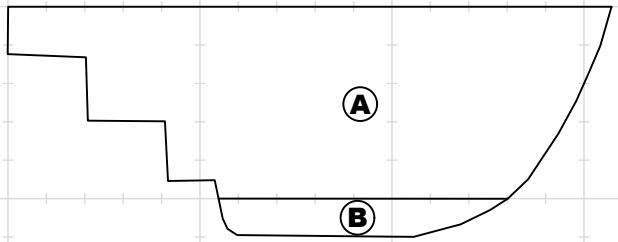
scale: 1in = 5 ft

2768

Project Name: Genstar, Ontario	Logged By: MJG	Trench No.: TP-15	LGC Geotechnical, Inc.
Project Number: 25040-01	Date: 3/20/2025	Engineering Properties:	
Equipment: Backhoe	Location: See Geotechnical Map		

Geologic Attitudes	Unit	SOIL DESCRIPTION:	GEOLOGIC UNIT	USCS	SAMPLE No	MOISTURE (%)	ORGANICS (%)
	A	**Artificial Fill By Others (afo)** @ 0' to 5' - Silty to Clayey SAND: light brownish gray, slightly moist, dense (probes firm), scattered gravel, upper 6" is topsoil, vegetation/rootlets	afo	SC/SM	G-1 @0'-2'	5.3	1.5
				SM	G-2 @2'-4'	10.7	1.5
					G-3 @4'-5'	7.3	1.2
	B	**Quaternary Alluvium (Qal)** @ 5' to 6' - Sandy SILT: gray with orange mottled, slightly moist, dense (probes firm), some white mineralization, minor pinhole porosity	Qal	ML			

GRAPHICAL REPRESENTATION BELOW: **Elevation: 699' MSL** **Surface Slope: 0 deg.** **Trend: N-S**



Total Depth: 6'
Groundwater: N/A
Backfilled: 3/20/25

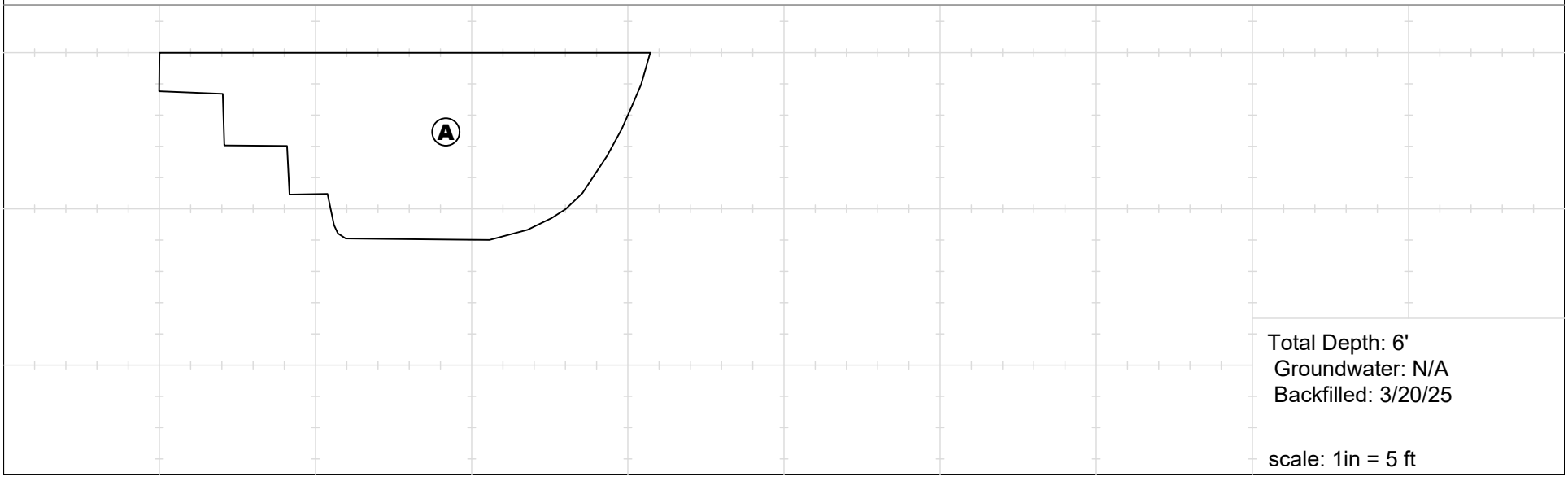
scale: 1in = 5 ft

2769

Project Name: Genstar, Ontario	Logged By: MJG	Trench No.: TP-16	LGC Geotechnical, Inc.
Project Number: 25040-01	Date: 3/20/2025	Engineering Properties:	
Equipment: Backhoe	Location: See Geotechnical Map		

Geologic Attitudes	Unit	SOIL DESCRIPTION:	GEOLOGIC UNIT	USCS	SAMPLE No	MOISTURE (%)	ORGANICS (%)
	A	**Artificial Fill By Others (afo)** @ 0' to 1' - Silty SAND: reddish brown, slightly moist, roots at surface, (~2" of vegetation) @ 1' to 6' - Silty SAND: light gray, slightly moist, dense (probes firm & unyielding), minor detritus, scattered gravel	afo	SM	G-1 @0'-2' G-2 @2'-4' G-3 @4'-6'	6.3 5.5 7.9	1.7 1.5 1.5

GRAPHICAL REPRESENTATION BELOW: **Elevation: 702' MSL** **Surface Slope: 0 deg.** **Trend: S-N**



EXPLORATION LOG

Project: Ontario Legacy		Boring No.:	B-1
Location: NE of Cleveland Ave & Bellegrave Ave., Ontario		Elevation:	702 ft
Job No.: 322-05	Client: Armada LLC	Date:	6/7/05
Drill Method: Hollow-Stem Auger	Driving Weight: 140 lbs / 30 in	Logged By:	EG

Depth (Feet)	Lithology	Material Description	Water	Samples: Blows	Samples: Core	Samples: Bulk	Laboratory Tests: Moisture Content (%)	Laboratory Tests: Dry Density (pcf)	Laboratory Tests: Other Lab Tests
		ALLUVIUM (Qal)							
		Silty Sand (SM): Light brown; dry upper foot becomes slightly moist below; loose to medium dense; fine- to medium-grained sand.		5			9.5	114.5	
				11					
		Sandy Silt (ML): Olive; moist; stiff; fine-grained sand; some clay; some carbonate stringers.		12					
5		Silty Sand (SM): Olive brown; moist; medium dense; fine- to medium-grained sand with some coarse sand; slightly micaceous.		5			7.1	110.5	CON
				5					
		Clayey Sand (SC): Olive; moist; dense; fine-grained sand; some carbonates; trace of rootlets; low plasticity; zones of Silt (ML) and Silty Sand (SM).		12					
				11			17.5	111.4	
				18					
				21					
10		Silty Sand (SM): Olive brown; moist; medium dense to dense; fine-grained sand; some iron oxide staining.		8			11.2	102.4	
				15					
				19					
15		Silty Sand with Gravel (SM): Olive brown; moist; dense to very dense; fine- to coarse-grained sand; subrounded gravel up to 1" diameter; ~ 20% gravel.		19			4.3	103.3	
				28					
				30					
20		Sand and Gravel (SW-GW): Reddish-yellow; moist; very dense to hard; fine- to coarse-grained sand; subrounded gravel up to 1 1/2" diameter.		50-3"			1.4	116.4	
25		Sand with Gravel (SP): Gray; slightly moist; very dense; fine- to medium-grained sand with some coarse sand; gravel ~ 30-40%.		21					
				29					
				30					
		Total Depth = 26.5 feet No Groundwater Borehole backfilled with soil cuttings.							

EXPLORATION LOG - V3 322-05.GPJ PETRA.GDT 7/8/05

PLATE A-1

Petra Geotechnical, Inc.

EXPLORATION LOG

Project: Ontario Legacy			Boring No.: B-2
Location: NE of Cleveland Ave & Bellegrave Ave., Ontario			Elevation: 712 ft
Job No.: 322-05	Client: Armada LLC		Date: 6/7/05
Drill Method: Hollow-Stem Auger	Driving Weight: 140 lbs / 30 in		Logged By: EG

Depth (Feet)	Lithology	Material Description	Water	Samples: Blows	Samples: Core	Samples: Bulk	Laboratory Tests: Moisture Content (%)	Laboratory Tests: Dry Density (pcf)	Laboratory Tests: Other Lab Tests
		ALLUVIUM (Qal)							
		Silty Sand (SM): Brown to light brown; dry upper foot becomes slightly moist below; loose to medium dense; fine- to medium-grained sand.		6			9.6	113.9	MAX
		@ 2.0 feet: Brown; moist; medium dense; fine-grained sand; trace of rootlets; slightly micaceous.		7					SO4
				9					pH CL
5		Silty Sand (SM): Brown; moist; medium dense to dense; fine-grained sand with some medium sand; slightly micaceous.		6			14.7	108.7	RES
				9					CON
				18					
		Silty Sand (SM): Olive brown; very moist; dense; fine- to medium-grained sand; some iron oxide staining; slightly micaceous.		9			8.3	98.4	
10				13					
				16					
		Sand with Gravel (SP): Gray to reddish-yellow; slightly moist; dense to very dense; fine- to medium-grained sand with some coarse sand; subrounded gravel ~ 20%; micaceous.		18			1.9	95.8	
				25					
				32					
15		Same as above; increase in gravel content ~ 30-40%.		9			1.0	122.8	
				15					
				30					
20		Silty Sand (SM): Mottled gray - reddish brown; moist; dense; fine-grained sand; slightly micaceous; silt ~ 30-40%.		12			8.2	98.9	
				25					
				25					
25		Silty Sand (SM): Olive gray; moist; medium dense to dense; fine-grained sand; micaceous.		6					
				7					
				11					

EXPLORATION LOG - V3 322-05.GPJ PETRA.GDT 7/13/05

PLATE A-2

Petra Geotechnical, Inc.

EXPLORATION LOG

Project: Ontario Legacy			Boring No.: B-2
Location: NE of Cleveland Ave & Bellegrave Ave., Ontario			Elevation: 712 ft
Job No.: 322-05	Client: Armada LLC		Date: 6/7/05
Drill Method: Hollow-Stem Auger	Driving Weight: 140 lbs / 30 in		Logged By: EG

Depth (Feet)	Lithology	Material Description	Water	Samples: Blows	Samples: Core	Samples: Bulk	Laboratory Tests: Moisture Content (%)	Laboratory Tests: Dry Density (pcf)	Laboratory Tests: Other Lab Tests
		Clayey Sand (SC): Yellowish-brown; moist; medium dense to dense; fine-grained sand; zones of Sandy Clay (CL): gray, very moist, stiff.		7 9 13			27.1	92.1	
35		Silty Sand with Clay (SM): Reddish-brown; moist; dense; fine-grained sand; abundance of silt.		8 11 16					
40		Sandy Clay (CL): Brownish-gray; very moist to wet; firm to stiff; fine-grained sand.		7 14 19			25.4	95.8	
45		Clayey Sand (SC): Light reddish-brown; moist to very moist; dense; fine-grained sand; slightly micaceous.		15 17 15					
50		Silty Sand (SM): Light brown; slightly moist; very dense; fine-grained sand; micaceous.		28 50			5.7	107.6	
		Total Depth = 51.0 feet No Groundwater Borehole backfilled with soil cuttings.							

EXPLORATION LOG - VS 322-05.GPJ PETRA.GDT 7/13/05

PLATE A-3

Petra Geotechnical, Inc.

EXPLORATION LOG

Project: Ontario Legacy			Boring No.: B- 4
Location: NE of Cleveland Ave & Bellegrave Ave., Ontario			Elevation: 705 ft
Job No.: 322-05	Client: Armada LLC		Date: 6/7/05
Drill Method: Hollow-Stem Auger	Driving Weight: 140 lbs / 30 in		Logged By: EG

Depth (Feet)	Lithology	Material Description	Water	Samples: Blows	Samples: Core	Samples: Bulk	Laboratory Tests: Moisture Content (%)	Laboratory Tests: Dry Density (pcf)	Laboratory Tests: Other Lab Tests
		ALLUVIUM (Qal)							
		Silty Sand (SM): Brown; dry (upper foot) to moist; loose to medium dense; fine-grained sand with some medium sand; slightly porous; trace of rootlets; slightly micaceous.		7			8.5	119.3	
				8					
				9					
		Silty Sand (SM): Brown; moist; medium dense; fine- to coarse-grained sand; trace of rootlets; slightly micaceous.		7			12.8	111.0	CON
5				9					
				17					
		Sand (SP): Yellowish-brown; moist; dense; fine-grained sand; micaceous.		10			3.1	99.9	
				12					
				13					
10		Clayey Sand (SC): Olive brown; very moist; medium dense to dense; fine-grained sand; some silt; some carbonate stringers; zones of Sandy Clay (CL).		5			13.3	113.7	
				10					
				12					
15		Silty Sand (SM): Yellowish-brown to brown; moist; dense to very dense; fine- to medium-grained sand with some coarse sand; some carbonate stringers; slightly micaceous; zones of Silt (ML): olive, very moist, stiff.		12			10.4	114.1	
				22					
				35					
20		Silty Sand (SM): Mottled reddish brown - gray; very moist; dense; fine-grained sand; some clay; zones of Sand (SP): yellowish gray, moist, dense, fine-grained sand.		14			16.7	106.5	
				11					
				13					
25		Silty Sand (SM): Olive; very moist; medium dense to dense; fine-grained sand; micaceous; zones of Silt (ML).		8					
				11					
				14					
		Total Depth = 26.5 feet No Groundwater Borehole backfilled with soil cuttings.							

EXPLORATION LOG - V3 SIZE-BLSP.J PETRA.GDT 7/8/05

PLATE A-5

Petra Geotechnical, Inc.

Appendix C
Field and Laboratory Test Results

APPENDIX C

Laboratory Test Results

Samples collected by PSE that are considered representative of site conditions were generally tested in accordance with American Society for Testing and Materials (ASTM) procedures, where applicable. The following summary is a brief outline of the test type and a table summarizing the test results.

Expansion Index: The expansion potential of selected representative samples was evaluated by the Expansion Index Test per ASTM D4829.

Sample Location	Expansion Index	Expansion Potential*
TP-1 (B-1)	4	Very Low
TP-4 (B-1)	5	Very Low
TP-12 (B-1)	2	Very Low

*Per ASTM D 4829

Maximum Density Tests: The maximum dry density and optimum moisture content of materials were determined in accordance with ASTM Test Method D1557. The results of these tests are presented in the table below.

Sample Location (Soil Type)	Sample Description	Maximum Dry Density (pcf)	Optimum Moisture Content (%)
TP-1 (B-1); "1"	Pale Brown Silty Sand	125.5	11.5
TP-4 (B-1); "4"	Pale Brown Silty Sand	127.5	9.5
TP-12 (B-1); "12"	Pale Brown Silty Sand	129.5	8.5

Organic Content: The organic content of selected samples was determined by standard ASTM D 2974 (Test Methods A & C). Results of organic content testing are presented on Test Pit logs, Appendix B.

Laboratory Testing Procedures and Test Results

Chloride Content: Chloride content was tested in accordance with Caltrans Test Method (CTM) 422. The results are presented below.

Sample Location	Chloride Content (% by Weight)
TP-1 (B-1)	0.004
TP-4 (B-1)	0.004
TP-12 (B-1)	0.006

Soluble Sulfates: The soluble sulfate contents of selected samples were determined by standard geochemical methods (CTM 417). The soluble sulfate content is used to determine the appropriate cement type and maximum water-cement ratios. The test results are presented in the table below.

Sample Location/Number	Sulfate Content (% by Weight)
TP-1 (B-1)	0.008
TP-4 (B-1)	0.010
TP-12 (B-1)	0.006

Appendix B
Explanation and Summary of Field Density Test Results

Test No.	Test Method	Test Date	Test of	Tech	Test Location	Test Elev. (feet)	Soil Type	Dry Density (pcf) Field	Moisture Content (%) Field	Relative Compaction (%)	Remarks
Test Pits											
1	N	3/18/2025	CF	CMR	TP1	-2	4	116.8	11.1	91	
2	N	3/18/2025	CF	CMR	TP2	-4	4	115.0	10.1	90	
3	N	3/18/2025	CF	CMR	TP2	-2	1	113.3	10.9	90	
4	N	3/18/2025	CF	CMR	TP4	-8	1	113.3	13.4	90	
5	N	3/18/2025	CF	CMR	TP3	-1	1	105.9	10.8	84	F
6	N	3/18/2025	CF	CMR	TP4	-6	1	115.3	13.4	91	
7	N	3/18/2025	CF	CMR	TP4	-4	4	115.0	12.1	90	
8	N	3/18/2025	CF	CMR	TP5	-2	1	108.1	17.9	86	F
9	N	3/19/2025	CF	CMR	TP6	-5	1	113.0	11.3	90	
10	N	3/19/2025	CF	CMR	TP6	-3	1	114.4	10.1	91	
11	N	3/19/2025	CF	CMR	TP7	-4	1	114.4	9.8	91	
12	N	3/19/2025	CF	CMR	TP7	-2	1	114.3	8.1	91	
13	N	3/19/2025	CF	CMR	TP8	-2	1	114.4	11.4	91	
14	N	3/19/2025	CF	CMR	TP9	-3	1	117.1	8.0	93	
15	N	3/19/2025	CF	CMR	TP10	-3	1	117.2	11.1	93	
16	N	3/19/2025	CF	CMR	TP10	-1.5	1	106.0	7.8	84	F
17	N	3/19/2025	CF	CMR	TP11	-3	1	113.2	10.3	90	
18	N	3/19/2025	CF	CMR	TP11	-1	1	114.5	9.2	91	
19	N	3/19/2025	CF	CMR	TP12	-5	1	116.3	7.0	92	
20	N	3/19/2025	CF	CMR	TP12	-1	1	113.5	6.3	90	
21	N	3/20/2025	CF	CMR	TP13	-4.5	1	106.5	8.9	84	F
22	N	3/20/2025	CF	CMR	TP13	-3.5	1	108.0	9.4	86	F
23	N	3/20/2025	CF	CMR	TP13	-2	1	106.3	6.8	84	F
24	N	3/20/2025	CF	CMR	TP14	-3	1	108.8	2.2	86	F
25	N	3/20/2025	CF	CMR	TP15	-2	1	113.9	8.6	90	
26	N	3/20/2025	CF	CMR	TP16	-4	1	114.4	11.1	91	
27	N	3/20/2025	CF	CMR	TP16	-2	4	119.8	7.4	93	

Appendix D
General Earthwork and Grading Specifications

General Earthwork and Grading Specifications for Rough Grading

1.0 General

1.1 Intent

These General Earthwork and Grading Specifications are for the grading and earthwork shown on the approved grading plan(s) and/or indicated in the geotechnical report(s). These Specifications are a part of the recommendations contained in the geotechnical report(s). In case of conflict, the specific recommendations in the geotechnical report shall supersede these more general Specifications. Observations of the earthwork by the project Geotechnical Consultant during the course of grading may result in new or revised recommendations that could supersede these specifications or the recommendations in the geotechnical report(s).

1.2 The Geotechnical Consultant of Record

Prior to commencement of work, the owner shall employ a qualified Geotechnical Consultant of Record (Geotechnical Consultant). The Geotechnical Consultant shall be responsible for reviewing the approved geotechnical report(s) and accepting the adequacy of the preliminary geotechnical findings, conclusions, and recommendations prior to the commencement of the grading.

Prior to commencement of grading, the Geotechnical Consultant shall review the "work plan" prepared by the Earthwork Contractor (Contractor) and schedule sufficient personnel to perform the appropriate level of observation, mapping, and compaction testing.

During the grading and earthwork operations, the Geotechnical Consultant shall observe, map, and document the subsurface exposures to verify the geotechnical design assumptions. If the observed conditions are found to be significantly different than the interpreted assumptions during the design phase, the Geotechnical Consultant shall inform the owner, recommend appropriate changes in design to accommodate the observed conditions, and notify the review agency where required.

The Geotechnical Consultant shall observe the moisture-conditioning and processing of the subgrade and fill materials and perform relative compaction testing of fill to confirm that the attained level of compaction is being accomplished as specified. The Geotechnical Consultant shall provide the test results to the owner and the Contractor on a routine and frequent basis.

1.3 The Earthwork Contractor

The Earthwork Contractor (Contractor) shall be qualified, experienced, and knowledgeable in earthwork logistics, preparation and processing of ground to receive fill, moisture-conditioning and processing of fill, and compacting fill. The Contractor shall review and accept the plans, geotechnical report(s), and these Specifications prior to commencement of grading. The Contractor shall be solely responsible for performing the grading in accordance with the project plans and specifications. The Contractor shall prepare and submit to the owner and the Geotechnical Consultant a work plan that indicates the sequence of earthwork grading, the number of “equipment” of work and the estimated quantities of daily earthwork

contemplated for the site prior to commencement of grading. The Contractor shall inform the owner and the
Geotechnical Consultant of changes in work schedules and updates to the work plan at least 24 hours in advance of such changes so that appropriate personnel will be available for observation and testing. The Contractor shall not assume that the Geotechnical Consultant is aware of all grading operations.

The Contractor shall have the sole responsibility to provide adequate equipment and methods to accomplish the earthwork in accordance with the applicable grading codes and agency ordinances, these Specifications, and the recommendations in the approved geotechnical report(s) and grading plan(s). If, in the opinion of the Geotechnical Consultant, unsatisfactory conditions, such as unsuitable soil, improper moisture condition, inadequate compaction, insufficient buttress key size, adverse weather, etc., are resulting in a quality of work less than required in these specifications, the Geotechnical Consultant shall reject the work and may recommend to the owner that construction be stopped until the conditions are rectified. It is the contractor's sole responsibility to provide proper fill compaction.

2.0 Preparation of Areas to be Filled

2.1 Clearing and Grubbing

Vegetation, such as brush, grass, roots, and other deleterious material shall be sufficiently removed and properly disposed of in a method acceptable to the owner, governing agencies, and the Geotechnical Consultant.

The Geotechnical Consultant shall evaluate the extent of these removals depending on specific site conditions. Earth fill material shall not contain more than 1 percent of organic materials (by volume). Nesting of the organic materials shall not be allowed.

If potentially hazardous materials are encountered, the Contractor shall stop work in the affected area, and a hazardous material specialist shall be informed immediately for proper evaluation and handling of these materials prior to continuing to work in that area.

As presently defined by the State of California, most refined petroleum products (gasoline, diesel fuel, motor oil, grease, coolant, etc.) have chemical constituents that are considered to be hazardous waste. As such, the indiscriminate dumping or spillage of these fluids onto the ground may constitute a misdemeanor, punishable by fines and/or imprisonment, and shall not be allowed. The contractor is responsible for all hazardous waste relating to his work. The Geotechnical Consultant does not have expertise in this area. If hazardous waste is a concern, then the Client should acquire the services of a qualified environmental assessor.

2.2 Processing

Existing ground that has been declared satisfactory for support of fill by the Geotechnical Consultant shall be scarified to a minimum depth of 6 inches. Existing ground that is not satisfactory shall be over-excavated as specified in the following section. Scarification shall continue until soils are broken down and free of oversize material and the working surface is reasonably uniform, flat, and free of uneven features that would inhibit uniform compaction.

2.3 Over-excavation

In addition to removals and over-excavations recommended in the approved geotechnical report(s) and the grading plan, soft, loose, dry, saturated, spongy, organic-rich, highly fractured or otherwise unsuitable ground shall be over-excavated to competent ground as evaluated by the Geotechnical Consultant during grading.

2.4 Benching

Where fills are to be placed on ground with slopes steeper than 5:1 (horizontal to vertical units), the ground shall be stepped or benched. Please see the Standard Details for a graphic illustration. The lowest bench or key shall be a minimum of 15 feet wide and at least 2 feet deep, into competent material as evaluated by the Geotechnical Consultant. Other benches shall be excavated a minimum height of 4 feet into competent material or as otherwise recommended by the Geotechnical Consultant. Fill placed on ground sloping flatter than 5:1 shall also be benched or otherwise over-excavated to provide a flat subgrade for the fill.

2.5 Evaluation/Acceptance of Fill Areas

All areas to receive fill, including removal and processed areas, key bottoms, and benches, shall be observed, mapped, elevations recorded, and/or tested prior to being accepted by the Geotechnical Consultant as suitable to receive fill. The Contractor shall obtain a written acceptance from the Geotechnical Consultant prior to fill placement. A licensed surveyor shall provide the survey control for determining elevations of processed areas, keys, and benches.

3.0 Fill Material

3.1 General

Material to be used as fill shall be essentially free of organic matter and other deleterious substances evaluated and accepted by the Geotechnical Consultant prior to placement. Soils of poor quality, such as those with unacceptable gradation, high expansion potential, or low strength shall be placed in areas acceptable to the Geotechnical Consultant or mixed with other soils to achieve satisfactory fill material.

3.2 Oversize

Oversize material defined as rock, or other irreducible material with a maximum dimension greater than 8 inches, shall not be buried or placed in fill unless location, materials, and placement methods are specifically accepted by the Geotechnical Consultant. Placement operations shall be such that nesting of oversized material does not occur and such that oversize material is completely surrounded by compacted or densified fill. Oversize material shall not be placed within 10 vertical feet of finish grade or within 2 feet of future utilities or underground construction.

3.3 Import

If importing of fill material is required for grading, proposed import material shall meet the requirements of the geotechnical consultant. The potential import source shall be given to the Geotechnical Consultant at least 48 hours (2 working days) before importing begins so that its suitability can be determined and appropriate tests performed.

4.0 Fill Placement and Compaction

4.1 Fill Layers

Approved fill material shall be placed in areas prepared to receive fill (per Section 3.0) in near-horizontal layers not exceeding 8 inches in loose thickness. The Geotechnical Consultant may accept thicker layers if testing indicates the grading procedures can adequately compact the thicker layers. Each layer shall be spread evenly and mixed thoroughly to attain relative uniformity of material and moisture throughout.

4.2 Fill Moisture Conditioning

Fill soils shall be watered, dried back, blended, and/or mixed, as necessary to attain a relatively uniform moisture content at or slightly over optimum. Maximum density and optimum soil moisture content tests shall be performed in accordance with the American Society of Testing and Materials (ASTM Test Method D1557).

4.3 Compaction of Fill

After each layer has been moisture-conditioned, mixed, and evenly spread, it shall be uniformly compacted to not less than 90 percent of maximum dry density (ASTM Test Method D1557). Compaction equipment shall be adequately sized and be either specifically designed for soil compaction or of proven reliability to efficiently achieve the specified level of compaction with uniformity.

4.4 Compaction of Fill Slopes

In addition to normal compaction procedures specified above, compaction of slopes shall be accomplished by backrolling of slopes with sheepsfoot rollers at increments of 3 to 4 feet in fill elevation, or by other methods producing satisfactory results acceptable to the Geotechnical Consultant. Upon completion of grading, relative compaction of the fill, out to the slope face, shall be at least 90 percent of maximum density per ASTM Test Method D1557.

4.5 Compaction Testing

Field tests for moisture content and relative compaction of the fill soils shall be performed by the Geotechnical Consultant. Location and frequency of tests shall be at the Consultant's discretion based on field conditions encountered. Compaction test locations will not necessarily be selected on a random basis. Test locations shall be selected to verify adequacy of compaction levels in areas that are judged to be prone to inadequate compaction (such as close to slope faces and at the fill/bedrock benches).

4.6 Frequency of Compaction Testing

Tests shall be taken at intervals not exceeding 2 feet in vertical rise and/or 1,000 cubic yards of compacted fill soils embankment. In addition, as a guideline, at least one test shall be taken on slope faces for each 5,000 square feet of slope face and/or each 10 feet of vertical height of slope. The Contractor shall assure that fill construction is such that the testing schedule can be accomplished by the Geotechnical Consultant. The Contractor shall stop or slow down the earthwork construction if these minimum standards are not met.

4.7 Compaction Test Locations

The Geotechnical Consultant shall document the approximate elevation and horizontal coordinates of each test location. The Contractor shall coordinate with the project surveyor to assure that sufficient grade stakes are established so that the Geotechnical Consultant can determine the test locations with sufficient accuracy. At a minimum, two grade stakes within a horizontal distance of 100 feet and vertically less than
5 feet apart from potential test locations shall be provided.

5.0 Subdrain Installation

Subdrain systems shall be installed in accordance with the approved geotechnical report(s), the grading plan, and the Standard Details. The Geotechnical Consultant may recommend additional subdrains and/or changes in subdrain extent, location, grade, or material depending on conditions encountered during grading. All subdrains shall be surveyed by a land surveyor/civil engineer for line and grade after installation and prior to burial. Sufficient time should be allowed by the Contractor for these surveys.

6.0 Excavation

Excavations, as well as over-excavation for remedial purposes, shall be evaluated by the Geotechnical Consultant during grading. Remedial removal depths shown on geotechnical plans are estimates only. The actual extent of removal shall be determined by the Geotechnical Consultant based on the field evaluation of exposed conditions during grading. Where fill-over-cut slopes are to be graded, the cut portion of the slope shall be made, evaluated, and accepted by the Geotechnical Consultant prior to placement of materials for construction of the fill portion of the slope, unless otherwise recommended by the Geotechnical Consultant.

7.0 Trench Backfills

7.1 The Contractor shall follow all OHSA and Cal/OSHA requirements for safety of trench excavations.

7.2 All bedding and backfill of utility trenches shall be done in accordance with the applicable provisions of Standard Specifications of Public Works Construction. Bedding material shall have a Sand Equivalent greater than 30 (SE>30). The bedding shall be placed to 1 foot over

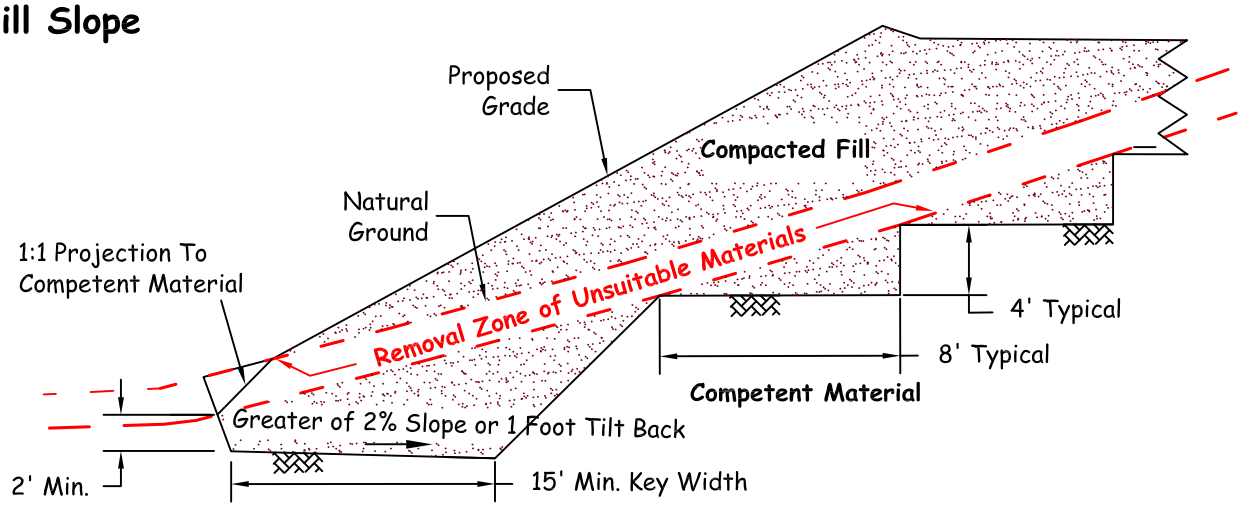
the top of the conduit and densified by jetting. Backfill shall be placed and densified to a minimum of 90 percent of maximum from 1 foot above the top of the conduit to the surface.

7.3 The jetting of the bedding around the conduits shall be observed by the Geotechnical Consultant.

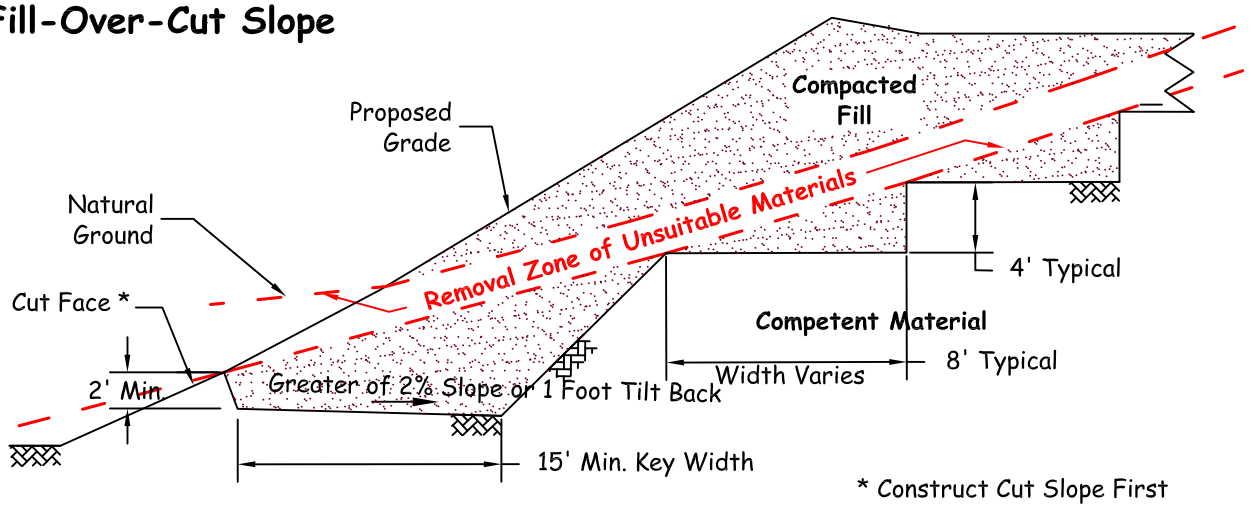
7.4 The Geotechnical Consultant shall test the trench backfill for relative compaction. At least one test should be made for every 300 feet of trench and 2 feet of fill.

7.5 Lift thickness of trench backfill shall not exceed those allowed in the Standard Specifications of Public Works Construction unless the Contractor can demonstrate to the Geotechnical Consultant that the fill lift can be compacted to the minimum relative compaction by his alternative equipment and method.

Fill Slope

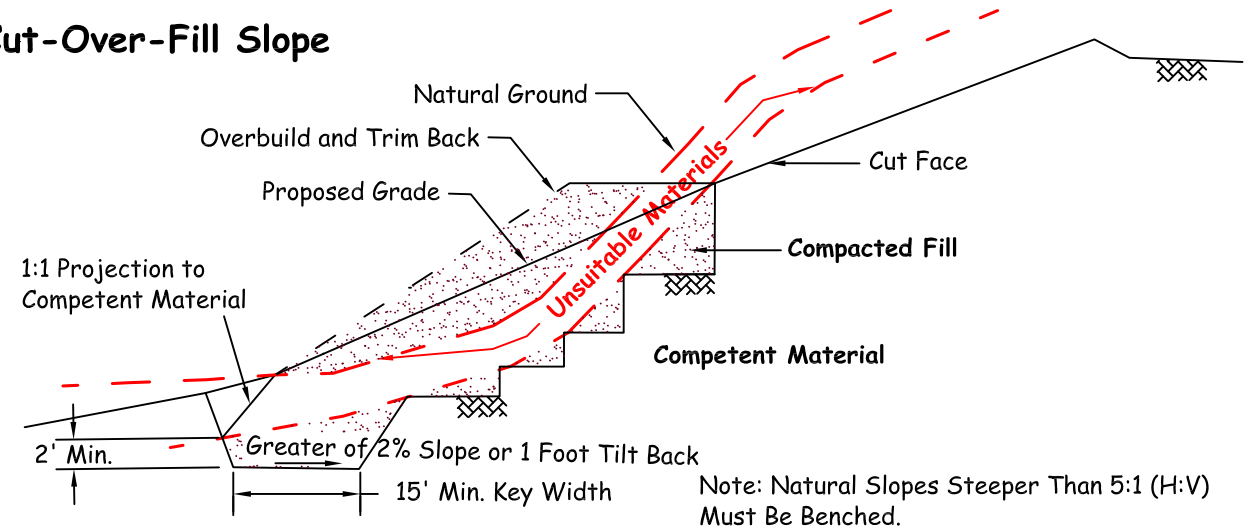


Fill-Over-Cut Slope



* Construct Cut Slope First

Cut-Over-Fill Slope



Note: Natural Slopes Steeper Than 5:1 (H:V) Must Be Benched.

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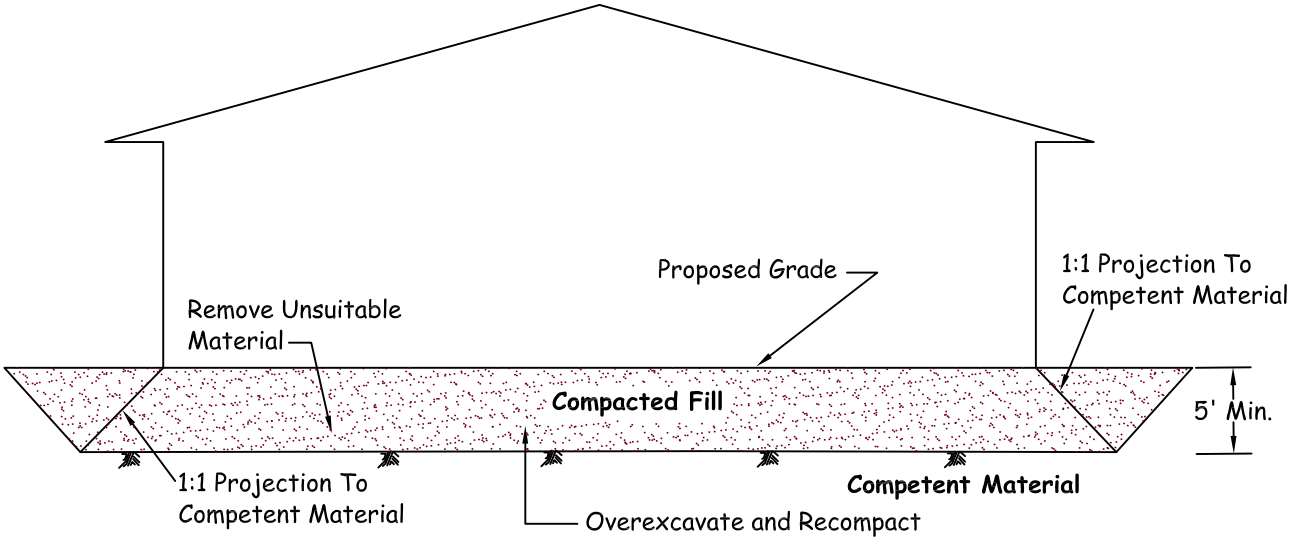
KEYING AND BENCHING

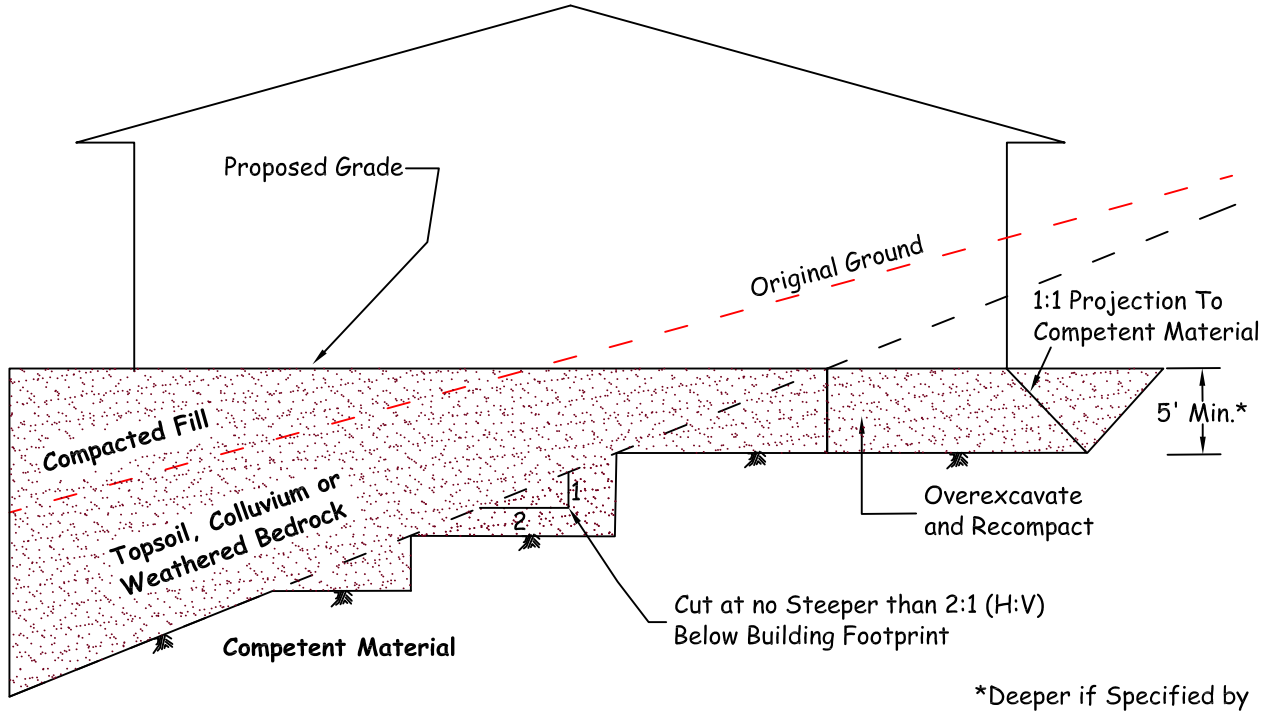
Cut Lot
(Exposing Unsuitable Soils at Design Grade)



Note 1: Removal Bottom Should be Graded With Minimum 2% Fall Towards Street or Other Suitable Area (as Determined by Soils Engineer) to Avoid Ponding Below Building

Note 2: Where Design Cut Lots are Excavated Entirely Into Competent Material, Overexcavation May Still be Required for Hard-Rock Conditions or for Materials With Variable Expansion Characteristics.

Cut/Fill Transition Lot



*Deeper if Specified by Soils Engineer

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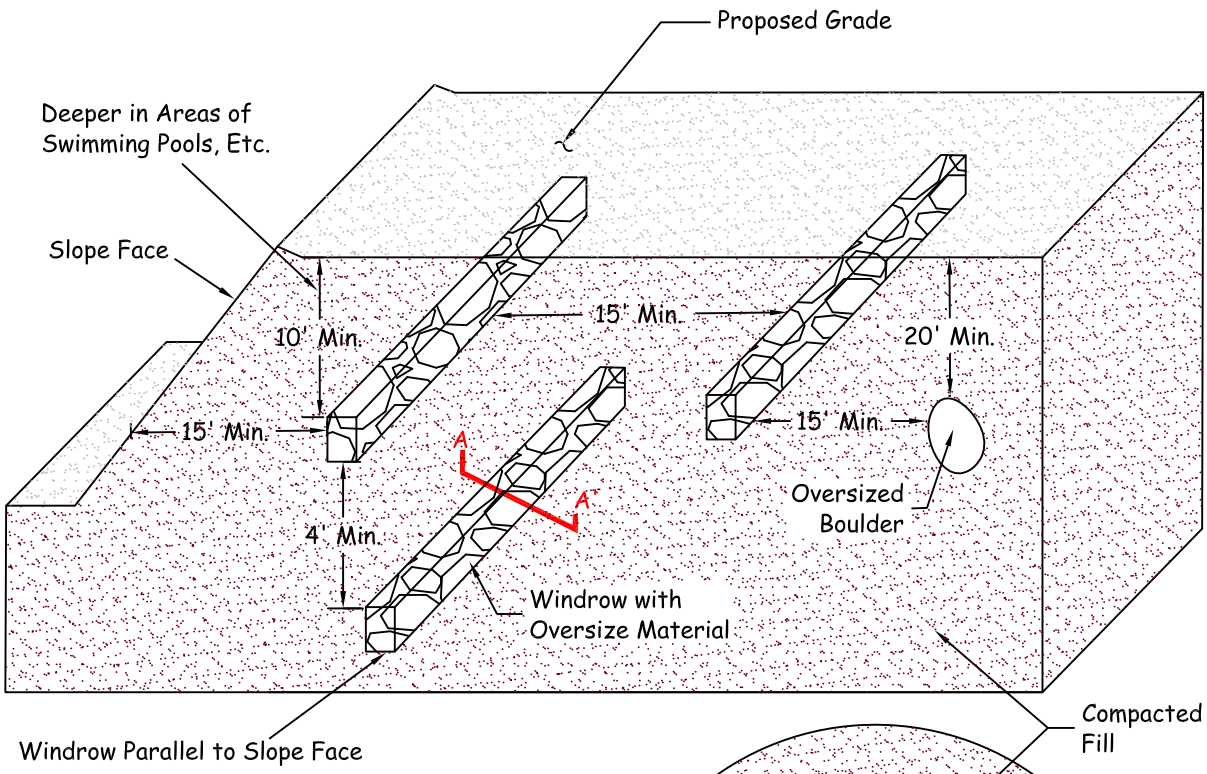
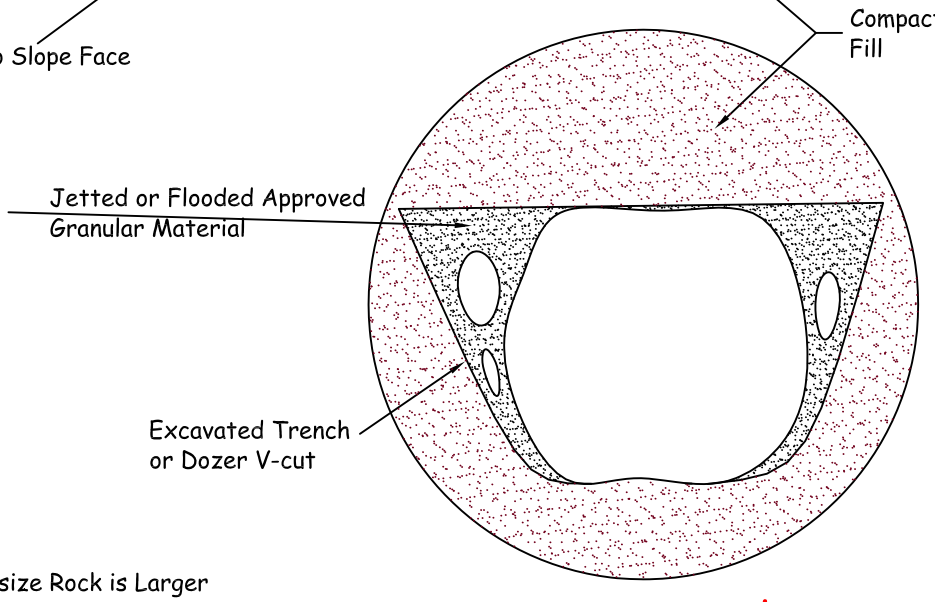
CUT AND TRANSITION LOT OVEREXCAVATION DETAIL





Note: Oversize Rock is Larger
than 8" in Maximum Dimension.

Section A-A'

LGC Geotechnical, Inc.

OVERSIZE ROCK DISPOSAL DETAIL

LEGEND

TP-16 — Approximate Location of Exploratory Test Pit by LGC Geotechnical

Approximate Site Limits

B-4, T.D. = 26.5' — Approximate Location of Boring by Others (LGC Geo-Environmental, 2017)

6' — Approximate Recommended Remedial Depths, in Feet

TP-1 1'
TP-2 1'
TP-3 2'
TP-4 2'
TP-5 2'
TP-6 1'
TP-7 1'
TP-8 1'
TP-9 1'
TP-10 2'
TP-11 4'
TP-12 1'
TP-13 6'
TP-14 3'
TP-15 1'
TP-16 1'
B-1, T.D. = 26.5'
B-2, T.D. = 51'
B-4, T.D. = 26.5'

CHATHAM STREET
CLIFTON AVENUE
EUCALYPTUS AVENUE
AMHERST AVENUE
SOUTH VENTURA AVENUE
SHELBURNE STREET

SCALE: 1"=40'
40' 0 40' 80'

LGC Geotechnical, Inc. 131 Calle Iglesia, Ste. 200 San Clemente, CA 92672 TEL (949) 369-6141 FAX (949) 369-6142	**Geotechnical Map**

PROJECT NAME	Genstar, Ontario
PROJECT NO.	25040-01
ENG. / GEOL.	RLD / KTM
SCALE	1" = 40'
DATE	April 2025

SHEET 1 of 1

2788

PALEONTOLOGICAL ASSESSMENT FOR THE EUCALYPTUS AND AMHERST AVENUES PROJECT

CITY OF ONTARIO, SAN BERNARDINO COUNTY, CALIFORNIA

APN 1073-101-05

Prepared for:

Moser Ventures, Inc.
45478 Blackfoot Way
Indian Wells, California 92210

Submitted to:

City of Ontario
Planning Department
303 East B Street
Ontario, California 91764

Prepared by:

BFSA Environmental Services,
a Perennial Company
14010 Poway Road, Suite A
Poway, California 92064

April 1, 2025

BFSA Environmental Services
A Perennial Company

Paleontological Database Information

Author:	Todd A. Wirths, M.S., P.G., Principal Paleontologist, California Professional Geologist No. 7588
Consulting Firm:	BFSA Environmental Services, a Perennial Company 14010 Poway Road, Suite A Poway, California 92064 (858) 679-8218
Report Date:	April 1, 2025
Report Title:	Paleontological Assessment for Eucalyptus and Amherst Avenues Project, City of Ontario, San Bernardino County, California
Prepared for:	Moser Ventures, Inc. 45478 Blackfoot Way Indian Wells, California 92210
Submitted to:	City of Ontario Planning Department 303 East B Street Ontario, California 91764
USGS Quadrangle:	Section 13, Township 2 South, Range 7 West of the *Corona North* (7.5-minute) USGS Quadrangle
Assessor's Parcel Number:	1073-101-05
Study Area:	10.02 acres
Key Words:	Paleontological assessment; Pleistocene alluvial deposits; high paleontological resource sensitivity; full-time monitoring recommended.

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I. INTRODUCTION AND LOCATION

A paleontological resource assessment has been completed for the Eucalyptus and Amherst Avenues Project, located within the city of Ontario, San Bernardino County, California (Figures 1 and 2). The project, bounded by Chatham Street, Clifton Avenue, South Amherst Avenue, and East Eucalyptus Avenue, consists of one 10.02-acre parcel (Assessor's Parcel Number [APN] 1073-101-05) and is located within Section 13, Township 2 South, Range 7 West, as shown on the United States Geological Survey 1:24,000-scale (7.5-minute) *Corona North* topographic quadrangle maps (see Figure 2). As designed, the applicant proposes to clear the property for the construction of a multi-family residential development with associated landscape, hardscape, and infrastructure (Figure 3). The parcel is currently vacant and was previously graded.

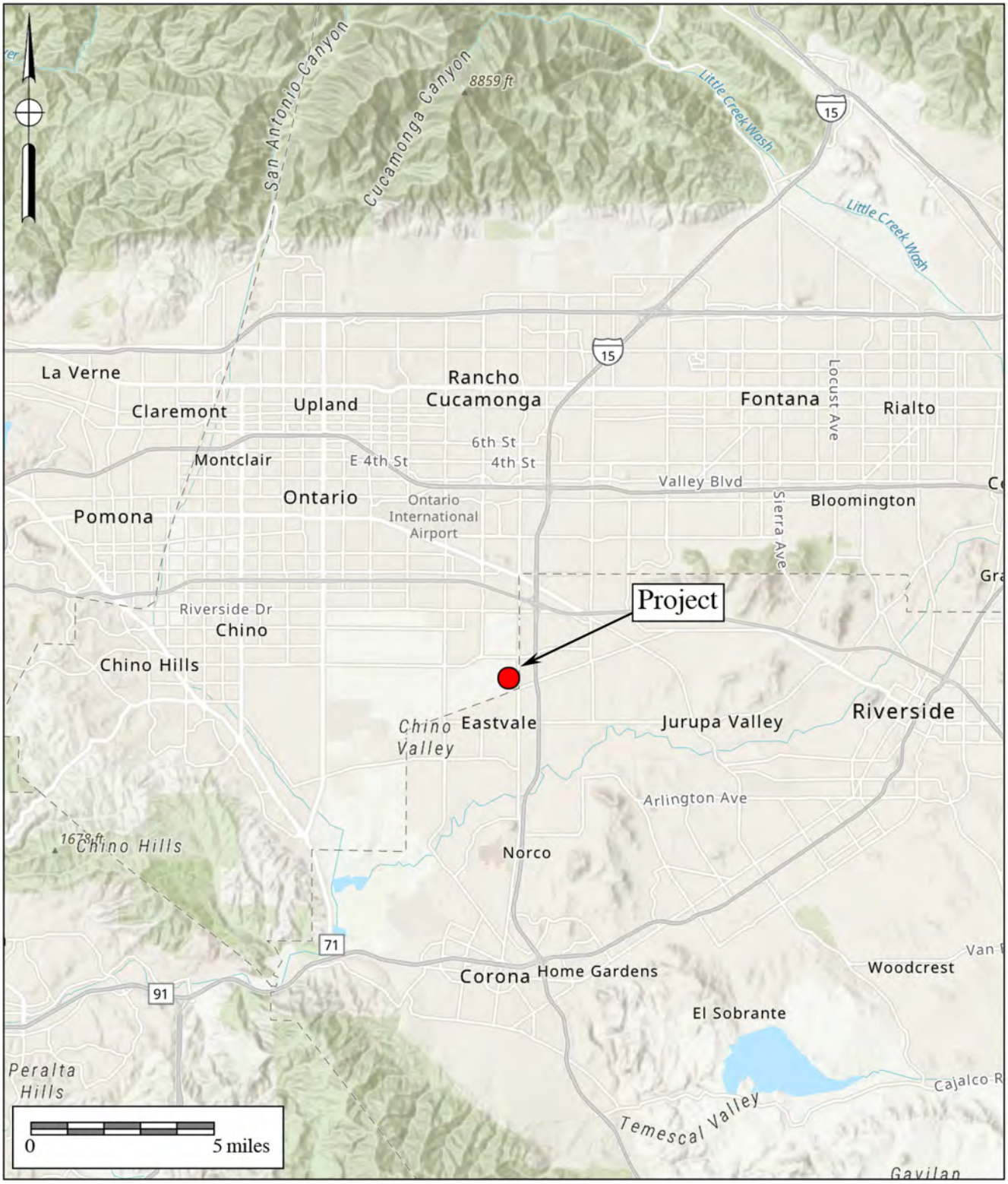
As the lead agency, the City of Ontario has required the preparation of a paleontological assessment to evaluate the project's potential to yield paleontological resources. The paleontological assessment of the project included a review of paleontological literature and fossil locality records for a previous project in the area, a review of the underlying geology, and recommendations to mitigate impacts to potential paleontological resources.

II. REGULATORY SETTING

The California Environmental Quality Act (CEQA), which is patterned after the National Environmental Policy Act, is the overriding environmental regulation that sets the requirement for protecting California's paleontological resources. CEQA mandates that governing permitting agencies (lead agencies) set their own guidelines for the protection of nonrenewable paleontological resources under their jurisdiction.

State of California

Under "Guidelines for Implementation of the California Environmental Quality Act," as amended in December 2018 (California Code of Regulations [CCR] Title 14, Division 6, Chapter 3, Sections 15000 et seq.), procedures define the types of activities, persons, and public agencies required to comply with CEQA. Section 15063 of the CCR provides a process by which a lead agency may review a project's potential impact to the environment, determine whether the impacts are significant, and, if necessary, provide recommendations.



BFSA Environmental Services
A Perennial Company

Figure 1
General Location Map

The Eucalyptus and Amherst Avenues Project

ESRI (1:250,000 series)

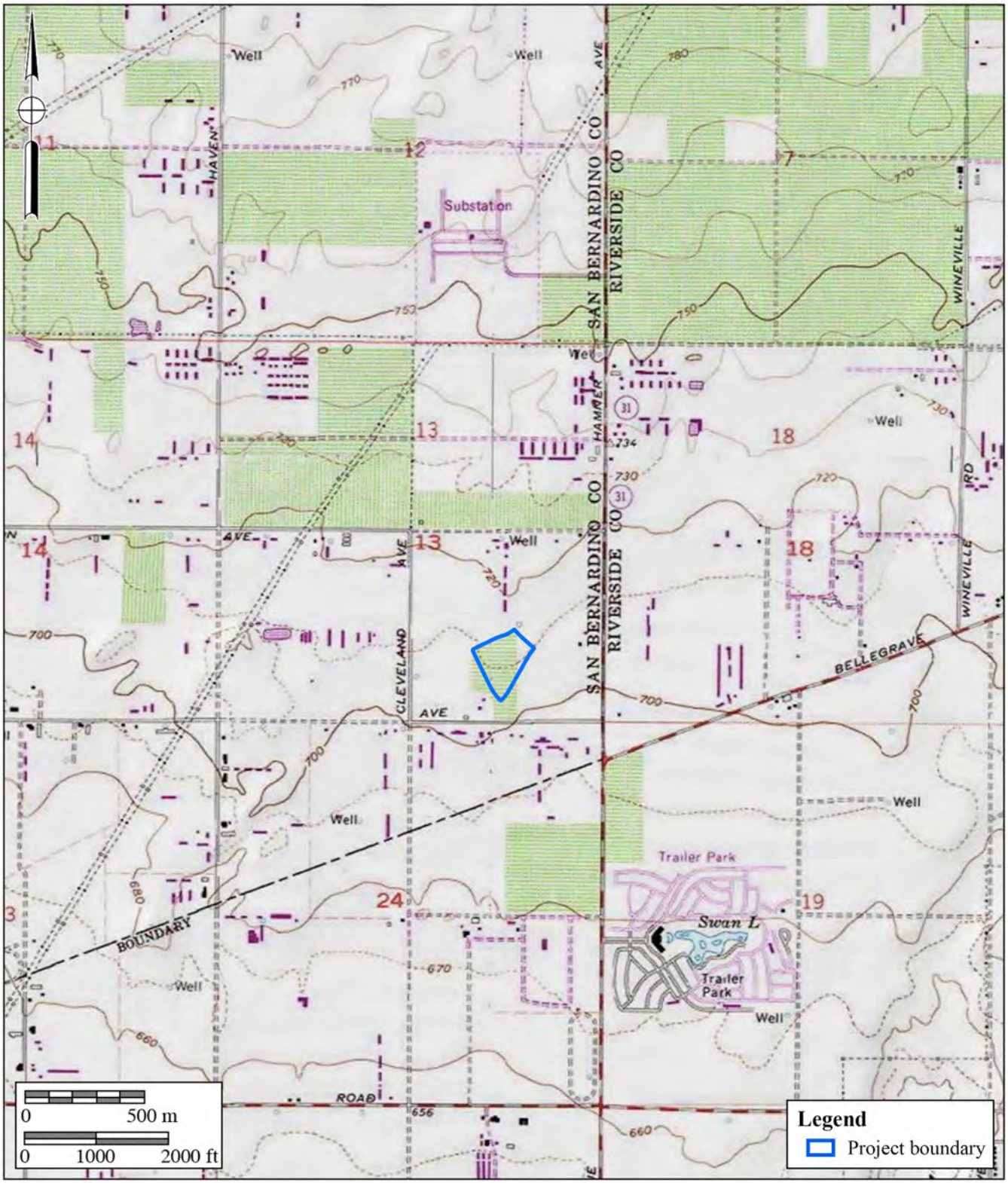


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Figure 2
Project Location Map

The Eucalyptus and Amhert Avenues Project

USGS *Corona North* Quadrangle (7.5-minute series)

BFSA Environmental Services
A Perennial Company

Figure 3

Project Development Map

The Eucalytpus and Amherst Avenues Project

In CEQA's Environmental Checklist Form, a question to respond to is, "Would the project directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?" (Appendix G, Section VII, Part f). This is to ensure compliance with California Public Resources Code Section 5097.5, the law that protects nonrenewable resources, including fossils, which is paraphrased below:

a) A person shall not knowingly and willfully excavate upon, or remove, destroy, injure or deface any historic or prehistoric ruins, burial grounds, archaeological or vertebrate paleontological site, including fossilized footprints, inscriptions made by human agency, rock art, or any other archaeological, paleontological or historical feature, situated on public lands, except with the express permission of the public agency having jurisdiction over such lands.
b) As used in this section, "public lands" means lands owned by, or under the jurisdiction of, the state, or any city, county, district, authority, or public corporation, or any agency thereof.
c) A violation of this section is a misdemeanor.

City of Ontario

The Ontario Plan (TOP) 2050 Final Supplemental Environmental Impact Report (FSEIR) sets forth goals and policies for the City to manage future growth and land uses. According to Impact 5.7-6 of the FSEIR:

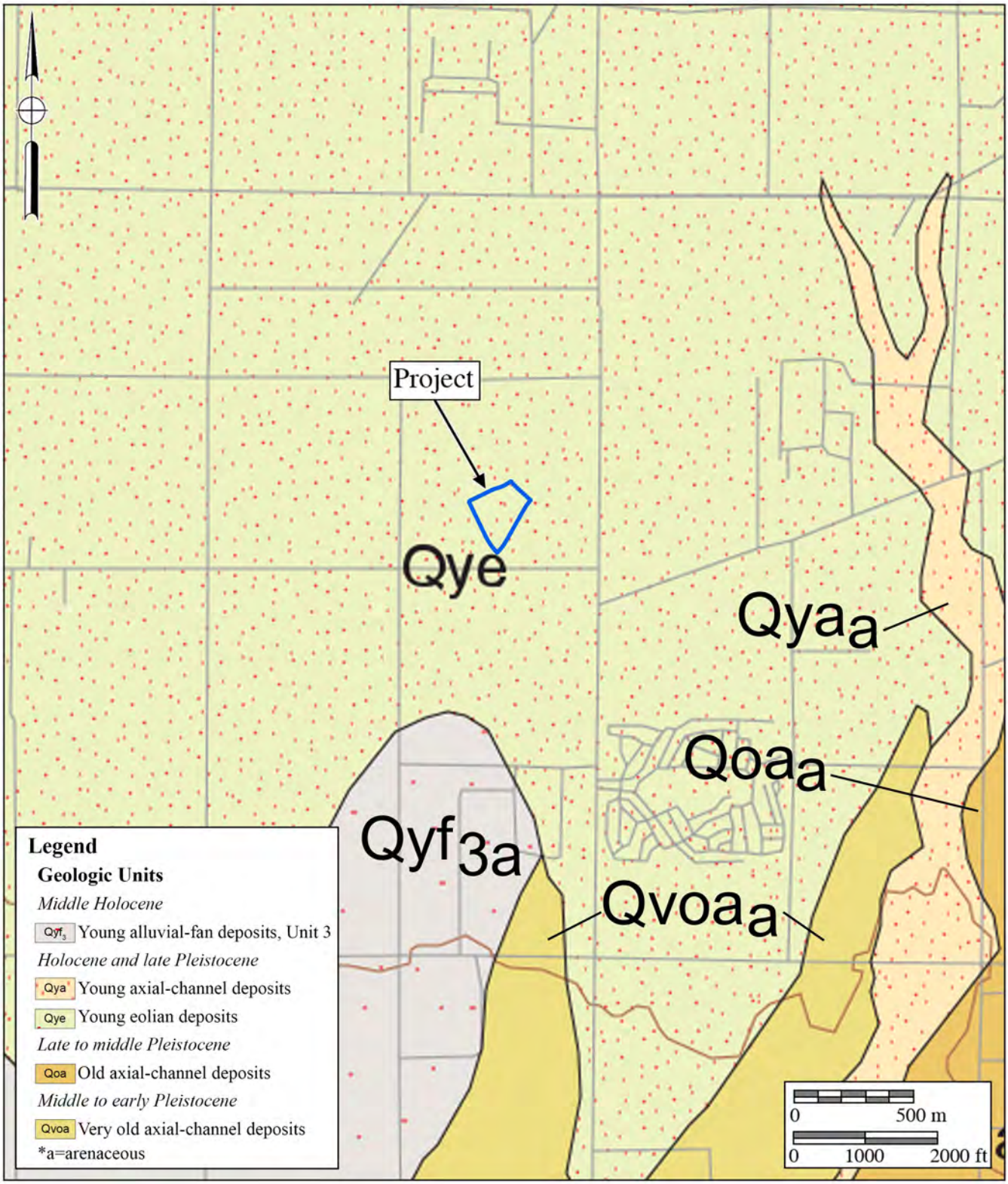
> Ontario is underlain by deposits of Quaternary and upper-Pleistocene sediments deposited during Pliocene and early Pleistocene time. Quaternary Older Alluvial sediments may contain significant, nonrenewable, paleontological resources and are therefore considered to have high sensitivity. Older Pleistocene alluvial sediments can yield fossil remains, often found at depths of 10 feet or more below existing ground surface. As previously discussed, for the Approved TOP, the San Bernardino County Museum, Division of Geological Sciences, conducted the paleontological records search and found one previously known paleontological resource locality recorded by the Regional Paleontologic Locality Inventory, a computer database with positional and contextual data for more than 3,000 fossil localities throughout California and the southwestern United States. This review found one paleontological locality for the City area (SBCM 5.1.8). This locality yielded the remains of a mammoth from approximately 20 feet below the ground surface. As a result, the possibility of finding additional paleontological resources within City boundaries is moderate to high at depths of 10 feet or more below ground surface. (PlaceWorks 2022a)

To mitigate the potential impacts identified in Impact 5.7-6, the FSEIR proposes the following mitigation measures. These measures are also stated in the Mitigation Monitoring and Reporting Program of TOP 2050 (PlaceWorks 2022b):

> **Mitigation Measure MM 5-2:** In areas of documented or inferred archaeological and/or paleontological resource presence, City staff shall require applicants for development permits to provide studies to document the presence/absence of such resources. On properties where resources are identified, such studies shall provide a detailed mitigation plan, including a monitoring program and recovery and/or in situ preservation plan, based on the recommendations of a qualified cultural preservation expert. The mitigation plan shall include the following requirements:
>
> a) Archaeologists and/or paleontologist shall be retained for the project and will be on call during grading and other significant ground-disturbing activities.
>
> b) Should any cultural resources be discovered, no further grading shall occur in the area of the discovery until the Planning Director or designee is satisfied that adequate provisions are in place to protect these resources.
>
> c) Unanticipated discoveries shall be evaluated for significance by a San Bernardino County Certified Professional Archaeologist/Paleontologist. If significance criteria are met, then the project shall be required to perform data recovery, professional identification, radiocarbon dates, and other special studies; submit materials to a museum for permanent curation; and provide a comprehensive final report including a catalog with museum numbers. (PlaceWorks 2022a, 2022b)

III. GEOLOGY

Surficial sediments below the project are mapped by Morton and Miller (2006) as Holocene and late Pleistocene eolian (wind-blown) deposits, with nearby sandy alluvial sediments of similar age (Figure 4). These surficial units overlie the ancestral Santa Ana River flood plain deposits mapped as lower to middle Pleistocene very old sandy alluvial channel deposits that are exposed on the surface to the south of the project and closer to the present course of the Santa Ana River.



BFSA Environmental Services
A Perennial Company

Figure 4
Geologic Map
The Eucalyptus and Amhert Avenues Project
Geology after Morton and Miller (2006)

IV. PALEONTOLOGICAL RESOURCES

Definition

Paleontological resources are the remains of prehistoric life that have been preserved in geologic strata. These remains are called fossils and include bones, shells, teeth, and plant remains (including their impressions, casts, and molds) in the sedimentary matrix, as well as trace fossils such as footprints and burrows. Fossils are considered older than 5,000 years of age (Society of Vertebrate Paleontology 2010) but may include younger remains (subfossils) when viewed in the context of local extinction of the organism or habitat, for example. Fossils are considered a nonrenewable resource under state and local guidelines (see Section II).

Fossil Locality Records Search

A paleontological literature review and collections and locality records search was conducted for the project using records obtained for prior projects from the Division of Geological Sciences at the San Bernardino County Museum (SBCM), the Natural History Museum of Los Angeles County (LACM), and the Western Science Center (WSC) in Hemet, and data from published and unpublished paleontological literature. The nearest recorded fossil locality is situated about a mile southwest of the project in Eastvale, consisting of the bones of a Pleistocene snake (LACM locality no. (loc.) 7811). Farther southwest, between one and two miles, Pleistocene vertebrate fossils were discovered during trenching activities along the nearby County Line Channel Project by BFSA paleontological monitors (Kennedy et al. 2005). Fossils occurred at depths ranging from 11 to 17 feet deep, and consisted of fragmentary bones from a camel, *Camelops* sp. cf. *C. hesternus*, a fragmentary jaw of a bighorn sheep, *Ovis canadensis*, and several unidentifiable bone fragments of large mammals. These fossils were deposited at the WSC.

More Pleistocene fossils have been recovered from a number of completed and ongoing projects by BFSA, all within two miles of the current project. The Vernola Ranch project to the east in Jurupa Valley and the TTM 20472 and Merril Commerce Center projects to the west have all recently yielded the fossil bones of yet-unidentified large mammals and await curation. Fossil bones from these projects were variously collected from depths ranging from 2.5 to 25 feet. At the Ontario 432 Project, two miles to the west of the current project, the sacrum from a large artiodactyl (hoofed grazer) and other unidentified mammalian remains were discovered, at depths ranging from five to seven feet. These specimens have been deposited at the WSC (Wirths 2021).

The nearest known fossil localities held by the SBCM are situated between two and three miles northwest of the project, containing several isolated fossil bones of camels (*Camelops* sp.) and a mastodon (*Mammut pacificus*) rib fragment (SBCM localities 5.1.23 – 5.1.27; Kottkamp 2022). Kottkamp (2022) indicates that the deposits mapped at the surface of this area are unlikely to yield fossils, but the underlying, older deposits "have been found to be highly

fossiliferous in the local area." It should be noted that all of these discoveries post-date the research materials used for paleontological resources in the FSEIR (PlaceWorks 2022a) and, therefore, the document can be construed as out-of-date in that regard.

Project Survey

On February 27, 2025, BFSA staff, under the supervision of Principal Investigator Todd A. Wirths, conducted an intuitive review of the property to determine if any paleontological resources were visible. The field methodology employed for the project included walking evenly spaced survey transects set approximately 15 meters apart while visually inspecting the ground surface, when possible. All potentially sensitive areas where paleontological resources might be located were closely inspected. Visibility of the natural ground surface was characterized as moderate to good. The vegetation within the property is dominated by non-native grasses and weeds. The survey confirmed that the entire property has been previously graded. Grading resulted in the development of a water catchment basin within the northwest portion of the property and a pad at the property's south half. No bedrock outcrops were exposed that might indicate the presence of fossils. No paleontological resources, or evidence of paleontological resources, were observed during the survey.

V. PALEONTOLOGICAL SENSITIVITY

Overview

The degree of paleontological sensitivity of any particular area is based upon a number of factors, including the documented presence of fossiliferous resources on a site or in nearby areas, the presence of documented fossils within a particular geologic formation or lithostratigraphic unit, and whether or not the original depositional environment of the sediments is one that might have been conducive to the accumulation of organic remains that may have become fossilized over time. Holocene alluvium is generally considered to be geologically too young to contain significant nonrenewable paleontological resources (*i.e.,* fossils) and thus is typically assigned a low paleontological sensitivity. Pleistocene (over 11,700 years old) alluvial and alluvial fan deposits in the Inland Empire, however, often yield important terrestrial vertebrate fossils such as extinct mammoths, mastodons, and giant ground sloths, as well as extinct species of horse, bison, camel, saber-toothed cats, and others (Jefferson 1991). These Pleistocene sediments are thus accorded a high paleontological resource sensitivity.

Professional Standards

The Society of Vertebrate Paleontology (2010) has drafted guidelines that include four categories of paleontological sensitivity for geologic units (formations) that might be impacted by a proposed project, and are summarized below:

- *High Potential:* Rock units from which vertebrate or significant invertebrate, plant, or trace fossils have been recovered.
- *Undetermined Potential:* Rock units for which little information is available concerning their paleontological content, geologic age, and depositional environment, and further study is needed to determine the potential of the rock unit.
- *Low Potential:* Rock units that are poorly represented by fossil specimens in institutional collections or, based on a general scientific consensus, that only preserve fossils in rare circumstances.
- *No Potential:* Rock units that have no potential to contain significant paleontological resources, such as high-grade metamorphic rocks and plutonic igneous rocks.

Using these criteria, based upon nearby fossil localities in southern and eastern Ontario and western Jurupa Valley, and the mapped geology, the Holocene eolian deposits at the surface of the project may be considered to have a low potential for paleontological resources. However, with increasing depth and age, this potential increases to a high potential for yielding significant paleontological resources.

City of Ontario Assessment of Paleontological Sensitivity

The City of Ontario considers strata at depths of 10 feet or greater as having a moderate to high paleontological sensitivity. As such, the potential to uncover undiscovered paleontological resources is considered high (PlaceWorks 2022a: 5.7-17).

VI. CONCLUSIONS AND RECOMMENDATIONS

Potentially fossiliferous late Pleistocene alluvial wash or fan deposits likely occur at a depth below the project. These deposits underlie the Holocene eolian deposits mapped at the surface ("Qye" on Figure 4). The occurrence of terrestrial vertebrate fossils at shallow depths from Pleistocene alluvial fan sediments across the Inland Empire is well documented. The high paleontological sensitivity rating typically assigned to Pleistocene alluvial fan sediments for yielding paleontological resources supports the recommendation that paleontological monitoring be implemented during mass grading and excavation activities in undisturbed Pleistocene alluvial fan sediments to mitigate any adverse impacts (loss or destruction) to potential nonrenewable paleontological resources.

On the basis of these statements, a Paleontological Resources Impact Mitigation Program (PRIMP) is recommended, in accordance with Mitigation Measure (MM) 5-2 of the City of Ontario (PlaceWorks 2022a, 2022b). The PRIMP shall be approved by the Planning Department of the City of Ontario prior to the issuance of the project's grading permit. Based upon these findings, **full-time monitoring starting at a depth of four feet below the surface** during earth disturbance activities is strongly recommended. A proposed paleontological monitoring plan is

detailed below. When implemented with the provisions of CEQA, the City of Ontario (PlaceWorks 2022a, 2022b), and the guidelines of the Society of Vertebrate Paleontology (2010), this paleontological monitoring plan would mitigate any adverse impacts (loss or destruction) to potential nonrenewable paleontological resources (fossils), if present, to a level below significant.

Paleontological Monitoring Plan

1. All mitigation programs shall be performed by a qualified professional (project) paleontologist, defined as an individual with an M.S. or Ph.D. in paleontology or geology who has proven experience and who is knowledgeable in professional paleontological procedures and techniques. Fieldwork may be conducted by a qualified paleontological monitor, defined as an individual who has experience in the collection and salvage of fossil materials. The paleontological monitor shall always work under the direction of a qualified paleontologist.
2. Monitoring of mass grading and excavation activities shall be performed by a qualified paleontologist or paleontological monitor. Starting at a depth of four feet, monitoring will be conducted full-time in areas of grading or excavation in undisturbed sediments. Monitoring of artificial fill is not recommended.
3. If a fossil(s) is found at a shallower depth, earth disturbance activities should be halted within a radius of 50 feet from the location of the fossil, and a project-level paleontologist shall be consulted to determine the significance of the fossilized remains. If the fossil is deemed significant by the project-level paleontologist, full-time monitoring should be initiated at the project.
4. Paleontological monitors will be equipped to salvage fossils as they are unearthed to avoid construction delays. The monitor must be empowered to temporarily halt or divert equipment to allow removal of abundant or large specimens in a timely manner. Monitoring may be reduced if the potentially fossiliferous units are not present in the subsurface or, if present, are determined upon exposure and examination by qualified paleontological personnel to have low potential to contain fossil resources. The monitor shall notify the project paleontologist, who will then notify the concerned parties of the discovery.
5. Paleontological salvage during trenching and boring activities is typically from the generated spoils and does not delay the trenching or drilling activities. Fossils will be collected and placed in cardboard flats or plastic buckets and identified by field number, collector, and date collected. Notes will be taken on the map location and stratigraphy of the site, which will be photographed before it is vacated, and the fossils are removed to a safe place. On mass grading projects, discovered fossil sites will be protected by flagging to prevent them from being overrun by earthmovers (scrapers) before salvage begins. Fossils will be collected in a similar manner, with

notes and photographs being taken before removing the fossils. The precise location of the site is determined with the use of electronic handheld devices. If the site involves remains from a large terrestrial vertebrate, such as large bone(s) or a mammoth tusk, that is/are too large to be easily removed by a single monitor, a fossil recovery crew shall excavate around the find, encase the find within a plaster and burlap jacket, and remove it after the plaster is set. For large fossils, use of the contractor's construction equipment may be solicited to help move the jacket to a safe location.

6. Isolated fossils will be collected by hand, wrapped in protective materials, and placed in temporary collecting flats or five-gallon buckets. Notes will be taken on the map location and stratigraphy of the site, which will be photographed before it is vacated, and the fossils are moved to a safe place.
7. Particularly small invertebrate fossils typically represent multiple specimens of a limited number of organisms, and a scientifically suitable sample can be obtained from one to several five-gallon buckets of fossiliferous sediment. If it is possible to dry screen the sediment in the field, a concentrated sample may consist of one or two buckets of material.
8. In accordance with the "Microfossil Salvage" section of the SVP guidelines (2010:7), bulk sampling and screening of fine-grained sedimentary deposits (including carbonate-rich paleosols) must be performed if the deposits are identified to possess indications of producing fossil "microvertebrates" to test the feasibility of the deposit to yield fossil bones and teeth. If indicators of potential microvertebrate fossils are found, screening of a test sample (approximately 600 pounds) is recommended, according to the SVP guidelines. If feasible, wet screening shall be conducted on the project site. If screening yields significant fossils, then removing and processing a "standard sample" of 6,000 pounds shall be performed.
9. In the laboratory, individual fossils will be cleaned of extraneous matrix, any breaks will be repaired, and the specimen, if needed, will be stabilized by soaking in an archivally approved acrylic hardener (*e.g.,* a solution of acetone and Paraloid B-72).
10. Recovered specimens will be prepared to a point of identification and permanent preservation (not display), including screen-washing sediments to recover small invertebrates and vertebrates. Preparation of individual vertebrate fossils is often more time-consuming than for accumulations of invertebrate fossils.
11. Recovered specimens will be identified and curated into a professional, accredited public museum repository with a commitment to archival conservation and permanent retrievable storage (*e.g.,* the San Bernardino County Museum). The paleontological program should include a written repository agreement prior to the initiation of mitigation activities. Prior to curation, the lead agency (the City of Ontario) will be consulted on the repository/museum to receive the fossil material.

12. A final report of findings and significance will be prepared, including lists of all fossils recovered and necessary maps and graphics to accurately record their original location(s). The report, when submitted to and accepted by the appropriate lead agency, will signify satisfactory completion of the project program to mitigate impacts to any potential nonrenewable paleontological resources (*i.e.,* fossils) that might have been lost or otherwise adversely affected without such a program in place.

VII. CERTIFICATION

I hereby certify that the statements furnished above and in the attached exhibits present the data and information required for this paleontological report, and that the facts, statements, and information presented are true and correct to the best of my knowledge and belief and have been compiled in accordance with CEQA criteria.

April 1, 2025

Todd A. Wirths, M.S., P.G. Date
Principal Paleontologist
California Professional Geologist No. 7588

VIII. REFERENCES

Jefferson, G.T. 1991. A catalogue of late Quaternary vertebrates from California: Part two, mammals. Natural History Museum of Los Angeles County, Technical Reports, no. 7: i-v + 1-129.

Kennedy, G.L., Shiller, G.I., and Stewart, J.D. 2005. Paleontological monitoring report, County Line Channel, Riverside County Flood Control and Water Conservation District Project No. 2-0-0300, Riverside and San Bernardino Counties, California. Unpublished letter report dated May 16, 2005, to Riverside Construction Company, Riverside, California, by Brian F. Smith and Associates, Inc., Poway, California.

Kottkamp, S. 2022. Paleontology records review for proposed site of 1600 East Francis Street project, Ontario, San Bernardino County, California. Unpublished letter for Brian F. Smith and Associates, Inc., Poway, California, by the San Bernardino County Museum, Redlands, California.

Morton, D.M. and Miller, F.K. 2006. Geologic map of the San Bernardino and Santa Ana 30' x 60' quadrangles, California: U.S. Geological Survey Open-File Report 06-1217, scale

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PlaceWorks. 2022a. Chapter 5. Environmental Analysis. The Ontario Plan 2050 Final Supplemental Environmental Impact Report, SCH No. 2021070364. Prepared for the City of Ontario by PlaceWorks, Santa Ana, California. https://content.ontarioca.gov/sites/default/files/2024-12/Final_DraftSEIR_TOP2050.pdf.

PlaceWorks. 2022b. Mitigation Monitoring and Reporting Program. The Ontario Plan 2050 for City of Ontario, SCH No. 2021070364. Prepared for the City of Ontario by PlaceWorks, Santa Ana, California. https://content.ontarioca.gov/sites/default/files/2024-12/MMRP_TOP2050SEIR.pdf.

Society of Vertebrate Paleontology. 2010. Standard procedures for the assessment and mitigation of adverse impacts to paleontological resources; by the SVP Impact Mitigation Guidelines Revision Committee. Electronic document, https://vertpaleo.org/wp-content/uploads/2021/01/SVP_Impact_Mitigation_Guidelines-1.pdf.

Wirths, T.A. 2021. Paleontological Monitoring Report for the Ontario 432 Project, City of Ontario, San Bernardino County, California (TR 18929 and 18930). Unpublished consulting report for Landsea Homes, Irvine, California, by Brian F. Smith and Associates, Inc., Poway, California.

APPENDIX A

Qualifications of Key Personnel

Todd A. Wirths, MS, PG No. 7588

Principal Paleontologist

BFSA Environmental Services, a Perennial Company
14010 Poway Road • Suite A •
Phone: (858) 679-8218 • Fax: (858) 679-9896 • Email: twirths@bfsa.perennialenv.com

Education

Master of Science, Geological Sciences, San Diego State University, California **1995**

Bachelor of Arts, Earth Sciences, University of California, Santa Cruz **1992**

Professional Certifications

California Professional Geologist #7588, 2003
Riverside County Approved Paleontologist
San Diego County Qualified Paleontologist
Orange County Certified Paleontologist
OSHA HAZWOPER 40-hour trained; current 8-hour annual refresher

Professional Memberships

Board member, San Diego Geological Society
San Diego Association of Geologists; past President (2012) and Vice President (2011)
South Coast Geological Society
Southern California Paleontological Society

Experience

Mr. Wirths has more than a dozen years of professional experience as a senior-level paleontologist throughout southern California. He is also a certified California Professional Geologist. At BFSA, Mr. Wirths conducts on-site paleontological monitoring, trains and supervises junior staff, and performs all research and reporting duties for locations throughout Los Angeles, Ventura, San Bernardino, Riverside, Orange, San Diego, and Imperial Counties. Mr. Wirths was formerly a senior project manager conducting environmental investigations and remediation projects for petroleum hydrocarbon-impacted sites across southern California.

Selected Recent Reports

2019 *Paleontological Assessment for the 10575 Foothill Boulevard Project, City of Rancho Cucamonga, San Bernardino County, California*. Prepared for T&B Planning, Inc. Report on file at Brian F. Smith and Associates, Inc., Poway, California.

2019 *Paleontological Assessment for the MorningStar Marguerite Project, Mission Viejo, Orange County, California.* Prepared for T&B Planning. Report on file at Brian F. Smith and Associates, Inc., Poway, California.

2019 *Paleontological Monitoring Report for the Nimitz Crossing Project, City of San Diego.* Prepared for Voltaire 24, LP. Report on file at Brian F. Smith and Associates, Inc., Poway, California.

2019 *Paleontological Resource Impact Mitigation Program (PRIMP) for the Jack Rabbit Trail Logistics Center Project, City of Beaumont, Riverside County, California.* Prepared for JRT BP 1, LLC. Report on file at Brian F. Smith and Associates, Inc., Poway, California.

2020 *Paleontological Monitoring Report for the Oceanside Beachfront Resort Project, Oceanside, San California.* Prepared for S.D. Malkin Properties. Report on file at Brian F. Smith and Associates, Inc., Poway, California.

2020 *Paleontological Resource Impact Mitigation Program for the Nakase Project, Lake Forest, Orange County, San California.* Prepared for Glenn Lukos Associates, Inc. Report on file at Brian F. Smith and Associates, Inc., Poway, California.

2020 *Paleontological Resource Impact Mitigation Program for the Sunset Crossroads Project, Banning, Riverside County*. Prepared for NP Banning Industrial, LLC. Report on file at Brian F. Smith and Associates, Inc., Poway, California.

2020 *Paleontological Assessment for the Ortega Plaza Project, Lake Elsinore, Riverside County*. Prepared for Empire Design Group. Report on file at Brian F. Smith and Associates, Inc., Poway, California.

2020 *Paleontological Resource Record Search Update for the Green River Ranch III Project, Green River Ranch Specific Plan SP00-001, City of Corona, California*. Prepared for Western Realco. Report on file at Brian F. Smith and Associates, Inc., Poway, California.

2020 *Paleontological Assessment for the Cypress/Slover Industrial Center Project, City of Fontana, San Bernardino County, California*. Prepared for T&B Planning, Inc. Report on file at Brian F. Smith and Associates, Inc., Poway, California.

2020 *Paleontological Monitoring Report for the Imperial Landfill Expansion Project (Phase VI, Segment C-2), Imperial County, California*. Prepared for Republic Services, Inc. Report on file at Brian F. Smith and Associates, Inc., Poway, California.

2021 *Paleontological Assessment for the Manitou Court Logistics Center Project, City of Jurupa Valley, Riverside County, California*. Prepared for Link Industrial. Report on file at Brian F. Smith and Associates, Inc., Poway, California.

2021 *Paleontological Resource Impact Mitigation Program for the Del Oro (Tract 36852) Project, Menifee, Riverside County*. Prepared for D.R. Horton. Report on file at Brian F. Smith and Associates, Inc., Poway, California.

2021 *Paleontological Assessment for the Alessandro Corporate Center Project (Planning Case PR-2020-000519), City of Riverside, Riverside County, California*. Prepared for OZI Alessandro, LLC. Report on file at Brian F. Smith and Associates, Inc., Poway, California.

2021 *Paleontological Monitoring Report for the Boardwalk Project, La Jolla, City of San Diego*. Prepared for Project Management Advisors, Inc. Report on file at Brian F. Smith and Associates, Inc., Poway, California.

MEMORANDUM

URBAN CROSSROADS

DATE: March 28, 2025
TO: Dave Waters, Genstar Development Company/GDCI-13
FROM: Haseeb Qureshi, Shannon Wong
JOB NO: 15662-05 GHG Assessment

ESPERANZA SPECIFIC PLAN AMENDMENT GREENHOUSE GAS ASSESSMENT

Dave Waters,

Urban Crossroads, Inc. is pleased to submit the following Greenhouse Gas Assessment for Esperanza Specific Plan Amendment development (referred to as **Project**) to support the proposed Specific Plan Amendment (**SPA**), which is located on the northeast corner of Eucalyptus Avenue and Amherst Avenue in the City of Ontario. The purpose of this work effort is to determine if the Project would result in new or substantially different Greenhouse Gas Impacts than those considered and addressed in the Esperanza Specific Plan (**Approved Specific Plan**) Environmental Impact Report (EIR) and The Ontario Plan 2050 Supplemental EIR (SEIR).

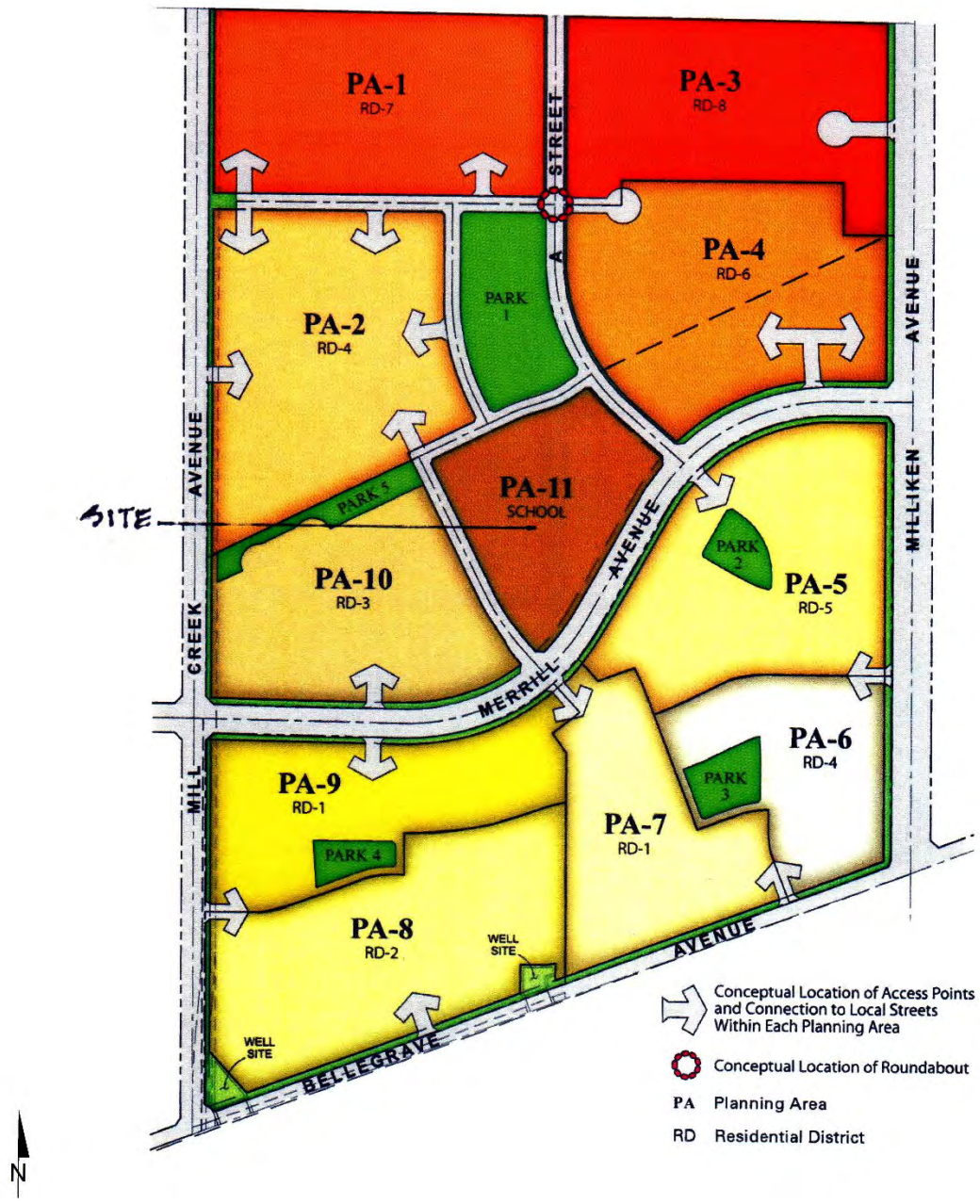
PROPOSED PROJECT

It is our understanding that the proposed Project is to consist of 161 multifamily residential dwelling units (with a density of approximately 16.1 dwelling units per net acre). The Project is located within the Esperanza Specific Plan. The original Specific Plan that was approved contemplated a 736-student elementary school within Planning Area 11. The land use will be updated from "School" to "MDR Medium Density Residential" consistent with the adjacent land use to the northeast. The Project is anticipated to be constructed in a single phase by the year 2029.

Exhibit 1 shows the preliminary site plan. For comparison purposes, Exhibit 2 shows the currently approved land use plan identifying Planning Area 11 with a school.

EXHIBIT 1: PRELIMINARY SITE PLAN

EXHIBIT 2: CURRENTLY APPROVED LAND USE PLAN



PROJECT GHG ANALYSIS

City of Ontario Community Climate Action Plan

The City of Ontario adopted the Community Climate Action Plan (CCAP) on December 16, 2014. The CAP contains further guidance on the City of Ontario's GHG Inventory reduction goals, policies, guidelines, and implementation programs. The purpose of the CAP is to provide guidance on how to analyze GHG emissions and determine significance during the CEQA review of proposed development projects within the City of Ontario (1). The CAP builds upon the Reduction Plan to address City-specific information and City-specific GHG reduction measures. To address the state's requirement to reduce GHG emissions, the City prepared its CAP with the goal of reducing GHG emissions within the City by 15% below 2008 levels by the year 2020. The City's target is consistent with the AB 32 target and ensures that the City of Ontario achieves GHG reductions locally that complement and are consistent with state efforts to reduce GHG emissions.

As part of the CAP, the City of Ontario published a guidance document titled "Greenhouse Gas Emissions, CEQA Thresholds and Screening Tables" (December 2014). As part of this guidance, the City determined that if GHG emissions of a given project exceeds 3,000 $MTCO_2e$/yr, then project emissions would need to be reduced by 25 percent when compared to year 2008 emissions levels. Alternatively, the project would need to achieve a minimum of 100 points pursuant to measures identified in the Screening Tables.

The Ontario Plan (TOP) 2050 includes an update to the City's Community Climate Action Plan (CCAP Update) which was adopted in 2014. The CCAP Update is a plan to reduce greenhouse gas (GHG) emissions and improve community resilience to hazardous conditions associated with climate change. The update to the CCAP includes updated emissions inventories; updated emissions forecasts; identifies GHG emissions reduction targets to achieve the GHG reduction goals of the City of Ontario consistent with Senate Bill 32, Executive Order S-03-05, and substantial progress toward the State's carbon neutrality goals of Executive Order B-55-18; and measures, that when quantified, achieve the GHG reduction targets for the City. As noted in The Ontario Plan 2050 Final Supplemental Environmental Impact Report (SCH No. 2021070364) certified by the City in 2022 (TOP 2050 SEIR), the measures included in the 2022 CCAP Update are not substantially different than that of the 2014 CCAP and therefore there is no change in the environmental impacts associated with the CCAP.

GHG IMPACTS

Standards of Significance

According to the CEQA Guidelines Appendix G thresholds, to determine whether impacts from GHG emissions are significant. Would the project:

- **Threshold 1**: Generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment?
- **Threshold 2**: Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of GHGs?

The evaluation of an impact under CEQA requires measuring data from a project against both existing conditions and a "threshold of significance." For establishing significance thresholds, the Office of

Planning and Research's amendments to the CEQA Guidelines Section 15064.7(c) state "[w]hen adopting thresholds of significance, a lead agency may consider thresholds of significance previously adopted or recommended by other public agencies, or recommended by experts, provided the decision of the lead agency to adopt such thresholds is supported by substantial evidence."

CEQA Guidelines Section 15064.4(a) further states, ". . . A lead agency shall have discretion to determine, in the context of a particular project, whether to: (1) Use a model or methodology to quantify greenhouse gas emissions resulting from a project, and which model or methodology to use . . .; or (2) Rely on a qualitative analysis or performance-based standards."

CEQA Guidelines Section 15064.4 provides that a lead agency should consider the following factors, among others, in assessing the significance of impacts from greenhouse gas emissions:

- **Consideration #1:** The extent to which the project may increase or reduce greenhouse gas emissions as compared to the existing environmental setting.
- **Consideration #2:** Whether the project emissions exceed a threshold of significance that the lead agency determines applies to the project.
- **Consideration #3:** The extent to which the project complies with regulations or requirements adopted to implement a statewide, regional, or local plan for the reduction or mitigation of greenhouse gas emissions. Such regulations or requirements must be adopted by the relevant public agency through a public review process and must reduce or mitigate the project's incremental contribution of greenhouse gas emissions. In determining the significance of impacts, the lead agency may consider a project's consistency with the State's long-term climate goals or strategies, provided that substantial evidence supports the agency's analysis of how those goals or strategies address the project's incremental contribution to climate change and its conclusion that the project's incremental contribution is not cumulatively considerable.

As noted above, the update to the CCAP includes updated emissions inventories; updated emissions forecasts; identifies GHG emissions reduction targets to achieve the GHG reduction goals of the City of Ontario consistent with Senate Bill 32, Executive Order S-03-05, and substantial progress toward the State's carbon neutrality goals of Executive Order B-55-18; and measures, that when quantified, achieve the GHG reduction targets for the City. As noted in the TOP EIR, the measures included in the 2022 update to the CCAP are not substantially different than that of the 2014 CCAP. Because the 2022 Update to the CCAP addresses GHG emissions reductions and is consistent with the requirements of AB 32, SB 32, and international efforts to reduce GHG emissions, Projects that comply with the CCAP Update would have a less than significant GHG impact.

PROJECT GHG EMISSIONS

The estimated GHG emissions for the Project are summarized in Table 1. The estimated GHG emissions include emissions from Carbon Dioxide (CO_2), Methane (CH_4), Nitrous Oxide (N_2O), and Refrigerants (R). As shown on Table 1, the Project would generate a total of approximately 2,238.00 $MTCO_2e$/yr.

TABLE 1: TOTAL PROJECT GHG EMISSIONS

Source	Emissions (MT/year)				
	CO_2	CH_4	N_2O	Refrigerants	Total CO_2e
Annual construction-related emissions amortized over 30 years	50.28	1.79E-03	1.40E-03	2.30E-02	50.77
Mobile Source	1,800.46	0.07	0.08	2.09	1,828.80
Area Source	41.21	0.00	0.00	0.00	41.26
Energy Source	260.76	0.02	0.00	0.00	261.84
Water	10.91	0.22	0.01	0.00	17.97
Waste	10.62	1.06	0.00	0.00	37.17
Refrigerants	0.00	0.00	0.00	0.18	0.18
Total CO_2e (All Sources)	**2,238.00**				

GHG IMPACT ANALYSIS

Would the Project have the potential to generate direct or indirect GHG emissions that would result in a significant impact on the environment?

Would the Project have the potential to conflict with any applicable plan, policy or regulation of an agency adopted for the purpose of reducing the emissions of GHGs?

The purpose of the 2022 CCAP Update is to provide guidance on how to analyze GHG emissions and determine significance during the CEQA review of proposed development projects within the City. Because the 2022 CCAP Update addresses GHG emissions reductions and is consistent with the requirements of AB 32, SB 32, and international efforts to reduce GHG emissions, compliance with the CAP Update fulfills the description of mitigation found in the State CEQA Guidelines.

The Project will implement Screening Table Measures providing for the required points pursuant to the City Screening Tables. As such, the Project would be consistent with the GHG Development Review Process' requirement to achieve the requisite number of points and thus the Project is considered to have a less than significant individual and cumulatively considerable impact on GHG emissions.

LEVEL OF SIGNIFICANCE BEFORE MITIGATION

Potentially Significant.

MM GHG-1

Project development proposals shall implement Screening Table Measures that achieve the requisite points per the City's Community Climate Action Plan (CCAP) Screening Tables. The City shall verify that Screening Table Measures achieving the requisite points are incorporated in development plans prior to the issuance of building permit(s) and/or site plans (as applicable). The City shall verify implementation of the selected Screening Table Measures prior to the issuance of Certificate(s) of Occupancy. At the discretion of the City, measures that provide GHG reductions equivalent to GHG emissions reductions achieved via the Screening Table Measures may be implemented.

LEVEL OF SIGNIFICANCE AFTER MITIGATION

Less than Significant

GREENHOUSE GAS CONCLUSION

Results of the assessment indicate that the Project is not anticipated to result in a significant impact during operational activities associated with greenhouse gas and with implementation of MM GHG-1 a less than significant impact is expected.

REFERENCES

1. **City of Ontario.** City of Ontario Climate Adaption Plan. [Online] 2014. https://www.ontarioca.gov/sites/default/files/Ontario-Files/Planning/Applications/Community%20Climate%20Action%20Plan.pdf.

ATTACHMENT A

CALEEMOD PROPOSED EMISSIONS MODEL OUTPUTS

15662 - Esperanza Specific Plan Amendment (Proposed) Detailed Report

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1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	15662 - Esperanza Specific Plan Amendment (Proposed)
Construction Start Date	8/3/2026
Operational Year	2029
Lead Agency	—
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	2.60
Precipitation (days)	18.8
Location	33.992352, -117.563101
County	San Bernardino-South Coast
City	Ontario
Air District	South Coast AQMD
Air Basin	South Coast
TAZ	5260
EDFZ	10
Electric Utility	Southern California Edison
Gas Utility	Southern California Gas
App Version	2022.1.1.29

1.2. Land Use Types

Land Use Subtype	Size	Unit	Lot Acreage	Building Area (sq ft)	Landscape Area (sq ft)	Special Landscape Area (sq ft)	Population	Description
Apartments Low Rise	161	Dwelling Unit	10.5	170,660	98,516	—	533	—

1.3. User-Selected Emission Reduction Measures by Emissions Sector

No measures selected

2. Emissions Summary

2.1. Construction Emissions Compared Against Thresholds

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Un/Mit.	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	4.65	3.91	34.7	32.3	0.06	1.77	5.90	7.67	1.62	2.74	4.37	—	7,052	7,052	0.29	0.14	6.00	7,082
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	29.5	29.0	30.1	32.4	0.06	1.38	2.95	4.33	1.27	1.05	2.32	—	7,029	7,029	0.28	0.17	0.17	7,058
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	3.27	3.22	7.98	14.6	0.02	0.36	1.16	1.43	0.33	0.35	0.68	—	3,239	3,239	0.11	0.10	1.85	3,274
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.60	0.59	1.46	2.66	< 0.005	0.06	0.21	0.26	0.06	0.06	0.12	—	536	536	0.02	0.02	0.31	542

2.2. Construction Emissions by Year, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Year	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily - Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2026	4.65	3.91	34.7	32.3	0.06	1.77	5.90	7.67	1.62	2.74	4.37	—	7,052	7,052	0.29	0.07	1.10	7,082

2027	1.90	1.60	11.0	22.1	0.03	0.37	1.64	2.01	0.34	0.39	0.73	—	4,644	4,644	0.16	0.14	6.00	4,697
2028	1.79	1.54	10.5	21.5	0.03	0.33	1.64	1.98	0.30	0.39	0.69	—	4,604	4,604	0.15	0.14	5.37	4,656
Daily - Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2026	4.13	3.47	30.1	29.8	0.06	1.38	2.95	4.33	1.27	1.05	2.32	—	7,029	7,029	0.28	0.15	0.17	7,058
2027	1.87	1.57	11.1	20.1	0.03	0.37	1.64	2.01	0.34	0.39	0.73	—	4,515	4,515	0.16	0.14	0.16	4,561
2028	1.76	1.51	10.5	19.7	0.03	0.33	1.64	1.98	0.30	0.39	0.69	—	4,478	4,478	0.16	0.14	0.14	4,524
2029	29.5	29.0	17.8	32.4	0.05	0.56	2.14	2.70	0.51	0.51	1.02	—	6,585	6,585	0.23	0.17	0.16	6,642
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2026	1.08	0.91	7.75	8.26	0.02	0.36	0.93	1.29	0.33	0.35	0.68	—	1,822	1,822	0.07	0.03	0.32	1,832
2027	1.34	1.12	7.98	14.6	0.02	0.27	1.16	1.43	0.24	0.28	0.52	—	3,239	3,239	0.11	0.10	1.85	3,274
2028	1.26	1.08	7.58	14.3	0.02	0.24	1.16	1.40	0.22	0.28	0.49	—	3,221	3,221	0.11	0.10	1.66	3,256
2029	3.27	3.22	2.19	4.05	0.01	0.07	0.27	0.34	0.06	0.06	0.13	—	829	829	0.03	0.02	0.34	837
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2026	0.20	0.17	1.41	1.51	< 0.005	0.06	0.17	0.23	0.06	0.06	0.12	—	302	302	0.01	< 0.005	0.05	303
2027	0.24	0.20	1.46	2.66	< 0.005	0.05	0.21	0.26	0.04	0.05	0.09	—	536	536	0.02	0.02	0.31	542
2028	0.23	0.20	1.38	2.62	< 0.005	0.04	0.21	0.26	0.04	0.05	0.09	—	533	533	0.02	0.02	0.28	539
2029	0.60	0.59	0.40	0.74	< 0.005	0.01	0.05	0.06	0.01	0.01	0.02	—	137	137	< 0.005	< 0.005	0.06	139

2.4. Operations Emissions Compared Against Thresholds

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Un/Mit.	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	9.18	8.44	7.52	53.4	0.14	0.35	11.3	11.7	0.34	2.88	3.22	77.0	17,534	17,611	8.40	0.57	33.0	18,023
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

2826

Unmit.	8.14	7.45	7.74	36.3	0.14	0.34	11.3	11.7	0.34	2.88	3.22	77.0	16,726	16,803	8.41	0.58	1.92	17,189
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	8.09	7.56	5.03	40.0	0.11	0.14	10.3	10.4	0.14	2.62	2.75	77.0	12,752	12,829	8.31	0.54	13.7	13,211
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	1.48	1.38	0.92	7.29	0.02	0.03	1.88	1.90	0.02	0.48	0.50	12.8	2,111	2,124	1.38	0.09	2.28	2,187

2.5. Operations Emissions by Sector, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Sector	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	4.00	3.51	4.09	42.8	0.12	0.07	11.3	11.4	0.07	2.88	2.95	—	12,491	12,491	0.46	0.52	31.9	12,689
Area	5.09	4.89	2.76	10.3	0.02	0.22	—	0.22	0.22	—	0.22	0.00	3,414	3,414	0.06	0.01	—	3,418
Energy	0.08	0.04	0.68	0.29	< 0.005	0.05	—	0.05	0.05	—	0.05	—	1,575	1,575	0.14	0.01	—	1,582
Water	—	—	—	—	—	—	—	—	—	—	—	12.9	53.1	65.9	1.32	0.03	—	109
Waste	—	—	—	—	—	—	—	—	—	—	—	64.2	0.00	64.2	6.41	0.00	—	225
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1.09	1.09
Total	9.18	8.44	7.52	53.4	0.14	0.35	11.3	11.7	0.34	2.88	3.22	77.0	17,534	17,611	8.40	0.57	33.0	18,023
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	3.80	3.31	4.39	34.9	0.11	0.07	11.3	11.4	0.07	2.88	2.95	—	11,708	11,708	0.46	0.54	0.83	11,880
Area	4.26	4.10	2.67	1.14	0.02	0.22	—	0.22	0.22	—	0.22	0.00	3,390	3,390	0.06	0.01	—	3,393
Energy	0.08	0.04	0.68	0.29	< 0.005	0.05	—	0.05	0.05	—	0.05	—	1,575	1,575	0.14	0.01	—	1,582
Water	—	—	—	—	—	—	—	—	—	—	—	12.9	53.1	65.9	1.32	0.03	—	109
Waste	—	—	—	—	—	—	—	—	—	—	—	64.2	0.00	64.2	6.41	0.00	—	225
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1.09	2827

Total	8.14	7.45	7.74	36.3	0.14	0.34	11.3	11.7	0.34	2.88	3.22	77.0	16,726	16,803	8.41	0.58	1.92	17,189
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	3.47	3.02	4.11	33.3	0.11	0.07	10.3	10.4	0.06	2.62	2.68	—	10,875	10,875	0.43	0.50	12.6	11,046
Area	4.54	4.50	0.24	6.35	< 0.005	0.02	—	0.02	0.02	—	0.02	0.00	249	249	0.01	< 0.005	—	249
Energy	0.08	0.04	0.68	0.29	< 0.005	0.05	—	0.05	0.05	—	0.05	—	1,575	1,575	0.14	0.01	—	1,582
Water	—	—	—	—	—	—	—	—	—	—	—	12.9	53.1	65.9	1.32	0.03	—	109
Waste	—	—	—	—	—	—	—	—	—	—	—	64.2	0.00	64.2	6.41	0.00	—	225
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1.09	1.09
Total	8.09	7.56	5.03	40.0	0.11	0.14	10.3	10.4	0.14	2.62	2.75	77.0	12,752	12,829	8.31	0.54	13.7	13,211
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.63	0.55	0.75	6.08	0.02	0.01	1.88	1.89	0.01	0.48	0.49	—	1,800	1,800	0.07	0.08	2.09	1,829
Area	0.83	0.82	0.04	1.16	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	0.00	41.2	41.2	< 0.005	< 0.005	—	41.3
Energy	0.01	0.01	0.12	0.05	< 0.005	0.01	—	0.01	0.01	—	0.01	—	261	261	0.02	< 0.005	—	262
Water	—	—	—	—	—	—	—	—	—	—	—	2.13	8.78	10.9	0.22	0.01	—	18.0
Waste	—	—	—	—	—	—	—	—	—	—	—	10.6	0.00	10.6	1.06	0.00	—	37.2
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.18	0.18
Total	1.48	1.38	0.92	7.29	0.02	0.03	1.88	1.90	0.02	0.48	0.50	12.8	2,111	2,124	1.38	0.09	2.28	2,187

3. Construction Emissions Details

3.1. Site Preparation (2026) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road	4.56	3.83	34.6	31.0	0.05	1.77	—	1.77	1.62	—	1.62	—	5,532	5,532	0.22	0.04	—	5,551
Dust From Material Movement	—	—	—	—	—	—	5.66	5.66	—	2.69	2.69	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.25	0.21	1.90	1.70	< 0.005	0.10	—	0.10	0.09	—	0.09	—	303	303	0.01	< 0.005	—	304
Dust From Material Movement	—	—	—	—	—	—	0.31	0.31	—	0.15	0.15	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.05	0.04	0.35	0.31	< 0.005	0.02	—	0.02	0.02	—	0.02	—	50.2	50.2	< 0.005	< 0.005	—	50.4
Dust From Material Movement	—	—	—	—	—	—	0.06	0.06	—	0.03	0.03	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.08	0.08	0.07	1.26	0.00	0.00	0.23	0.23	0.00	0.05	0.05	—	242	242	0.01	0.01	0.83	245
Vendor	< 0.005	< 0.005	0.03	0.02	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	30.3	30.3	< 0.005	< 0.005	0.08	31.9
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.05	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	12.3	12.3	< 0.005	< 0.005	0.02	12.5
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	1.66	1.66	< 0.005	< 0.005	< 0.005	1.74
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	2.04	2.04	< 0.005	< 0.005	< 0.005	2.07
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.28	0.28	< 0.005	< 0.005	< 0.005	0.29
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.3. Grading (2026) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	4.03	3.39	30.0	28.7	0.06	1.38	—	1.38	1.27	—	1.27	—	6,715	6,715	0.27	0.05	—	6,738

Dust From Material Movement	—	—	—	—	—	—	2.67	2.67	—	0.98	0.98	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	4.03	3.39	30.0	28.7	0.06	1.38	—	1.38	1.27	—	1.27	—	6,715	6,715	0.27	0.05	—	6,738
Dust From Material Movement	—	—	—	—	—	—	2.67	2.67	—	0.98	0.98	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.66	0.56	4.92	4.71	0.01	0.23	—	0.23	0.21	—	0.21	—	1,104	1,104	0.04	0.01	—	1,108
Dust From Material Movement	—	—	—	—	—	—	0.44	0.44	—	0.16	0.16	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.12	0.10	0.90	0.86	< 0.005	0.04	—	0.04	0.04	—	0.04	—	183	183	0.01	< 0.005	—	183

Dust From Material Movement	—	—	—	—	—	—	0.08	0.08	—	0.03	0.03	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.10	0.09	0.08	1.44	0.00	0.00	0.26	0.26	0.00	0.06	0.06	—	276	276	0.01	0.01	0.94	280
Vendor	0.01	< 0.005	0.07	0.04	< 0.005	< 0.005	0.02	0.02	< 0.005	< 0.005	0.01	—	60.7	60.7	< 0.005	0.01	0.16	63.7
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.09	0.08	0.09	1.09	0.00	0.00	0.26	0.26	0.00	0.06	0.06	—	253	253	< 0.005	0.01	0.02	256
Vendor	0.01	< 0.005	0.07	0.04	< 0.005	< 0.005	0.02	0.02	< 0.005	< 0.005	0.01	—	60.7	60.7	< 0.005	0.01	< 0.005	63.6
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.02	0.19	0.00	0.00	0.04	0.04	0.00	0.01	0.01	—	42.2	42.2	< 0.005	< 0.005	0.07	42.8
Vendor	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	9.97	9.97	< 0.005	< 0.005	0.01	10.5
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.03	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	6.99	6.99	< 0.005	< 0.005	0.01	7.08
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	1.65	1.65	< 0.005	< 0.005	< 0.005	1.73
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.5. Building Construction (2026) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.38	1.16	10.7	14.1	0.03	0.41	—	0.41	0.38	—	0.38	—	2,630	2,630	0.11	0.02	—	2,639
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.11	0.09	0.81	1.07	< 0.005	0.03	—	0.03	0.03	—	0.03	—	201	201	0.01	< 0.005	—	201
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.02	0.15	0.20	< 0.005	0.01	—	0.01	0.01	—	0.01	—	33.2	33.2	< 0.005	< 0.005	—	33.3
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	0.53	0.47	0.51	6.30	0.00	0.00	1.52	1.52	0.00	0.36	0.36	—	1,467	1,467	0.02	0.06	0.14	1,485
Vendor	0.04	0.01	0.51	0.27	< 0.005	0.01	0.13	0.14	0.01	0.04	0.04	—	455	455	0.03	0.07	0.03	477
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.04	0.04	0.04	0.51	0.00	0.00	0.11	0.11	0.00	0.03	0.03	—	114	114	< 0.005	< 0.005	0.18	115
Vendor	< 0.005	< 0.005	0.04	0.02	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	34.7	34.7	< 0.005	0.01	0.04	36.4
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.09	0.00	0.00	0.02	0.02	0.00	< 0.005	< 0.005	—	18.8	18.8	< 0.005	< 0.005	0.03	19.1
Vendor	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	5.75	5.75	< 0.005	< 0.005	0.01	6.03
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.7. Building Construction (2027) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.33	1.11	10.2	14.0	0.03	0.36	—	0.36	0.34	—	0.34	—	2,630	2,630	0.11	0.02	—	2,639
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	1.33	1.11	10.2	14.0	0.03	0.36	—	0.36	0.34	—	0.34	—	2,630	2,630	0.11	0.02	—	2,639
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.95	0.79	7.27	10.0	0.02	0.26	—	0.26	0.24	—	0.24	—	1,878	1,878	0.08	0.02	—	1,885
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.17	0.14	1.33	1.83	< 0.005	0.05	—	0.05	0.04	—	0.04	—	311	311	0.01	< 0.005	—	312
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.53	0.48	0.41	7.77	0.00	0.00	1.52	1.52	0.00	0.36	0.36	—	1,568	1,568	0.02	0.05	4.93	1,590
Vendor	0.04	0.01	0.47	0.26	< 0.005	0.01	0.13	0.14	0.01	0.04	0.04	—	446	446	0.03	0.07	1.07	468
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.50	0.45	0.46	5.85	0.00	0.00	1.52	1.52	0.00	0.36	0.36	—	1,438	1,438	0.02	0.05	0.13	1,455
Vendor	0.04	0.01	0.49	0.26	< 0.005	0.01	0.13	0.14	0.01	0.04	0.04	—	447	447	0.03	0.07	0.03	467
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.36	0.32	0.36	4.38	0.00	0.00	1.07	1.07	0.00	0.25	0.25	—	1,042	1,042	0.01	0.04	1.52	1,055
Vendor	0.03	0.01	0.35	0.18	< 0.005	< 0.005	0.09	0.10	< 0.005	0.03	0.03	—	319	319	0.02	0.05	0.33	334
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.07	0.06	0.07	0.80	0.00	0.00	0.20	0.20	0.00	0.05	0.05	—	172	172	< 0.005	0.01	0.25	175
Vendor	0.01	< 0.005	0.06	0.03	< 0.005	< 0.005	0.02	0.02	< 0.005	< 0.005	0.01	—	52.8	52.8	< 0.005	0.01	0.05	55.3
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.9. Building Construction (2028) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.28	1.07	9.66	14.0	0.03	0.33	—	0.33	0.30	—	0.30	—	2,630	2,630	0.11	0.02	—	2,639
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.28	1.07	9.66	14.0	0.03	0.33	—	0.33	0.30	—	0.30	—	2,630	2,630	0.11	0.02	—	2,639
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.92	0.77	6.92	10.1	0.02	0.23	—	0.23	0.21	—	0.21	—	1,884	1,884	0.08	0.02	—	1,890
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.17	0.14	1.26	1.83	< 0.005	0.04	—	0.04	0.04	—	0.04	—	312	312	0.01	< 0.005	—	313
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.47	0.46	0.40	7.20	0.00	0.00	1.52	1.52	0.00	0.36	0.36	—	1,538	1,538	0.02	0.05	4.42	1,559
Vendor	0.04	0.01	0.45	0.25	< 0.005	0.01	0.13	0.14	< 0.005	0.04	0.04	—	436	436	0.03	0.07	0.95	458
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.44	0.43	0.41	5.41	0.00	0.00	1.52	1.52	0.00	0.36	0.36	—	1,411	1,411	0.02	0.05	0.11	1,428
Vendor	0.04	0.01	0.47	0.25	< 0.005	0.01	0.13	0.14	< 0.005	0.04	0.04	—	436	436	0.03	0.07	0.02	457
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.31	0.31	0.32	4.11	0.00	0.00	1.07	1.07	0.00	0.25	0.25	—	1,025	1,025	0.01	0.04	1.37	1,038
Vendor	0.03	0.01	0.34	0.18	< 0.005	< 0.005	0.09	0.10	< 0.005	0.03	0.03	—	313	313	0.02	0.05	0.29	328
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	0.06	0.06	0.06	0.75	0.00	0.00	0.20	0.20	0.00	0.05	0.05	—	170	170	< 0.005	0.01	0.23	172
Vendor	0.01	< 0.005	0.06	0.03	< 0.005	< 0.005	0.02	0.02	< 0.005	< 0.005	0.01	—	51.7	51.7	< 0.005	0.01	0.05	54.2
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.11. Building Construction (2029) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.25	1.04	9.28	14.0	0.03	0.30	—	0.30	0.28	—	0.28	—	2,629	2,629	0.11	0.02	—	2,638
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.17	0.14	1.24	1.86	< 0.005	0.04	—	0.04	0.04	—	0.04	—	350	350	0.01	< 0.005	—	351
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.03	0.03	0.23	0.34	< 0.005	0.01	—	0.01	0.01	—	0.01	—	57.9	57.9	< 0.005	< 0.005	—	58.1

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.42	0.36	0.40	5.07	0.00	0.00	1.52	1.52	0.00	0.36	0.36	—	1,386	1,386	0.02	0.05	0.10	1,403
Vendor	0.04	0.01	0.45	0.24	< 0.005	< 0.005	0.13	0.13	< 0.005	0.04	0.04	—	425	425	0.03	0.06	0.02	445
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.06	0.05	0.05	0.71	0.00	0.00	0.20	0.20	0.00	0.05	0.05	—	187	187	< 0.005	0.01	0.23	189
Vendor	< 0.005	< 0.005	0.06	0.03	< 0.005	< 0.005	0.02	0.02	< 0.005	< 0.005	0.01	—	56.5	56.5	< 0.005	0.01	0.05	59.2
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.13	0.00	0.00	0.04	0.04	0.00	0.01	0.01	—	31.0	31.0	< 0.005	< 0.005	0.04	31.4
Vendor	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	9.36	9.36	< 0.005	< 0.005	0.01	9.80
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.13. Paving (2029) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Roa Equipment	0.80	0.67	6.46	9.92	0.01	0.24	—	0.24	0.22	—	0.22	—	1,511	1,511	0.06	0.01	—	1,516
Paving	0.00	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Roa d Equipm ent	0.09	0.07	0.71	1.09	< 0.005	0.03	—	0.03	0.02	—	0.02	—	166	166	0.01	< 0.005	—	166
Paving	0.00	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Roa d Equipm ent	0.02	0.01	0.13	0.20	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	27.4	27.4	< 0.005	< 0.005	—	27.5
Paving	0.00	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05	0.05	0.05	0.66	0.00	0.00	0.20	0.20	0.00	0.05	0.05	—	179	179	< 0.005	0.01	0.01	182
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

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Worker	0.01	0.01	0.01	0.08	0.00	0.00	0.02	0.02	0.00	< 0.005	< 0.005	—	19.9	19.9	< 0.005	< 0.005	0.02	20.2
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	3.30	3.30	< 0.005	< 0.005	< 0.005	3.34
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.15. Architectural Coating (2029) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.17	0.14	1.06	1.48	< 0.005	0.02	—	0.02	0.02	—	0.02	—	178	178	0.01	< 0.005	—	179
Architectural Coatings	26.7	26.7	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.01	0.12	0.16	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	19.5	19.5	< 0.005	< 0.005	—	19.6

Architect Coatings	2.93	2.93	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.02	0.03	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	3.23	3.23	< 0.005	< 0.005	—	3.24
Architectural Coatings	0.53	0.53	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.08	0.07	0.08	1.01	0.00	0.00	0.30	0.30	0.00	0.07	0.07	—	277	277	< 0.005	0.01	0.02	281
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.12	0.00	0.00	0.03	0.03	0.00	0.01	0.01	—	30.8	30.8	< 0.005	< 0.005	0.04	31.2
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.02	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	5.10	5.10	< 0.005	< 0.005	0.01	5.17
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

4. Operations Emissions Details

4.1. Mobile Emissions by Land Use

4.1.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Low Rise	4.00	3.51	4.09	42.8	0.12	0.07	11.3	11.4	0.07	2.88	2.95	—	12,491	12,491	0.46	0.52	31.9	12,689
Total	4.00	3.51	4.09	42.8	0.12	0.07	11.3	11.4	0.07	2.88	2.95	—	12,491	12,491	0.46	0.52	31.9	12,689
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Low Rise	3.80	3.31	4.39	34.9	0.11	0.07	11.3	11.4	0.07	2.88	2.95	—	11,708	11,708	0.46	0.54	0.83	11,880
Total	3.80	3.31	4.39	34.9	0.11	0.07	11.3	11.4	0.07	2.88	2.95	—	11,708	11,708	0.46	0.54	0.83	11,880
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Low Rise	0.63	0.55	0.75	6.08	0.02	0.01	1.88	1.89	0.01	0.48	0.49	—	1,800	1,800	0.07	0.08	2.09	1,829
Total	0.63	0.55	0.75	6.08	0.02	0.01	1.88	1.89	0.01	0.48	0.49	—	1,800	1,800	0.07	0.08	2.09	1,829

4.2. Energy

4.2.1. Electricity Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Low Rise	—	—	—	—	—	—	—	—	—	—	—	—	716	716	0.07	0.01	—	720
Total	—	—	—	—	—	—	—	—	—	—	—	—	716	716	0.07	0.01	—	720
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Low Rise	—	—	—	—	—	—	—	—	—	—	—	—	716	716	0.07	0.01	—	720
Total	—	—	—	—	—	—	—	—	—	—	—	—	716	716	0.07	0.01	—	720
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Low Rise	—	—	—	—	—	—	—	—	—	—	—	—	118	118	0.01	< 0.005	—	119
Total	—	—	—	—	—	—	—	—	—	—	—	—	118	118	0.01	< 0.005	—	119

4.2.3. Natural Gas Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Low Rise	0.08	0.04	0.68	0.29	< 0.005	0.05	—	0.05	0.05	—	0.05	—	859	859	0.08	< 0.005	—	862
Total	0.08	0.04	0.68	0.29	< 0.005	0.05	—	0.05	0.05	—	0.05	—	859	859	0.08	< 0.005	—	862

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Low Rise	0.08	0.04	0.68	0.29	< 0.005	0.05	—	0.05	0.05	—	0.05	—	859	859	0.08	< 0.005	—	862
Total	0.08	0.04	0.68	0.29	< 0.005	0.05	—	0.05	0.05	—	0.05	—	859	859	0.08	< 0.005	—	862
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Low Rise	0.01	0.01	0.12	0.05	< 0.005	0.01	—	0.01	0.01	—	0.01	—	142	142	0.01	< 0.005	—	143
Total	0.01	0.01	0.12	0.05	< 0.005	0.01	—	0.01	0.01	—	0.01	—	142	142	0.01	< 0.005	—	143

4.3. Area Emissions by Source

4.3.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Source	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hearths	0.31	0.16	2.67	1.14	0.02	0.22	—	0.22	0.22	—	0.22	0.00	3,390	3,390	0.06	0.01	—	3,393
Consumer Products	3.65	3.65	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.29	0.29	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	0.84	0.79	0.09	9.16	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	24.4	24.4	< 0.005	< 0.005	—	24.5
Total	5.09	4.89	2.76	10.3	0.02	0.22	—	0.22	0.22	—	0.22	0.00	3,414	3,414	0.06	0.01	—	

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hearths	0.31	0.16	2.67	1.14	0.02	0.22	—	0.22	0.22	—	0.22	0.00	3,390	3,390	0.06	0.01	—	3,393
Consumer Products	3.65	3.65	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.29	0.29	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	4.26	4.10	2.67	1.14	0.02	0.22	—	0.22	0.22	—	0.22	0.00	3,390	3,390	0.06	0.01	—	3,393
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hearths	< 0.005	< 0.005	0.03	0.01	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	0.00	38.4	38.4	< 0.005	< 0.005	—	38.5
Consumer Products	0.67	0.67	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.05	0.05	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	0.10	0.10	0.01	1.14	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	2.77	2.77	< 0.005	< 0.005	—	2.78
Total	0.83	0.82	0.04	1.16	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	0.00	41.2	41.2	< 0.005	< 0.005	—	41.3

4.4. Water Emissions by Land Use

4.4.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
																		2846

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Low Rise	—	—	—	—	—	—	—	—	—	—	—	12.9	53.1	65.9	1.32	0.03	—	109
Total	—	—	—	—	—	—	—	—	—	—	—	12.9	53.1	65.9	1.32	0.03	—	109
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Low Rise	—	—	—	—	—	—	—	—	—	—	—	12.9	53.1	65.9	1.32	0.03	—	109
Total	—	—	—	—	—	—	—	—	—	—	—	12.9	53.1	65.9	1.32	0.03	—	109
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Low Rise	—	—	—	—	—	—	—	—	—	—	—	2.13	8.78	10.9	0.22	0.01	—	18.0
Total	—	—	—	—	—	—	—	—	—	—	—	2.13	8.78	10.9	0.22	0.01	—	18.0

4.5. Waste Emissions by Land Use

4.5.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Low Rise	—	—	—	—	—	—	—	—	—	—	—	64.2	0.00	64.2	6.41	0.00	—	225
Total	—	—	—	—	—	—	—	—	—	—	—	64.2	0.00	64.2	6.41	0.00	—	225

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Low Rise	—	—	—	—	—	—	—	—	—	—	—	64.2	0.00	64.2	6.41	0.00	—	225
Total	—	—	—	—	—	—	—	—	—	—	—	64.2	0.00	64.2	6.41	0.00	—	225
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Low Rise	—	—	—	—	—	—	—	—	—	—	—	10.6	0.00	10.6	1.06	0.00	—	37.2
Total	—	—	—	—	—	—	—	—	—	—	—	10.6	0.00	10.6	1.06	0.00	—	37.2

4.6. Refrigerant Emissions by Land Use

4.6.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Low Rise	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1.09	1.09
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1.09	1.09
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Low Rise	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1.09	1.09
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1.09	1.09
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Apartme Low Rise	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.18	0.18
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.18	0.18

4.7. Offroad Emissions By Equipment Type

4.7.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.8. Stationary Emissions By Equipment Type

4.8.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.9. User Defined Emissions By Equipment Type

4.9.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Vegetation	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
																		2850

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.2. Above and Belowground Carbon Accumulation by Land Use Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Species	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

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5. Activity Data

5.1. Construction Schedule

Phase Name	Phase Type	Start Date	End Date	Days Per Week	Work Days per Phase	Phase Description
Site Preparation	Site Preparation	8/3/2026	8/28/2026	5.00	20.0	10
Grading	Grading	8/31/2026	11/20/2026	5.00	60.0	30
Building Construction	Building Construction	11/23/2026	3/9/2029	5.00	600	300
Paving	Paving	1/15/2029	3/9/2029	5.00	40.0	20
Architectural Coating	Architectural Coating	1/15/2029	3/9/2029	5.00	40.0	20

5.2. Off-Road Equipment

5.2.1. Unmitigated

Phase Name	Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor
Site Preparation	Rubber Tired Dozers	Diesel	Average	3.00	8.00	367	0.40
Site Preparation	Crawler Tractors	Diesel	Average	4.00	8.00	87.0	0.43
Grading	Excavators	Diesel	Average	2.00	8.00	36.0	0.38
Grading	Graders	Diesel	Average	1.00	8.00	148	0.41
Grading	Rubber Tired Dozers	Diesel	Average	1.00	8.00	367	0.40
Grading	Scrapers	Diesel	Average	2.00	8.00	423	0.48
Grading	Crawler Tractors	Diesel	Average	2.00	8.00	87.0	0.43
Building Construction	Cranes	Diesel	Average	1.00	8.00	367	0.29
Building Construction	Forklifts	Diesel	Average	3.00	8.00	82.0	0.20
Building Construction	Generator Sets	Diesel	Average	1.00	8.00	14.0	0.74
Building Construction	Tractors/Loaders/Backhoes	Diesel	Average	3.00	8.00	84.0	0.37
Building Construction	Welders	Diesel	Average	1.00	8.00	46.0	0.45
Paving	Pavers	Diesel	Average	2.00	8.00	81.0	0.42

Paving	Paving Equipment	Diesel	Average	2.00	8.00	89.0	0.36
Paving	Rollers	Diesel	Average	2.00	8.00	36.0	0.38
Architectural Coating	Air Compressors	Diesel	Average	1.00	8.00	37.0	0.48

5.3. Construction Vehicles

5.3.1. Unmitigated

Phase Name	Trip Type	One-Way Trips per Day	Miles per Trip	Vehicle Mix
Site Preparation	—	—	—	—
Site Preparation	Worker	17.5	18.5	LDA,LDT1,LDT2
Site Preparation	Vendor	1.00	10.2	HHDT,MHDT
Site Preparation	Hauling	0.00	20.0	HHDT
Site Preparation	Onsite truck	—	—	HHDT
Grading	—	—	—	—
Grading	Worker	20.0	18.5	LDA,LDT1,LDT2
Grading	Vendor	2.00	10.2	HHDT,MHDT
Grading	Hauling	0.00	20.0	HHDT
Grading	Onsite truck	—	—	HHDT
Building Construction	—	—	—	—
Building Construction	Worker	116	18.5	LDA,LDT1,LDT2
Building Construction	Vendor	15.0	10.2	HHDT,MHDT
Building Construction	Hauling	0.00	20.0	HHDT
Building Construction	Onsite truck	—	—	HHDT
Paving	—	—	—	—
Paving	Worker	15.0	18.5	LDA,LDT1,LDT2
Paving	Vendor	—	10.2	HHDT,MHDT
Paving	Hauling	0.00	20.0	HHDT
Paving	Onsite truck	—	—	HHDT

Architectural Coating	—	—	—	—
Architectural Coating	Worker	23.2	18.5	LDA,LDT1,LDT2
Architectural Coating	Vendor	—	10.2	HHDT,MHDT
Architectural Coating	Hauling	0.00	20.0	HHDT
Architectural Coating	Onsite truck	—	—	HHDT

5.4. Vehicles

5.4.1. Construction Vehicle Control Strategies

Non-applicable. No control strategies activated by user.

5.5. Architectural Coatings

Phase Name	Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
Architectural Coating	345,587	115,196	0.00	0.00	—

5.6. Dust Mitigation

5.6.1. Construction Earthmoving Activities

Phase Name	Material Imported (cy)	Material Exported (cy)	Acres Graded (acres)	Material Demolished (sq. ft.)	Acres Paved (acres)
Site Preparation	—	—	70.0	0.00	—
Grading	—	—	240	0.00	—
Paving	0.00	0.00	0.00	0.00	—

5.6.2. Construction Earthmoving Control Strategies

Control Strategies Applied	Frequency (per day)	PM10 Reduction	PM2.5 Reduction
Water Exposed Area	3	74%	74%

5.7. Construction Paving

Land Use	Area Paved (acres)	% Asphalt
Apartments Low Rise	—	0%

5.8. Construction Electricity Consumption and Emissions Factors

kWh per Year and Emission Factor (lb/MWh)

Year	kWh per Year	CO2	CH4	N2O
2026	0.00	346	0.03	< 0.005
2027	0.00	346	0.03	< 0.005
2028	0.00	346	0.03	< 0.005
2029	0.00	346	0.03	< 0.005

5.9. Operational Mobile Sources

5.9.1. Unmitigated

Land Use Type	Trips/Weekday	Trips/Saturday	Trips/Sunday	Trips/Year	VMT/Weekday	VMT/Saturday	VMT/Sunday	VMT/Year
Apartments Low Rise	943	733	621	316,575	15,986	12,412	10,530	5,363,927

5.10. Operational Area Sources

5.10.1. Hearths

5.10.1.1. Unmitigated

Hearth Type	Unmitigated (number)
Apartments Low Rise	—
Wood Fireplaces	0
Gas Fireplaces	161

Propane Fireplaces	0
Electric Fireplaces	0
No Fireplaces	0

5.10.2. Architectural Coatings

Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
345586.5	115,196	0.00	0.00	—

5.10.3. Landscape Equipment

Season	Unit	Value
Snow Days	day/yr	0.00
Summer Days	day/yr	250

5.11. Operational Energy Consumption

5.11.1. Unmitigated

Electricity (kWh/yr) and CO2 and CH4 and N2O and Natural Gas (kBTU/yr)

Land Use	Electricity (kWh/yr)	CO2	CH4	N2O	Natural Gas (kBTU/yr)
Apartments Low Rise	754,406	346	0.0330	0.0040	2,681,706

5.12. Operational Water and Wastewater Consumption

5.12.1. Unmitigated

Land Use	Indoor Water (gal/year)	Outdoor Water (gal/year)
Apartments Low Rise	6,710,669	1,933,654

5.13. Operational Waste Generation

5.13.1. Unmitigated

Land Use	Waste (ton/year)	Cogeneration (kWh/year)
Apartments Low Rise	119	—

5.14. Operational Refrigeration and Air Conditioning Equipment

5.14.1. Unmitigated

Land Use Type	Equipment Type	Refrigerant	GWP	Quantity (kg)	Operations Leak Rate	Service Leak Rate	Times Serviced
Apartments Low Rise	Average room A/C & Other residential A/C and heat pumps	User Defined	750	< 0.005	2.50	2.50	10.0
Apartments Low Rise	Household refrigerators and/or freezers	R-134a	1,430	0.12	0.60	0.00	1.00

5.15. Operational Off-Road Equipment

5.15.1. Unmitigated

Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor

5.16. Stationary Sources

5.16.1. Emergency Generators and Fire Pumps

Equipment Type	Fuel Type	Number per Day	Hours per Day	Hours per Year	Horsepower	Load Factor

5.16.2. Process Boilers

Equipment Type	Fuel Type	Number	Boiler Rating (MMBtu/hr)	Daily Heat Input (MMBtu/day)	Annual Heat Input (MM

5.17. User Defined

Equipment Type	Fuel Type

5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres

5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

Biomass Cover Type	Initial Acres	Final Acres

5.18.2. Sequestration

5.18.2.1. Unmitigated

Tree Type	Number	Electricity Saved (kWh/year)	Natural Gas Saved (btu/year)

6. Climate Risk Detailed Report

6.1. Climate Risk Summary

Cal-Adapt midcentury 2040–2059 average projections for four hazards are reported below for your project location. These are under Representation Concentration Pathway (RCP) 8.5 which assumes GHG emissions will continue to rise strongly through 2050 and then plateau around 2100.

Climate Hazard	Result for Project Location	Unit
Temperature and Extreme Heat	19.8	annual days of extreme heat
Extreme Precipitation	3.10	annual days with precipitation above 20 mm

Sea Level Rise	—	meters of inundation depth
Wildfire	6.78	annual hectares burned

Temperature and Extreme Heat data are for grid cell in which your project are located. The projection is based on the 98th historical percentile of daily maximum/minimum temperatures from observed historical data (32 climate model ensemble from Cal-Adapt, 2040–2059 average under RCP 8.5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Extreme Precipitation data are for the grid cell in which your project are located. The threshold of 20 mm is equivalent to about ¾ an inch of rain, which would be light to moderate rainfall if received over a full day or heavy rain if received over a period of 2 to 4 hours. Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Sea Level Rise data are for the grid cell in which your project are located. The projections are from Radke et al. (2017), as reported in Cal-Adapt (Radke et al., 2017, CEC-500-2017-008), and consider inundation location and depth for the San Francisco Bay, the Sacramento-San Joaquin River Delta and California coast resulting different increments of sea level rise coupled with extreme storm events. Users may select from four scenarios to view the range in potential inundation depth for the grid cell. The four scenarios are: No rise, 0.5 meter, 1.0 meter, 1.41 meters
Wildfire data are for the grid cell in which your project are located. The projections are from UC Davis, as reported in Cal-Adapt (2040–2059 average under RCP 8.5), and consider historical data of climate, vegetation, population density, and large (> 400 ha) fire history. Users may select from four model simulations to view the range in potential wildfire probabilities for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warmer/drier (HadGEM2-ES), Cooler/wetter (CNRM-CM5), Average conditions (CanESM2), Range of different rainfall and temperature possibilities (MIROC5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

6.2. Initial Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	2	0	0	N/A
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	1	0	0	N/A
Wildfire	1	0	0	N/A
Flooding	N/A	N/A	N/A	N/A
Drought	N/A	N/A	N/A	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	0	0	0	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores do not include implementation of climate risk reduction measures.

6.3. Adjusted Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	2	1	1	3

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Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	1	1	1	2
Wildfire	1	1	1	2
Flooding	N/A	N/A	N/A	N/A
Drought	N/A	N/A	N/A	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	1	1	1	2

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores include implementation of climate risk reduction measures.

6.4. Climate Risk Reduction Measures

7. Health and Equity Details

7.1. CalEnviroScreen 4.0 Scores

The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Exposure Indicators	—
AQ-Ozone	77.1
AQ-PM	93.4
AQ-DPM	57.1
Drinking Water	100.0
Lead Risk Housing	17.5
Pesticides	84.9
Toxic Releases	67.6
Traffic	18.1
Effect Indicators	—

CleanUp Sites	80.3
Groundwater	98.1
Haz Waste Facilities/Generators	86.6
Impaired Water Bodies	87.0
Solid Waste	98.9
Sensitive Population	—
Asthma	16.5
Cardio-vascular	29.1
Low Birth Weights	49.0
Socioeconomic Factor Indicators	—
Education	52.9
Housing	59.3
Linguistic	68.9
Poverty	35.4
Unemployment	36.4

7.2. Healthy Places Index Scores

The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Economic	—
Above Poverty	73.60451687
Employed	6.274862056
Median HI	76.55588349
Education	—
Bachelor's or higher	64.85307327
High school enrollment	100
Preschool enrollment	66.93186193
Transportation	—

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Auto Access	63.41588605
Active commuting	24.5989991
Social	—
2-parent households	66.95752598
Voting	70.69164635
Neighborhood	—
Alcohol availability	97.0101373
Park access	52.77813422
Retail density	10.02181445
Supermarket access	6.557166688
Tree canopy	8.238162453
Housing	—
Homeownership	60.78532016
Housing habitability	61.41408957
Low-inc homeowner severe housing cost burden	71.53856025
Low-inc renter severe housing cost burden	18.38829719
Uncrowded housing	64.30129603
Health Outcomes	—
Insured adults	73.78416528
Arthritis	95.7
Asthma ER Admissions	84.6
High Blood Pressure	97.7
Cancer (excluding skin)	89.7
Asthma	34.7
Coronary Heart Disease	98.7
Chronic Obstructive Pulmonary Disease	94.6
Diagnosed Diabetes	96.0
Life Expectancy at Birth	75.7

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Cognitively Disabled	56.3
Physically Disabled	69.8
Heart Attack ER Admissions	68.4
Mental Health Not Good	54.9
Chronic Kidney Disease	97.1
Obesity	68.0
Pedestrian Injuries	19.6
Physical Health Not Good	86.2
Stroke	97.8
Health Risk Behaviors	—
Binge Drinking	28.2
Current Smoker	59.6
No Leisure Time for Physical Activity	76.7
Climate Change Exposures	—
Wildfire Risk	0.0
SLR Inundation Area	0.0
Children	9.0
Elderly	91.7
English Speaking	35.1
Foreign-born	48.1
Outdoor Workers	88.5
Climate Change Adaptive Capacity	—
Impervious Surface Cover	78.1
Traffic Density	21.6
Traffic Access	23.0
Other Indices	—
Hardship	45.2
Other Decision Support	—

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2016 Voting	74.7

7.3. Overall Health & Equity Scores

Metric	Result for Project Census Tract
CalEnviroScreen 4.0 Score for Project Location (a)	72.0
Healthy Places Index Score for Project Location (b)	55.0
Project Located in a Designated Disadvantaged Community (Senate Bill 535)	No
Project Located in a Low-Income Community (Assembly Bill 1550)	No
Project Located in a Community Air Protection Program Community (Assembly Bill 617)	No

a: The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.
b: The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

7.4. Health & Equity Measures

No Health & Equity Measures selected.

7.5. Evaluation Scorecard

Health & Equity Evaluation Scorecard not completed.

7.6. Health & Equity Custom Measures

No Health & Equity Custom Measures created.

8. User Changes to Default Data

Screen	Justification
Land Use	Taken from site plan
Operations: Vehicle Data	Trip characteristics based on information provided in the Traffic Analysis
Operations: Hearths	SCAQMD Rule 445 no wood burning devices. Wood burning devices added to gas devices.
Operations: Refrigerants	Beginning 1 January 2025, all new air conditioning equipment may not use refrigerants with a GWP of 750 or greater.

Construction: Construction Phases	Based on client provided data, construction schedule to begin Q3 2026 and completed Q1 2029 Building Construction, Paving, and Architectural Coating overlap to present a conservative analysis
Construction: Off-Road Equipment	T/L/B replaced with Crawler Tractor to accurately calculate disturbance for Site Preparation and Grading phases. Standard 8 hours work days
Construction: Trips and VMT	Vendor Trips adjusted based on CalEEMod defaults for Building Construction and number of days for Site Preparation, Grading, and Building Construction

Phase I Environmental Site Assessment

10.02-Acre Site at Northeast Corner of Amherst and Eucalyptus Avenues
Ontario, California 91761
Assessor Parcel Number (APN): 1073-101-05

GDC Investments, LP/GDC Investments 13
c/o Dave Waters, Vice President
12770 El Camino Real, Suite 220
San Diego, California 92130
(858) 523-9055

SCS ENGINEERS

Project No. 01225043.00 | March 14, 2025

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EXECUTIVE SUMMARY

SCS Engineers (SCS) was retained by GDC Investments to prepare a Phase I Environmental Site Assessment (Phase I ESA) of a 10.02-acre site located at the northeast corner of Amherst Avenue and Eucalyptus Avenue, Ontario, California (the "Subject Property" or "Property"). This assessment was performed in conformance with 40 CFR 312, Standards for Conducting All Appropriate Inquiries, and in general conformance with ASTM E1527-21.

The Property is located on the northeastern side of Amherst Avenue, immediately north of the intersection with Eucalyptus Avenue. According to tax assessor information reviewed, it is 10.02 acres and is currently undeveloped, vacant land.

Based on the historical records reviewed, SCS identified no historical structures on the Property. It was undeveloped or agricultural land from at least 1902 through 2012. A row of trees functioning as a windbreak (likely eucalyptus trees) extended north-south across the eastern portion of the Property. Around 2016, grading activities were first visible on the eastern portion of the Property, associated with activities on the adjoining site to the east. Following 2016, much more extensive grading occurred and in 2020, hundreds of soil stockpiles were visible on the central and northern portions of the Property. The appearance of the stockpile coincided with the grading and paving of the adjoining streets and SCS considers it likely that the soil was from sites with similar history (undeveloped and/or agricultural land). Further grading occurred in 2021, which likely resulted in the export or blending of that that stockpiled soil. Since 2021, the Property has remained vacant and undeveloped, with relative low points at the northwestern and southeastern corners.

The Property was vacant and undeveloped at the time of the site inspection. A chain-link fence surrounds the Property with gate access in the northeastern corner. The Property is covered in low, grassy vegetation and bare soil, with small amounts of wind-blown trash observed on the outer edges of the Property (against the fence). A depression likely due to former grading activities was observed in the northwestern portion of the Property. Rumble grates were also noted in the northeastern corner. A sloped area was observed on the southeastern boundary of the Property. A storm drain was noted in the southwestern corner of the Property.

Regulatory database information identified no known and suspected contamination sites in the area surrounding the Property. Based on a review of the available information, it is unlikely that any of these sites has negatively affected the environmental condition of the Property.

Conclusions

In summary, SCS performed a Phase I ESA of a 10.02-acre site located at the northeast corner of Amherst Avenue and Eucalyptus Avenue, Ontario, California, in conformance with the scope and limitations of 40 CFR 312 and ASTM E1527-21. Any exceptions or deviations are described in Section 8 of this report.

In the opinion of the Environmental Professional, this assessment has revealed no recognized environmental conditions, controlled recognized environmental conditions, or significant data gaps in connection with the Property. Further investigation is not recommended.

1 INTRODUCTION

SCS Engineers (SCS) was retained by GDC Investments (the "User") to prepare a Phase I Environmental Site Assessment (Phase I ESA) of a 10.02-acre site located at the northeast corner of Amherst Avenue and Eucalyptus Avenue, Ontario, California (the "Subject Property" or "Property"). A location map for the Property is presented as **Figure 1** in **Appendix A**. This assessment was performed in conformance with 40 CFR 312, Standards for Conducting All Appropriate Inquiries (AAI), and in general conformance with ASTM International (ASTM) E1527-21.

PURPOSE

This Phase I ESA is intended to constitute appropriate inquiry into the previous ownership and uses of the Property, as required to support the assertion of the innocent landowner, contiguous property owner, and/or bona fide prospective purchaser defenses to liability (collectively, the landowner liability protections, or LLPs) under the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA, a.k.a. Superfund), as amended by the Superfund Amendments and Reauthorization Act of 1986 (SARA), and the Small Business Liability Relief and Brownfields Revitalization Act of 2002.

The purpose of this investigation was to identify conditions indicative of the presence of hazardous substances as defined in CERCLA Section 101, and petroleum products, in, on, or at the Subject Property due to a release, likely release, or material threat of a future release to the environment.

If known or suspected contamination is identified, a User seeking to maintain LLPs has responsibilities in addition to completion of an AAI-compliant Phase I ESA. These "continuing obligations" include taking "appropriate care" and "reasonable steps" with respect to known or suspected releases of hazardous substances or petroleum products during the term of property ownership. In addition to these requirements under federal law, there are different requirements under state law with respect to liability protections. If warranted, SCS can provide support for clients with continuing obligations, as appropriate.

SCOPE OF SERVICES

This Phase I ESA is based on:

- Interviews with past and/or present owners, operators, and/or occupants of the Property.
- Reviews of federal, tribal, state, and local government records.
- Visual inspection of the Subject Property and adjoining sites performed on February 27, 2025.
- Review of historical Property use information (topographic maps, aerial photographs, fire insurance maps, previous environmental reports, etc.).
- Commonly known or reasonably ascertainable information about the Property (e.g., interviews with appropriate regulatory agency personnel, review of readily available agency files and documents, interviews with other knowledgeable persons, etc.).
- Degree of obviousness of the presence or likely presence of releases or threatened releases of hazardous substances or petroleum products at the Subject Property and the ability to detect releases or threatened releases by appropriate investigation.
- Information provided as a result of the additional inquiries conducted by the User.

- Review of environmental liens, if provided or authorized to obtain by the User.

SPECIAL TERMS AND CONDITIONS

This Phase I ESA for the 10.02-acre site at the northeast corner of Amherst Avenue and Eucalyptus Avenue, located in Ontario, California, has been prepared specifically for GDC Investments. The report has been prepared in accordance with the care and skill generally exercised by reputable professionals, under similar circumstances, in this or similar localities. No other warranty, express or implied, is made as to the professional opinions presented herein.

No other party, known or unknown to SCS, is intended as a beneficiary of this report. Third parties use this report at their own risk. SCS assumes no liability of any kind with respect to such use. Third party reliance letters may be issued on request to SCS subject to approval of GDC Investments and payment to SCS of a fee for such letters.

LIMITATIONS AND ASSUMPTIONS

The assessment focuses on releases and threatened releases of hazardous substances or petroleum products that could be considered a recognized environmental condition (REC) and/or a liability due to their possible presence in significant concentrations (e.g., above acceptable limits set by applicable regulatory authorities) or due to the potential for contaminant migration through exposure pathways (e.g., soil vapor migration or groundwater ingestion). Materials that may contain substances not currently deemed hazardous by the U.S. Environmental Protection Agency (U.S. EPA) or the California Environmental Protection Agency (CalEPA) were not considered as part of this study.

Unless specifically included in our scope of services, formal surveys for asbestos-containing materials (ACMs), lead-based paint (LBP), water supply plumbing, mold, indoor air quality, and similar matters are not part of this assessment. SCS did not evaluate the Subject Property for compliance with land use, zoning, wetlands, or similar laws. This report is not intended to be an environmental compliance audit.

Hazardous substances naturally occurring in plants, soils, and rocks (e.g., heavy metals, naturally occurring asbestos, radon, etc.) are not typically considered in a Phase I ESA. Similarly, construction debris (e.g., discarded concrete, asphalt, etc.) is not considered a concern unless observations suggest that hazardous substances are likely to be present in significant concentrations.

Unless otherwise noted, sampling and laboratory analyses of soil, water, air, building materials, or other media, were not performed as part of this investigation. Positive identification of hazardous substances can only be accomplished through sampling and appropriate laboratory analysis.

SCS assumes no responsibility for the accuracy of information obtained from, compiled by, or provided by third-party sources, including regulatory agency listings. SCS assumes that information collected during this Phase I ESA is accurate and correct, unless SCS determines that reliable information exists to the contrary or the information is obviously inaccurate. Additional information subsequently provided, discovered, or produced may alter findings or conclusions made in this Phase I ESA report. Unless warranted, information collected has not been independently validated as part of this assessment. SCS is not responsible for consequences or conditions arising from facts that were not fully disclosed to SCS during the assessment.

PHASE I ESA VIABILITY

This Phase I ESA is based on conditions at the time the individual elements of the report were completed. A Phase I ESA that meets or exceeds the requirements of ASTM E1527-21 and 40 CFR 312 is presumed to be viable when it is conducted within 180 days of the date of the intended transaction (acquisition, lease, refinance, etc.). The completion dates for the Phase I ESA components with a 180-day shelf life are identified below.

Component of Phase I ESA with Shelf Life Requirement	Completion Date
Interviews	March 7, 2025
Review of Governmental and Historical Records	February 25, 2025
Visual Inspection	February 27, 2025
Declaration of Environmental Professional	March 14, 2025
Environmental Lien Search	Not provided by User

2 GENERAL SITE CHARACTERISTICS

SUBJECT PROPERTY LOCATION

The Property is located on the northeastern side of Amherst Avenue, immediately north of the intersection with Eucalyptus Avenue. It has been assigned San Bernardino County tax assessor parcel number (APN) 1073-101-05. An APN map is provided as **Figure 2** in **Appendix A**.

GENERAL SUBJECT PROPERTY DESCRIPTION

According to tax assessor information reviewed, the Property is 10.02 acres. It is currently undeveloped, vacant land.

ADJOINING SITE USE

- Northwest – Chatham Street immediately adjoins the Property to the northwest. Vacant lots are located across the street to the northwest.
- Northeast – Clifton Avenue immediately adjoins the Property to the northeast. Newly constructed townhomes and private roads are located across the street to the northeast.
- Southeast – Eucalyptus Avenue immediately adjoins the Property to the southeast. Multiple residential homes are located across the street to the southeast.
- Southwest – South Amherst Avenue immediately adjoins the Property to the southwest. Multiple residential homes are located across the street to the southwest.

PHYSICAL SETTING

Physiographic Setting

According to the U.S. Geological Survey (USGS), Corona North, California 7.5-minute topographic maps (**Appendix C**), the Property is located in the eastern portion of San Bernardino County at an

elevation of 713 feet above mean sea level. Site topography is generally flat with a slight regional slope to the south.

Geologic Characteristics

The Property is located within the Chino Basin, which is underlain by Pleistocene and Recent Age alluvial and terrace deposits. Younger alluvium varies in thickness from a few feet at the northern portion of the basin to more than 100 feet in the southern portion. Older alluvium can be more than 1,100 feet in thickness, and averages 500 feet in thickness across the basin.

Hydrogeologic Characteristics

According to Bulletin 118 - California's Groundwater of the California Department of Water Resources (CDWR), the Upper Santa Ana Valley Subbasin underlies the City of Ontario and is bounded by the Rialto-Colton Fault to the east. The Santa Ana Valley Subbasin sediment units include Holocene and Upper Pleistocene alluvium. According to information reviewed on the State Water Resource Control Board (SWRCB) GeoTracker website for a the Exelsior Farms leaking underground storage tank (LUST) case located at 7401 Hamner Avenue (approximately 3,000 feet southeast of the Property), in 2003, first groundwater was reported to be approximately 25 feet below ground surface (bgs) and flow direction was reported to be to the west. Based on its proximity and comparable elevation, first groundwater is likely at a similar depth beneath the Property. Groundwater flow direction likely follows the regional surface topography to the south, potentially with a westerly component.

3 SITE RECONNAISSANCE

Maddie Peterson of SCS conducted a reconnaissance of the Property and surrounding area on February 27, 2025. An aerial image showing the Property is provided as **Figure 3** in **Appendix A**. Photographs taken during the site reconnaissance are included in **Appendix B**.

GENERAL SITE INFORMATION

The Property was vacant and undeveloped at the time of the site inspection. A chain-link fence surrounds the Property with gate access in the northeastern corner. The Property is covered in low, grassy vegetation and bare soil, with wind-blown trash observed on the outer edges of the Property (up against the fence). A depression likely due to former grading activities was observed in the northwestern portion of the Property. Rumble grates were also noted in the northeastern corner.

A sloped area was observed on the southeastern boundary of the Property. A storm drain was noted in the southwestern corner of the Property.

POTABLE WATER SUPPLY

Drinking water is not currently supplied to the Property.

SEWAGE DISPOSAL SYSTEM

Sanitary wastewater is not currently generated at the Property.

PROCESS WASTEWATER

No industrial wastewater is generated on the Property.

HAZARDOUS SUBSTANCES AND PETROLEUM PRODUCTS

No hazardous substances or hazardous wastes were observed at the Property.

STORAGE TANKS

No evidence (fill ports, vent lines, or dispensers) of underground storage tanks (USTs) was observed on the Property. No aboveground storage tanks (ASTs) were observed on the Property.

ELECTRICAL EQUIPMENT (POLYCHLORINATED BIPHENYLS)

One dry-type transformer was found on the northeastern side of the Property.

ELEVATORS AND OTHER HYDRAULIC EQUIPMENT

No elevators or other hydraulic equipment were observed at the Property.

PITS, PONDS, OR LAGOONS

No pits, ponds, or lagoons were observed at the Property.

WELLS

No water supply wells or groundwater monitoring wells were observed on the Property or in the immediately surrounding area.

NATURAL DRAINAGE

Natural waterways are not currently located on the Property. Stormwater runoff from the Property flows to a stormwater drain found on the southwestern corner of the Property or the adjoining streets.

SOLID WASTE DUMPING, LANDFILLING, OR SUSPECTED FILL MATERIAL

No indication of solid waste dumping, landfilling or buried material was observed during the site reconnaissance.

VISUAL INSPECTION OF ADJOINING SITES

SCS viewed the adjoining sites from the Property and/or publicly accessible areas (e.g., public roadways, etc.). No obvious evidence of a REC or indications of contamination (e.g. remediation equipment, staining, USTs, etc.), were observed on adjoining sites during the site inspection.

4 INTERVIEWS

An Owner Questionnaire was provided to and completed by the owner of the Property, Mr. David Waters, and is included in **Appendix F**. Mr. Waters has owned the Property since 2010. Mr. Waters indicated that there have been no underground storage tanks, no knowledge of spills or releases to the Property, and the site was historically associated with a dairy farm but had ceased operations in the early 2000's (a reference to the historically adjoining dairy to the north). The site was graded around 2018 but no other site improvements were installed.

5 HISTORICAL RESEARCH

Site history was evaluated from the following sources:

- Historical aerial photographs provided by Environmental Data Resources (EDR; February 25, 2025).
- USGS topographic maps provided by EDR (February 25, 2025).
- A search was made of EDR-Sanborn fire insurance map collection and no maps of the Property were found (February 25, 2025).
- A city directory review report provided by EDR (February 25, 2025).
- As the Property has never before been developed with structures, no building permit information was identified. SCS searched the City of Ontario Department of Building and Safety online records database using the APN number and identified no records.

Copies of aerial photographs, topographic maps, and city directories are included in **Appendix C**.

Year	Description	Source
1897	The Property and adjoining sites were shown to be unmapped.	Topographic map
1900	The Property and adjoining sites were shown to be unmapped.	Topographic map
1902	The Property and adjoining sites were shown to be undeveloped land.	Topographic map
1903	The Property and adjoining sites were shown to be unmapped.	Topographic map
1931	The Property was undeveloped or agricultural land, with a row of trees crossing the eastern side north-south, likely functioning as a windbreak. Agricultural fields were noted on the adjoining sites to the northwest, southwest, southeast, and southwest.	Aerial photo
1938	No significant changes from the 1931 aerial photo were noted. A portion of the southern corner of the Property was not photographed. Agricultural fields were noted on the adjoining sites to the northwest, southwest, northeast and southeast. Portions of the adjoining site to the southwest and southeast were not photographed.	Aerial photo
1941	The Property and adjoining sites were shown to be unmapped.	Topographic map
1942	The Property and adjoining sites were shown to be undeveloped land. An unnamed road was noted to the south of the Property.	Topographic map
1944 and 1947	The Property was shown to be undeveloped land with a road depicted on the southwestern corner of the Property.	Topographic map

1948	The Property was agricultural, planted with row crops.	Aerial photo
1953	No significant changes from the 1948 aerial photo were noted on the Property or adjoining sites.	Topographic map and Aerial photo
1954	The Property and adjoining sites appeared to be unmapped.	Topographic map
1966	The Property appeared to be undeveloped land, with a trail running centrally through the Property. The previous unnamed road, known currently as Eucalyptus Avenue, was shown to the south of the Property.	Topographic map
1967	No significant changes from the 1953 aerial photo or 1966 topographic map were noted on the Property. A dirt path was noted separating the agricultural fields on the adjoining site to the southwest. The adjoining site to the northeast appeared to be graded.	Topographic map and Aerial photo
1973	The Property was shown to be an agricultural. The adjoining sites to the southwest and south were shown to be agricultural, with a structure noted on the adjoining site to the southwest. Long rectangular structures were depicted on the adjoining site to the northwest.	Topographic map
1975	The Property remained agricultural land. A new residential structure was noted on the adjoining site to the southwest. A dairy farm with feeding troughs and a central milking area was visible on the adjoining site to the northwest. Furrer L A was listed as an occupant on the adjoining site to the southeast under historical address 11121 Eucalyptus Avenue. Sherwin Westra was listed as an occupant on the adjoining site to the southwest under historical address 11022 Eucalyptus Avenue from 1975 to 1985. Jake J Westra was listed as an occupant on the adjoining site to the southwest under historical address 11060 Eucalyptus Avenue from 1975 to 1995.	Topographic map, Aerial photo, and City directory
1976	The Property and adjoining sites were shown to be unmapped.	Topographic map
1981	No significant changes from the 1975 topographic map were noted on the Property.	Topographic map
1985	No significant changes from the 1975 aerial photo were noted on the Property or adjoining sites. Diana Furrer was listed as an occupant on the adjoining site to the southeast under historical address 11121 Eucalyptus Avenue.	Aerial photo and City directory
1989	No significant changes from the 1985 aerial photo were noted on the Property or adjoining sites.	Aerial photo

1990	No significant changes from the 1989 aerial photo were noted on the Property or adjoining sites. The Furniture Shop and Irrer LA were listed as occupants on the adjoining site to the southeast under historical address 11121 Eucalyptus Avenue. Calvin Westra was listed as an occupant on the adjoining site to the southwest under historical address 11022 Eucalyptus Avenue from 1990 to 1995.	Aerial photo and City directory
1992	Harvey Hettinga was listed as an occupant on the adjoining site to the southeast under historical address 11101 Eucalyptus Avenue from 1992 to 1995.	City directory
1994	No significant changes from the 1990 aerial photo were noted on the Property or adjoining sites.	Aerial photo
1995	Pete Hettinga was listed as an occupant on the adjoining site to the southeast under historical address 11101 Eucalyptus Avenue from 1995 to 2000. Weirama Philip & Sandy were listed as occupants on the adjoining site to the southeast under historical address 11121 Eucalyptus Avenue.	City directory
2000	Hettinga Harvey Milk was listed as an occupant on the adjoining site to the southeast under historical address 11101 Eucalyptus Avenue.	City directory
2002	No significant changes from the 1994 aerial photo were noted on the Property or adjoining sites.	Aerial photo
2005	Wheelin and Deelin was listed as an occupant on the adjoining site to the southeast under historical address 11101 Eucalyptus Avenue.	City directory
2006	No significant changes from the 2002 aerial photo were noted on the Property or adjoining sites.	Aerial photo
2009	The agricultural field and vegetation on the Property was removed. The Property appeared to be graded. The adjoining site to the southwest appeared to be graded.	Aerial photo
2010	Occupant Unknown was listed as an occupant on the adjoining site to the southeast under historical address 11101 Eucalyptus Avenue.	City directory
2012	The 2012 topographic map does not include Site-specific details. The western side of the Property was fallow agricultural land. The eastern side of the Property was still part of agricultural field, separated by a dirt path that runs north to south, where the windbreak trees were historically located.	Topographic map and Aerial photo
2015	The 2015 topographic map does not include Site-specific details.	Topographic map
2016	The Property was undeveloped land and no longer appeared to be used for agriculture purposes. Grading activities were visible on the eastern portion of the Property, associated with additional grading activities offsite to the east.	Aerial photo

	With the exception of grading to the east-southeast, no other significant changes were noted on the adjoining sites.	
2018	The 2018 topographic map does not include Site-specific details.	Topographic map
2020	The Property had been much more extensively graded, with a depression filled with rainwater on its northwestern side. Hundreds of soil stockpiles were present on the central and north-central portions of the Property. Eucalyptus Avenue was developed in its current configuration to the southeast of the Property. Amherst Avenue was newly paved to the southwest of the Property. Residential homes were under developed across the streets to the southwest and southeast.	Aerial photo
2021 and 2022	The 2021 topographic map does not include Site-specific details. Google Earth aerial photographs showed that Property was further graded and the stockpiles present in the 2020 aerial photo were no longer visible. They were either removed from the Property or blended into it during further onsite grading. Additional residential development on adjoining sites was visible.	Topographic map and Google Earth aerial photos
2023	No significant changes from the 2020 aerial photo was noted on the Property. The dairy farm on the adjoining site to the northwest was removed. Grading activities were observed on the adjoining sites to the northwest and the northeast. Multiple residential homes were developed on the adjoining sites to the southwest and southeast.	Google Earth aerial photo
2024	The Property remains undeveloped land that appeared to be graded. Residential homes were constructed on the adjoining sites to the northwest and northeast. A small park is located on the adjoining site to the northwest.	Google Earth aerial photo

SUBJECT PROPERTY HISTORICAL USE SUMMARY

Based on the historical records reviewed, SCS identified no historical structures on the Property. It was undeveloped or agricultural land from at least 1902 through 2012. A row of trees functioning as a windbreak (likely eucalyptus trees) extended north-south across the eastern portion of the Property. Around 2016, grading activities were first visible on the eastern portion of the Property, associated with activities on the adjoining site to the east. Following 2016, much more extensive grading occurred and in 2020, hundreds of soil stockpiles were visible on the central and northern portions of the Property. The appearance of the stockpile coincided with the grading and paving of the adjoining streets and SCS considers it likely that the soil was from sites with similar history (undeveloped and/or agricultural land). Further grading occurred in 2021, which likely resulted in the export or blending of that that stockpiled soil. Since 2021, the Property has remained vacant and undeveloped, with relative low points at the northwestern and southeastern corners.

The existence of past agricultural activities on the Property and in adjacent areas indicates a potential for pesticide and/or heavy metal (associated with dusting powders) contamination. In SCS's experience, it is not uncommon to find trace levels of pesticides in soils at former agricultural areas in Southern California. However, these trace concentrations are rarely cause for environmental concern. Additionally, Department of Toxic Substances Control (DTSC) has issued an Interim Guidance for Sampling Agricultural Properties (DTSC, August 7, 2008) which states that the guidance "does not apply to disturbed land, such as, land that has been graded in preparation for construction, areas where imported soil has been brought in, or any other activity that would redistribute or impact the soil, other than normal agricultural practices, such as disking and plowing." It is our opinion that, given the extensive grading that has occurred at the Property and without specific evidence of bulk pesticide storage or mismanagement on the Property, past use for agricultural purposes does not represent a significant environmental concern and collection and analysis of soil samples for pesticides is unwarranted.

HISTORICAL USE OF ADJOINING SITES

The adjoining sites were undeveloped from at least 1902 to 1931. Between the 1930s and early 2000s, they were primarily used for agriculture. Around 1973, a dairy farm was established on the adjoining site to the northwest, and a structure was observed on the adjoining site to the southwest. The sites continued as agricultural land until at least 2016, when the adjoining sites to the southwest, northeast, and southeast appeared to be graded. The dairy farm remained operational on the northwest site until approximately 2022. In 2023, new residential homes were built on the adjoining sites to the southwest and southeast, followed by additional residential construction on the northwest and northeast sites in 2024.

6 RECORD REVIEW

PREVIOUS ENVIRONMENTAL REPORTS

The User provided the following two previous environmental reports to SCS:

- David J. Tanner & Associates, Inc., January 9, 2003. Phase I Environmental Site Assessment, Assesors Parcel No's 0128-252-03, 05, 05, 0128-332-01, 02, 03 & 04, City of Ontario, California.

- LGC Geo-Environmental, Inc., August 26, 2014. Updated Methane Site Assessment for the Proposed "Esperanza West" Residential Development, Located at the Northeast Corner of Cleveland Avenue and Bellgrave Avenue, APN's 0218-332-11 and 0218-252-17, City of Ontario, San Bernardino County, California.

The Tanner & Associates 2003 Phase I ESA was prepared for Forecast PPI and covered a much larger land area (139 acres) extending from Mill Creek Avenue to the west to Hamner Avenue to the east, and from Bellegrave Avenue to the south to what is now Chatham Avenue to the north. Tanner & Associated identified multiple residences (with suspected lead-based paint and asbestos), diesel fuel tanks, diesel pumps, a few 55-gallon drums, diesel farm equipment, animal carcasses, unauthorized dumping (primarily south of Eucalyptus Avenue), etc. None of these features appears to have been related to the Subject Property of the current Phase I ESA. The report concluded that there was no obvious evidence of a REC.

The Methane report included coverage of the Property, but identified only areas to the south of Eucalyptus Avenue as areas associated with historical Dairy operations that might have potential

methane gas. SCS concurs with this conclusion. SCS identified no evidence that the Property was historically used for dairy operations.

REGULATORY AGENCY RECORDS

Local regulatory agencies and other sources were reviewed in an effort to identify any known or suspected contamination sites or incidents of hazardous waste storage or disposal, which might have resulted in soil and/or groundwater contamination, or volatile organic compound (VOC) vapor migration to the Subject Property. Generally, this includes records for the Property and adjacent parcels, although relevant information for other sites of possible interest in the area (up to one mile) may also be included. Within the City of Ontario, the San Bernardino County Fire Department (SBCFD) generally acts as the lead enforcement agency for UST compliance. If a tank has leaked and groundwater contamination is suspected, the Santa Ana Regional Water Quality Control Board (SARWQCB) generally becomes the lead agency in supervising contaminant characterization and cleanup.

California Environmental Protection Agency

The Property is not a listed site on the California Environmental Protection Agency (CalEPA) Regulated Site Portal website (**Appendix D**).

Santa Ana Regional Water Quality Control Board

The Property does not appear as a listed site on the State Water Resources Control Board (SWRCB) GeoTracker website. Recent SARWQCB case files, if any, would be listed on this website (**Appendix D**).

A request to review SARWQCB files was submitted and no files were found for the APN associated with the Property (**Appendix D**).

Department of Toxic Substances Control

The Property does not appear as a listed site on the California Department of Toxic Substances Control (DTSC) EnviroStor website. Recent DTSC case files, if any, would be listed on this website (**Appendix D**).

A request to review DTSC files was submitted and no files were found for the APN associated with the Property (**Appendix D**).

South Coast Air Quality Management District

The Property does not appear as a listed facility on the South Coast Air Quality Management District (AQMD) online Facility INformation Detail (FIND) website (**Appendix D**).

San Bernardino County Fire Department Files

Since the Property has never been developed and has no history of activities of concern, a request for records was not submitted to the SBCFD.

San Bernardino County Department of Environmental Health

A request to review San Bernardino County Department of Environmental Health (SBCDEH) files were submitted and no files were found for the APN associated with the Property. (**Appendix D**).

California Department of Conservation, Geologic Energy Management Division

Available oil and gas well maps from the California Department of Conservation, Geologic Energy Management Division (CalGEM) were reviewed to identify oil and gas wells on the Property or in the nearby area. According to the CalGEM Well Finder online database, the Property is not located within the boundaries of a delineated oil and gas field.

A map showing the location of the Property relative to nearby oil and gas wells is provided in **Appendix D**. One oil and gas production well was drilled approximately 0.77 miles to the southeast of the Property. It is identified as a dry, plugged well. No other oil or gas wells were identified within one mile of the Property. Based on the available information, no significant environmental impacts to the Property are anticipated from oil and gas wells.

National Pipeline Mapping System

SCS reviewed the National Pipeline Mapping System (NPMS) website for the Property and surrounding area to identify any hazardous materials pipelines. The NPMS is a geographic information system (GIS) created by the U.S. Department of Transportation, Pipeline and Hazardous Materials Safety Administration (PHMSA), and Office of Pipeline Safety (OPS) in cooperation with other federal and state governmental agencies and the pipeline industry. The NPMS consists of geospatial data, attribute data, public contact information, and metadata pertaining to the interstate and intrastate hazardous liquid trunklines and hazardous liquid low-stress lines, as well as gas transmission pipelines, liquefied natural gas (LNG) plants, and hazardous liquid breakout tanks (tanks that receive and store liquids transported by pipeline) jurisdictional to PHMSA. The nominal accuracy of geospatial data in the NPMS is +/-500 feet. The NPMS does not contain information on interconnects, pump and compressor stations, valves, direction of flow, capacity, throughput, or operating pressure. In addition, distribution and gathering pipelines are not included in the NPMS.

The NPMS is built from data submitted by pipeline, LNG plant, and breakout tank facility operators. Since 2002, transmission pipeline and LNG plant facility operators are required to submit mapping information to the NPMS and to update their submissions annually. Breakout tank operators are able to submit data to the NPMS on a voluntary basis.

Based on review of the NPMS website, one West Coast Terminals pipeline (Pipeline ID No.: 1825) is located along Edison Avenue that was permanently abandoned in 1957, approximately 0.33 miles to the north of the Property (**Appendix D**). The website does not contain any information about releases from these pipelines. Based on the available information, no negative environmental affects to the Property are anticipated from these pipelines.

DATABASE SEARCH

A database search for sites listed on various federal, state, tribal, and local databases in the area around the Property was obtained from EDR (February 25, 2025). A description of each of the databases searched is included in the report, which is attached as **Appendix E**. Among the databases

included in the EDR report are NPL (federal, tribal, and state-equivalent), proposed and delisted NPL, CORRACTS (RCRA facilities subject to corrective actions), hazardous waste sites identified for investigation or remediation (SEMS [Superfund Enterprise Management System, formerly known as CERCLIS], State CERCLIS, VCP, Brownfields, etc.), LUST, sites with engineering controls, former CERCLIS (NFRAP), RCRA and state hazardous waste generators, ERNS, SWLF, USTs, and Toxic Pits.

Review of these records satisfies all requirements as set forth in 40 CFR Section 312.26 (b) and (c) with regard to the review of federal, tribal, and state government records of databases of such government records and local government records and databases of such records pertaining to both the Property and the nearby or adjoining properties. Further, the search distances for each particular database are as specified in 40 CFR 312.26 and ASTM E1527-21.

Any known or suspected contaminated sites included on these lists within 0.25 miles of the Property are discussed in the following text. As a general rule, sites beyond 0.25 miles are not anticipated to impact a site significantly. Any sites beyond 0.25 miles with a high potential to impact the Property are also discussed. Please note: the distances and directions listed in this report have been field verified and might not always match those in the EDR report.

Sites such as TSD facilities, hazardous waste generators, HAZNET, FINDS, SQGs, LQGs, USTs, HIST UST, RCRA violations, and TRIS facilities with toxic chemical releases (generally in accordance with permitting requirements - into the air, water, or land as reported under SARA Title III) use or store hazardous materials and thus may pose a potential problem in the event of a spill or leak. However, unless these sites also appear in an agency list of contaminated sites, there is no evidence of any problems at this time. Therefore, sites on these lists will not be discussed unless on or in close proximity to the Property.

Please refer to **Appendix E** for further information on these sites.

Property Listings

The Subject Property is not listed in any of the databases searched by EDR.

Adjoining Site Listings

The adjoining sites are not listed in any of the databases searched by EDR.

Other Database Sites

The EDR report provides a summary table of regulatory database sites within specified distances of the Property, including standard environmental records, additional environmental records, high risk historical records, and recovered governmental records. This summary table is provided beginning on Page 4 of the EDR report (**Appendix E**).

Several sites located within 0.25 miles of the Property are listed in databases associated with known releases of hazardous substances such as LUST, UST FINDER RELEASE, and ENVIROSTOR, but are located relatively cross- or downgradient, or based on case status and/or distance are not anticipated to negatively affect the environmental condition of the Property. Several sites located within 0.25 miles also appear in databases not typically associated with documented releases, such as Cortese, Hist Cortese, CERS, ENF, San Bern Co. Permit, WDS, CIWQS, PFAS, SCH, and Notify 65. Based on a review of the database information, none of these sites are known to have any contamination at this time; therefore, none are anticipated to have negatively affected the

environmental condition of the Property. None of the sites situated beyond 0.25 miles are anticipated to have impacted the Property.

Unmappable or Orphan Sites

Three unmappable sites were identified in the EDR report. Unmappable sites cannot be plotted due to inaccurate or incomplete addresses. Based on review of the provided data, including the estimated locations of the unmappable sites in relation to the Property, it appears unlikely that the unmappable sites have adversely affected the environmental condition of the Property.

7 USER PROVIDED INFORMATION

The following information is the responsibility of the User (40 CFR 312.22) and is addressed in a questionnaire provided to the User and attached to this report as **Appendix F**:

- Identification of environmental cleanup liens against the Subject Property.
- Specialized knowledge or experience of the User.
- The relationship of the purchase price to the fair market value of the Subject Property.

A User Questionnaire was completed by Mr. David Waters and is included in **Appendix F**. The provided information is discussed below.

TITLE RECORDS

No title report was provided to SCS for review.

ENVIRONMENTAL LIENS OR ACTIVITY AND USE LIMITATIONS

No information regarding environmental liens or activity and use limitations was provided to SCS. No environmental liens or activity/use limitations were identified by SCS during the course of this assessment.

SPECIALIZED KNOWLEDGE OR EXPERIENCE

As described above, Mr. Waters indicated specialized knowledge of the Property in which the Property was historically a dairy farm operation, however, this appears to be a reference to its relationship with a much larger land area. Mr. Waters indicated that the dairy operations ceased sometime in the early 2000s, prior to their ownership. During their ownership the site was graded along with the surrounding land, however, no improvements other than those currently in place on the perimeter were installed. No other specialized knowledge regarding RECs or other environmental issues that could materially impact the current or future use of the Subject Property or have an impact on the current real estate transaction was noted by Mr. Waters.

VALUATION REDUCTION FOR ENVIRONMENTAL ISSUES

Mr. Waters is not aware of any environmental issues that would dimmish the Property value. No other property valuation information was provided to SCS.

8 DATA GAPS AND DEVIATIONS

Certain other limitations could affect the accuracy and completeness of this report, as follows:

- Site Access Limitations – None.
- Physical Obstructions to Observations – None.
- Outstanding Information Requests – None.
- Historical Data Sources Failure – SCS attempted to review the referenced historical sources (i.e., aerial photographs, topographic maps, city directories, etc.) in a minimum of five-year increments. Breaches in the sequence of reviewed sources are due to the limitations of the referenced collections. Based on the available information, this is not considered a significant data gap.
- Other Limitations – None.

9 FINDINGS AND OPINIONS

Based on the scope of work performed, SCS finds the following:

SCS was retained by GDC Investments to prepare a Phase I ESA of a 10.02-acre site located at the northeast corner of Amherst Avenue and Eucalyptus Avenue, Ontario, California (the "Subject Property" or "Property"). This assessment was performed in conformance with 40 CFR 312, Standards for Conducting All Appropriate Inquiries, and in general conformance with ASTM E1527-21.

The Property is located on the northeastern side of Amherst Avenue, immediately north of the intersection with Eucalyptus Avenue. According to tax assessor information reviewed, it is 10.02 acres and is currently undeveloped, vacant land.

Based on the historical records reviewed, SCS identified no historical structures on the Property. It was undeveloped or agricultural land from at least 1902 through 2012. A row of trees functioning as a windbreak (likely eucalyptus trees) extended north-south across the eastern portion of the Property. Around 2016, grading activities were first visible on the eastern portion of the Property, associated with activities on the adjoining site to the east. Following 2016, much more extensive grading occurred and in 2020, hundreds of soil stockpiles were visible on the central and northern portions of the Property. The appearance of the stockpile coincided with the grading and paving of the adjoining streets and SCS considers it likely that the soil was from sites with similar history (undeveloped and/or agricultural land). Further grading occurred in 2021, which likely resulted in the export or blending of that that stockpiled soil. Since 2021, the Property has remained vacant and undeveloped, with relative low points at the northwestern and southeastern corners.

The Property was vacant and undeveloped at the time of the site inspection. A chain-link fence surrounds the Property with gate access in the northeastern corner. The Property is covered in low, grassy vegetation and bare soil, with small amounts of wind-blown trash observed on the outer edges of the Property (against the fence). A depression likely due to former grading activities was observed in the northwestern portion of the Property. Rumble grates were also noted in the northeastern corner. A sloped area was observed on the southeastern boundary of the Property. A storm drain was noted in the southwestern corner of the Property.

Regulatory database information identified no known and suspected contamination sites in the area surrounding the Property. Based on a review of the available information, it is unlikely that any of these sites has negatively affected the environmental condition of the Property.

10 CONCLUSIONS

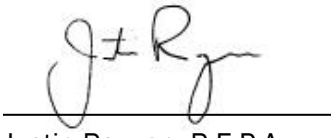
In summary, SCS performed a Phase I ESA of the property located at the 10.02-acre site at the northeast corner of Amherst Avenue and Eucalyptus Avenue, located in Ontario, California, in conformance with the scope and limitations of 40 CFR 312 and ASTM E1527-21. Any exceptions or deviations are described in Section 8 of this report.

In the opinion of the Environmental Professional, this assessment has revealed no recognized environmental conditions, controlled recognized environmental conditions, or significant data gaps in connection with the Property. Further investigation is not recommended.

11 DECLARATION OF ENVIRONMENTAL PROFESSIONAL

This Phase I ESA report for the property located at the 10.02-acre site at the northeast corner of Amherst Avenue and Eucalyptus Avenue, Ontario, California dated March 14, 2024, was prepared by Maddie Peterson and reviewed by Justin Rauzon.

I declare that, to the best of my professional knowledge and belief, I meet the definition of Environmental Professional as defined in §312.10 of 40 CFR 312. I have the specific qualifications based on education, training, and experience to assess a property of the nature, history, and setting of the subject property. I have developed and performed the all appropriate inquiries in conformance with the standards and practices set forth in 40 CFR Part 312. The resume for the individual below is included in **Appendix G.**



Justin Rauzon, R.E.P.A.
Senior Project Manager
SCS ENGINEERS

12 REFERENCES

ASTM International, November 1, 2021. Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process, Designation: E1527-21.

California Department of Conservation, Geologic Energy Management Division (CalGEM) Website: http://www.conservation.ca.gov/dog/Pages/Index.aspx.

California Department of Health Services (CDHS), Updated February 2016. *California Indoor Radon Test Results*: https://www.cdph.ca.gov/Programs/CEH/DRSEM/CDPH%20Document%20Library/EMB/Radon/Radon%20Test%20Results.pdf

California Department of Toxic Substance Control (DTSC) EnviroStor Website: https://www.envirostor.dtsc.ca.gov/public/.

California Department of Water Resources (CDWR), Groundwater Basin Boundary Assessment Tool (BBAT), Updated February 11, 2019. https://gis.water.ca.gov/app/bbat/

California Department of Water Resources (CDWR), Reprinted April 1988. *Planned Utilization of the Ground Water Basins of the Coastal Plain of Los Angeles County*. Bulletin No. 104.

California Department of Water Resources (CDWR), Updated 2003. South Coast Hydrologic Region, Los Angeles Subregion. Bulletin No. 118.

California Environmental Protection Agency (CalEPA), Site Portal Website: https://siteportal.calepa.ca.gov/nsite/.

California Environmental Protection Agency, State Water Resources Control Board (SWRCB), GeoTracker Website: http://geotracker.waterboards.ca.gov/.

City of Ontario Department of Building and Safety Public Records Portal Website: https://aca-prod.accela.com/ONT/Cap/CapHome.aspx?module=Building&TabName=Building

David J. Tanner & Associates, Inc., January 9, 2003. Phase I Environmental Site Assessment, Assesors Parcel No's 0128-252-03, 05, 05, 0128-332-01, 02, 03 & 04, City of Ontario, California.

Environmental Data Resources, Inc. (EDR), www.edrnet.com, (800) 352-0050.

Federal Register, The Daily Journal of the United States Government, December 15, 2022. Environmental Protection Agency, 40 CFR Part 312, Standards and Practices for All Appropriate Inquiry. Volume 87, No. 240. Action: Final Rule.

LGC Geo-Environmental, Inc., August 26, 2014. Updated Methane Site Assessment for the Proposed "Esperanza West" Residential Development, Located at the Northeast Corner of Cleveland Avenue and Bellgrave Avenue, APN's 0218-332-11 and 0218-252-17, City of Ontario, San Bernardino County, California.

National Pipeline Mapping System (NPMS) Website: https://www.npms.phmsa.dot.gov/PublicViewer/.

San Benardino County Department of Environmental Health, 385 N. Arrowhead Avenue, San Bernardino, California 92415. (888) 818-8988.

Santa Ana Regional Water Quality Control Board (SARWQCB). 3737 Main Street, Suite 500, Riverside, California 92501, (951) 782-4130.

South Coast Air Quality Management District (AQMD), Facility INformation Detail (FIND) website: http://www3.aqmd.gov/webappl/fim/prog/search.aspx.

United States Geological Survey (USGS), 1975. Corona North, California 7.5 Minute Topographic Map.

13 GLOSSARY

AAI – All Appropriate Inquiry

AUL – Activity and Use Limitations

BER – Business environmental risk. As defined in ASTM E1527-21, a risk which can have a material environmental or environmentally-driven impact on the business associated with the current or planned use of commercial real estate, not necessarily related to those environmental issues required to be investigated in the ASTM E1527-21 practice.

BTEX – Benzene, toluene, ethylbenzene, and total xylenes

CERCLA – Comprehensive, Environmental Response, Compensation, and Liability Act

CERCLIS – Comprehensive Environmental Response, Compensation, and Liability Information System

CFR – Code of Federal Regulations

CORRACTS – Corrective Action Against Responsible Parties at a RCRA site

CREC – Controlled Recognized Environmental Condition. As defined in ASTM E1527-21, a recognized environmental condition affecting the subject property that has been addressed to the satisfaction of the applicable regulatory authority, or authorities with hazardous substances or petroleum products allowed to remain in place subject to implementation of required controls (for example, activity use limitations, or other property use limitations).

De Minimis Condition – A condition related to a release that generally does not present a threat to human health or the environment and that generally would not be the subject of an enforcement action if brought to the attention of appropriate governmental agencies. A condition determined to be a *de minimis condition* is not a recognized environmental condition nor a controlled recognized environmental condition.

DTSC – California EPA Department of Toxic Substances Control

EDR – Environmental Data Resources, Inc.

ERNS – Emergency Response Notification System

ESA – Environmental Site Assessment

FINDS – Facility Index System

HAZNET – California EPA Hazardous Waste Facility and Manifest Data

HREC – Historical Recognized Environmental Condition. As defined in ASTM E1527-21, a previous release of hazardous substances or petroleum products affecting the subject property that has been addressed to the satisfaction of the applicable regulatory authority or authorities and meeting unrestricted use criteria established by the applicable regulatory authority or

authorities without subjecting the subject property to any controls (for example, activity use limitations or other property use limitations).

LQG – Large Quantity Hazardous Waste Generator

LUST – Leaking Underground Storage Tank

MCL – Maximum contaminant level

MTBE – Methyl-tert-butyl-ether

NFA – No Further Action determination

NFRAP – No Further Remedial Action Planned

NPL – National Priority List (Superfund)

PAHs – Polynuclear aromatic hydrocarbons

PCBs – Polychlorinated biphenyls

RCRA – Resource Conservation and Recovery Act

RCRIS – Resource Conservation and Recovery Information System

REC – Recognized environmental condition. As defined by ASTM E1527-21, a REC means (1) the presence of hazardous substances or petroleum products in, on, or at the subject property due to a release to the environment; (2) the likely presence of hazardous substances or petroleum products in, on, or at the subject property due to a release or likely release to the environment; or (3) the presence of hazardous substances or petroleum products in, on, or at the subject property under conditions that pose a material threat of a future release to the environment. A *de minimis condition* is not a recognized environmental condition.

ROD – Record of Decision

RBSLs – Risk-based Screening Levels

RSLs – Regional Screening Levels

RWQCB -- Regional Water Quality Control Board

SARA – Superfund Amendments and Reauthorization Act

SLIC -- Spills, Leaks, Investigations, and Cleanups database

SQG – Small Quantity Hazardous Waste Generator

SWIS – Solid Waste Information System

SWLF – Solid Waste Facility/Landfills

TPH – Total Petroleum Hydrocarbons

TRIS – Toxic Release Inventory System

TSD – Treatment, Storage, and/or Disposal Facility

User – As defined in ASTM E1527-21, the party seeking to use Practice E1527 to complete an environmental site assessment of the subject property.

U.S. EPA – United States Environmental Protection Agency

USGS – United States Geologic Survey

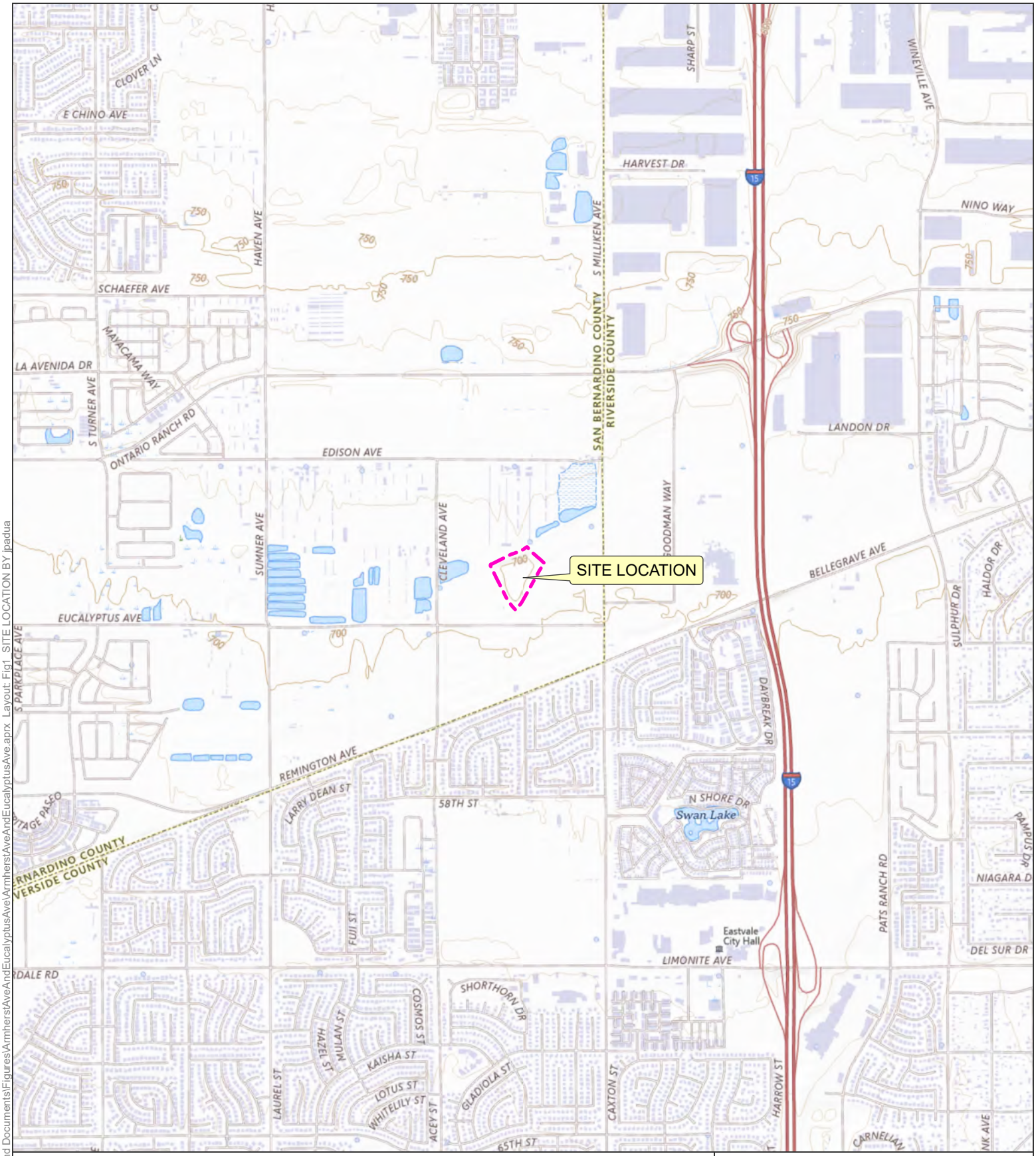
UST – Underground Storage Tank

VCP – Voluntary Cleanup Program

VOCs – Volatile organic compounds

Appendix A

Figures 1 through 3



Legend

Approximate Site Boundary

N
W E
S

0 2,000
Feet

1 inch = 2,000 feet

Site Location Map

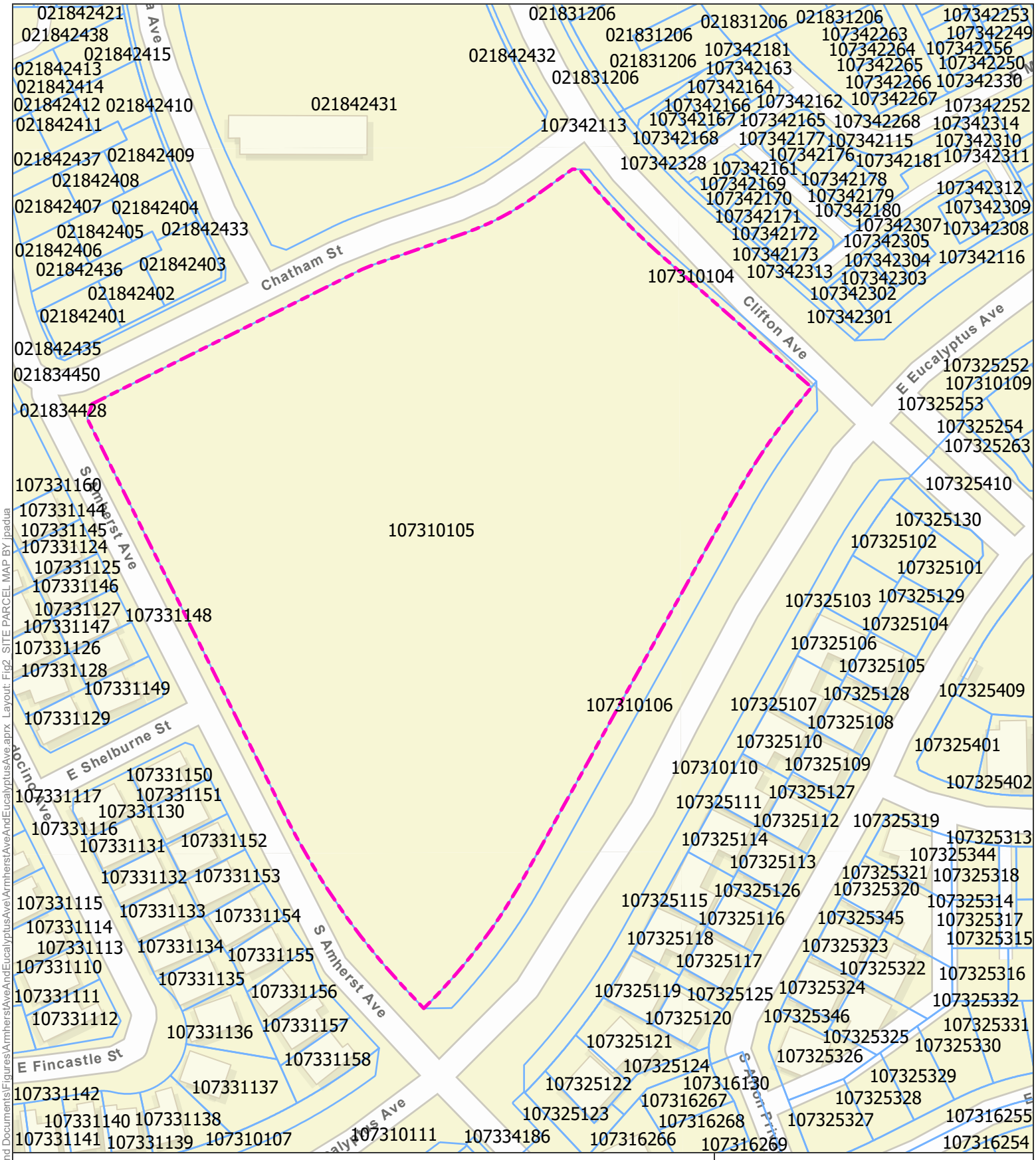
NE Corner of Amherst Avenue and Eucalyptus Avenue
Ontario, California
Project No. 01225043.00

Figure 1	Feb 2025

SCS ENGINEERS 2894

N:\PROJECTS\01225043.00\Background Documents\Figures\AmherstAveAndEucalyptusAve\AmherstAveAndEucalyptusAve.aprx Layout: Fig1_SITE LOCATION BY jpadua

USGS The National Map: National Boundaries Dataset, 3DEP Elevation Program, Geographic Names Information System, National Hydrography Dataset, National Land Cover Database, National Structures Dataset,



Legend

- Approximate Site Boundary
- San Bernardino County Parcels

N
W E
S

0 150
Feet

1 inch = 150 feet

Parcel Map

NE Corner of Amherst Avenue and Eucalyptus Avenue Ontario, California
Project No. 01225043.00

Figure 2	Feb 2025

SCS ENGINEERS 2895

N:\PROJECTS\01225043.00\Background Documents\Figures\AmherstAveAndEucalyptusAve\AmherstAveAndEucalyptusAve.aprx Layout: Fig2_SITE PARCEL MAP BY jpadua

Esri Community Maps Contributors, County of Riverside, County of San Bernardino, California State Parks, © OpenStreetMap, Microsoft, Esri, TomTom, Garmin, SafeGraph, GeoTechnologies, Inc, METI/NASA, USGS,

Legend

Approximate Site Boundary

N
W E
S

0 150
Feet

1 inch = 150 feet

Existing Site Conditions

NE Corner of Amherst Avenue and Eucalyptus Avenue
Ontario, California
Project No. 01225043.00

Figure 3	Feb 2025

SCS ENGINEERS 2896

N:\PROJECTS\01225043.00\Background Documents\Figures\AmherstAveAndEucalyptusAve\AmherstAveAndEucalyptusAve.aprx Layout: Fig3_SITE CONDITIONS BY jpadua

USGS The National Map: National Transportation Dataset; U.S. Census Bureau – TIGER/Line; U.S. Forest Service. Data Refreshed January, 2025., Maxar

Appendix B

Photographs

Photo 1: View of Property from the intersection of Eucalyptus Avenue and Amherst Avenue.

Photo 2: View of the Property from the southwest looking east.

Photo 3: View of the northwestern side of the Property looking south.

Photo 4: View of the southeastern side of the Property along Eucalyptus Avenue.

Photo 5: View of the northeastern corner of the Property near the intersection of Clifton Avenue and Chatham Street.

Photo 6: View of electrical box on the southeastern corner of the Property.

Photo 7: View of electrical boxes and dry-type transformer found on the southeastern side of the Property along Clifton Avenue.

Photo 8: Rumble grates found on the northeastern corner of the Property.

Photo 10: View of storm drain found on the southwestern corner of the Property.

Photo 11: View of adjacent park to the northwest.

Photo 12: View of adjacent residential homes to the northwest.

Photo 13: View of adjacent residential homes along Amherst Avenue to the southwest.

Photo 14: View of adjacent park near the intersection of Amherst Avenue and Chatham Street.

Photo 15: View of adjacent homes across the street from Eucalyptus Avenue to the southeast.

Photo 16: View of intersection of Amherst Avenue and Eucalyptus Avenue.

Appendix C

Historical Property and Adjoining Site Use Information

Not Reported

Not Reported

Ontario, CA 91761

Inquiry Number: 7908232.8

February 25, 2025

The EDR Aerial Photo Decade Package

6 Armstrong Road, 4th floor
Shelton, CT 06484
Toll Free: 800.352.0050
www.edrnet.com

EDR Aerial Photo Decade Package

02/25/25

Site Name:

Not Reported
Not Reported
Ontario, CA 91761
EDR Inquiry # 7908232.8

Client Name:

SCS Engineers
3900 Kilroy Airport Way
Long Beach, CA 90806
Contact: Jose William Padua

Environmental Data Resources, Inc. (EDR) Aerial Photo Decade Package is a screening tool designed to assist environmental professionals in evaluating potential liability on a target property resulting from past activities. EDR's professional researchers provide digitally reproduced historical aerial photographs, and when available, provide one photo per decade.

Search Results:

Year	Scale	Details	Source
2020	1"=500'	Flight Year: 2020	USDA/NAIP
2016	1"=500'	Flight Year: 2016	USDA/NAIP
2012	1"=500'	Flight Year: 2012	USDA/NAIP
2009	1"=500'	Flight Year: 2009	USDA/NAIP
2006	1"=500'	Flight Year: 2006	USDA/NAIP
2002	1"=500'	Acquisition Date: January 01, 2002	USGS/DOQQ
1994	1"=500'	Acquisition Date: June 01, 1994	USGS/DOQQ
1990	1"=500'	Flight Date: August 29, 1990	USDA
1989	1"=500'	Flight Date: August 03, 1989	USDA
1985	1"=500'	Flight Date: July 28, 1985	USDA
1975	1"=500'	Flight Date: August 01, 1975	USGS
1967	1"=500'	Flight Date: May 15, 1967	USDA
1953	1"=500'	Flight Date: February 02, 1953	USDA
1948	1"=500'	Flight Date: July 10, 1948	USGS
1938	1"=500'	Flight Date: June 14, 1938	USDA
1931	1"=500'	Flight Date: September 18, 1931	FAIR

When delivered electronically by EDR, the aerial photo images included with this report are for ONE TIME USE ONLY. Further reproduction of these aerial photo images is prohibited without permission from EDR. For more information contact your EDR Account Executive.

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Any analyses, estimates, ratings, environmental risk levels, or risk codes provided in this Report are provided for illustrative purposes only, and are not intended to provide, nor should they be interpreted as providing any facts regarding, or prediction or forecast of, any environmental risk for any property. Only an assessment performed by a qualified environmental professional can provide findings, opinions or conclusions regarding the environmental risk or conditions in, on or at any property.

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INQUIRY #: 7908232.8
YEAR: 2020
= 500'
N
EDR
2909

INQUIRY #: 7908232.8
YEAR: 2016
= 500'
N
EDR
2910

INQUIRY #: 7908232.8
YEAR: 2012
= 500'
N
EDR
2911

INQUIRY #: 7908232.8
YEAR: 2009
= 500'
N
EDR

INQUIRY #: 7908232.8
YEAR: 2006
= 500'
N
EDR
2913

INQUIRY #: 7908232.8

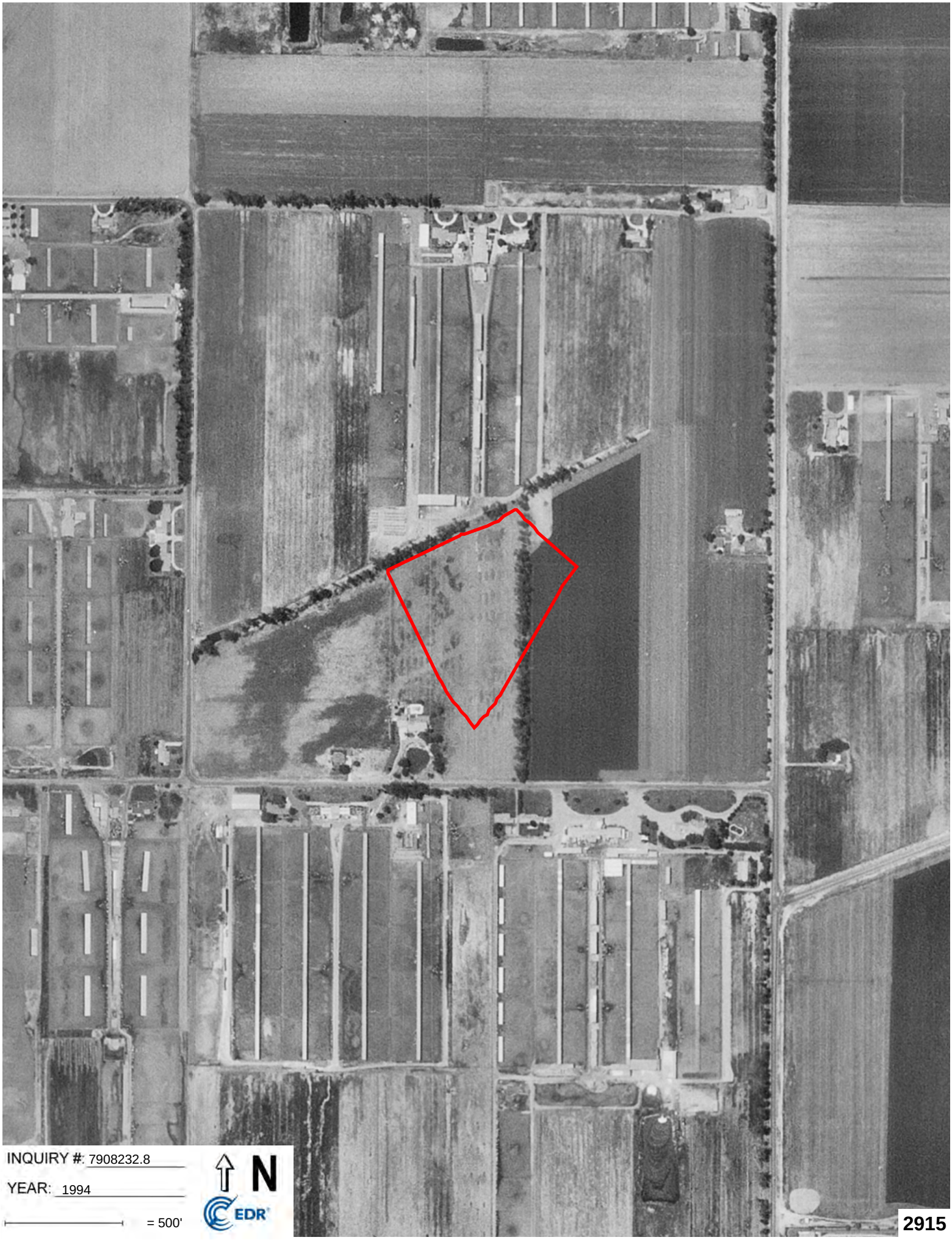
YEAR: 2002

= 500'

N

EDR

2914



INQUIRY #: 7908232.8

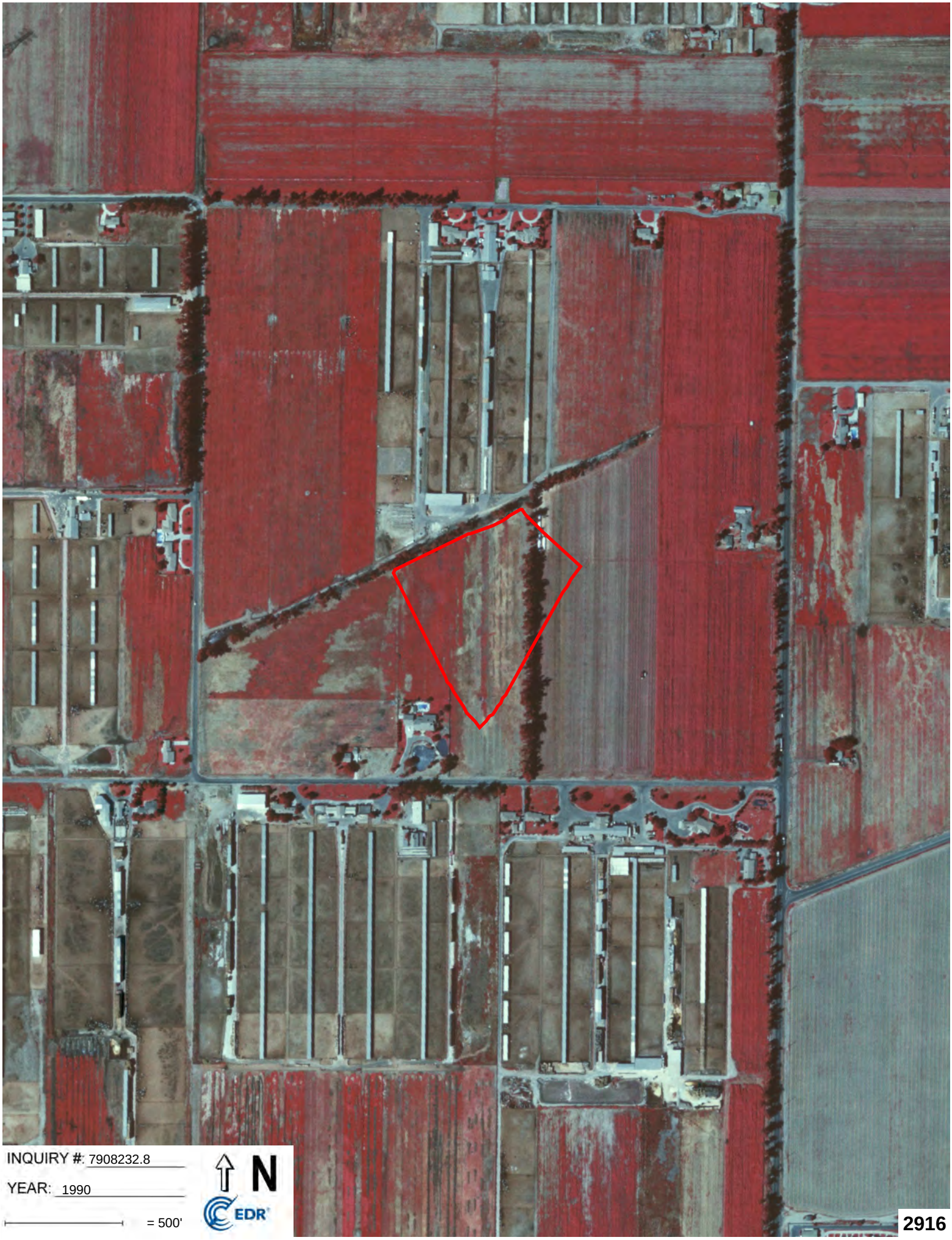
YEAR: 1994

= 500'

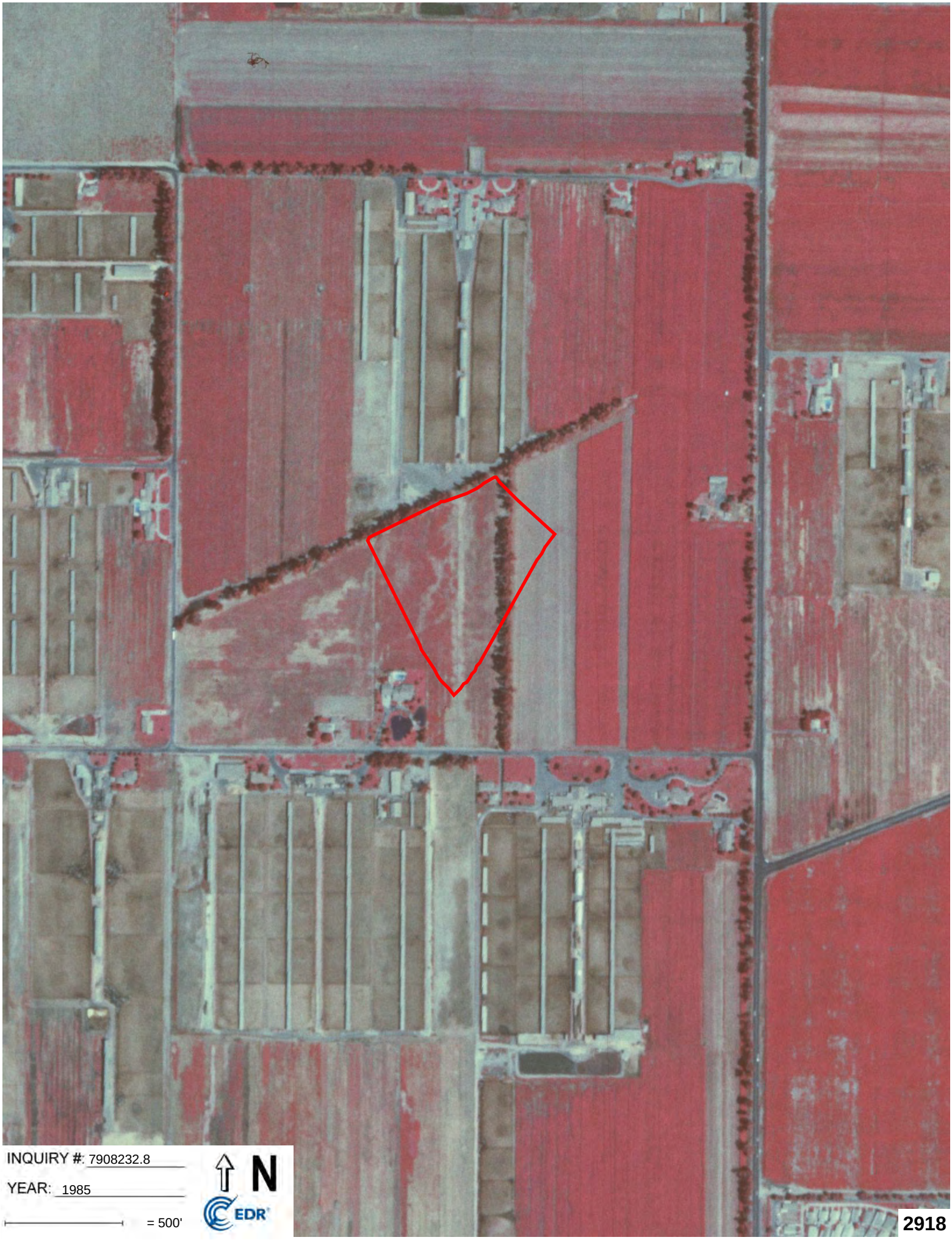
N

EDR

2915


INQUIRY #: 7908232.8
YEAR: 1990
= 500'
N
EDR

INQUIRY #: 7908232.8
YEAR: 1989
= 500'
N
EDR


INQUIRY #: 7908232.8
YEAR: 1985
= 500'
N
EDR

INQUIRY #: 7908232.8

YEAR: 1975

= 500'

N

EDR

2919

INQUIRY #: 7908232.8

YEAR: 1967

= 500'

N

EDR

2920

INQUIRY #: 7908232.8

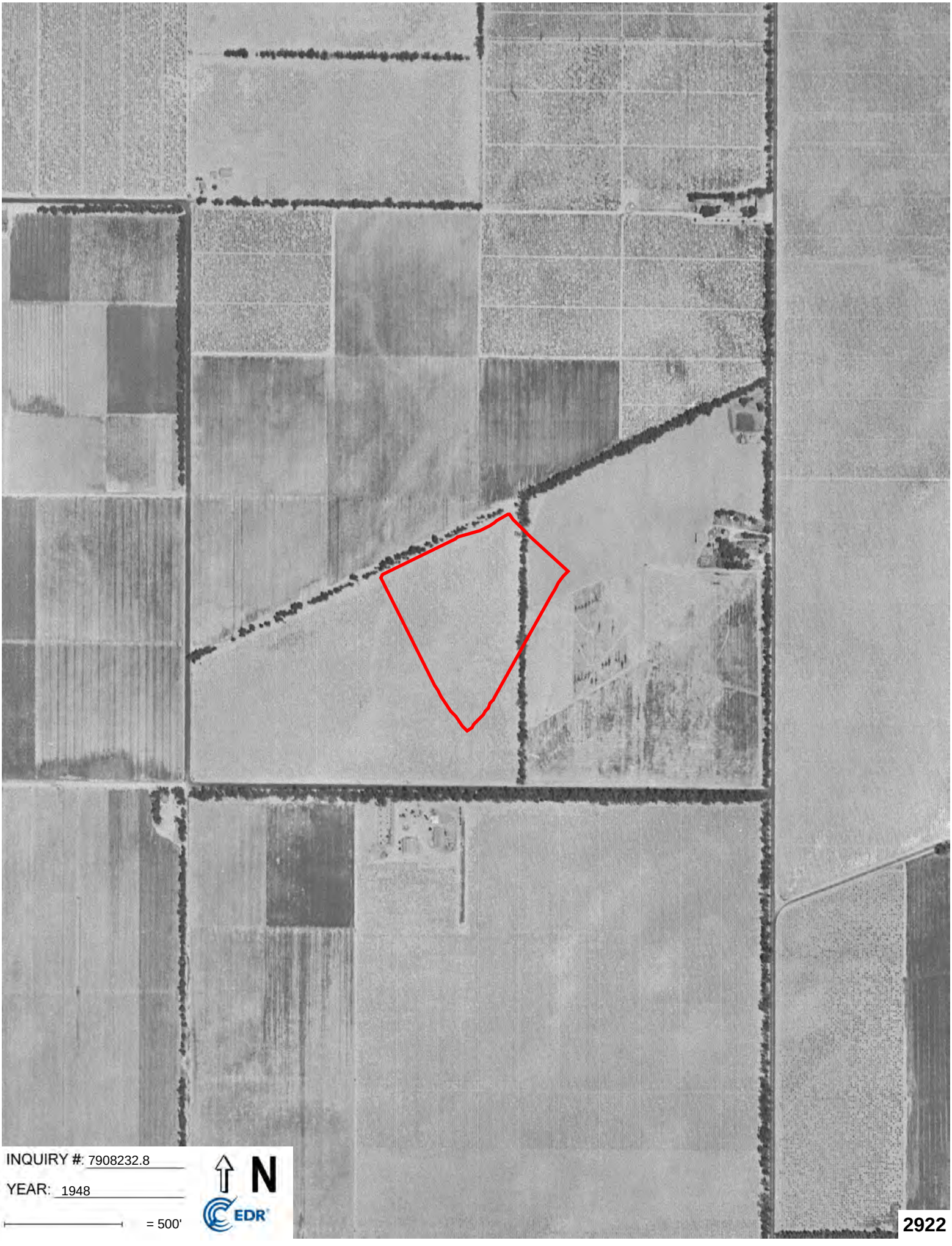
YEAR: 1953

= 500'

N

EDR

2921



INQUIRY #: 7908232.8

YEAR: 1948

= 500'

N

EDR

2922

INQUIRY #: 7908232.8

YEAR: 1938

= 500'

N

EDR

2923

INQUIRY #: 7908232.8

YEAR: 1931

= 500'

N

EDR

2924

Not Reported
Not Reported
Ontario, CA 91761

Inquiry Number: 7908232.5
February 25, 2025

The EDR-City Directory Abstract

Environmental Data Resources Inc
6 Armstrong Road
Shelton, CT 06484
800.352.0050
www.edrnet.com

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SECTION

Executive Summary

Findings

City Directory Images

Thank you for your business.
Please contact EDR at 1-800-352-0050
with any questions or comments.

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EXECUTIVE SUMMARY

DESCRIPTION

Environmental Data Resources, Inc.'s (EDR) City Directory Abstract is a screening tool designed to assist environmental professionals in evaluating potential liability on a target property resulting from past activities. EDR's City Directory Abstract includes a search and abstract of available city directory data. For each address, the directory lists the name of the corresponding occupant at approximately five year intervals.

Business directories including city, cross reference and telephone directories were reviewed, if available, at approximately five year intervals for the years spanning 1922 through current. This report compiles information gathered in this review by geocoding the latitude and longitude of properties identified and gathering information about properties within 1320 feet of the target property.

Summary information obtained is provided in the text of this report.

RECORD SOURCES

The EDR City Directory Report accesses a variety of business directory sources, including Haines, InfoUSA, Polk, Cole, Bresser, and Stewart. Listings marked as EDR Digital Archive access Cole and InfoUSA records. The various directory sources enhance and complement each other to provide a more thorough and accurate report.

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RESEARCH SUMMARY

The following research sources were consulted in the preparation of this report. An "X" indicates where information was identified in the source and provided in this report.

Year	Source	TP	Adjoining	Text Abstract	Source Image
2020	EDR Digital Archive	-	X	X	-
2017	Cole Information	-	X	X	-
2014	Cole Information	-	X	X	-
2010	Cole Information	-	X	X	-
2008	Haines Company, Inc.	-	X	X	-
2005	Cole Information	-	X	X	-
2003	Haines & Co Publishers	-	X	X	-
2002	Cole Information Services	-	-	-	-
2000	Cole Information	-	X	X	-
1996	GTE	-	-	-	-
1995	Cole Information	-	X	X	-
	GTE Directories	-	X	X	-
1992	Cole Information	-	X	X	-
1991	GTE California Incorporated	-	-	-	-
1990	GTE	-	X	X	-
1985	GTE	-	X	X	-

EXECUTIVE SUMMARY

Year	Source	TP	Adjoining	Text Abstract	Source Image
1981	General Telephone Company of California	-	-	-	-
1980	GTE General Telephone Company of California	-	X	X	-
1975	GTE Directories	-	X	X	-
1970	General Telephone Company of California	-	X	X	-
1965	GTE	-	-	-	-
1964	Luskey Brothers & Co	-	-	-	-
1961	Luskey Brothers& Co Publishers	-	-	-	-
1960	Luskey Brothers & Co Publishers	-	-	-	-
1956	General Telephone Company Publishers	-	-	-	-
1955	Luskey Brothers Co Publishers	-	-	-	-
1951	Los Angeles Directory Co Publishers	-	-	-	-
1950	The Pacific Telephone and Telegraph Co	-	-	-	-
1949	San Bernardino Directory Co. Publishers	-	-	-	-
1946	Los Angeles Directory Company Publishers	-	-	-	-
1945	Southern Califronia Telephone Company	-	-	-	-
1942	San Bernardino Directory Co Publisher	-	-	-	-
1941	Associated Telephone Company Limited	-	-	-	-
1940	Los Angeles Directory Co.	-	-	-	-
1938	Los Angeles Directory Co.	-	-	-	-
1936	San Bernardino Directory Co Publisher	-	-	-	-
1934	Los Angeles Directory Co.	-	-	-	-
1931	Los Angeles Directory Co.	-	-	-	-
1930	San Bernardino Directory Co Publisher	-	-	-	-
1926	Los Angeles Directory Co.	-	-	-	-
1923	Los Angeles Directory Company	-	-	-	-
1922	R.L. Polk & Co Publishers	-	-	-	-

FINDINGS

TARGET PROPERTY INFORMATION

ADDRESS

Not Reported
Ontario, CA 91761

FINDINGS DETAIL

Target Property research detail.

FINDINGS

ADJOINING PROPERTY DETAIL

The following Adjoining Property addresses were researched for this report. Detailed findings are provided for each address.

CLEVELAND AVE

14320 CLEVELAND AVE

Year	Uses	Source
2008	CHACON M	Haines Company, Inc.
1995	Douma Herman	GTE Directories
1990	Douma Herman	GTE
1985	DOUMA HERMAN	GTE
1980	DOUMA HERMAN	GTE General Telephone Company of California
1975	Douma Herman	GTE Directories

14350 CLEVELAND AVE

Year	Uses	Source
1995	Douma Fred A	GTE Directories
1990	Douma Fred A	GTE
1985	DOUMA FRED A	GTE
1980	DOUMA FRED	GTE General Telephone Company of California
1975	Douma Fred A	GTE Directories

14482 CLEVELAND AVE

Year	Uses	Source
2008	LEININGER James	Haines Company, Inc.
1985	DOUMA MICHAEL J	GTE

CLEVELAND ST

14320 CLEVELAND ST

Year	Uses	Source
1995	OCCUPANT UNKNOWNN	Cole Information

FINDINGS

14330 CLEVELAND ST

Year	*Uses*	*Source*
1995	DOUMA, HERMANS B	Cole Information

14350 CLEVELAND ST

Year	*Uses*	*Source*
1995	DOUMA, FRED A	Cole Information

14482 CLEVELAND ST

Year	*Uses*	*Source*
1992	ATTEMA, RODNEY	Cole Information

E EUCALYPTUS AVE

10753 E EUCALYPTUS AVE

Year	*Uses*	*Source*
2005	WILLIAM PENICKS	Cole Information
2000	OCCUPANT UNKNOWN	Cole Information
1995	HILL, KURT	Cole Information

10869 E EUCALYPTUS AVE

Year	*Uses*	*Source*
2005	BRENDA GUILHERME	Cole Information
2000	VYFHUIZEN MELINDA & CASE	Cole Information
1995	VYFHUIZEN, CASE	Cole Information
1992	VYFHUIZEN, CASE	Cole Information

11009 E EUCALYPTUS AVE

Year	*Uses*	*Source*
2000	JOHN WESTRA	Cole Information
	WESTRA DAIRY FARMS	Cole Information
1995	WESTRA, JOHN	Cole Information
	WESTRA DAIRY FARMS	Cole Information
1992	WESTRA, JOHN	Cole Information
	WESTRA DAIRY FARMS	Cole Information

FINDINGS

11022 E EUCALYPTUS AVE

Year	Uses	Source
2000	CALVIN WESTRA	Cole Information
1995	WESTRA, CALVIN	Cole Information
1992	WESTRA, CALVIN	Cole Information

11023 E EUCALYPTUS AVE

Year	Uses	Source
2000	OCCUPANT UNKNOWN	Cole Information

11060 E EUCALYPTUS AVE

Year	Uses	Source
2010	MICHELLE GRIEPSMA	Cole Information
2005	MICHELLE GRIEPSMA	Cole Information
2000	JAKE WESTRA	Cole Information
1995	WESTRA, JAKE J	Cole Information
1992	WESTRA, JAKE J	Cole Information

11101 E EUCALYPTUS AVE

Year	Uses	Source
2010	OCCUPANT UNKNOWN	Cole Information
2005	WHEELIN AND DEELIN	Cole Information
	WHEELIN & DEELIN	Cole Information
2000	PETE HETTINGA	Cole Information
	HETTINGA HARVEY MILK	Cole Information
1995	HETTINGA, PETE	Cole Information
	HARVEY HETTINGA	Cole Information
1992	HETTINGA HARVEY	Cole Information

11111 E EUCALYPTUS AVE

Year	Uses	Source
2014	OCCUPANT UNKNOWN	Cole Information
2010	OCCUPANT UNKNOWN	Cole Information
2005	OCCUPANT UNKNOWN	Cole Information
2000	HARVEY HETTINGA	Cole Information
	ANA MEDEL	Cole Information

Year	Uses	Source
2000	RUBEN LEDESMA	Cole Information
	JURUPA FEEDERS	Cole Information
	HETTINGA HARVEY MILK	Cole Information
1995	HETTINGIA, PETER	Cole Information
	HETTINGA, HARVEY	Cole Information
	JIMENEZ, IGNACIO	Cole Information
	SHAFFER, JOEY J	Cole Information
1992	HETTINGIA, PETER	Cole Information
	BALDERRAMA, ENRIQUE	Cole Information
	HETTINGA, HARVEY	Cole Information
	ORTIZ, ANTONIO	Cole Information

11121 E EUCALYPTUS AVE

Year	Uses	Source
2010	OCCUPANT UNKNOWN	Cole Information
2000	IGNACIO JIMENEZ	Cole Information
1995	WIERSMA, PHILLIP	Cole Information
1992	FURRER, LOUIS A	Cole Information

EUCALYPTS AVE

11009 EUCALYPTS AVE

Year	Uses	Source
1990	Westra Jake J Dairy	GTE

EUCALYPTUS AVE

10869 EUCALYPTUS AVE

Year	Uses	Source
2003	DEVRIES Case	Haines & Co Publishers
1995	Vyfhu Lten Melinda	GTE Directories
1985	DE HAAN LARRY	GTE
1980	DE HAAN LARRY	GTE General Telephone Company of California

FINDINGS

11008 EUCALYPTUS AVE

Year	*Uses*	*Source*
1995	WESTRA DAIRY FARMS	GTE Directories

11009 EUCALYPTUS AVE

Year	*Uses*	*Source*
2003	XXXX	Haines & Co Publishers
1995	Westra John	GTE Directories
1990	Westra John	GTE
1985	WESTRA JAKE J DAIRY	GTE
	WESTRA JOHN	GTE
1980	+NWESTRA JAKE J DAIRY	GTE General Telephone Company of California
	WESTRA JOHN	GTE General Telephone Company of California
1975	Westra Jake J Dairy	GTE Directories
	Westra John	GTE Directories
1970	WESTRA JOHN	General Telephone Company of California

11022 EUCALYPTUS AVE

Year	*Uses*	*Source*
1995	Westra Calvin	GTE Directories
1990	Westra Calvin	GTE
1985	WESTRA CALVIN	GTE
1980	WESTRA SHERWIN	GTE General Telephone Company of California
1975	Westra Sherwin	GTE Directories

11060 EUCALYPTUS AVE

Year	*Uses*	*Source*
1995	Westra Jake J	GTE Directories
1990	Westra Jake J	GTE
1985	WESTRA JAKE J	GTE
1980	WESTRA JAKE J	GTE General Telephone Company of California
1975	Westra Jake J	GTE Directories

FINDINGS

11101 EUCALYPTUS AVE

Year	*Uses*	*Source*
2003	HETTINGA HARVEY	Haines & Co Publishers
	HETTINGA Pete	Haines & Co Publishers
	HETTINGA Peter	Haines & Co Publishers
1995	Hettinga Pete	GTE Directories
	HETTINGA HARVEY	GTE Directories
1990	Hettinga Harvey milk	GTE
	Ofc	GTE
	Hettinga Pete	GTE
1985	HETTINGA PETE	GTE
	HETTINGA HARVEY	GTE
1980	HETTINGA PETE	GTE General Telephone Company of California
	HETTINGA HARVEY	GTE General Telephone Company of California

11111 EUCALYPTUS AVE

Year	*Uses*	*Source*
2003	HETTINGA Harvey	Haines & Co Publishers
1995	JURUPA FEEDERS	GTE Directories
	HettInga H	GTE Directories
	A HettInga Peter	GTE Directories
1985	HETTINGA H	GTE
	SWIHART TIM	GTE
1980	HETTINGA H	GTE General Telephone Company of California
	VANNAH KAREN	GTE General Telephone Company of California
	1/2 JONES TERRY	GTE General Telephone Company of California
1975	Romberg Delmer	GTE Directories

11121 EUCALYPTUS AVE

Year	*Uses*	*Source*
2003	JIMENEZ Ignaclo	Haines & Co Publishers
1995	Wierama Philip & Sandy	GTE Directories

Year	Uses	Source
1990	Furniture Shop The	GTE
	Irrer LA	GTE
1985	FURRER DIANA	GTE
1975	Furrer L A	GTE Directories

MILLIKEN AVE

14328 MILLIKEN AVE

Year	Uses	Source
2003	COFFMAN Carol	Haines & Co Publishers

S CLEVELAND AVE

14320 S CLEVELAND AVE

Year	Uses	Source
2017	PAUL BARROWMAN	Cole Information
	CHINO VALLEY YOUNG LIFE	Cole Information
2014	M CHACON	Cole Information
2010	M CHACON	Cole Information
2005	M CHACON	Cole Information
1995	OCCUPANT UNKNOWNN	Cole Information
1992	DOUMA, HERMAN	Cole Information

14330 S CLEVELAND AVE

Year	Uses	Source
2017	GORDON HAY INCDAIRY 2	Cole Information
2014	GORDON HAY INCDAIRY 2	Cole Information

14350 S CLEVELAND AVE

Year	Uses	Source
2020	JAMIE SCRIVNER	EDR Digital Archive
2017	JAMIE SCRIVNER	Cole Information
2014	REBECCA DURAN	Cole Information
2010	BEN DURAN	Cole Information
2005	OCCUPANT UNKNOWN	Cole Information
1992	DOUMA, FRED A	Cole Information

FINDINGS

14482 S CLEVELAND AVE

Year	*Uses*	*Source*
2017	PETER KUHL	Cole Information
2014	PETER KUHL	Cole Information
2010	OCCUPANT UNKNOWN	Cole Information
2005	JAMES LEININGER	Cole Information
1995	ECHEVERRIA, ISABELL R	Cole Information

S MILLIKEN AVE

14328 S MILLIKEN AVE

Year	*Uses*	*Source*
2005	CAROL COFFMAN	Cole Information
2000	OCCUPANT UNKNOWN	Cole Information

FINDINGS

ADJOINING PROPERTY: ADDRESSES NOT IDENTIFIED IN RESEARCH SOURCE

The following Adjoining Property addresses were researched for this report, and the addresses were not identified in research source.

Address Researched	Address Not Identified in Research Source
10753 E EUCALYPTUS AVE	2020, 2017, 2014, 2010, 2008, 2003, 2002, 1996, 1992, 1991, 1990, 1985, 1981, 1980, 1975, 1970, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
10869 E EUCALYPTUS AVE	2020, 2017, 2014, 2010, 2008, 2003, 2002, 1996, 1991, 1990, 1985, 1981, 1980, 1975, 1970, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
10869 EUCALYPTUS AVE	2020, 2017, 2014, 2010, 2008, 2005, 2002, 2000, 1996, 1992, 1991, 1990, 1981, 1975, 1970, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
11008 EUCALYPTUS AVE	2020, 2017, 2014, 2010, 2008, 2005, 2003, 2002, 2000, 1996, 1992, 1991, 1990, 1985, 1981, 1980, 1975, 1970, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
11009 E EUCALYPTUS AVE	2020, 2017, 2014, 2010, 2008, 2005, 2003, 2002, 1996, 1991, 1990, 1985, 1981, 1980, 1975, 1970, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
11009 EUCALYPTS AVE	2020, 2017, 2014, 2010, 2008, 2005, 2003, 2002, 2000, 1996, 1995, 1992, 1991, 1985, 1981, 1980, 1975, 1970, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
11009 EUCALYPTUS AVE	2020, 2017, 2014, 2010, 2008, 2005, 2002, 2000, 1996, 1992, 1991, 1981, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
11022 E EUCALYPTUS AVE	2020, 2017, 2014, 2010, 2008, 2005, 2003, 2002, 1996, 1991, 1990, 1985, 1981, 1980, 1975, 1970, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
11022 EUCALYPTUS AVE	2020, 2017, 2014, 2010, 2008, 2005, 2003, 2002, 2000, 1996, 1992, 1991, 1981, 1970, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
11023 E EUCALYPTUS AVE	2020, 2017, 2014, 2010, 2008, 2005, 2003, 2002, 1996, 1995, 1992, 1991, 1990, 1985, 1981, 1980, 1975, 1970, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
11060 E EUCALYPTUS AVE	2020, 2017, 2014, 2008, 2003, 2002, 1996, 1991, 1990, 1985, 1981, 1980, 1975, 1970, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
11060 EUCALYPTUS AVE	2020, 2017, 2014, 2010, 2008, 2005, 2003, 2002, 2000, 1996, 1992, 1991, 1981, 1970, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
11101 E EUCALYPTUS AVE	2020, 2017, 2014, 2008, 2003, 2002, 1996, 1991, 1990, 1985, 1981, 1980, 1975, 1970, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922

FINDINGS

Address Researched	Address Not Identified in Research Source
11101 EUCALYPTUS AVE	2020, 2017, 2014, 2010, 2008, 2005, 2002, 2000, 1996, 1992, 1991, 1981, 1975, 1970, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
11111 E EUCALYPTUS AVE	2020, 2017, 2008, 2003, 2002, 1996, 1991, 1990, 1985, 1981, 1980, 1975, 1970, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
11111 EUCALYPTUS AVE	2020, 2017, 2014, 2010, 2008, 2005, 2002, 2000, 1996, 1992, 1991, 1990, 1981, 1970, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
11121 E EUCALYPTUS AVE	2020, 2017, 2014, 2008, 2005, 2003, 2002, 1996, 1991, 1990, 1985, 1981, 1980, 1975, 1970, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
11121 EUCALYPTUS AVE	2020, 2017, 2014, 2010, 2008, 2005, 2002, 2000, 1996, 1992, 1991, 1981, 1980, 1970, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
14320 CLEVELAND AVE	2020, 2017, 2014, 2010, 2005, 2003, 2002, 2000, 1996, 1992, 1991, 1981, 1970, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
14320 CLEVELAND ST	2020, 2017, 2014, 2010, 2008, 2005, 2003, 2002, 2000, 1996, 1992, 1991, 1990, 1985, 1981, 1980, 1975, 1970, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
14320 S CLEVELAND AVE	2020, 2008, 2003, 2002, 2000, 1996, 1991, 1990, 1985, 1981, 1980, 1975, 1970, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
14328 MILLIKEN AVE	2020, 2017, 2014, 2010, 2008, 2005, 2002, 2000, 1996, 1995, 1992, 1991, 1990, 1985, 1981, 1980, 1975, 1970, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
14328 S MILLIKEN AVE	2020, 2017, 2014, 2010, 2008, 2003, 2002, 1996, 1995, 1992, 1991, 1990, 1985, 1981, 1980, 1975, 1970, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
14330 CLEVELAND ST	2020, 2017, 2014, 2010, 2008, 2005, 2003, 2002, 2000, 1996, 1992, 1991, 1990, 1985, 1981, 1980, 1975, 1970, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
14330 S CLEVELAND AVE	2020, 2010, 2008, 2005, 2003, 2002, 2000, 1996, 1995, 1992, 1991, 1990, 1985, 1981, 1980, 1975, 1970, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
14350 CLEVELAND AVE	2020, 2017, 2014, 2010, 2008, 2005, 2003, 2002, 2000, 1996, 1992, 1991, 1981, 1970, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
14350 CLEVELAND ST	2020, 2017, 2014, 2010, 2008, 2005, 2003, 2002, 2000, 1996, 1992, 1991, 1990, 1985, 1981, 1980, 1975, 1970, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
14350 S CLEVELAND AVE	2008, 2003, 2002, 2000, 1996, 1995, 1991, 1990, 1985, 1981, 1980, 1975, 1970, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922

FINDINGS

Address Researched	Address Not Identified in Research Source
14482 CLEVELAND AVE	2020, 2017, 2014, 2010, 2005, 2003, 2002, 2000, 1996, 1995, 1992, 1991, 1990, 1981, 1980, 1975, 1970, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
14482 CLEVELAND ST	2020, 2017, 2014, 2010, 2008, 2005, 2003, 2002, 2000, 1996, 1995, 1991, 1990, 1985, 1981, 1980, 1975, 1970, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
14482 S CLEVELAND AVE	2020, 2008, 2003, 2002, 2000, 1996, 1992, 1991, 1990, 1985, 1981, 1980, 1975, 1970, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922

TARGET PROPERTY: ADDRESS NOT IDENTIFIED IN RESEARCH SOURCE

The following Target Property addresses were researched for this report, and the addresses were not identified in the research source.

Address Researched	Address Not Identified in Research Source
Not Reported	2020, 2017, 2014, 2010, 2008, 2005, 2003, 2002, 2000, 1996, 1995, 1992, 1991, 1990, 1985, 1981, 1980, 1975, 1970, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922

Not Reported

Not Reported

Ontario, CA 91761

Inquiry Number: 7908232.4

February 25, 2025

EDR Historical Topo Map Report

with QuadMatch™

6 Armstrong Road, 4th floor
Shelton, CT 06484
Toll Free: 800.352.0050
www.edrnet.com

EDR Historical Topo Map Report

02/25/25

Site Name:	Client Name:
Not Reported	SCS Engineers
Not Reported	3900 Kilroy Airport Way
Ontario, CA 91761	Long Beach, CA 90806
EDR Inquiry # 7908232.4	Contact: Jose William Padua

EDR Topographic Map Library has been searched by EDR and maps covering the target property location as provided by SCS Engineers were identified for the years listed below. EDR's Historical Topo Map Report is designed to assist professionals in evaluating potential liability on a target property resulting from past activities. EDRs Historical Topo Map Report includes a search of a collection of public and private color historical topographic maps, dating back to the late 1800s.

Search Results:		*Coordinates:*	
P.O.#	01225043.00 T1	**Latitude:**	33.992206 33° 59' 32" North
Project:	Armherst Ave & Eucalyptus Av	**Longitude:**	-117.562857 -117° 33' 46" West
		UTM Zone:	Zone 11 North
		UTM X Meters:	448016.31
		UTM Y Meters:	3761434.55
		Elevation:	713.00' above sea level

Maps Provided:

2022, 2021	1966, 1967	1900
2018	1954	1897
2015	1953, 1954	
2012	1944, 1947	
1981	1942	
1976	1941	
1975	1903	
1973	1902	

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Topo Sheet Key

This EDR Topo Map Report is based upon the following USGS topographic map sheets.

2022, 2021 Source Sheets

Corona North
2022
7.5-minute, 24000

Guasti
2021
7.5-minute, 24000

2018 Source Sheets

Corona North
2018
7.5-minute, 24000

Guasti
2018
7.5-minute, 24000

2015 Source Sheets

Corona North
2015
7.5-minute, 24000

Guasti
2015
7.5-minute, 24000

2012 Source Sheets

Corona North
2012
7.5-minute, 24000

Guasti
2012
7.5-minute, 24000

Topo Sheet Key

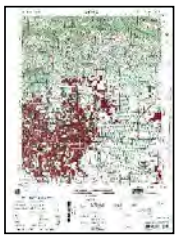
This EDR Topo Map Report is based upon the following USGS topographic map sheets.

1981 Source Sheets

Guasti
1981
7.5-minute, 24000
Aerial Photo Revised 1978

Corona North
1981
7.5-minute, 24000
Aerial Photo Revised 1978

1976 Source Sheets



ONTARIO
1976
15-minute, 50000

1975 Source Sheets

Corona North
1975
7.5-minute, 24000
Aerial Photo Revised 1975

1973 Source Sheets

Corona North
1973
7.5-minute, 24000
Aerial Photo Revised 1973

Guasti
1973
7.5-minute, 24000
Aerial Photo Revised 1973

Topo Sheet Key

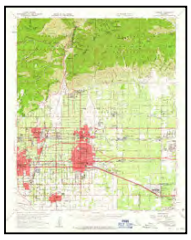
This EDR Topo Map Report is based upon the following USGS topographic map sheets.

1966, 1967 Source Sheets

Guasti
1966
7.5-minute, 24000
Aerial Photo Revised 1966

Corona North
1967
7.5-minute, 24000
Aerial Photo Revised 1966

1954 Source Sheets



Ontario
1954
15-minute, 62500
Aerial Photo Revised 1952

1953, 1954 Source Sheets

Guasti
1953
7.5-minute, 24000
Aerial Photo Revised 1952

Corona North
1954
7.5-minute, 24000
Aerial Photo Revised 1952

1944, 1947 Source Sheets

CUCAMONGA
1944
15-minute, 50000

CORONA
1947
15-minute, 50000

Topo Sheet Key

This EDR Topo Map Report is based upon the following USGS topographic map sheets.

1942 Source Sheets

Corona and Vicinity
1942
7.5-minute, 31680

1941 Source Sheets

GUASTI VICINITY
1941
7.5-minute, 31680

1903 Source Sheets

Cucamonga
1903
15-minute, 62500

1902 Source Sheets

Corona
1902
30-minute, 125000

Topo Sheet Key

This EDR Topo Map Report is based upon the following USGS topographic map sheets.

1900 Source Sheets

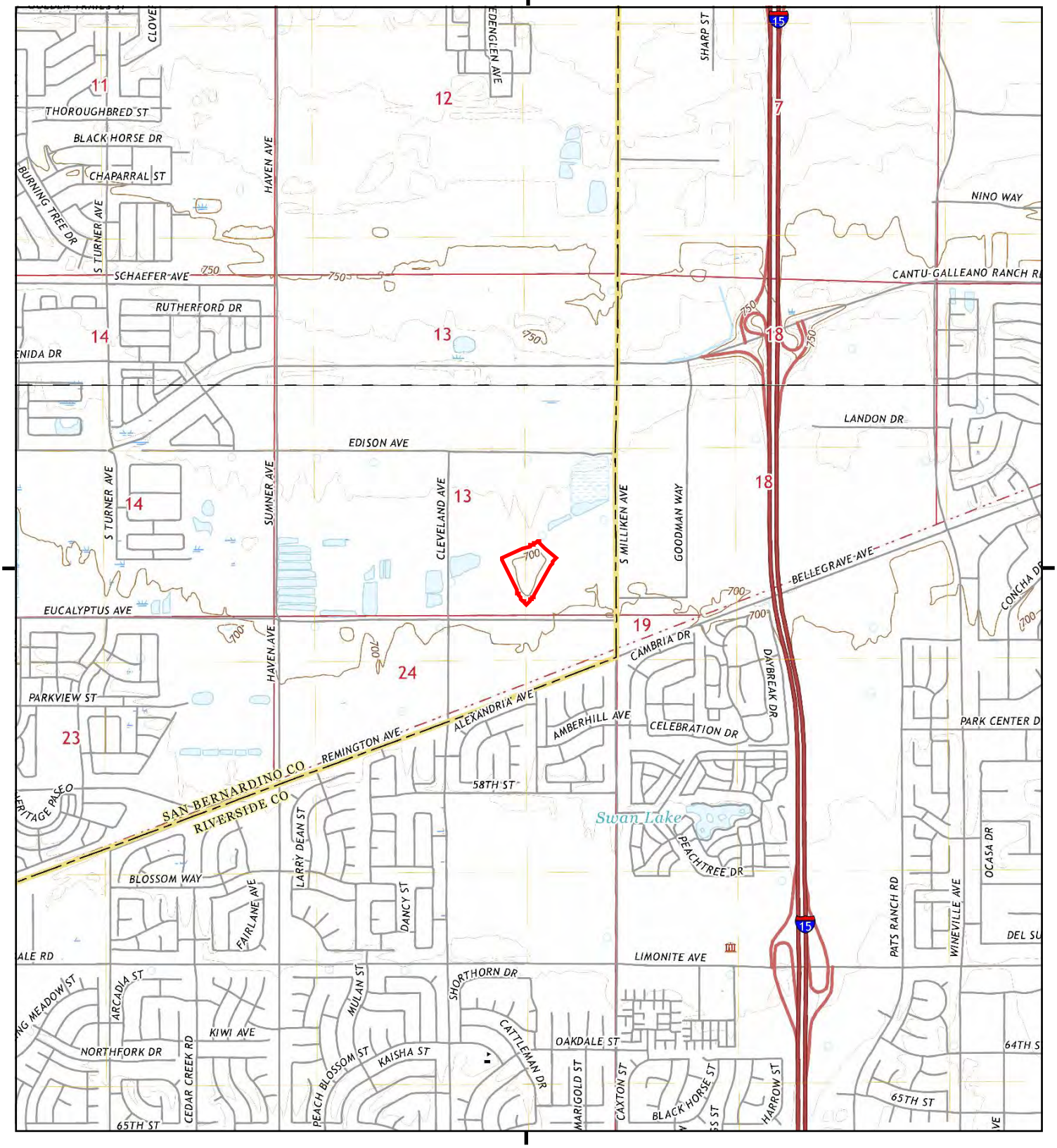
Cucamonga
1900
15-minute, 62500

1897 Source Sheets

Cucamonga
1897
15-minute, 62500

Historical Topo Map

2022, 2021



This report includes information from the following map sheet(s).

0 Miles 0.25 0.5 1 1.5

NW N NE
W E
SW S SE

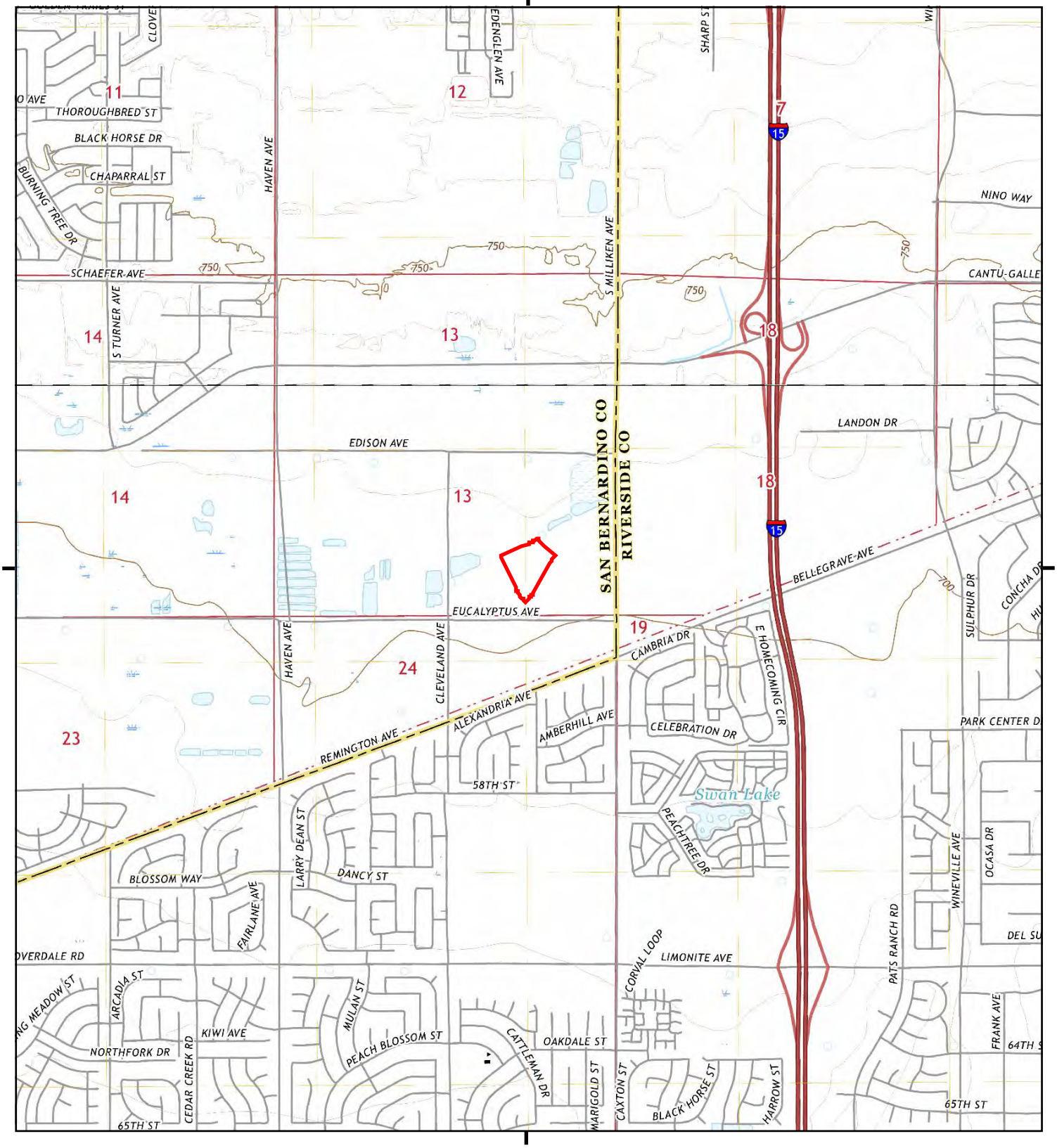
TP, Corona North, 2022, 7.5-minute
N, Guasti, 2021, 7.5-minute

SITE NAME: Not Reported
ADDRESS: Not Reported
Ontario, CA 91761
CLIENT: SCS Engineers

N

Historical Topo Map

2018



This report includes information from the following map sheet(s).

0 Miles 0.25 0.5 1 1.5

NW N NE
W E
SW S SE

TP, Corona North, 2018, 7.5-minute
N, Guasti, 2018, 7.5-minute

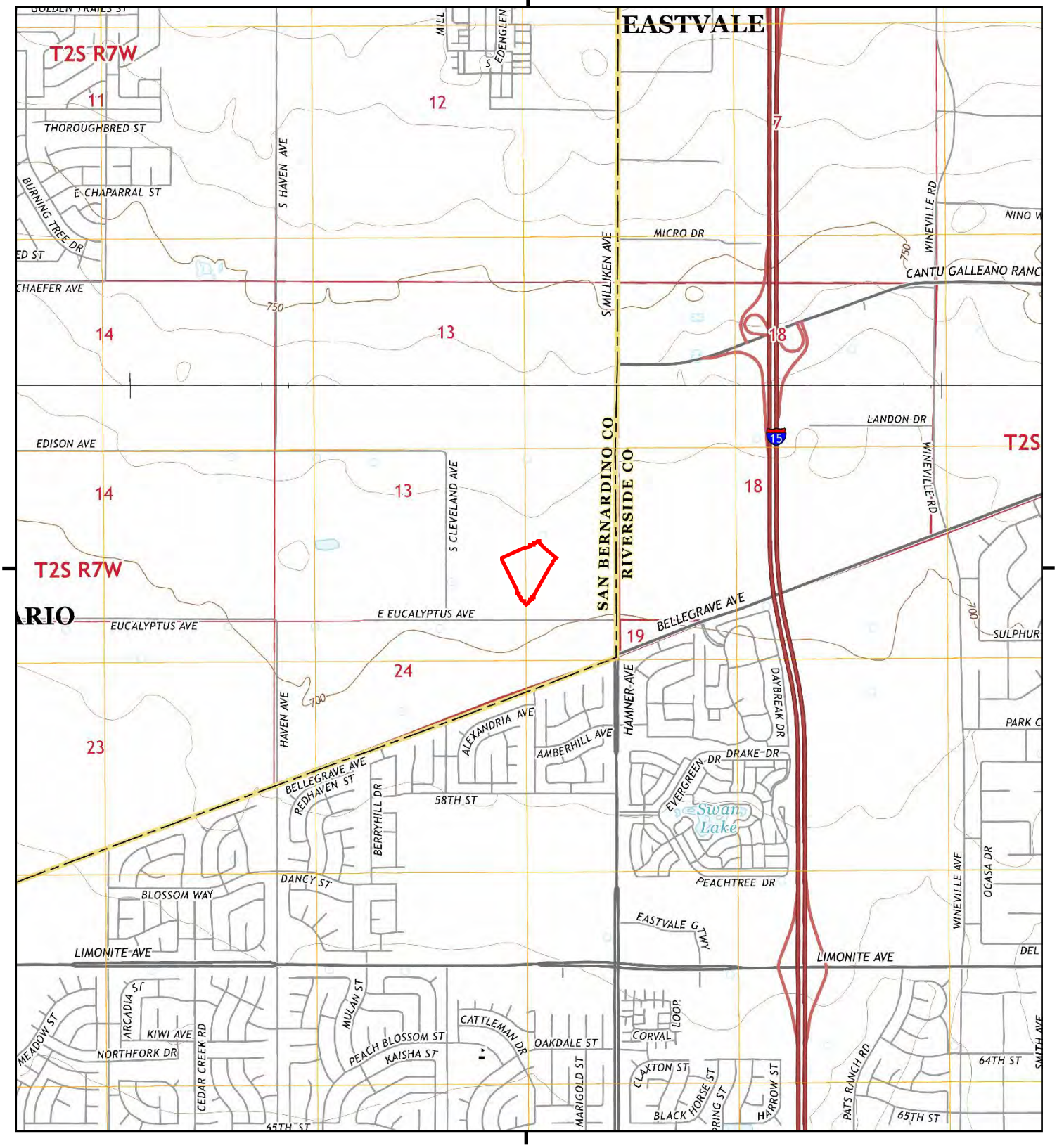
SITE NAME: Not Reported
ADDRESS: Not Reported
Ontario, CA 91761
CLIENT: SCS Engineers

N

2950

Historical Topo Map

2015



This report includes information from the following map sheet(s).

0 Miles 0.25 0.5 1 1.5

NW N NE
W E
SW S SE

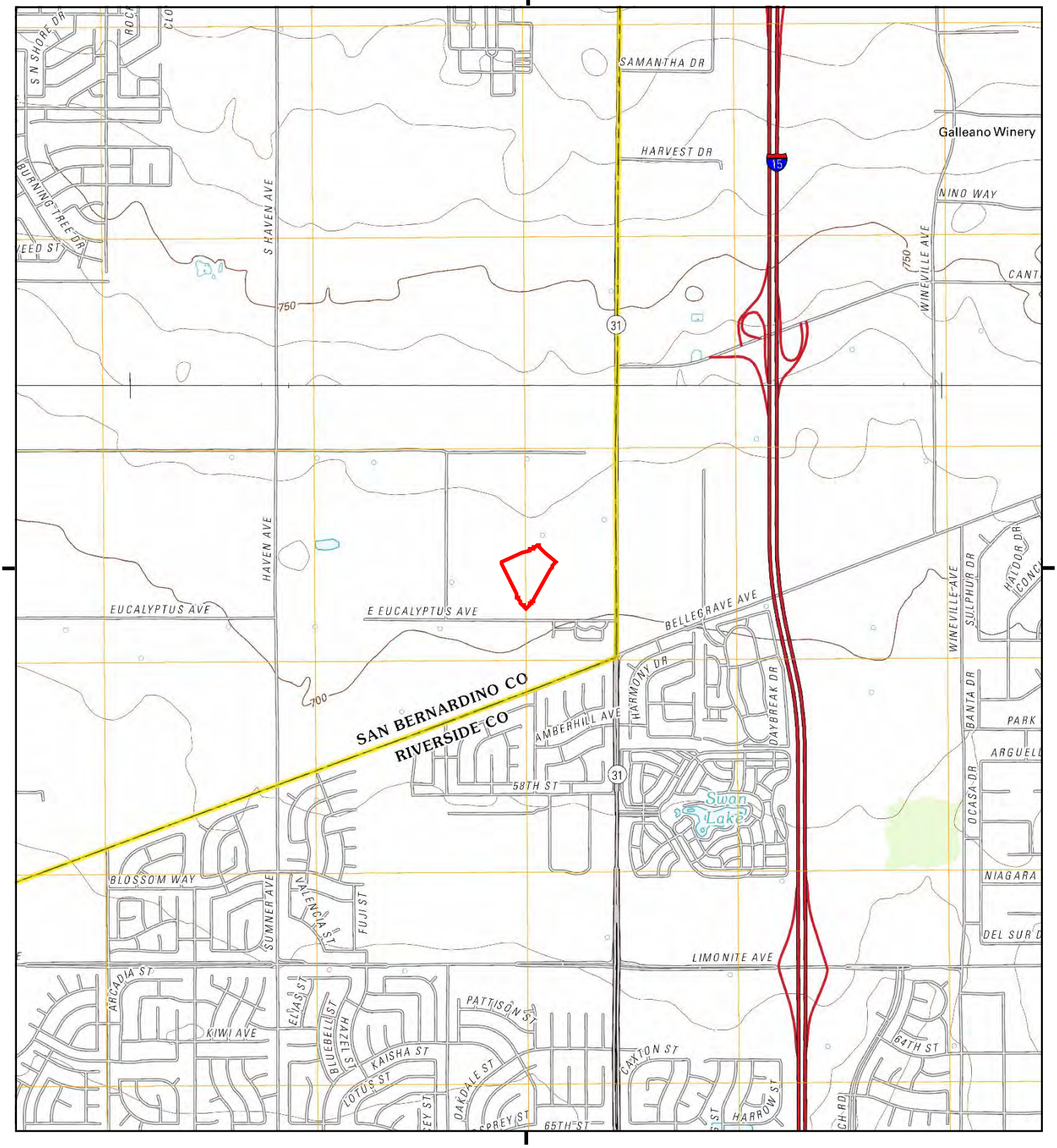
TP, Corona North, 2015, 7.5-minute
N, Guasti, 2015, 7.5-minute

SITE NAME: Not Reported
ADDRESS: Not Reported
Ontario, CA 91761
CLIENT: SCS Engineers

N

Historical Topo Map

2012



This report includes information from the following map sheet(s).

0 Miles 0.25 0.5 1 1.5

NW N NE
W E
SW S SE

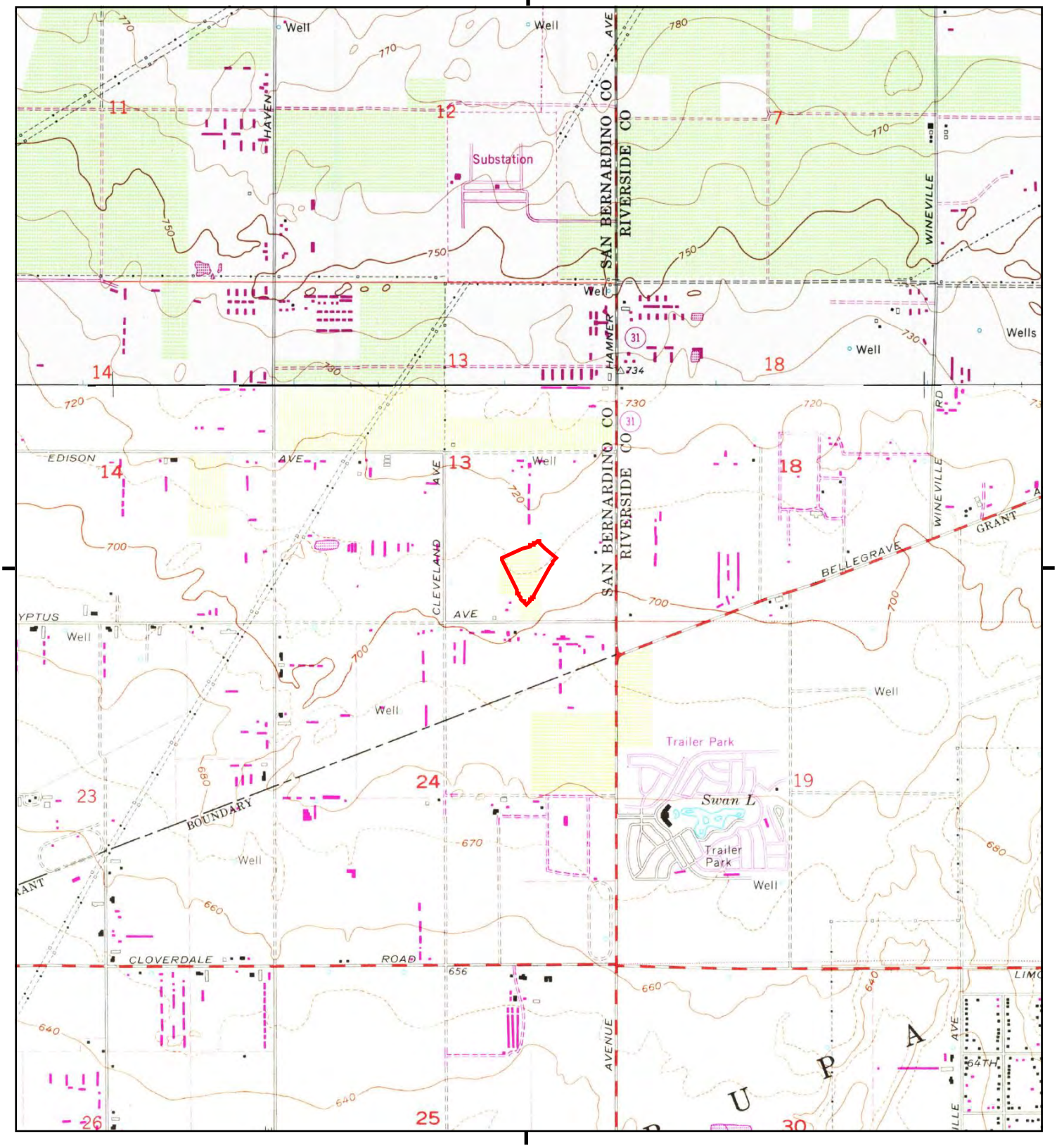
TP, Corona North, 2012, 7.5-minute
N, Guasti, 2012, 7.5-minute

SITE NAME: Not Reported
ADDRESS: Not Reported
Ontario, CA 91761
CLIENT: SCS Engineers

N

Historical Topo Map

1981



This report includes information from the following map sheet(s).

0 Miles 0.25 0.5 1 1.5

NW N NE
W E
SW S SE

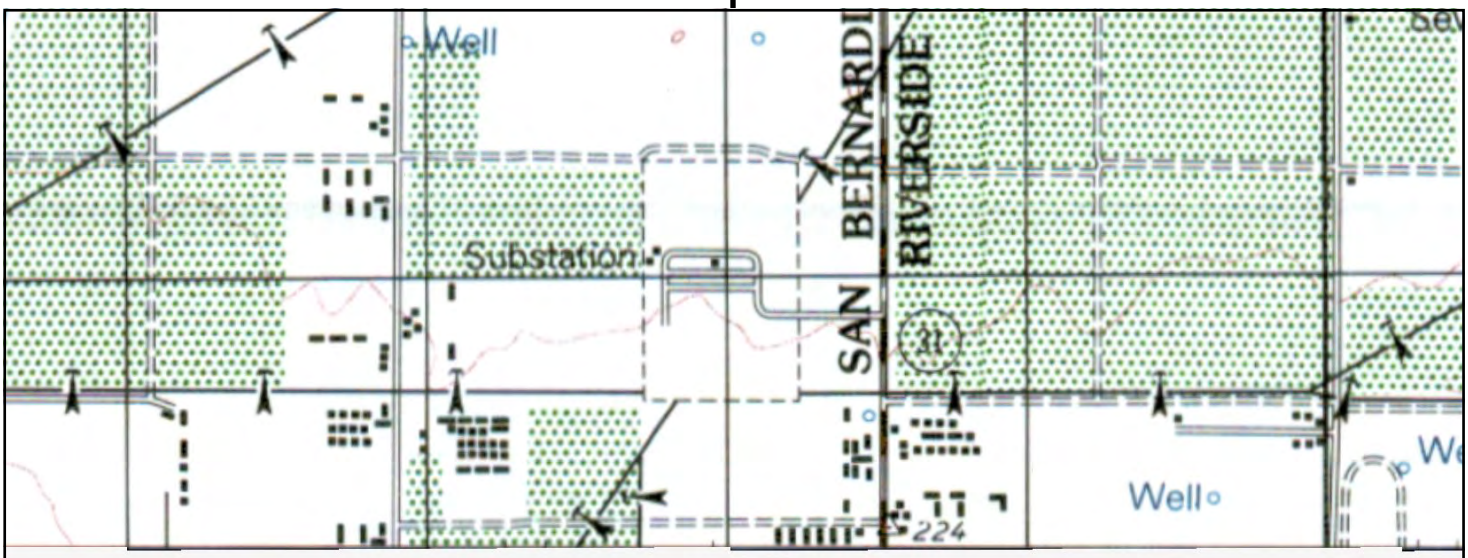
TP, Corona North, 1981, 7.5-minute
N, Guasti, 1981, 7.5-minute

SITE NAME: Not Reported
ADDRESS: Not Reported
Ontario, CA 91761
CLIENT: SCS Engineers

N

Historical Topo Map

1976



UNMAPPED

This report includes information from the following map sheet(s).

0 Miles 0.25 0.5 1 1.5

NW N NE
W E
SW S SE

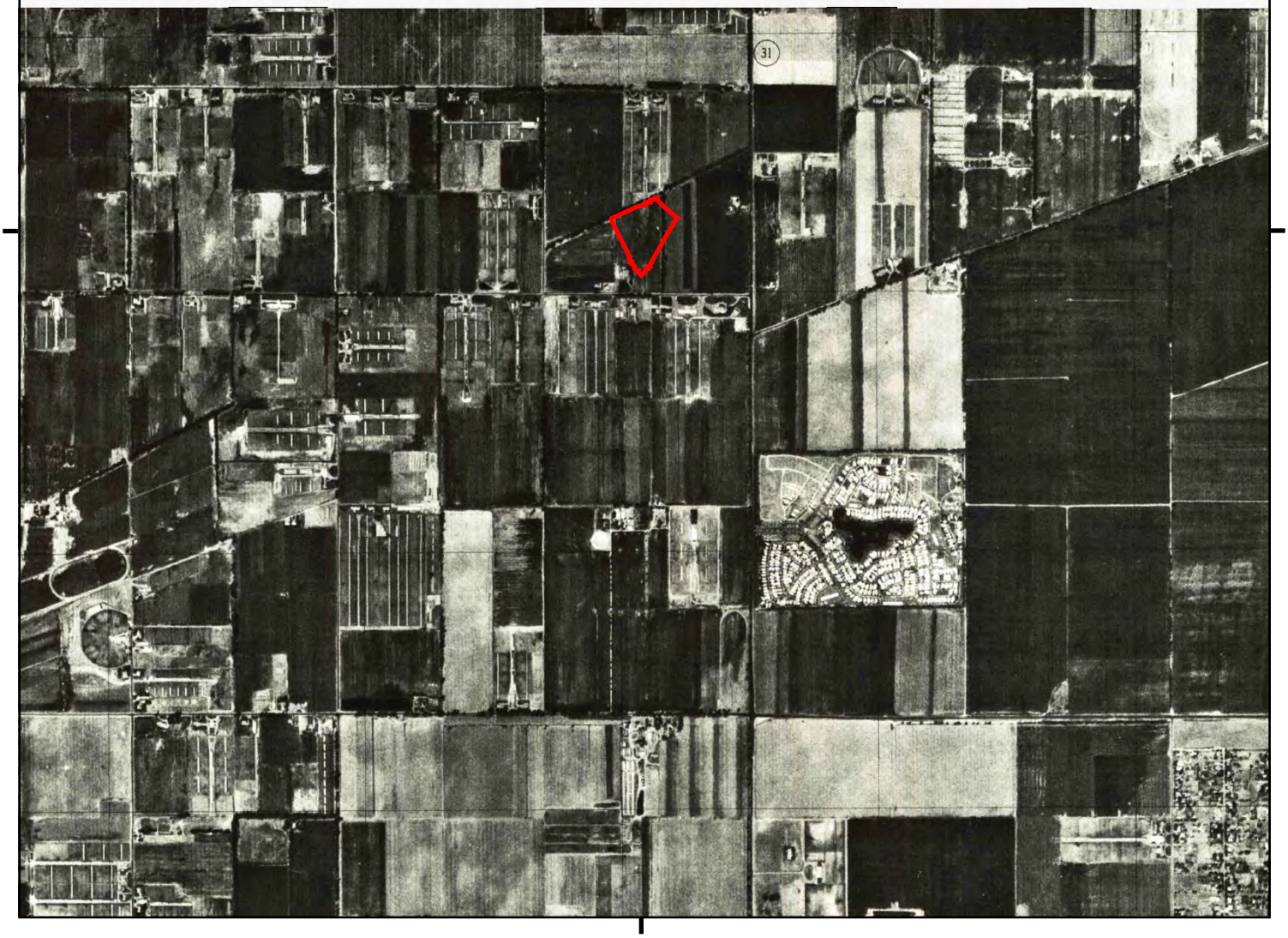
N, ONTARIO, 1976, 15-minute

SITE NAME: Not Reported
ADDRESS: Not Reported
Ontario, CA 91761
CLIENT: SCS Engineers

N

Historical Topo Map

1975



This report includes information from the following map sheet(s).

0 Miles 0.25 0.5 1 1.5

NW N NE
W E
SW S SE

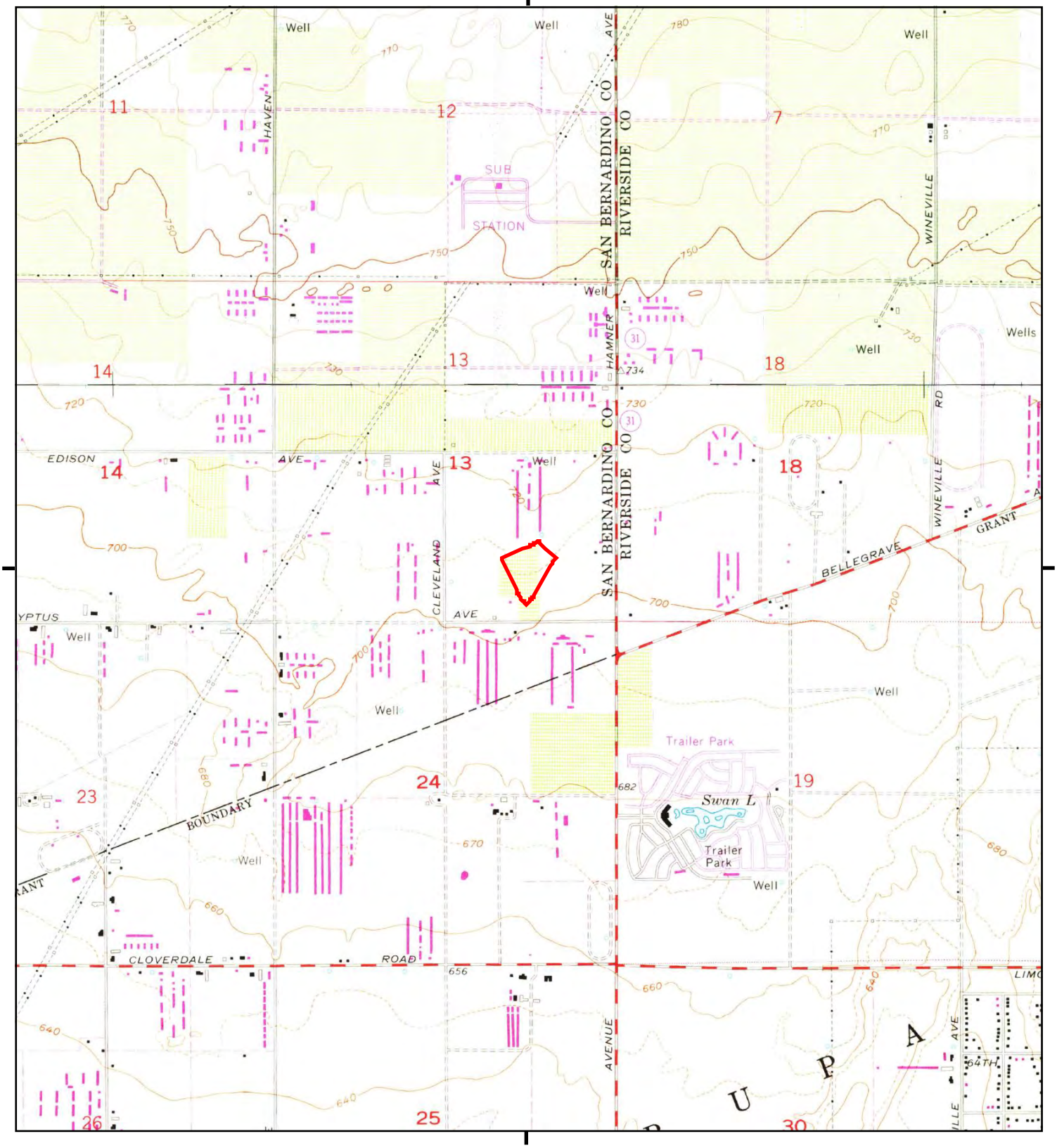
TP, Corona North, 1975, 7.5-minute

SITE NAME: Not Reported
ADDRESS: Not Reported
Ontario, CA 91761
CLIENT: SCS Engineers

N

Historical Topo Map

1973



This report includes information from the following map sheet(s).

0 Miles 0.25 0.5 1 1.5

NW N NE
W E
SW S SE

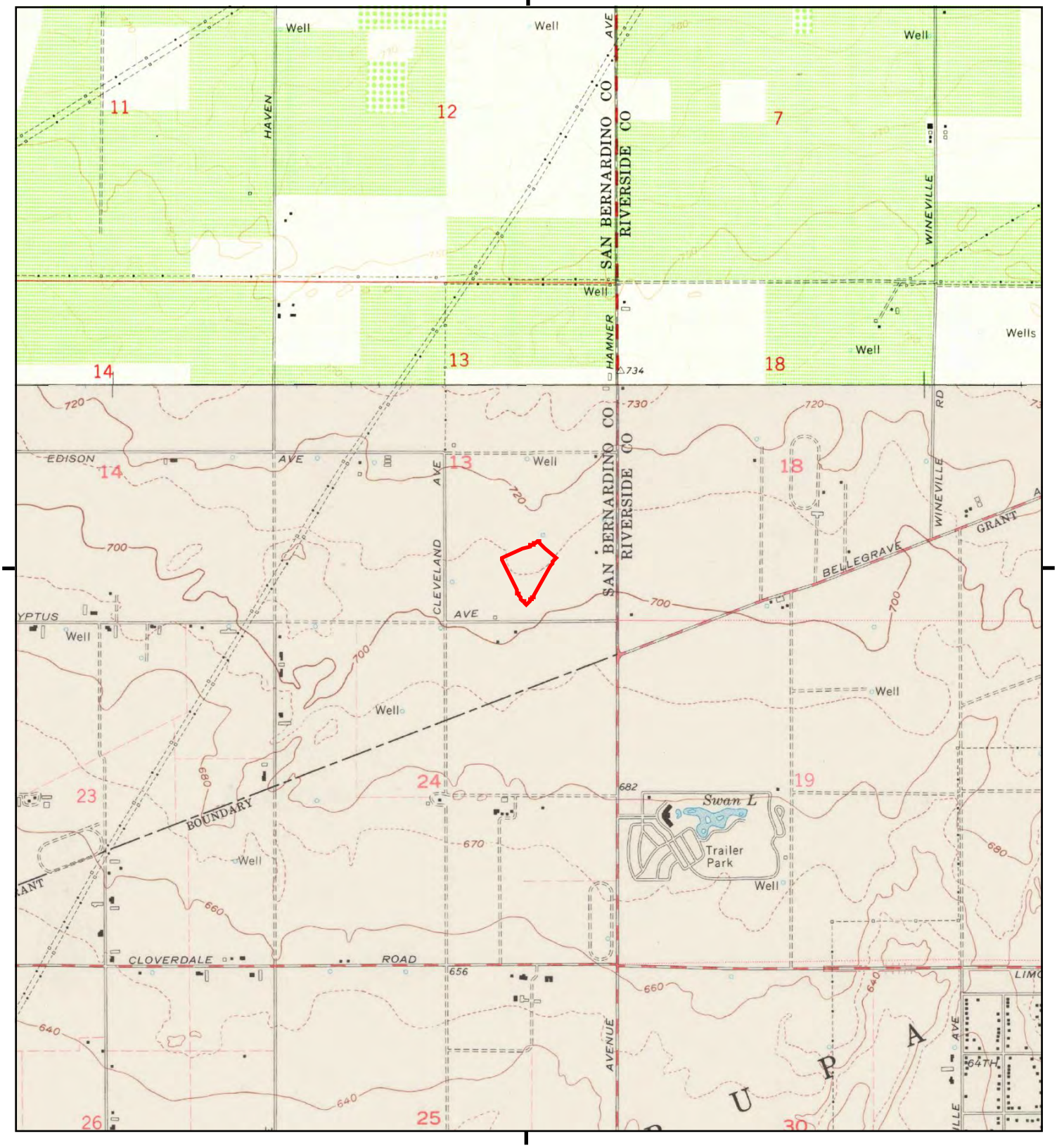
TP, Corona North, 1973, 7.5-minute
N, Guasti, 1973, 7.5-minute

SITE NAME: Not Reported
ADDRESS: Not Reported
Ontario, CA 91761
CLIENT: SCS Engineers

N

Historical Topo Map

1966, 1967



This report includes information from the following map sheet(s).

0 Miles 0.25 0.5 1 1.5

NW N NE
W E
SW S SE

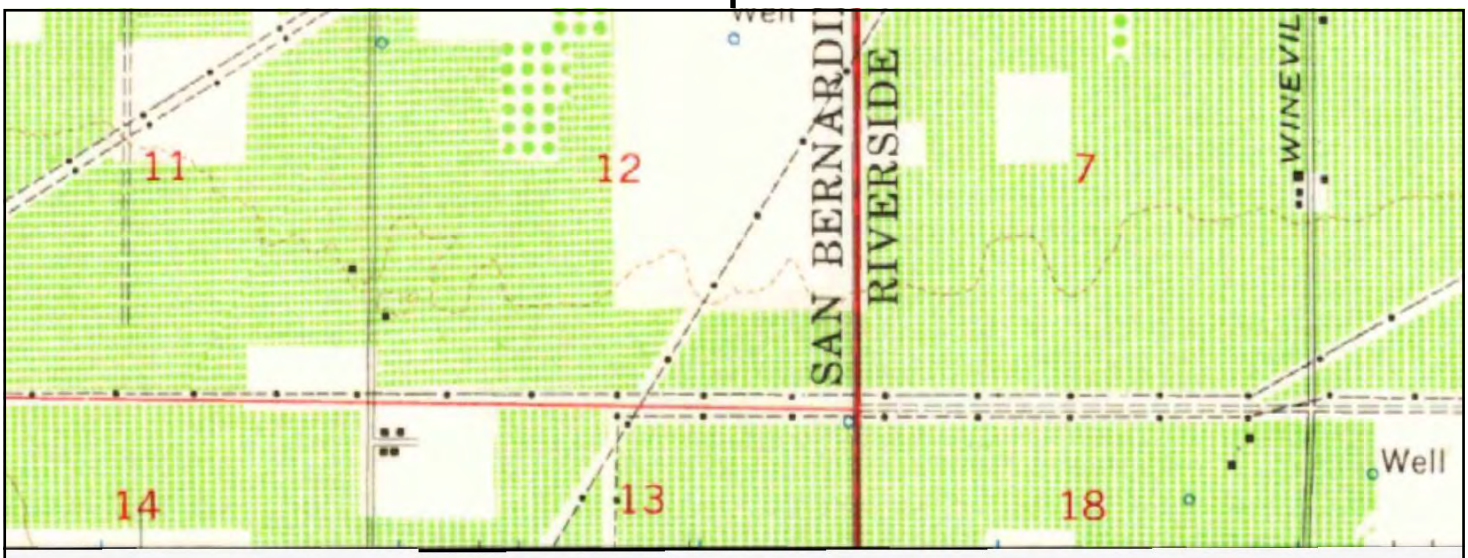
TP, Corona North, 1967, 7.5-minute
N, Guasti, 1966, 7.5-minute

SITE NAME: Not Reported
ADDRESS: Not Reported
Ontario, CA 91761
CLIENT: SCS Engineers

N

Historical Topo Map

1954



UNMAPPED

This report includes information from the following map sheet(s).

0 Miles 0.25 0.5 1 1.5

NW N NE
W E
SW S SE

N, Ontario, 1954, 15-minute

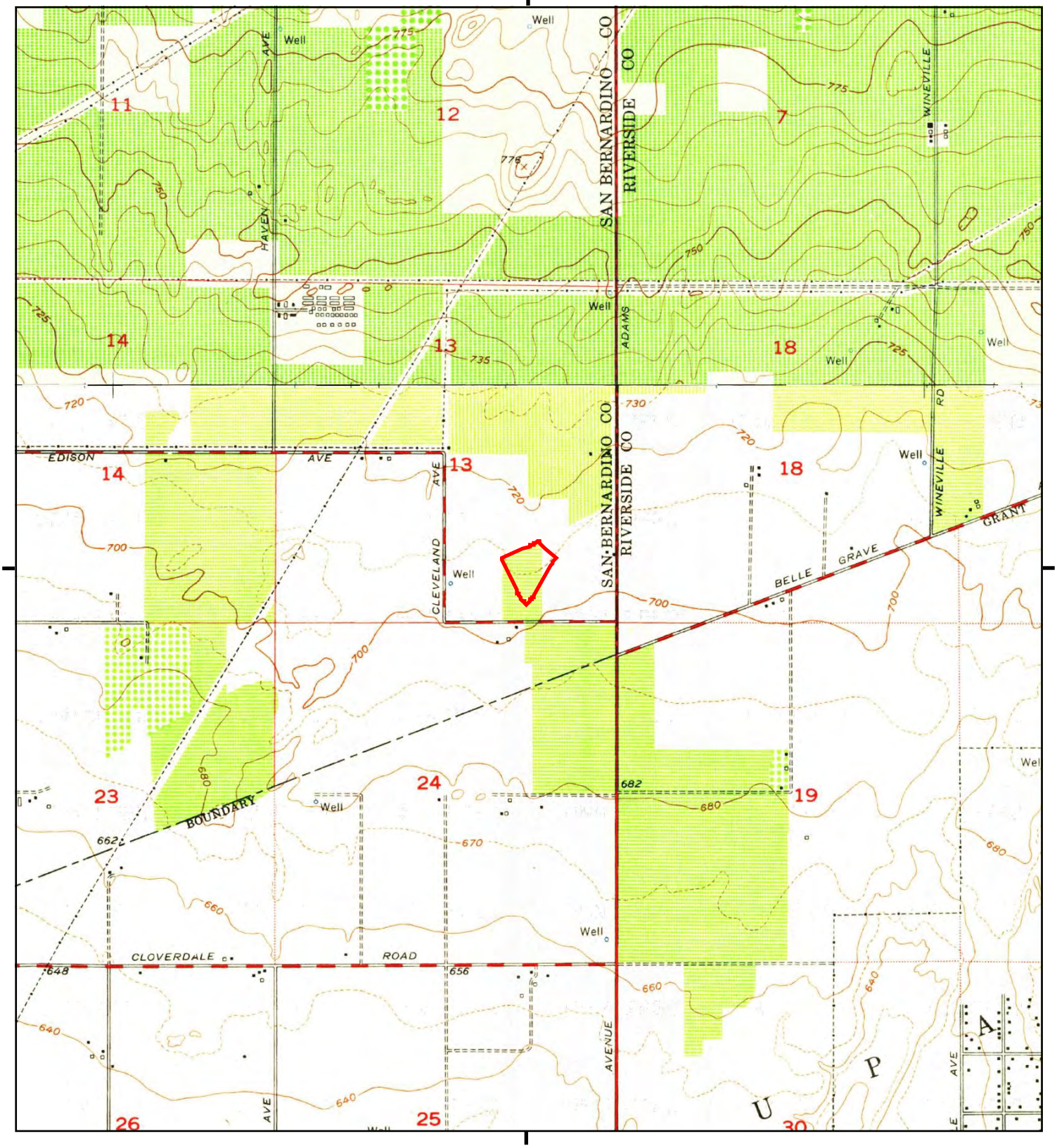
SITE NAME: Not Reported
ADDRESS: Not Reported
Ontario, CA 91761
CLIENT: SCS Engineers

N

2958

Historical Topo Map

1953, 1954



This report includes information from the following map sheet(s).

0 Miles 0.25 0.5 1 1.5

NW N NE
W E
SW S SE

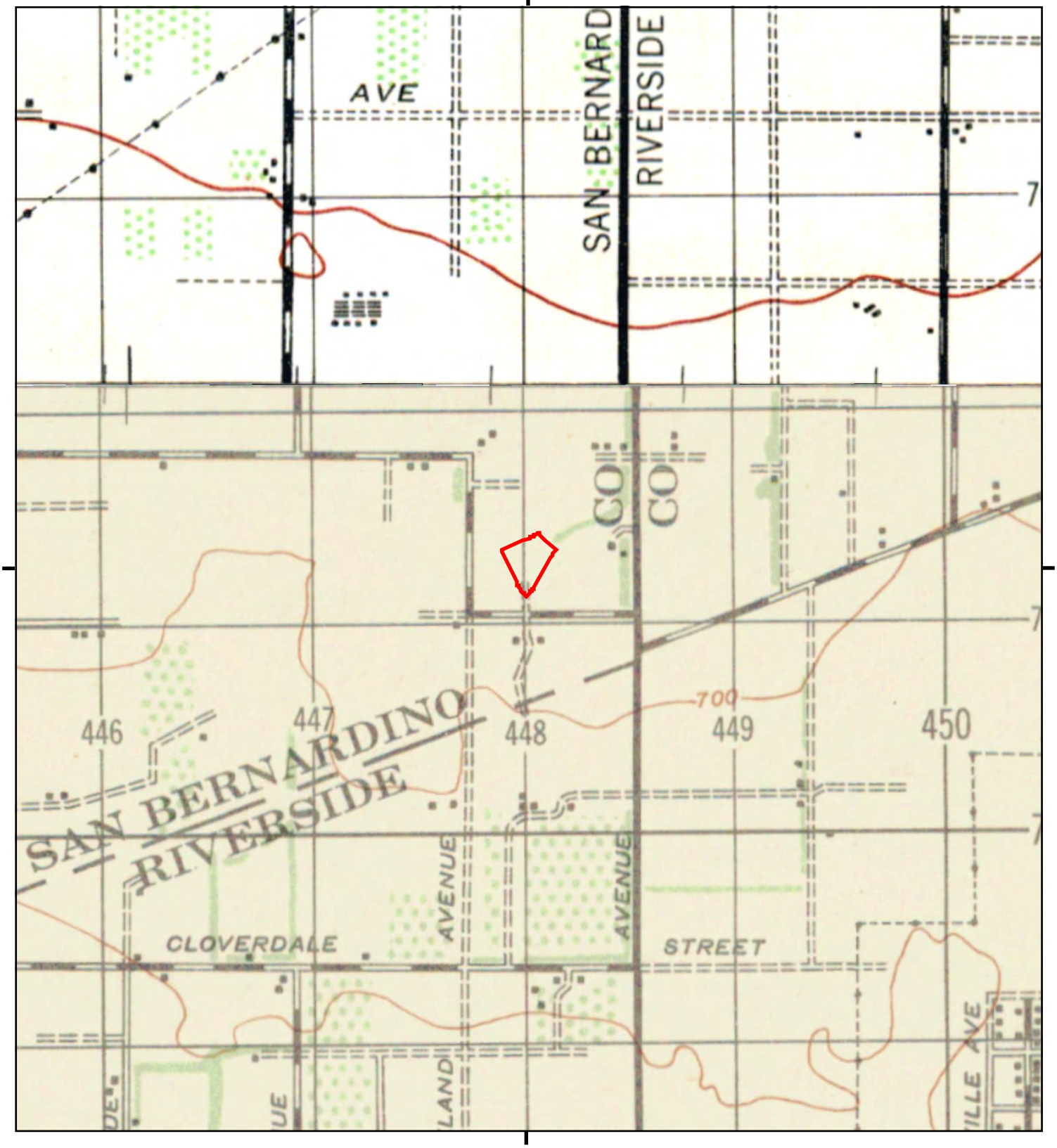
TP, Corona North, 1954, 7.5-minute
N, Guasti, 1953, 7.5-minute

SITE NAME: Not Reported
ADDRESS: Not Reported
Ontario, CA 91761
CLIENT: SCS Engineers

N

Historical Topo Map

1944, 1947



This report includes information from the following map sheet(s).

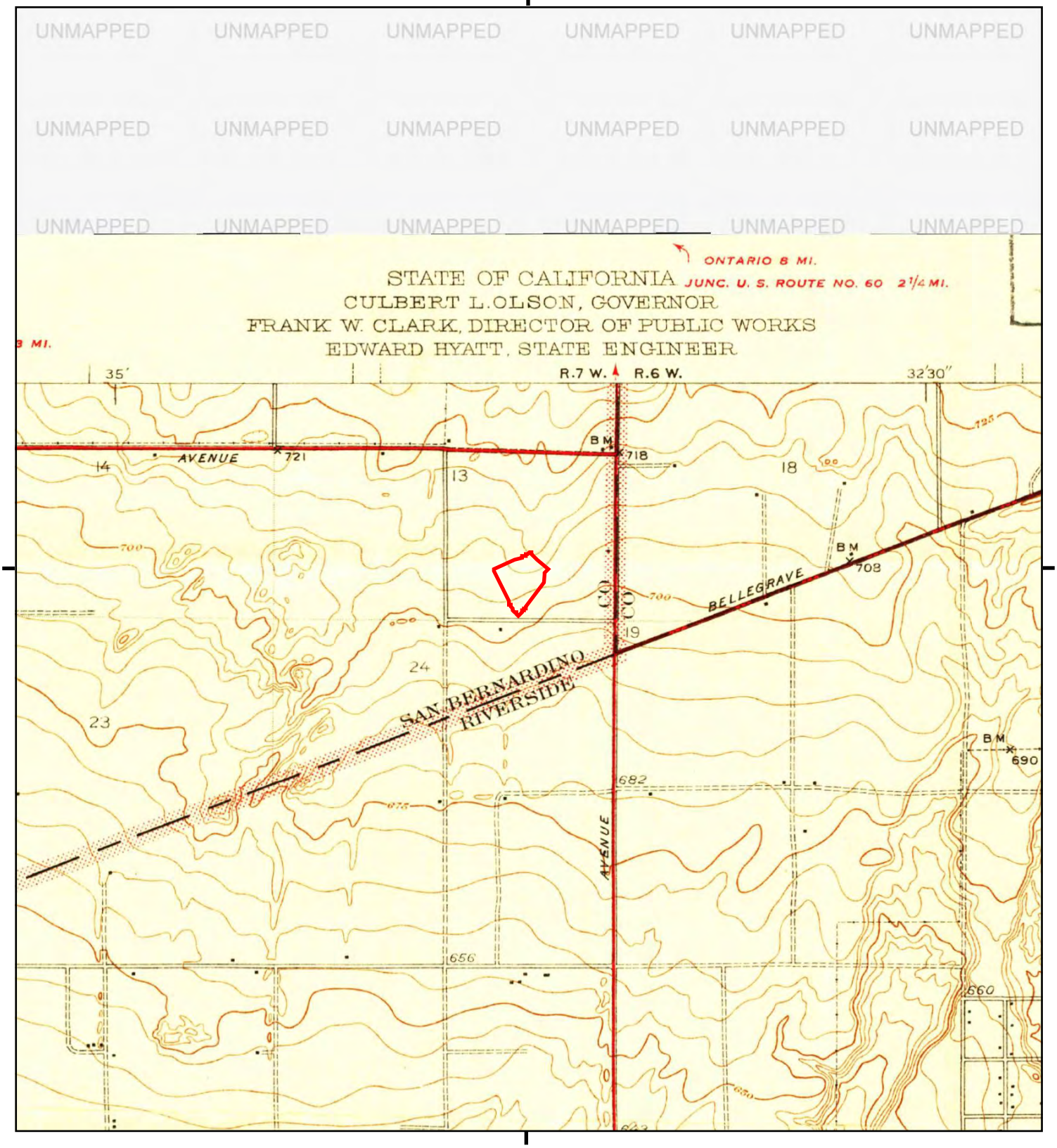
0 Miles 0.25 0.5 1 1.5

NW N NE
W E
SW S SE

TP, CORONA, 1947, 15-minute
N, CUCAMONGA, 1944, 15-minute

SITE NAME: Not Reported
ADDRESS: Not Reported
Ontario, CA 91761
CLIENT: SCS Engineers

N



This report includes information from the following map sheet(s).

0 Miles 0.25 0.5 1 1.5

NW N NE
W E
SW S SE

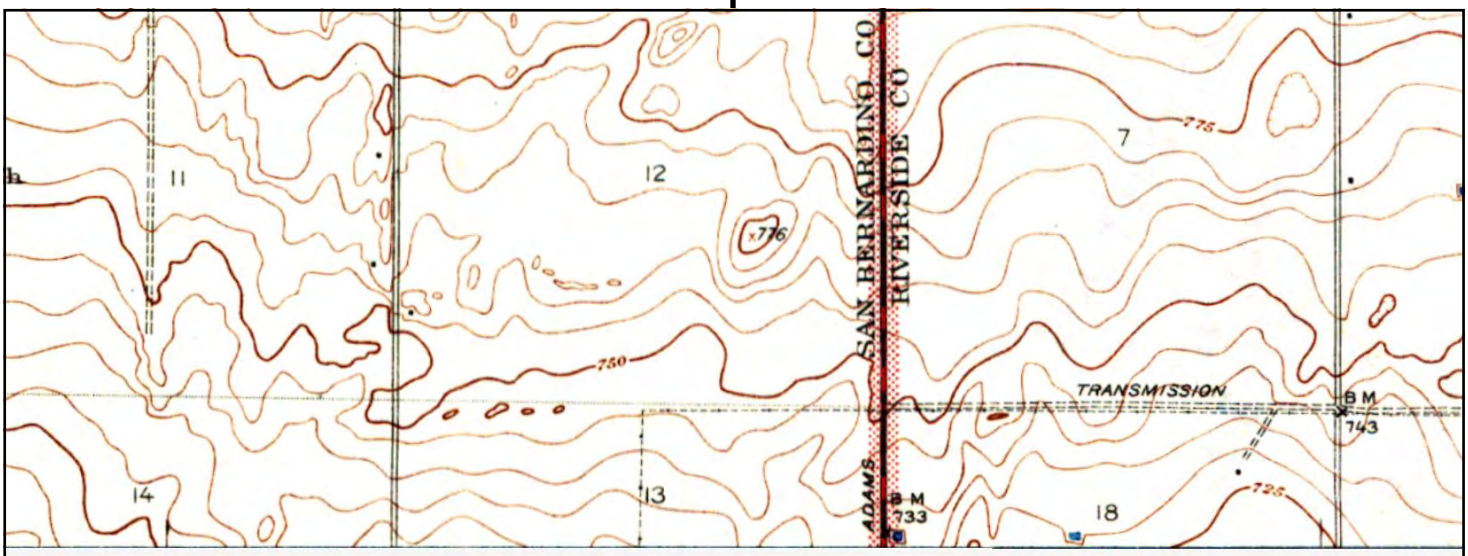
TP, Corona and Vicinity, 1942, 7.5-minute

SITE NAME: Not Reported
ADDRESS: Not Reported
Ontario, CA 91761
CLIENT: SCS Engineers

N

Historical Topo Map

1941



UNMAPPED

This report includes information from the following map sheet(s).

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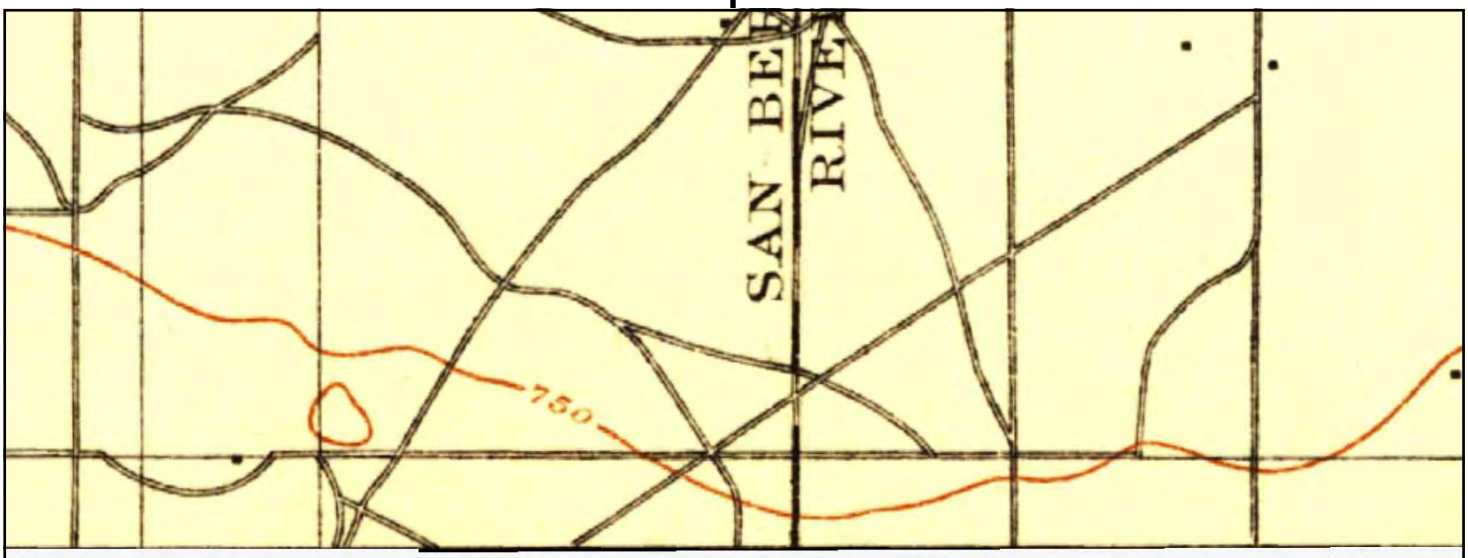
NW N NE
W E
SW S SE

N, GUASTI VICINITY, 1941, 7.5-minute

SITE NAME: Not Reported
ADDRESS: Not Reported
Ontario, CA 91761
CLIENT: SCS Engineers

N



UNMAPPED

This report includes information from the following map sheet(s).

0 Miles 0.25 0.5 1 1.5

NW N NE
W E
SW S SE

N, Cucamonga, 1903, 15-minute

SITE NAME: Not Reported
ADDRESS: Not Reported
Ontario, CA 91761
CLIENT: SCS Engineers

N

UNMAPPED UNMAPPED UNMAPPED UNMAPPED UNMAPPED UNMAPPED
UNMAPPED UNMAPPED UNMAPPED UNMAPPED UNMAPPED UNMAPPED
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This report includes information from the following map sheet(s).

0 Miles 0.25 0.5 1 1.5

NW N NE
W E
SW S SE

TP, Corona, 1902, 30-minute

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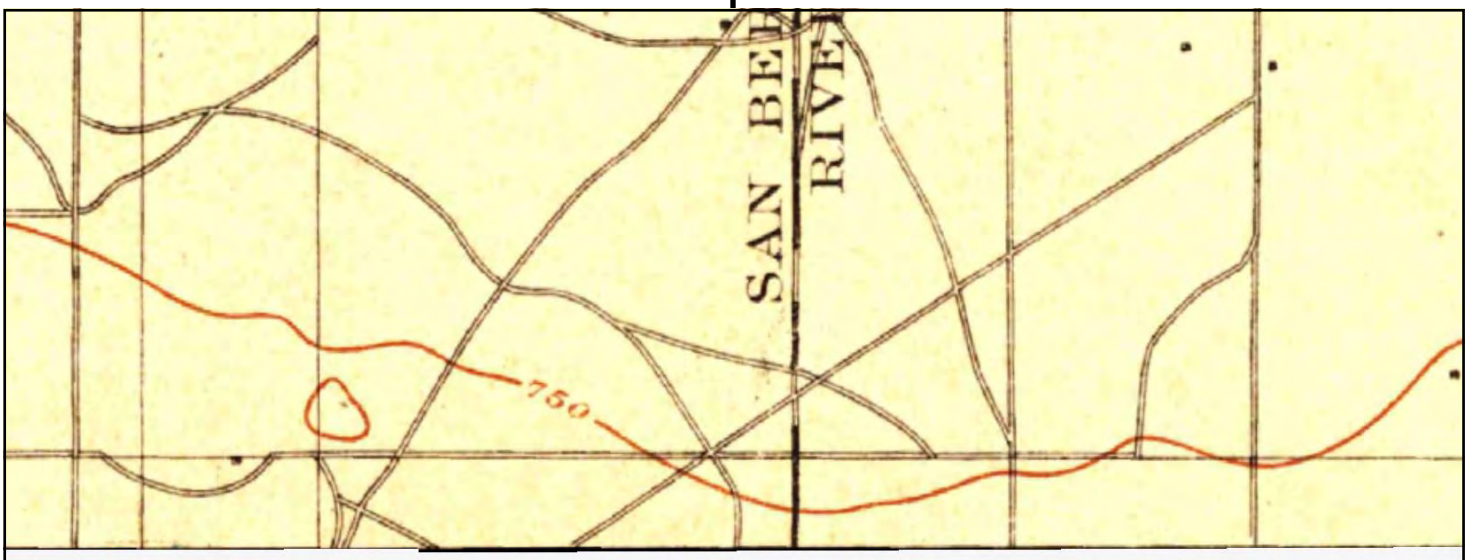
ADDRESS: Not Reported
Ontario, CA 91761
CLIENT: SCS Engineers

N

Historical Topo Map

1900



UNMAPPED

This report includes information from the following map sheet(s).

0 Miles 0.25 0.5 1 1.5

NW N NE
W E
SW S SE

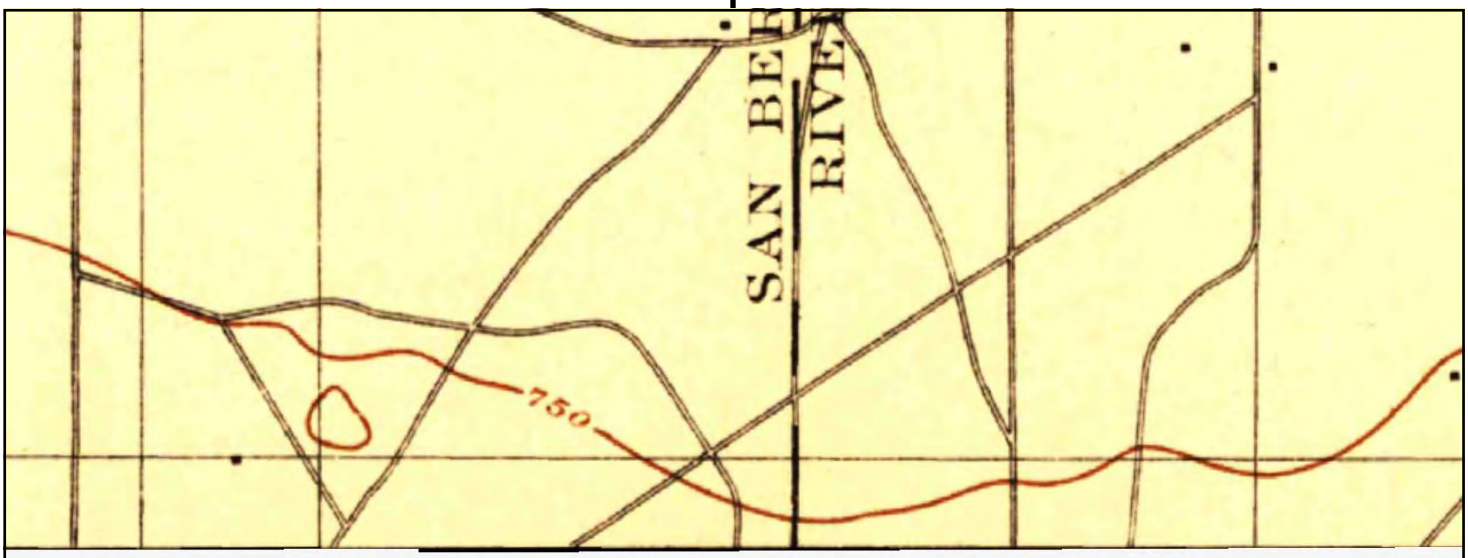
N, Cucamonga, 1900, 15-minute

SITE NAME: Not Reported
ADDRESS: Not Reported
Ontario, CA 91761
CLIENT: SCS Engineers

N

Historical Topo Map

1897



UNMAPPED

This report includes information from the following map sheet(s).

0 Miles 0.25 0.5 1 1.5

NW N NE
W E
SW S SE

N, Cucamonga, 1897, 15-minute

SITE NAME: Not Reported
ADDRESS: Not Reported
Ontario, CA 91761
CLIENT: SCS Engineers

N

Not Reported

Not Reported

Ontario, CA 91761

Inquiry Number: 7908232.3

February 25, 2025

Certified Sanborn® Map Report

6 Armstrong Road, 4th floor
Shelton, CT 06484
Toll Free: 800.352.0050
www.edrnet.com

Certified Sanborn® Map Report

02/25/25

Site Name:	Client Name:
Not Reported	SCS Engineers
Not Reported	3900 Kilroy Airport Way
Ontario, CA 91761	Long Beach, CA 90806
EDR Inquiry # 7908232.3	Contact: Jose William Padua

The Sanborn Library has been searched by EDR and maps covering the target property location as provided by SCS Engineers were identified for the years listed below. The Sanborn Library is the largest, most complete collection of fire insurance maps. The collection includes maps from Sanborn, Bromley, Perris & Browne, Hopkins, Barlow, and others. Only Environmental Data Resources Inc. (EDR) is authorized to grant rights for commercial reproduction of maps by the Sanborn Library LLC, the copyright holder for the collection. Results can be authenticated by visiting www.edrnet.com/sanborn.

The Sanborn Library is continually enhanced with newly identified map archives. This report accesses all maps in the collection as of the day this report was generated.

Certified Sanborn Results:

Certification # 3ADF-461D-86D6

PO # 01225043.00 T1

Project Armherst Ave & Eucalyptus Ave

UNMAPPED PROPERTY

This report certifies that the complete holdings of the Sanborn Library, LLC collection have been searched based on client supplied target property information, and fire insurance maps covering the target property were not found.

Sanborn® Library search results

Certification #: 3ADF-461D-86D6

The Sanborn Library includes more than 1.2 million fire insurance maps from Sanborn, Bromley, Perris & Browne, Hopkins, Barlow and others which track historical property usage in approximately 12,000 American cities and towns. Collections searched:

- ☑ Library of Congress
- ☑ University Publications of America
- ☑ EDR Private Collection

The Sanborn Library LLC Since 1866™

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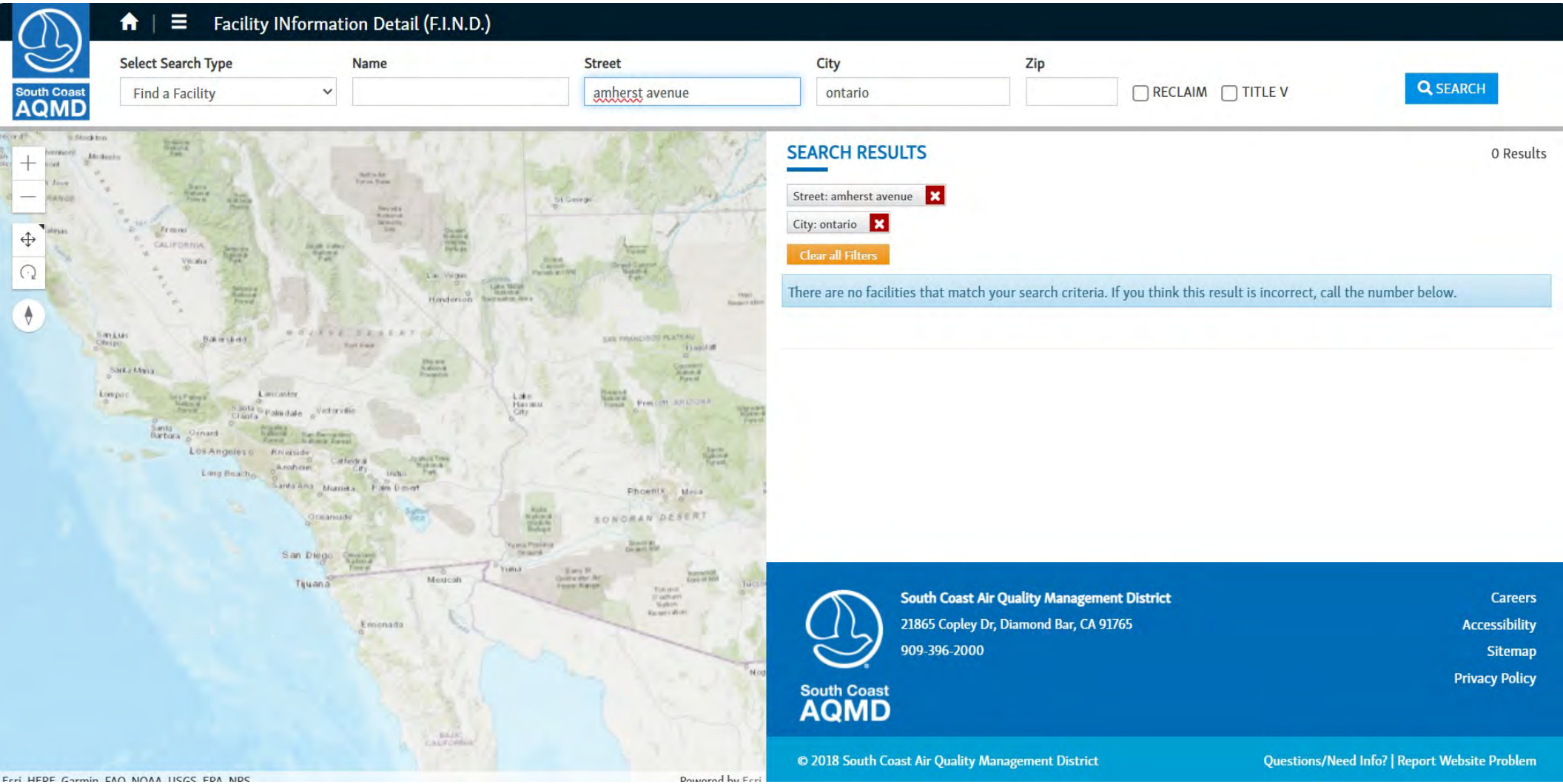
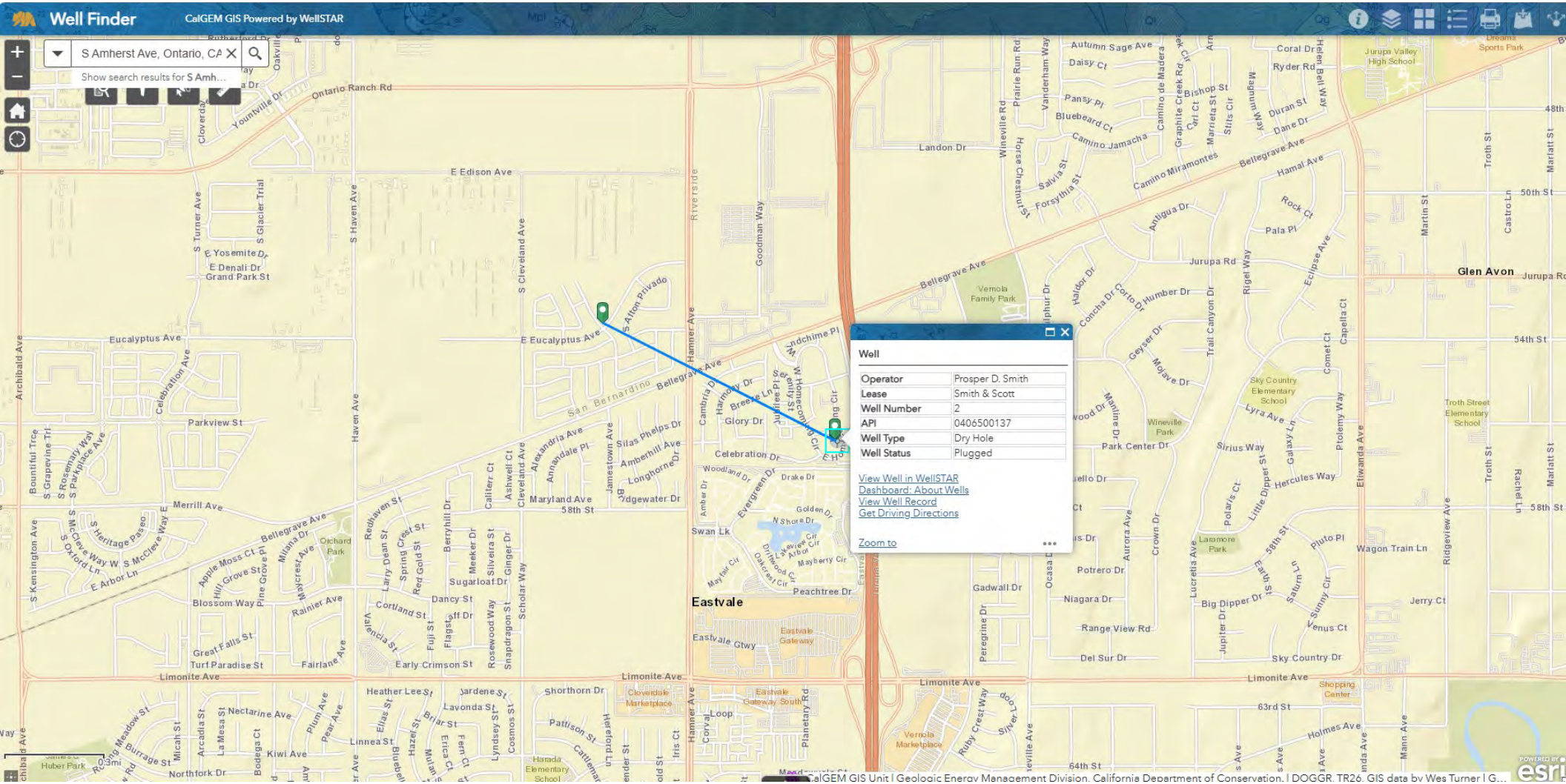
Appendix D

Regulatory Agency Review Information


Facility INformation Detail (F.I.N.D.)
Select Search Type
Find a Facility
Name
Street
amherst avenue
City
ontario
Zip
RECLAIM
TITLE V
SEARCH
SEARCH RESULTS
0 Results
Street: amherst avenue
City: ontario
Clear all Filters
There are no facilities that match your search criteria. If you think this result is incorrect, call the number below.
South Coast Air Quality Management District
21865 Copley Dr, Diamond Bar, CA 91765
909-396-2000
Careers
Accessibility
Sitemap
Privacy Policy
© 2018 South Coast Air Quality Management District
Questions/Need Info? | Report Website Problem

CalEPA
CalEPA Regulated Site Portal
s amherst ave, ontario
18 sites found
Did you mean:
S Amherst Ave, Ontario, CA 91761
Rynsburger Farms
10785 EDISON
ONTARIO CA 91761
Gordon Dairy #2
14482 CLEVELAND
ONTARIO CA 91761
Echeverrea & Sons Dairy #2
14330 CLEVELAND
ONTARIO CA 91761
Carlos Echeverria & Sons Dairy
14330 CLEVELAND
ONTARIO CA 91761
WESTRA DAIRY FARMS
11009 EUCALYPTUS AVE
ONTARIO CA 91710
Esperanza
EDISON AVENUE AND SCHOLAR WAY
ONTARIO CA 91761
S Cleveland Ave
Hamner Ave
Goodman Way
E Eucalyptus Ave
Bellegrave Ave
500 ft


Well Finder
CalGEM GIS Powered by WellSTAR
S Amherst Ave, Ontario, CA
Show search results for S Amh...
Well
Operator Prosper D. Smith
Lease Smith & Scott
Well Number 2
API 0406500137
Well Type Dry Hole
Well Status Plugged
View Well in WellSTAR Dashboard: About Wells
View Well Record
Get Driving Directions
Zoom to
Eastvale
Glen Avon
Ontario Ranch Rd
E Edison Ave
Bellegrave Ave
Limonite Ave
Jurupa Rd
Landon Dr
Celebration Dr
Eucalyptus Ave
Parkview St
Merrill Ave
58th St
63rd St
54th St
50th St
48th
Riverside
Hamner Ave
Haven Ave
Archibald Ave
Vernola Family Park
Wineville Park
Sky Country Elementary School
Troth Street Elementary School
Laramore Park
Jurupa Valley High School
Dreams Sports Park
Cloverdale Marketplace
Eastvale Gateway
Eastvale Gateway South
Vernola Marketplace
Shopping Center
Harada Elementary School
Huber Park
Orchard Park
Peachtree Dr
Swan Lk
Sugarloaf Dr
Dancy St
Cortland St
Rainier Ave
Fairlane Ave
Early Crimson St
Great Falls St
Turf Paradise St
Blossom Way
Apple Moss Ct
Hill Grove St
Pine Grove Pl
Nectarine Ave
Kiwi Ave
Northfork Dr
Shorthorn Dr
Pattison St
Linnea St
Heather Lee St
Lavonda St
Eastvale Gtwy
Corval Loop
Planetary Rd
Gadwall Dr
Niagara Dr
Potrero Dr
Range View Rd
Del Sur Dr
Sky Country Dr
Big Dipper Dr
Jupiter Dr
Venus Ct
Jerry Ct
Wagon Train Ln
Pluto Pl
Hercules Way
Sirius Way
Lyra Ave
Park Center Dr
Mojave Dr
Geyser Dr
Trail Canyon Dr
Rigel Way
Humber Dr
Corto Dr
Concha Dr
Haldor Dr
Antigua Dr
Pala Pl
Rock Ct
Hamal Ave
Bellegrave Ave
Camino Miramontes
Camino Jamacha
Bluebeard Ct
Pansy Pl
Daisy Ct
Autumn Sage Ave
Coral Dr
Ryder Rd
Duran St
Dane Dr
Bishop St
Marrieta St
Stits Cir
Graphite Creek Rd
Camino de Madera
Vanderham Way
Prairie Run Rd
Wineville Rd
Horse Chestnut St
Salvia St
Forsythia St
Martin St
Castro Ln
Troth St
Marlatt St
Rachel Ln
Ridgeview Ave
Etiwanda Ave
Ptolemy Way
Comet Ct
Capella Ct
Eclipse Ave
Aurora Ave
Crown Dr
Ocasa Dr
Lucretia Ave
Polaris Ct
Little Dipper St
Galaxy Ln
Saturn Ln
Sunny Ct
Mann Ave
Holmes Ave
Ruby Crest Way
Silver Ave
Peregrine Dr
Evergreen Dr
Drake Dr
Golden Dr
N Shore Dr
Woodland Dr
Amber Dr
Maylar Cir
Mayberry Cir
Driftwood Cir
Gatecrest Cir
Lakeview Cir
Arbor Cir
Glory Dr
Breeze Hill Pl
Julliet Pl
Serenity St
Westcomming Cir
Cambria Dr
Harmony Dr
Hondchime Pl
Silas Phelps Dr
Amberhill Ave
Longhorne Dr
Jamestown Ave
Alexandria Ave
Annandale Pl
Maryland Ave
Ashwell Ct
Cleveland Ave
Calliterr Ct
Redhaven St
Berryhill Dr
Meeker Dr
Silveira St
Ginger Dr
Scholar Way
Rosewood Way
Snapdragon St
Red Gold St
Spring Crest St
Larry Dean St
Fuji St
Flagstaff Dr
Lyndsey St
Cosmos St
Erica Ct
Fern Ct
Briar St
Hazel St
Elias St
Micah St
Arcadia St
La Mesa St
Bodega Ct
Plum Ave
Pear Ave
Blurrage St
Rolling Meadow St
Maplecrest Ave
Miliana Dr
Redlands Blvd
S Haven Ave
S Turner Ave
S Glacier Trial
E Yosemite Dr
E Denali Dr
Grand Park St
S Cleveland Ave
Goodman Way
S Alton Privado
E Eucalyptus Ave
San Bernardino
S Grapevine Trl
S Rosemary Way
S Parkplace Ave
Bountiful Trce
S Heritage Paseo
S McClevе Way E
S McClevе Way W
S Oxford Ln
E Arbor Ln
S Kensington Ave
Celebration Ave
Cloverdale Dr
Yountville Dr
Oakville Dr
Rutherford Dr
Esri

Department of Toxic Substances Control

Yana Garcia
Secretary for
Environmental Protection

Katherine M. Butler, MPH, Director
5796 Corporate Avenue
Cypress, California 90630
https://dtsc.ca.gov/

Gavin Newsom
Governor

February 24, 2025

Maddie Peterson
SCS Engineers
Mpeterson@scsengineers.com

PR4-022425-03

Dear Requestor:

On Jan 24, 2025, the Department of Toxic Substances Control (DTSC) received your email requesting records under the Public Records Act. After a thorough review of our files, *no site records* were found pertaining to the sites/facilities referenced below.

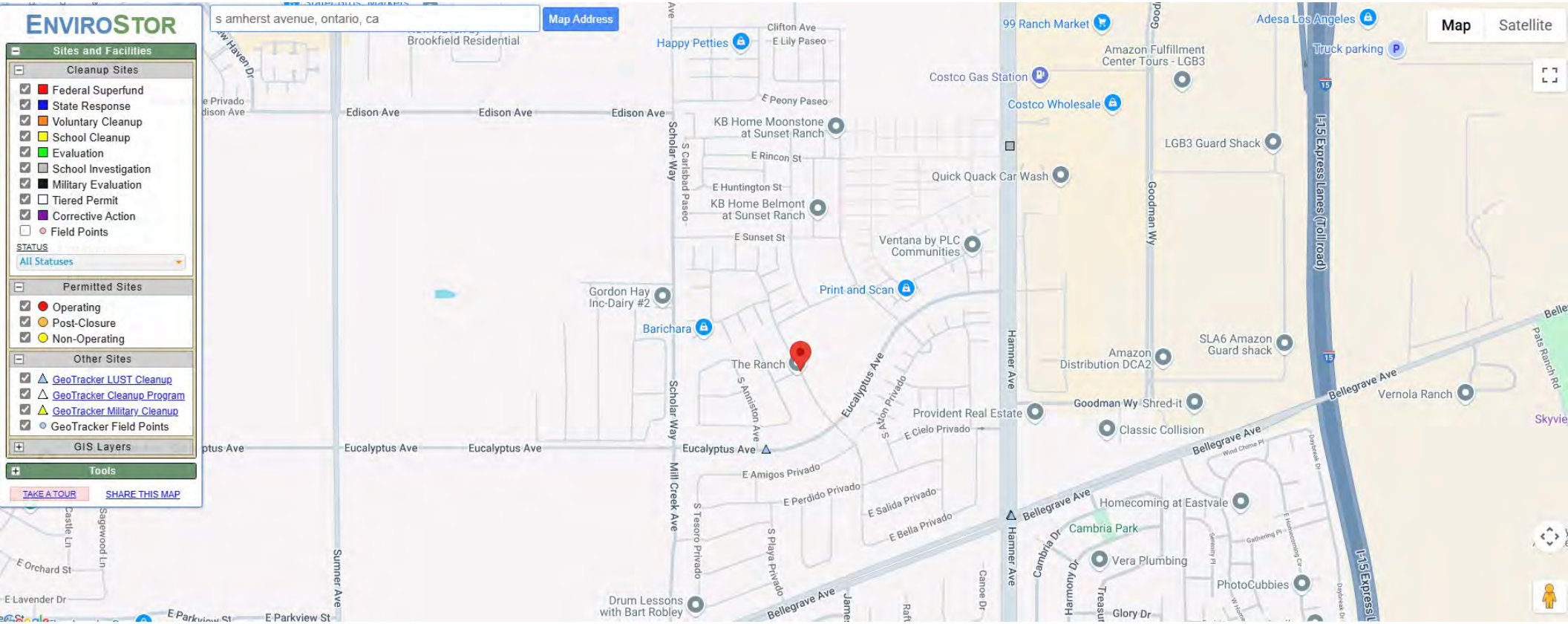
1073-101-05 Ontario

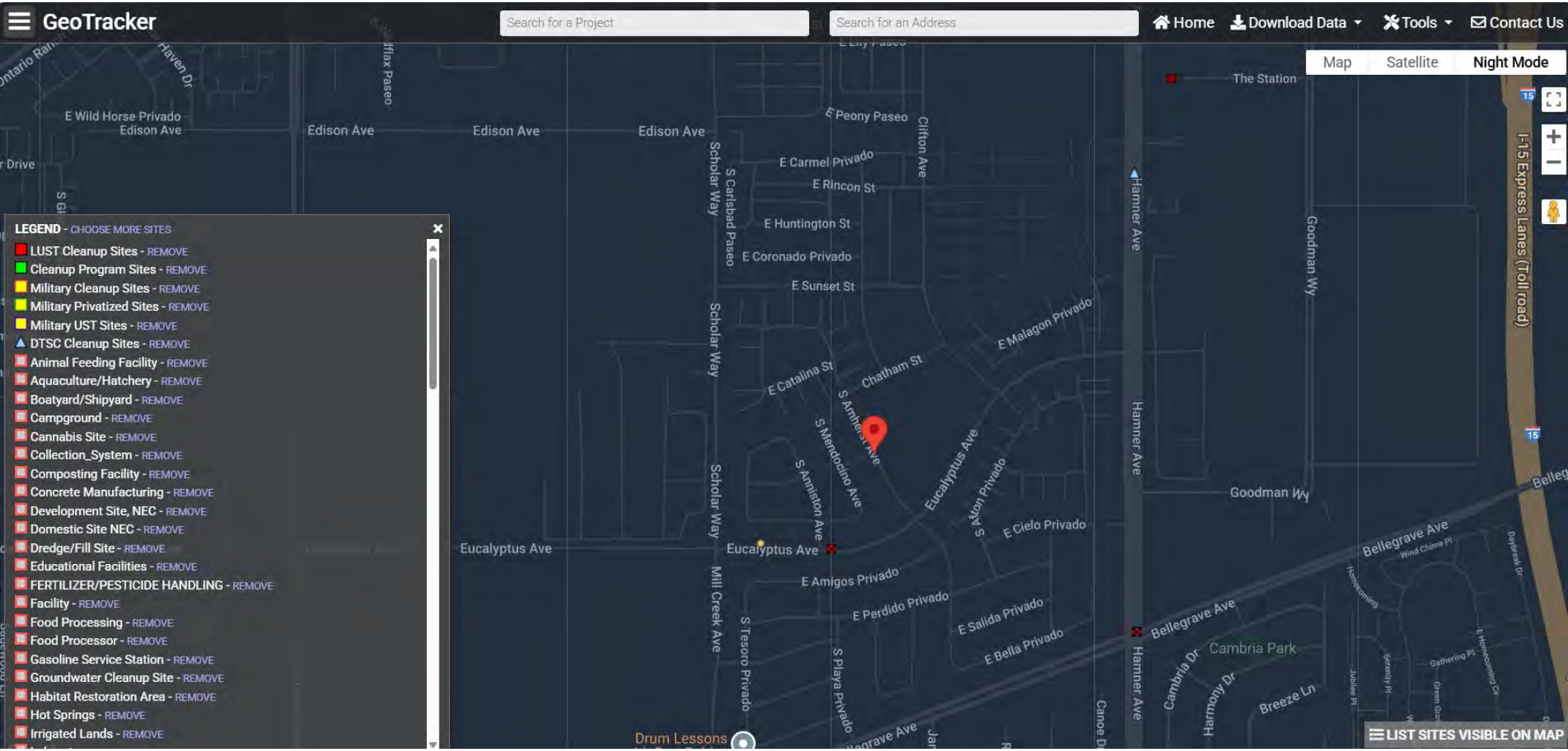
We were unable to locate an address in the county database using the APNs provided and we are unable to search our records using APNs as our databases do not include this information.

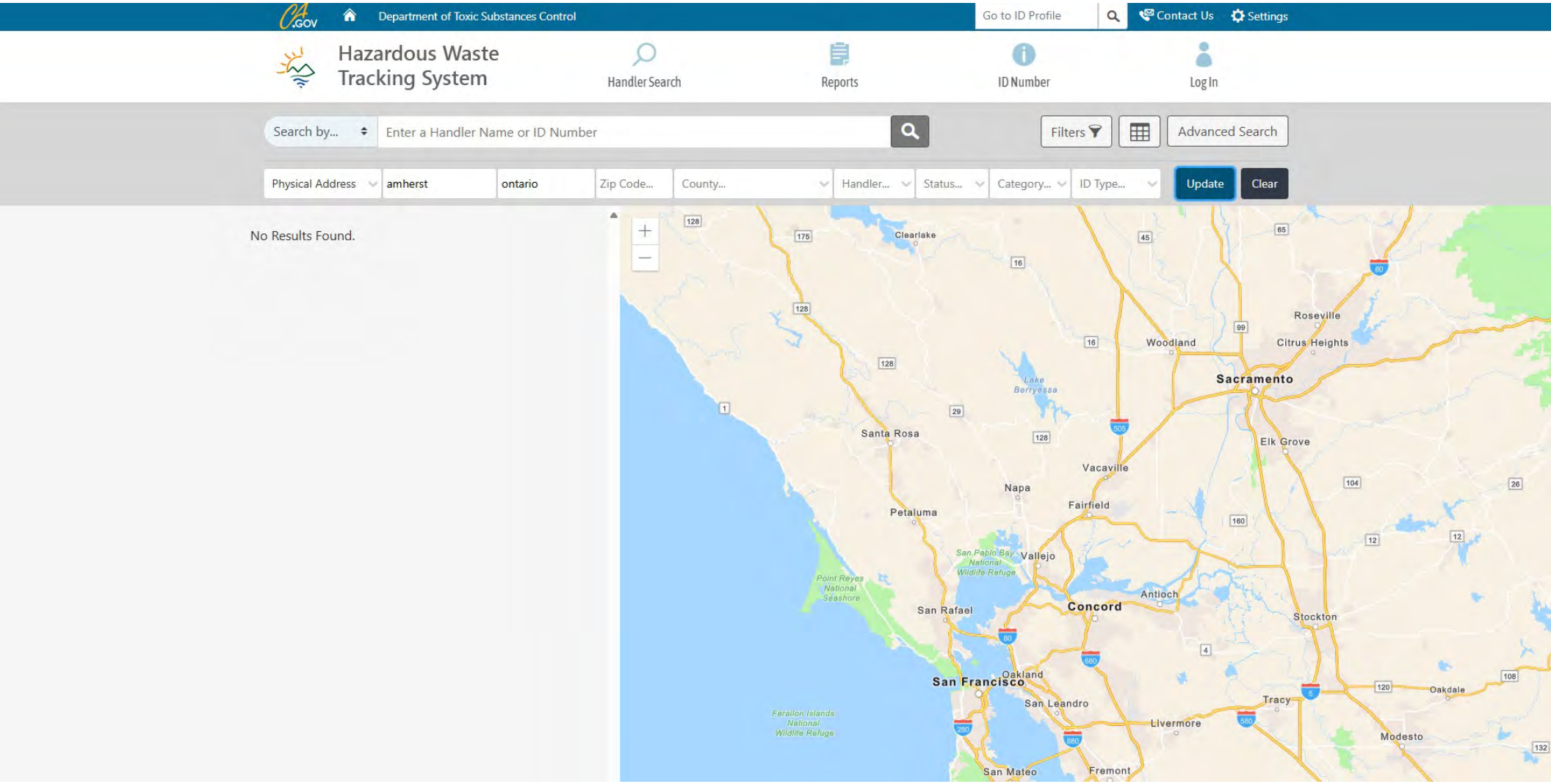
A large number of our records are available on EnviroStor, an online database that provides non-confidential, public access to DTSCs data management system. It tracks our cleanup, permitting, enforcement, and investigation efforts at hazardous waste facilities and sites with known or suspected contamination issues. EnviroStor is available 24/7, 365 days a year. The data reflects the latest updates as they are entered in the system. Access it from your computer or smartphone, the local library – anywhere Internet access is available. Just go to www.envirostor.dtsc.ca.gov. You'll find a step-by-step tour of EnviroStor under the "How to Use EnviroStor" menu on the website.

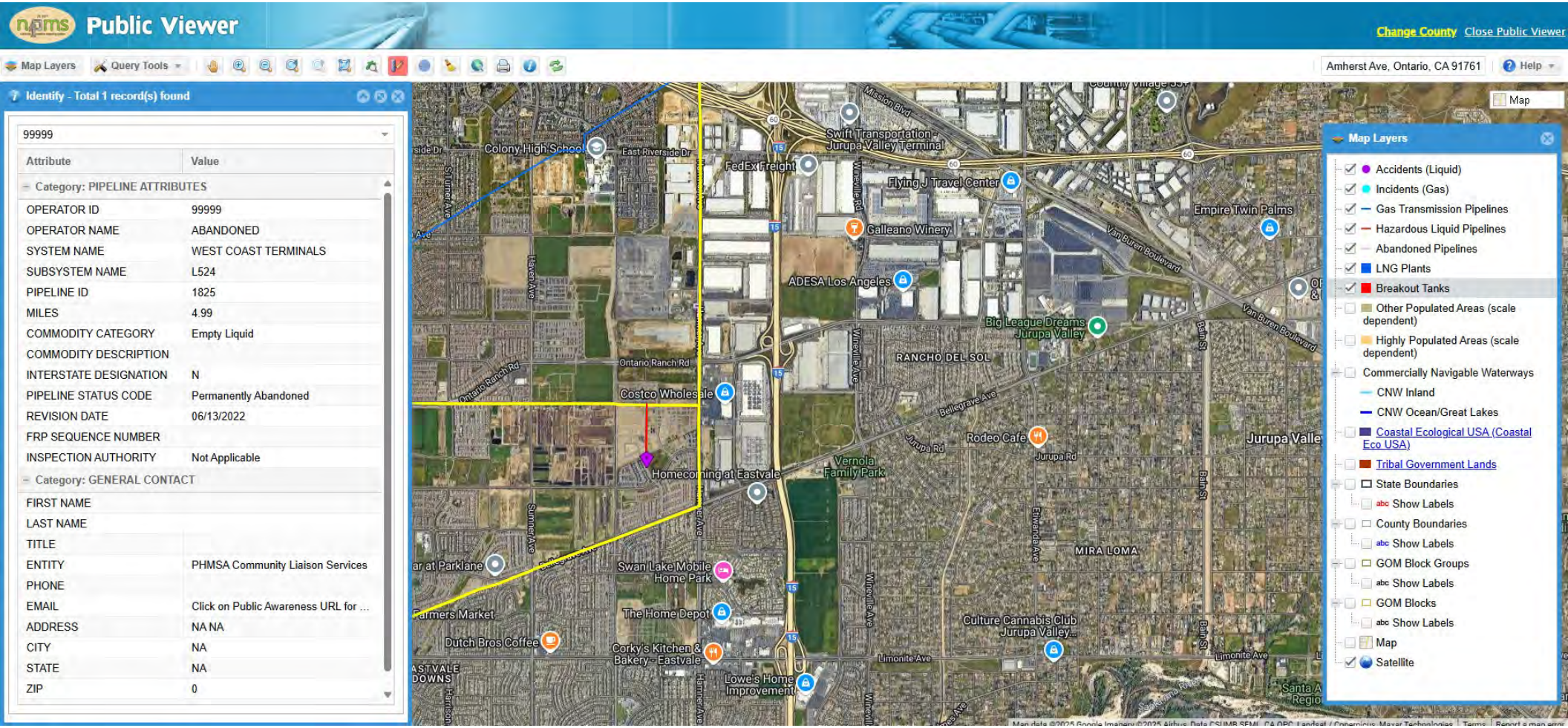
If you have any questions or would like further information regarding your request, please contact me at 714.484.5336 or via email at jone.barrio@dtsc.ca.gov .

Sincerely,
Jone Barrio
Jone Barrio
Regional Records Coordinator


ENVIROSTOR
Sites and Facilities
Cleanup Sites
Federal Superfund
State Response
Voluntary Cleanup
School Cleanup
Evaluation
School Investigation
Military Evaluation
Tiered Permit
Corrective Action
Field Points
STATUS
All Statuses
Permitted Sites
Operating
Post-Closure
Non-Operating
Other Sites
GeoTracker LUST Cleanup
GeoTracker Cleanup Program
GeoTracker Military Cleanup
GeoTracker Field Points
GIS Layers
Tools
TAKE A TOUR
SHARE THIS MAP
s amherst avenue, ontario, ca
Map Address
Map
Satellite
Brookfield Residential
Happy Petties
Clifton Ave
E Lily Paseo
99 Ranch Market
Adesa Los Angeles
Truck parking
Amazon Fulfillment Center Tours - LGB3
Costco Gas Station
Costco Wholesale
E Peony Paseo
KB Home Moonstone at Sunset Ranch
LGB3 Guard Shack
E Rincon St
Quick Quack Car Wash
E Huntington St
KB Home Belmont at Sunset Ranch
E Sunset St
Ventana by PLC Communities
Print and Scan
Gordon Hay Inc-Dairy #2
Barichara
The Ranch
SLA6 Amazon Guard shack
Amazon Distribution DCA2
Goodman Wy Shred-it
Provident Real Estate
E Cielo Privado
Classic Collision
Vernola Ranch
Bellegrave Ave
Homecoming at Eastvale
Cambria Park
Vera Plumbing
PhotoCubbies
Drum Lessons with Bart Robley
Edison Ave
Eucalyptus Ave
E Amigos Privado
E Perdido Privado
E Salida Privado
E Bella Privado
Scholar Way
Mill Creek Ave
Hamner Ave
Goodman Wy
I-15 Express Lanes (Tolliroad)
Sumner Ave
E Orchard St
E Lavender Dr
E Parkview St
Glory Dr


GeoTracker
Search for a Project
Search for an Address
Home
Download Data
Tools
Contact Us
Map
Satellite
Night Mode
LEGEND - CHOOSE MORE SITES
LUST Cleanup Sites - REMOVE
Cleanup Program Sites - REMOVE
Military Cleanup Sites - REMOVE
Military Privatized Sites - REMOVE
Military UST Sites - REMOVE
DTSC Cleanup Sites - REMOVE
Animal Feeding Facility - REMOVE
Aquaculture/Hatchery - REMOVE
Boatyard/Shipyard - REMOVE
Campground - REMOVE
Cannabis Site - REMOVE
Collection_System - REMOVE
Composting Facility - REMOVE
Concrete Manufacturing - REMOVE
Development Site, NEC - REMOVE
Domestic Site NEC - REMOVE
Dredge/Fill Site - REMOVE
Educational Facilities - REMOVE
FERTILIZER/PESTICIDE HANDLING - REMOVE
Facility - REMOVE
Food Processing - REMOVE
Food Processor - REMOVE
Gasoline Service Station - REMOVE
Groundwater Cleanup Site - REMOVE
Habitat Restoration Area - REMOVE
Hot Springs - REMOVE
Irrigated Lands - REMOVE
E Wild Horse Privado
Edison Ave
Edison Ave
Edison Ave
Edison Ave
E Peony Paseo
Clifton Ave
E Carmel Privado
E Rincon St
E Huntington St
E Coronado Privado
E Sunset St
Scholar Way
S Carlsbad Paseo
Scholar Way
Scholar Way
Mill Creek Ave
E Malagon Privado
E Catalina St
Chatham St
S Amherst Ave
S Mendocino Ave
S Anniston Ave
Eucalyptus Ave
S Alton Privado
E Cielo Privado
Eucalyptus Ave
Eucalyptus Ave
E Amigos Privado
E Perdido Privado
E Salida Privado
E Bella Privado
S Tesoro Privado
S Playa Privado
Hamner Ave
Hamner Ave
Hamner Ave
Goodman Wy
Goodman Wy
The Station
I-15 Express Lanes (Toll road)
Bellegrave Ave
Bellegrave Ave
Bellegrave Ave
Cambria Dr
Cambria Park
Harmony Dr
Breeze Ln
Drum Lessons
LIST SITES VISIBLE ON MAP


Department of Toxic Substances Control
Go to ID Profile
Contact Us
Settings
Hazardous Waste Tracking System
Handler Search
Reports
ID Number
Log In
Search by...
Enter a Handler Name or ID Number
Filters
Advanced Search
Physical Address
amherst
ontario
Zip Code...
County...
Handler...
Status...
Category...
ID Type...
Update
Clear
No Results Found.
Clearlake
Roseville
Woodland
Citrus Heights
Sacramento
Lake Berryessa
Santa Rosa
Elk Grove
Vacaville
Napa
Fairfield
Petaluma
San Pablo Bay National Wildlife Refuge
Vallejo
Point Reyes National Seashore
Antioch
San Rafael
Concord
Stockton
Oakland
San Francisco
San Leandro
Tracy
Oakdale
Farallon Islands National Wildlife Refuge
Livermore
Modesto
San Mateo
Fremont


Public Viewer
Change County
Close Public Viewer
Map Layers
Query Tools
Amherst Ave, Ontario, CA 91761
Help
Identify - Total 1 record(s) found
99999
Attribute
Value
Category: PIPELINE ATTRIBUTES
OPERATOR ID 99999
OPERATOR NAME ABANDONED
SYSTEM NAME WEST COAST TERMINALS
SUBSYSTEM NAME L524
PIPELINE ID 1825
MILES 4.99
COMMODITY CATEGORY Empty Liquid
COMMODITY DESCRIPTION
INTERSTATE DESIGNATION N
PIPELINE STATUS CODE Permanently Abandoned
REVISION DATE 06/13/2022
FRP SEQUENCE NUMBER
INSPECTION AUTHORITY Not Applicable
Category: GENERAL CONTACT
FIRST NAME
LAST NAME
TITLE
ENTITY PHMSA Community Liaison Services
PHONE
EMAIL Click on Public Awareness URL for ...
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CITY NA
STATE NA
ZIP 0
Map
Map Layers
Accidents (Liquid)
Incidents (Gas)
Gas Transmission Pipelines
Hazardous Liquid Pipelines
Abandoned Pipelines
LNG Plants
Breakout Tanks
Other Populated Areas (scale dependent)
Highly Populated Areas (scale dependent)
Commercially Navigable Waterways
CNW Inland
CNW Ocean/Great Lakes
Coastal Ecological USA (Coastal Eco USA)
Tribal Government Lands
State Boundaries
Show Labels
County Boundaries
Show Labels
GOM Block Groups
Show Labels
GOM Blocks
Show Labels
Map
Satellite
Colony High School
Swift Transportation - Jurupa Valley Terminal
FedEx Freight
Flying J Travel Center
Galleano Winery
Empire Twin Palms
ADESA Los Angeles
Big League Dreams Jurupa Valley
RANCHO DEL SOL
Costco Wholesale
Rodeo Cafe
Vernola Family Park
Homecoming at Eastvale
Swan Lake Mobile Home Park
The Home Depot
Culture Cannabis Club Jurupa Valley...
Dutch Bros Coffee
Corky's Kitchen & Bakery - Eastvale
Lowe's Home Improvement
MIRA LOMA
Jurupa Valley
Ontario Ranch Rd
Bellegrave Ave
Jurupa Rd
Limonite Ave
Van Buren Boulevard
Mission Blvd
East Riverside Dr
Hamner Ave
Wineville Ave
Etiwanda Ave
Bain St
Haven Ave
Sumner Ave

Search for Records

Enter information below to search the City's recording database. Records can be searched for by entering any of the following information:

- Record Number
- Parcel Number
- Address (Work Location)

Search results, if any, will display at the bottom of the page. Details can be viewed by clicking on the Record Number link within the search list.

General Search

Record Number:

Parcel No.:
1073-101-05

Street No.:
From - To

Direction: --Select--

Street Name:

Street Type: --Select--

Unit Type: --Select--

Unit No.:

Search | Clear

Notice:
Your search returned no results. Please modify your search criteria and try again.

Peterson, Maddie

From: WB-RB8-FileReview8 <FileReview8@waterboards.ca.gov>
Sent: Monday, February 24, 2025 9:49 AM
To: Peterson, Maddie
Cc: Hutchens, Ashley
Subject: RE: Records Request

This email originated from outside of SCS Engineers. Do not click links or open attachments unless you recognize the sender and know the content is safe.

Good morning,

Unfortunately, we do not use APNs or cross streets to maintain our files. We only use facility names and/or physical address numbers to locate files. If you can provide a numerical address or facility name, we can carry out your request.

If we can be of further assistance, please do not hesitate to contact us again.

Thank you,
File Review Desk
3737 Main St. Suite 500
Riverside, CA 92501

From: Peterson, Maddie <MPeterson@scsengineers.com>
Sent: Monday, February 24, 2025 9:38 AM
To: WB-RB8-FileReview8 <FileReview8@waterboards.ca.gov>
Cc: Hutchens, Ashley <AHutchens@SCSEngineers.com>
Subject: Records Request

Caution: External Email. Use caution when clicking links or opening attachments. When in doubt, contact DIT or use the Phish Alert Button.

Hello,

We are requesting any and all information for the following parcel in Ontario, CA.:

- **APN#: 1073-101-05**

Thank you,

Please note that we have a new Suite # as of 2/10/25.

Maddie Peterson
Staff Professional
SCS Engineers
3900 Kilroy Airport Way, **#300**
Long Beach, CA 90806

Office (562) 426-9544 x2914
Cell (562) 355-6956
MPeterson@scsengineers.com

Peterson, Maddie

From: San Bernardino County Public Records <messages@nextrequest.com>
Sent: Monday, February 24, 2025 2:13 PM
To: Peterson, Maddie
Subject: Your San Bernardino County public records request #25-5396 has been closed.

This email originated from outside of SCS Engineers. Do not click links or open attachments unless you recognize the sender and know the content is safe.

-- Attach a non-image file and/or reply ABOVE THIS LINE with a message, and it will be sent to staff on this request. --

San Bernardino County Public Records

Record request #25-5396 has been closed. The closure reason supplied was:

Hello,
Environmental Health Services does not have the type of record (s) you have requested. Please submit your request to the San Bernardino County Fire Protection District. Go to their website at https://sbcfire.org/publicrecords/ for more information.
Thank you,
Raul Robles
OA IV

View Request 25-5396

https://sanbernardinocounty.nextrequest.com/requests/25-5396

Questions about your request? Reply to this email or sign in to contact staff at San Bernardino County.

Technical support: See our help page

Appendix E

EDR Database Report Information

Not Reported
Not Reported
Ontario, CA 91761

Inquiry Number: 07908232.2r
February 25, 2025

The EDR Radius Map™ Report with GeoCheck®

6 Armstrong Road, 4th floor
Shelton, CT 06484
Toll Free: 800.352.0050
www.edrnet.com

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GEOCHECK ADDENDUM

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Thank you for your business.
Please contact EDR at 1-800-352-0050
with any questions or comments.

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EXECUTIVE SUMMARY

A search of available environmental records was conducted by Environmental Data Resources, Inc (EDR). The report was designed to assist parties seeking to meet the search requirements of EPA's Standards and Practices for All Appropriate Inquiries (40 CFR Part 312), the ASTM Standard Practice for Environmental Site Assessments (E1527 - 21), the ASTM Standard Practice for Environmental Site Assessments for Forestland or Rural Property (E2247 - 16), the ASTM Standard Practice for Limited Environmental Due Diligence: Transaction Screen Process (E1528 - 22) or custom requirements developed for the evaluation of environmental risk associated with a parcel of real estate.

TARGET PROPERTY INFORMATION

ADDRESS

NOT REPORTED
ONTARIO, CA 91761

COORDINATES

Latitude (North):	33.9922060 - 33° 59' 31.94''
Longitude (West):	117.5628570 - 117° 33' 46.28''
Universal Tranverse Mercator:	Zone 11
UTM X (Meters):	448015.2
UTM Y (Meters):	3761240.2
Elevation:	713 ft. above sea level

USGS TOPOGRAPHIC MAP ASSOCIATED WITH TARGET PROPERTY

Target Property Map:	50005749 CORONA NORTH, CA
Version Date:	2022
North Map:	50005338 GUASTI, CA
Version Date:	2021

AERIAL PHOTOGRAPHY IN THIS REPORT

Portions of Photo from:	20200423
Source:	USDA

MAPPED SITES SUMMARY

Target Property Address:
NOT REPORTED
ONTARIO, CA 91761

Click on Map ID to see full detail.

MAP ID	SITE NAME	ADDRESS	DATABASE ACRONYMS	RELATIVE ELEVATION	DIST (ft. & mi.) DIRECTION
A1	WESTRA DAIRY FARMS	11009 EUCALYPTUS AVE	UST FINDER RELEASE	Lower	583, 0.110, SW
A2	WESTRA DAIRY FARMS	11009 EUCALYPTUS AVE	LUST, Cortese, HIST CORTESE, CERS	Lower	583, 0.110, SW
3	MILK MAID DAIRY	10869 EUCALYPTUS AVE	ENF, San Bern. Co. Permit, WDS, CIWQS	Lower	1005, 0.190, SW
4	WELL II-3		PFAS	Lower	1207, 0.229, South
5	PROPOSED K-8 SCHOOL	5240 AND 5380 HAMNER	ENVIROSTOR, SCH	Lower	1512, 0.286, SE
6	CHAFFEY HIGH SCHOOL	EDISON AVENUE / HAVE	ENVIROSTOR, SCH	Higher	3893, 0.737, WNW
7	SWAN LAKE TEXACO	5800 HAMMER AVENUE	Notify 65	Lower	4268, 0.808, SE

EXECUTIVE SUMMARY

TARGET PROPERTY SEARCH RESULTS

The target property was not listed in any of the databases searched by EDR.

DATABASES WITH NO MAPPED SITES

No mapped sites were found in EDR's search of available ("reasonably ascertainable ") government records either on the target property or within the search radius around the target property for the following databases:

STANDARD ENVIRONMENTAL RECORDS

Lists of Federal NPL (Superfund) sites

NPL ---- National Priority List
Proposed NPL ---- Proposed National Priority List Sites
NPL LIENS ---- Federal Superfund Liens

Lists of Federal Delisted NPL sites

Delisted NPL ---- National Priority List Deletions

Lists of Federal sites subject to CERCLA removals and CERCLA orders

FEDERAL FACILITY ---- Federal Facility Site Information listing
SEMS ---- Superfund Enterprise Management System

Lists of Federal CERCLA sites with NFRAP

SEMS-ARCHIVE ---- Superfund Enterprise Management System Archive

Lists of Federal RCRA facilities undergoing Corrective Action

CORRACTS ---- Corrective Action Report

Lists of Federal RCRA TSD facilities

RCRA-TSDF ---- RCRA - Treatment, Storage and Disposal

Lists of Federal RCRA generators

RCRA-LQG ---- RCRA - Large Quantity Generators
RCRA-SQG ---- RCRA - Small Quantity Generators
RCRA-VSQG ---- RCRA - Very Small Quantity Generators (Formerly Conditionally Exempt Small Quantity Generators)

Federal institutional controls / engineering controls registries

LUCIS ---- Land Use Control Information System

US ENG CONTROLS ..... Engineering Controls Sites List
US INST CONTROLS ..... Institutional Controls Sites List

Federal ERNS list

ERNS ..... Emergency Response Notification System

Lists of state- and tribal (Superfund) equivalent sites

RESPONSE ..... State Response Sites

Lists of state and tribal landfills and solid waste disposal facilities

SWF/LF ..... Solid Waste Information System

Lists of state and tribal leaking storage tanks

INDIAN LUST ..... Leaking Underground Storage Tanks on Indian Land
CPS-SLIC ..... Statewide SLIC Cases

Lists of state and tribal registered storage tanks

FEMA UST ..... Underground Storage Tank Listing
UST ..... Active UST Facilities
AST ..... Aboveground Petroleum Storage Tank Facilities
INDIAN UST ..... Underground Storage Tanks on Indian Land

Lists of state and tribal voluntary cleanup sites

INDIAN VCP ..... Voluntary Cleanup Priority Listing
VCP ..... Voluntary Cleanup Program Properties

Lists of state and tribal brownfield sites

BROWNFIELDS ..... Considered Brownfieds Sites Listing

ADDITIONAL ENVIRONMENTAL RECORDS

Local Brownfield lists

US BROWNFIELDS ..... A Listing of Brownfields Sites

Local Lists of Landfill / Solid Waste Disposal Sites

WMUDS/SWAT ..... Waste Management Unit Database
SWRCY ..... Recycler Database
HAULERS ..... Registered Waste Tire Haulers Listing
INDIAN ODI ..... Report on the Status of Open Dumps on Indian Lands
ODI ..... Open Dump Inventory
DEBRIS REGION 9 ..... Torres Martinez Reservation Illegal Dump Site Locations
IHS OPEN DUMPS ..... Open Dumps on Indian Land

Local Lists of Hazardous waste / Contaminated Sites

US HIST CDL ..... Delisted National Clandestine Laboratory Register

HIST Cal-Sites ---- Historical Calsites Database
SCH ---- School Property Evaluation Program
CDL ---- Clandestine Drug Labs
Toxic Pits ---- Toxic Pits Cleanup Act Sites
CERS HAZ WASTE ---- California Environmental Reporting System Hazardous Waste
US CDL ---- National Clandestine Laboratory Register

Local Lists of Registered Storage Tanks

SWEEPS UST ---- SWEEPS UST Listing
HIST UST ---- Hazardous Substance Storage Container Database
CERS TANKS ---- California Environmental Reporting System (CERS) Tanks
CA FID UST ---- Facility Inventory Database

Local Land Records

LIENS ---- Environmental Liens Listing
LIENS 2 ---- CERCLA Lien Information
DEED ---- Deed Restriction Listing

Records of Emergency Release Reports

HMIRS ---- Hazardous Materials Information Reporting System
CHMIRS ---- California Hazardous Material Incident Report System
LDS ---- Land Disposal Sites Listing
MCS ---- Military Cleanup Sites Listing
SPILLS 90 ---- SPILLS 90 data from FirstSearch

Other Ascertainable Records

RCRA NonGen / NLR ---- RCRA - Non Generators / No Longer Regulated
FUDS ---- Formerly Used Defense Sites
DOD ---- Department of Defense Sites
SCRD DRYCLEANERS ---- State Coalition for Remediation of Drycleaners Listing
US FIN ASSUR ---- Financial Assurance Information
EPA WATCH LIST ---- EPA WATCH LIST
2020 COR ACTION ---- 2020 Corrective Action Program List
TSCA ---- Toxic Substances Control Act
TRIS ---- Toxic Chemical Release Inventory System
SSTS ---- Section 7 Tracking Systems
ROD ---- Records Of Decision
RMP ---- Risk Management Plans
RAATS ---- RCRA Administrative Action Tracking System
PRP ---- Potentially Responsible Parties
PADS ---- PCB Activity Database System
ICIS ---- Integrated Compliance Information System
FTTS ---- FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)
MLTS ---- Material Licensing Tracking System
COAL ASH DOE ---- Steam-Electric Plant Operation Data
COAL ASH EPA ---- Coal Combustion Residues Surface Impoundments List
PCB TRANSFORMER ---- PCB Transformer Registration Database
RADINFO ---- Radiation Information Database
HIST FTTS ---- FIFRA/TSCA Tracking System Administrative Case Listing
DOT OPS ---- Incident and Accident Data

CONSENT	Superfund (CERCLA) Consent Decrees
INDIAN RESERV	Indian Reservations
FUSRAP	Formerly Utilized Sites Remedial Action Program
UMTRA	Uranium Mill Tailings Sites
LEAD SMELTERS	Lead Smelter Sites
US AIRS	Aerometric Information Retrieval System Facility Subsystem
US MINES	Mines Master Index File
MINES MRDS	Mineral Resources Data System
ABANDONED MINES	Abandoned Mines
FINDS	Facility Index System/Facility Registry System
ECHO	Enforcement & Compliance History Information
DOCKET HWC	Hazardous Waste Compliance Docket Listing
UXO	Unexploded Ordnance Sites
FUELS PROGRAM	EPA Fuels Program Registered Listing
PFAS NPL	Superfund Sites with PFAS Detections Information
PFAS FEDERAL SITES	Federal Sites PFAS Information
PFAS TRIS	List of PFAS Added to the TRI
PFAS TSCA	PFAS Manufacture and Imports Information
PFAS RCRA MANIFEST	PFAS Transfers Identified In the RCRA Database Listing
PFAS ATSDR	PFAS Contamination Site Location Listing
PFAS WQP	Ambient Environmental Sampling for PFAS
PFAS PROJECT	NORTHEASTERN UNIVERSITY PFAS PROJECT
PFAS NPDES	Clean Water Act Discharge Monitoring Information
PFAS ECHO	Facilities in Industries that May Be Handling PFAS Listing
PFAS ECHO FIRE TRAIN	Facilities in Industries that May Be Handling PFAS Listing
PFAS PT 139 AIRPORT	All Certified Part 139 Airports PFAS Information Listing
AQUEOUS FOAM NRC	Aqueous Foam Related Incidents Listing
BIOSOLIDS	ICIS-NPDES Biosolids Facility Data
UST FINDER	UST Finder Database
E MANIFEST	Hazardous Waste Electronic Manifest System
AQUEOUS FOAM	Former Fire Training Facility Assessments Listing
CA BOND EXP. PLAN	Bond Expenditure Plan
CHROME PLATING	Chrome Plating Facilities Listing
CUPA Listings	CUPA Resources List
DRYCLEANERS	Cleaner Facilities
EMI	Emissions Inventory Data
ENF	Enforcement Action Listing
Financial Assurance	Financial Assurance Information Listing
ICE	Inspection, Compliance and Enforcement
HWP	EnviroStor Permitted Facilities Listing
HWT	Registered Hazardous Waste Transporter Database
HWTS	Hazardous Waste Tracking System
HAZNET	Facility and Manifest Data
MINES	Mines Site Location Listing
MWMP	Medical Waste Management Program Listing
NPDES	NPDES Permits Listing
PEST LIC	Pesticide Regulation Licenses Listing
PROC	Certified Processors Database
HAZMAT	Hazardous Material Facilities
UIC	UIC Listing
UIC GEO	UIC GEO (GEOTRACKER)
WASTEWATER PITS	Oil Wastewater Pits Listing
WDS	Waste Discharge System
WIP	Well Investigation Program Case List
MILITARY PRIV SITES	MILITARY PRIV SITES (GEOTRACKER)

EXECUTIVE SUMMARY

PROJECT ---- PROJECT (GEOTRACKER)
WDR ---- Waste Discharge Requirements Listing
CIWQS ---- California Integrated Water Quality System
CERS ---- CERS
NON-CASE INFO ---- NON-CASE INFO (GEOTRACKER)
OTHER OIL GAS ---- OTHER OIL & GAS (GEOTRACKER)
PROD WATER PONDS ---- PROD WATER PONDS (GEOTRACKER)
SAMPLING POINT ---- SAMPLING POINT (GEOTRACKER)
WELL STIM PROJ ---- Well Stimulation Project (GEOTRACKER)

EDR HIGH RISK HISTORICAL RECORDS

EDR Exclusive Records

EDR MGP ---- EDR Proprietary Manufactured Gas Plants
EDR Hist Auto ---- EDR Exclusive Historical Auto Stations
EDR Hist Cleaner ---- EDR Exclusive Historical Cleaners

EDR RECOVERED GOVERNMENT ARCHIVES

Exclusive Recovered Govt. Archives

RGA LF ---- Recovered Government Archive Solid Waste Facilities List
RGA LUST ---- Recovered Government Archive Leaking Underground Storage Tank

SURROUNDING SITES: SEARCH RESULTS

Surrounding sites were identified in the following databases.

Elevations have been determined from the USGS Digital Elevation Model and should be evaluated on a relative (not an absolute) basis. Relative elevation information between sites of close proximity should be field verified. Sites with an elevation equal to or higher than the target property have been differentiated below from sites with an elevation lower than the target property.
Page numbers and map identification numbers refer to the EDR Radius Map report where detailed data on individual sites can be reviewed.

Sites listed in ***bold italics*** are in multiple databases.

Unmappable (orphan) sites are not considered in the foregoing analysis.

STANDARD ENVIRONMENTAL RECORDS

Lists of state- and tribal hazardous waste facilities

ENVIROSTOR: The Department of Toxic Substances Control's (DTSC's) Site Mitigation and Brownfields Reuse Program's (SMBRP's) EnviroStor database identifes sites that have known contamination or sites for which there may be reasons to investigate further. The database includes the following site types: Federal Superfund sites (National Priorities List (NPL)); State Response, including Military Facilities and State Superfund; Voluntary Cleanup; and School sites. EnviroStor provides similar information to the information that was available in CalSites, and provides additional site information, including, but not limited to, identification of formerly-contaminated properties that have been released for reuse, properties where environmental deed restrictions have been recorded to prevent inappropriate land uses, and risk

characterization information that is used to assess potential impacts to public health and the environment at contaminated sites.

A review of the ENVIROSTOR list, as provided by EDR, and dated 10/21/2024 has revealed that there are 2 ENVIROSTOR sites within approximately 1 mile of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
CHAFFEY HIGH SCHOOL	***EDISON AVENUE / HAVE***	***WNW 1/2 - 1 (0.737 mi.)***	***6***	***31***
Facility Id: 36000007				
Status: No Further Action				

Lower Elevation	Address	Direction / Distance	Map ID	Page
PROPOSED K-8 SCHOOL	***5240 AND 5380 HAMNER***	***SE 1/4 - 1/2 (0.286 mi.)***	***5***	***27***
Facility Id: 60000409				
Status: No Further Action				

Lists of state and tribal leaking storage tanks

LUST: Leaking Underground Storage Tank (LUST) Sites included in GeoTracker. GeoTracker is the Water Boards data management system for sites that impact, or have the potential to impact, water quality in California, with emphasis on groundwater.

A review of the LUST list, as provided by EDR, has revealed that there is 1 LUST site within approximately 0.5 miles of the target property.

Lower Elevation	Address	Direction / Distance	Map ID	Page
WESTRA DAIRY FARMS	***11009 EUCALYPTUS AVE***	***SW 0 - 1/8 (0.110 mi.)***	***A2***	***9***
Database: LUST REG 8, Date of Government Version: 02/14/2005				
Database: LUST, Date of Government Version: 08/28/2024				
Status: Completed - Case Closed				
Facility Status: Case Closed				
Global Id: T0607100611				
Global ID: T0607100611				

ADDITIONAL ENVIRONMENTAL RECORDS

Other Ascertainable Records

UST FINDER RELEASE: US EPA's UST Finder data is a national composite of leaking underground storage tanks. This data contains information about, and locations of, leaking underground storage tanks. Data was collected from state sources and standardized into a national profile by EPA's Office of Underground Storage Tanks, Office of Research and Development, and the Association of State and Territorial Solid Waste Management Officials.

A review of the UST FINDER RELEASE list, as provided by EDR, and dated 06/08/2023 has revealed that there is 1 UST FINDER RELEASE site within approximately 0.5 miles of the target property.

Lower Elevation	Address	Direction / Distance	Map ID	Page
WESTRA DAIRY FARMS	11009 EUCALYPTUS AVE	SW 0 - 1/8 (0.110 mi.)	A1	9

EXECUTIVE SUMMARY

PFAS: A listing of PFAS sites included in the Envirostor and GeoTracker databases. Locations of potential sources of per - and polyfluoroalkyl substances (PFAS). This does not mean that PFAS has been produced, used, or discharged at these sites.

A review of the PFAS list, as provided by EDR, and dated 12/02/2024 has revealed that there is 1 PFAS site within approximately 0.25 miles of the target property.

Lower Elevation	Address	Direction / Distance	Map ID	Page
WELL II-3		S 1/8 - 1/4 (0.229 mi.)	4	19

Cortese: The sites for the list are designated by the State Water Resource Control Board (LUST), the Integrated Waste Board (SWF/LS), and the Department of Toxic Substances Control (Cal-Sites).

A review of the Cortese list, as provided by EDR, and dated 09/16/2024 has revealed that there is 1 Cortese site within approximately 0.5 miles of the target property.

Lower Elevation	Address	Direction / Distance	Map ID	Page
WESTRA DAIRY FARMS	***11009 EUCALYPTUS AVE***	***SW 0 - 1/8 (0.110 mi.)***	***A2***	***9***
Cleanup Status: COMPLETED - CASE CLOSED				

HIST CORTESE: The sites for the list are designated by the State Water Resource Control Board [LUST], the Integrated Waste Board [SWF/LS], and the Department of Toxic Substances Control [CALSITES]. This listing is no longer updated by the state agency.

A review of the HIST CORTESE list, as provided by EDR, and dated 04/01/2001 has revealed that there is 1 HIST CORTESE site within approximately 0.5 miles of the target property.

Lower Elevation	Address	Direction / Distance	Map ID	Page
WESTRA DAIRY FARMS	***11009 EUCALYPTUS AVE***	***SW 0 - 1/8 (0.110 mi.)***	***A2***	***9***
Reg Id: 083603584T				

San Bern. Co. Permit: San Bernardino County Fire Department Hazardous Materials Division.

A review of the San Bern. Co. Permit list, as provided by EDR, and dated 08/13/2024 has revealed that there is 1 San Bern. Co. Permit site within approximately 0.25 miles of the target property.

Lower Elevation	Address	Direction / Distance	Map ID	Page
MILK MAID DAIRY	***10869 EUCALYPTUS AVE***	***SW 1/8 - 1/4 (0.190 mi.)***	***3***	***13***
Facility Status: INACTIVE				
Facility Id: FA0000570				

Notify 65: Listings of all Proposition 65 incidents reported to counties by the State Water Resources Control Board and the Regional Water Quality Control Board. This database is no longer updated by the reporting agency.

A review of the Notify 65 list, as provided by EDR, and dated 09/05/2024 has revealed that there is 1 Notify 65 site within approximately 1 mile of the target property.

EXECUTIVE SUMMARY

Lower Elevation	Address	Direction / Distance	Map ID	Page
SWAN LAKE TEXACO	5800 HAMMER AVENUE	SE 1/2 - 1 (0.808 mi.)	7	35

EXECUTIVE SUMMARY

Due to poor or inadequate address information, the following sites were not mapped. Count: 3 records.

Site Name	Database(s)
NOT PROVIDED	HMIRS
SO CAL GAS/ONTARIO MGP	EDR MGP
MILLIKEN SANITARY LANDFILL	ENVIROSTOR

OVERVIEW MAP - 07908232.2R

Target Property

Sites at elevations higher than or equal to the target property

Sites at elevations lower than the target property

Manufactured Gas Plants

National Priority List Sites

Dept. Defense Sites

0 1/4 1/2 1 Miles

Indian Reservations BIA

County Boundary

Power transmission lines

Pipelines

Special Flood Hazard Area (1%)

0.2% Annual Chance Flood Hazard

National Wetland Inventory

State Wetlands

Areas of Concern

This report includes Interactive Map Layers to display and/or hide map information. The legend includes only those icons for the default map view.

SITE NAME:	Not Reported	CLIENT:	SCS Engineers
ADDRESS:	Not Reported Ontario CA 91761	CONTACT:	Jose William Padua
		INQUIRY #:	07908232.2r
LAT/LONG:	33.992206 / 117.562857	DATE:	February 25, 2025 1:27 pm

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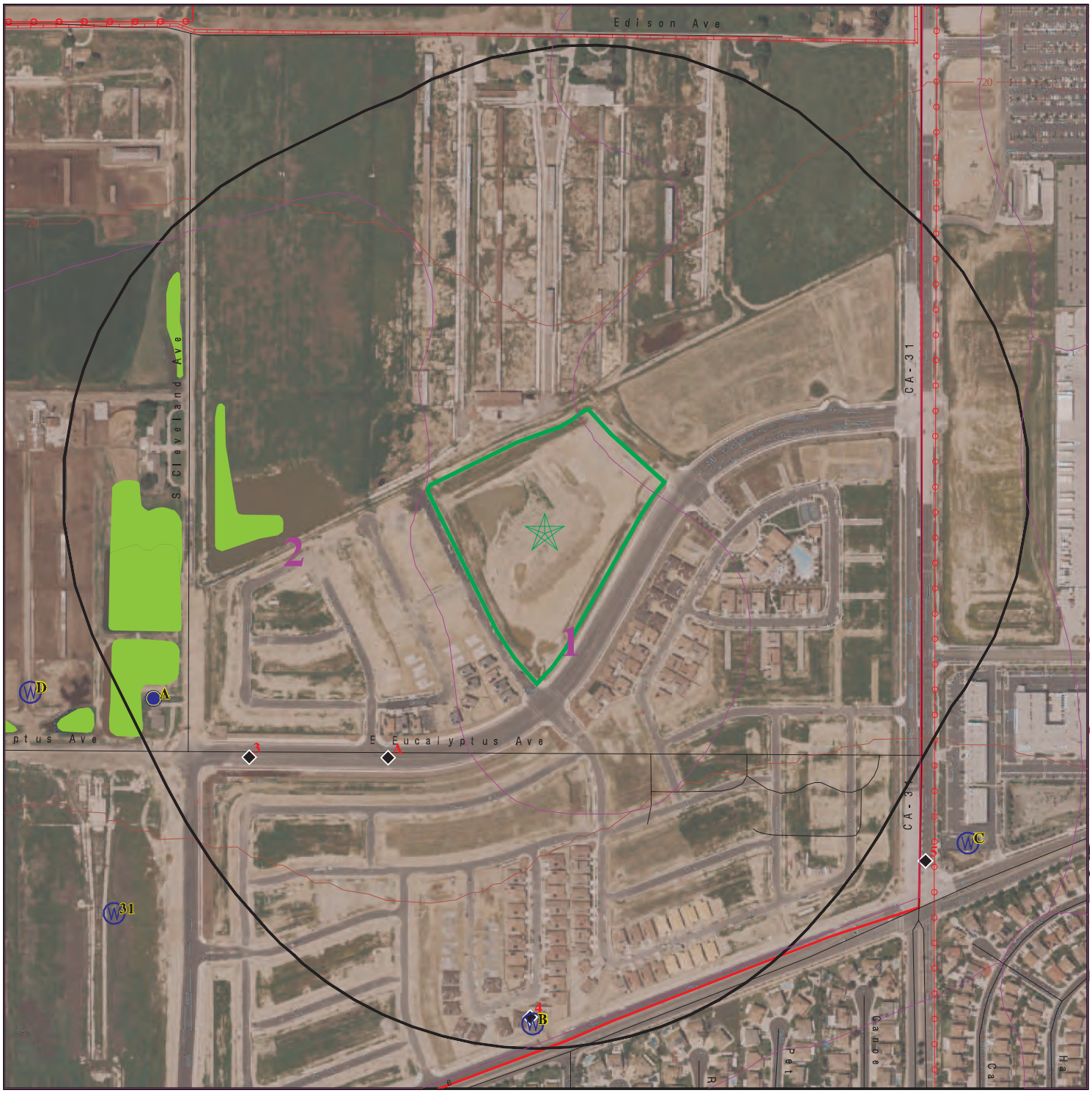
DETAIL MAP - 07908232.2R



- Target Property
- Sites at elevations higher than or equal to the target property
- Sites at elevations lower than the target property
- Manufactured Gas Plants
- Sensitive Receptors
- National Priority List Sites
- Dept. Defense Sites

0 1/16 1/8 1/4 Miles

- Indian Reservations BIA
- County Boundary
- Power transmission lines
- Pipelines
- Special Flood Hazard Area (1%)
- 0.2% Annual Chance Flood Hazard
- National Wetland Inventory
- State Wetlands
- Areas of Concern

This report includes Interactive Map Layers to display and/or hide map information. The legend includes only those icons for the default map view.

SITE NAME: Not Reported ADDRESS: Not Reported Ontario CA 91761 LAT/LONG: 33.992206 / 117.562857	CLIENT: SCS Engineers CONTACT: Jose William Padua INQUIRY #: 07908232.2r DATE: February 25, 2025 1:27 pm

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MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
STANDARD ENVIRONMENTAL RECORDS								
Lists of Federal NPL (Superfund) sites								
NPL	1.000		0	0	0	0	NR	0
Proposed NPL	1.000		0	0	0	0	NR	0
NPL LIENS	1.000		0	0	0	0	NR	0
Lists of Federal Delisted NPL sites								
Delisted NPL	1.000		0	0	0	0	NR	0
Lists of Federal sites subject to CERCLA removals and CERCLA orders								
FEDERAL FACILITY	0.500		0	0	0	NR	NR	0
SEMS	0.500		0	0	0	NR	NR	0
Lists of Federal CERCLA sites with NFRAP								
SEMS-ARCHIVE	0.500		0	0	0	NR	NR	0
Lists of Federal RCRA facilities undergoing Corrective Action								
CORRACTS	1.000		0	0	0	0	NR	0
Lists of Federal RCRA TSD facilities								
RCRA-TSDF	0.500		0	0	0	NR	NR	0
Lists of Federal RCRA generators								
RCRA-LQG	0.250		0	0	NR	NR	NR	0
RCRA-SQG	0.250		0	0	NR	NR	NR	0
RCRA-VSQG	0.250		0	0	NR	NR	NR	0
Federal institutional controls / engineering controls registries								
LUCIS	0.500		0	0	0	NR	NR	0
US ENG CONTROLS	0.500		0	0	0	NR	NR	0
US INST CONTROLS	0.500		0	0	0	NR	NR	0
Federal ERNS list								
ERNS	TP		NR	NR	NR	NR	NR	0
Lists of state- and tribal (Superfund) equivalent sites								
RESPONSE	1.000		0	0	0	0	NR	0
Lists of state- and tribal hazardous waste facilities								
ENVIROSTOR	1.000		0	0	1	1	NR	2
Lists of state and tribal landfills and solid waste disposal facilities								
SWF/LF	0.500		0	0	0	NR	NR	0

MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
Lists of state and tribal leaking storage tanks								
LUST	0.500		1	0	0	NR	NR	1
INDIAN LUST	0.500		0	0	0	NR	NR	0
CPS-SLIC	0.500		0	0	0	NR	NR	0
Lists of state and tribal registered storage tanks								
FEMA UST	0.250		0	0	NR	NR	NR	0
UST	0.250		0	0	NR	NR	NR	0
AST	0.250		0	0	NR	NR	NR	0
INDIAN UST	0.250		0	0	NR	NR	NR	0
Lists of state and tribal voluntary cleanup sites								
INDIAN VCP	0.500		0	0	0	NR	NR	0
VCP	0.500		0	0	0	NR	NR	0
Lists of state and tribal brownfield sites								
BROWNFIELDS	0.500		0	0	0	NR	NR	0
ADDITIONAL ENVIRONMENTAL RECORDS								
Local Brownfield lists								
US BROWNFIELDS	0.500		0	0	0	NR	NR	0
Local Lists of Landfill / Solid Waste Disposal Sites								
WMUDS/SWAT	0.500		0	0	0	NR	NR	0
SWRCY	0.500		0	0	0	NR	NR	0
HAULERS	TP		NR	NR	NR	NR	NR	0
INDIAN ODI	0.500		0	0	0	NR	NR	0
ODI	0.500		0	0	0	NR	NR	0
DEBRIS REGION 9	0.500		0	0	0	NR	NR	0
IHS OPEN DUMPS	0.500		0	0	0	NR	NR	0
Local Lists of Hazardous waste / Contaminated Sites								
US HIST CDL	TP		NR	NR	NR	NR	NR	0
HIST Cal-Sites	1.000		0	0	0	0	NR	0
SCH	0.250		0	0	NR	NR	NR	0
CDL	TP		NR	NR	NR	NR	NR	0
Toxic Pits	1.000		0	0	0	0	NR	0
CERS HAZ WASTE	0.250		0	0	NR	NR	NR	0
US CDL	TP		NR	NR	NR	NR	NR	0
Local Lists of Registered Storage Tanks								
SWEEPS UST	0.250		0	0	NR	NR	NR	0
HIST UST	0.250		0	0	NR	NR	NR	0
CERS TANKS	0.250		0	0	NR	NR	NR	0
CA FID UST	0.250		0	0	NR	NR	NR	0
Local Land Records								
LIENS	TP		NR	NR	NR	NR	NR	0

MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
LIENS 2	TP		NR	NR	NR	NR	NR	0
DEED	0.500		0	0	0	NR	NR	0
Records of Emergency Release Reports								
HMIRS	TP		NR	NR	NR	NR	NR	0
CHMIRS	TP		NR	NR	NR	NR	NR	0
LDS	TP		NR	NR	NR	NR	NR	0
MCS	TP		NR	NR	NR	NR	NR	0
SPILLS 90	TP		NR	NR	NR	NR	NR	0
Other Ascertainable Records								
RCRA NonGen / NLR	0.250		0	0	NR	NR	NR	0
FUDS	1.000		0	0	0	0	NR	0
DOD	1.000		0	0	0	0	NR	0
SCRD DRYCLEANERS	0.500		0	0	0	NR	NR	0
US FIN ASSUR	TP		NR	NR	NR	NR	NR	0
EPA WATCH LIST	TP		NR	NR	NR	NR	NR	0
2020 COR ACTION	0.250		0	0	NR	NR	NR	0
TSCA	TP		NR	NR	NR	NR	NR	0
TRIS	TP		NR	NR	NR	NR	NR	0
SSTS	TP		NR	NR	NR	NR	NR	0
ROD	1.000		0	0	0	0	NR	0
RMP	TP		NR	NR	NR	NR	NR	0
RAATS	TP		NR	NR	NR	NR	NR	0
PRP	TP		NR	NR	NR	NR	NR	0
PADS	TP		NR	NR	NR	NR	NR	0
ICIS	TP		NR	NR	NR	NR	NR	0
FTTS	TP		NR	NR	NR	NR	NR	0
MLTS	TP		NR	NR	NR	NR	NR	0
COAL ASH DOE	TP		NR	NR	NR	NR	NR	0
COAL ASH EPA	0.500		0	0	0	NR	NR	0
PCB TRANSFORMER	TP		NR	NR	NR	NR	NR	0
RADINFO	TP		NR	NR	NR	NR	NR	0
HIST FTTS	TP		NR	NR	NR	NR	NR	0
DOT OPS	TP		NR	NR	NR	NR	NR	0
CONSENT	1.000		0	0	0	0	NR	0
INDIAN RESERV	1.000		0	0	0	0	NR	0
FUSRAP	1.000		0	0	0	0	NR	0
UMTRA	0.500		0	0	0	NR	NR	0
LEAD SMELTERS	TP		NR	NR	NR	NR	NR	0
US AIRS	TP		NR	NR	NR	NR	NR	0
US MINES	0.250		0	0	NR	NR	NR	0
MINES MRDS	0.250		0	0	NR	NR	NR	0
ABANDONED MINES	0.250		0	0	NR	NR	NR	0
FINDS	TP		NR	NR	NR	NR	NR	0
ECHO	TP		NR	NR	NR	NR	NR	0
DOCKET HWC	TP		NR	NR	NR	NR	NR	0
UXO	1.000		0	0	0	0	NR	0
FUELS PROGRAM	0.250		0	0	NR	NR	NR	0
PFAS NPL	0.250		0	0	NR	NR	NR	0
PFAS FEDERAL SITES	0.250		0	0	NR	NR	NR	0

MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
PFAS TRIS	0.250		0	0	NR	NR	NR	0
PFAS TSCA	0.250		0	0	NR	NR	NR	0
PFAS RCRA MANIFEST	0.250		0	0	NR	NR	NR	0
PFAS ATSDR	0.250		0	0	NR	NR	NR	0
PFAS WQP	0.250		0	0	NR	NR	NR	0
PFAS PROJECT	0.250		0	0	NR	NR	NR	0
PFAS NPDES	0.250		0	0	NR	NR	NR	0
PFAS ECHO	0.250		0	0	NR	NR	NR	0
PFAS ECHO FIRE TRAIN	0.250		0	0	NR	NR	NR	0
PFAS PT 139 AIRPORT	0.250		0	0	NR	NR	NR	0
AQUEOUS FOAM NRC	0.250		0	0	NR	NR	NR	0
BIOSOLIDS	TP		NR	NR	NR	NR	NR	0
UST FINDER	0.250		0	0	NR	NR	NR	0
UST FINDER RELEASE	0.500		1	0	0	NR	NR	1
E MANIFEST	0.250		0	0	NR	NR	NR	0
PFAS	0.250		0	1	NR	NR	NR	1
AQUEOUS FOAM	0.250		0	0	NR	NR	NR	0
CA BOND EXP. PLAN	1.000		0	0	0	0	NR	0
CHROME PLATING	0.500		0	0	0	NR	NR	0
Cortese	0.500		1	0	0	NR	NR	1
CUPA Listings	0.250		0	0	NR	NR	NR	0
DRYCLEANERS	0.250		0	0	NR	NR	NR	0
EMI	TP		NR	NR	NR	NR	NR	0
ENF	TP		NR	NR	NR	NR	NR	0
Financial Assurance	TP		NR	NR	NR	NR	NR	0
ICE	TP		NR	NR	NR	NR	NR	0
HIST CORTESE	0.500		1	0	0	NR	NR	1
HWP	1.000		0	0	0	0	NR	0
HWT	0.250		0	0	NR	NR	NR	0
HWTS	TP		NR	NR	NR	NR	NR	0
HAZNET	TP		NR	NR	NR	NR	NR	0
MINES	0.250		0	0	NR	NR	NR	0
MWMP	0.250		0	0	NR	NR	NR	0
NPDES	TP		NR	NR	NR	NR	NR	0
San Bern. Co. Permit	0.250		0	1	NR	NR	NR	1
PEST LIC	TP		NR	NR	NR	NR	NR	0
PROC	0.500		0	0	0	NR	NR	0
Notify 65	1.000		0	0	0	1	NR	1
HAZMAT	0.250		0	0	NR	NR	NR	0
UIC	TP		NR	NR	NR	NR	NR	0
UIC GEO	TP		NR	NR	NR	NR	NR	0
WASTEWATER PITS	0.500		0	0	0	NR	NR	0
WDS	TP		NR	NR	NR	NR	NR	0
WIP	0.250		0	0	NR	NR	NR	0
MILITARY PRIV SITES	TP		NR	NR	NR	NR	NR	0
PROJECT	TP		NR	NR	NR	NR	NR	0
WDR	TP		NR	NR	NR	NR	NR	0
CIWQS	TP		NR	NR	NR	NR	NR	0
CERS	TP		NR	NR	NR	NR	NR	0
NON-CASE INFO	TP		NR	NR	NR	NR	NR	0
OTHER OIL GAS	TP		NR	NR	NR	NR	NR	0

MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
PROD WATER PONDS	TP		NR	NR	NR	NR	NR	0
SAMPLING POINT	TP		NR	NR	NR	NR	NR	0
WELL STIM PROJ	TP		NR	NR	NR	NR	NR	0
EDR HIGH RISK HISTORICAL RECORDS								
EDR Exclusive Records								
EDR MGP	1.000		0	0	0	0	NR	0
EDR Hist Auto	0.125		0	NR	NR	NR	NR	0
EDR Hist Cleaner	0.125		0	NR	NR	NR	NR	0
EDR RECOVERED GOVERNMENT ARCHIVES								
Exclusive Recovered Govt. Archives								
RGA LF	TP		NR	NR	NR	NR	NR	0
RGA LUST	TP		NR	NR	NR	NR	NR	0
- Totals --		0	4	2	1	2	0	9

NOTES:

TP = Target Property

NR = Not Requested at this Search Distance

Sites may be listed in more than one database

A1
SW
< 1/8
0.110 mi.
583 ft.

WESTRA DAIRY FARMS
11009 EUCALYPTUS AVE
ONTARIO, CA 91710

Site 1 of 2 in cluster A

UST FINDER RELEASE | **1029130553**
N/A

Relative:
Lower

Actual:
705 ft.

UST FINDER RELEASE:

Object ID:	69782
Facility ID:	Not reported
Lust ID:	CAT0607100611
Name:	WESTRA DAIRY FARMS
Address:	11009 EUCALYPTUS AVE
City,State,Zip:	ONTARIO, CA 91710
Address Match Type:	PointAddress
Reported Date:	Not reported
Status:	No Further Action
Substance:	Not reported
Population within 1500ft:	74
Domestic Wells within 1500ft:	17
Land Use:	Non-Developed
Within SPA:	No
SPA PWS Facility ID:	Not reported
SPA Water Type:	Not reported
SPA Facility Type:	Not reported
SPA HUC12:	Not reported
Within WHPA:	Yes
WHPA PWS Facility ID:	CA3601027_38435
WHPA Water Type:	GW - Ground water
WHPA Facility Type:	WL - Well
WHPA HUC12:	180702030705
Within 100yr Floodplain:	No
Tribe:	Not reported
EPA Region:	9
NFA Letter 1:	Not reported
NFA Letter 2:	Not reported
NFA Letter 3:	Not reported
NFA Letter 4:	Not reported
Closed With Residual Contaminate:	Not reported
Coordinate Source:	Geocode
X Coord:	-117.56512
Y Coord:	33.98997
Latitude:	33.98997
Longitude:	-117.565119999999

A2
SW
< 1/8
0.110 mi.
583 ft.

WESTRA DAIRY FARMS
11009 EUCALYPTUS AVE
ONTARIO, CA 91710

Site 2 of 2 in cluster A

LUST
Cortese
HIST CORTESE
CERS

S104405158
N/A

Relative:
Lower

Actual:
705 ft.

LUST:

Name:	WESTRA DAIRY FARMS
Address:	11009 EUCALYPTUS AVE
City,State,Zip:	ONTARIO, CA 91710
Lead Agency:	SAN BERNARDINO COUNTY
Case Type:	LUST Cleanup Site

Geo Track:

Global Id:	T0607100611
Latitude:	33.9899846

WESTRA DAIRY FARMS (Continued) **S104405158**

Longitude:	-117.5646824
Status:	Completed - Case Closed
Status Date:	04/24/2000
Case Worker:	JC
RB Case Number:	083603584T
Local Agency:	SAN BERNARDINO COUNTY
File Location:	Local Agency
Local Case Number:	99123
Potential Media Affect:	Soil
Potential Contaminants of Concern:	Diesel
EPA Region:	9
Coordinate Source:	Google Geocode
Cuf Case:	NO
Quantity Released Gallons:	Not reported
Begin Date:	07/28/1999
Leak Reported Date:	09/13/1999
How Discovered:	Tank Closure
How Discovered Description:	Not reported
Discharge Source:	Other
Discharge Cause:	Unknown
Stop Method:	Not reported
Stop Description:	Not reported
No Further Action Date:	04/24/2000
CA Water Watershed Name:	Santa Ana River - Middle Santa Ana River - Chino (Split) (801.21)
Dwr Groundwater Subbasin Name:	Upper Santa Ana Valley - Chino (8-002.01)
Disadvantaged Community:	Not reported
CA Enviroscreen 3 Score:	76-80%
CA Enviroscreen 4 Score:	70-75%
Military DOD Site:	No
Facility Project Subtype:	Not reported
RWQCB Region:	SANTA ANA RWQCB (REGION 8)
Site History:	Not reported

LUST:

Global Id:	T0607100611
Contact Type:	Local Agency Caseworker - Primary Caseworker
Contact Name:	JACKSON CRUTSINGER
Organization Name:	SAN BERNARDINO COUNTY
Address:	620 SOUTH E STREET
City:	SAN BERNARDINO
Email:	jcrutsinger@sbcfire.org
Phone Number:	Not reported

LUST:

Global Id:	T0607100611
Action Type:	Other
Date:	09/13/1999
Action:	Leak Reported

Global Id:	T0607100611
Action Type:	Other
Date:	07/28/1999
Action:	Leak Stopped

Global Id:	T0607100611
Action Type:	ENFORCEMENT
Date:	04/24/2000

WESTRA DAIRY FARMS (Continued) **S104405158**

Action: Closure/No Further Action Letter

Global Id: T0607100611
Action Type: Other
Date: 07/28/1999
Action: Leak Discovery

LUST:
Global Id: T0607100611
Status: Open - Case Begin Date
Status Date: 07/28/1999

Global Id: T0607100611
Status: Open - Site Assessment
Status Date: 09/13/1999

Global Id: T0607100611
Status: Completed - Case Closed
Status Date: 04/24/2000

LUST REG 8:

Name:	WESTRA DAIRY FARMS
Address:	11009 EUCALYPTUS AVE
City:	ONTARIO
Region:	8
County:	San Bernardino
Regional Board:	Santa Ana Region
Facility Status:	Case Closed
Case Number:	083603584T
Local Case Num:	99123
Case Type:	Soil only
Substance:	Diesel
Qty Leaked:	Not reported
Abate Method:	Not reported
Cross Street:	MILLIKEN AVE
Enf Type:	CLOS
Funding:	Not reported
How Discovered:	Tank Closure
How Stopped:	Not reported
Leak Cause:	UNK
Leak Source:	UNK
Global ID:	T0607100611
How Stopped Date:	7/28/1999
Enter Date:	12/17/1999
Date Confirmation of Leak Began:	9/13/1999
Date Preliminary Assessment Began:	Not reported
Discover Date:	7/28/1999
Enforcement Date:	Not reported
Close Date:	4/24/2000
Date Prelim Assessment Workplan Submitted:	Not reported
Date Pollution Characterization Began:	Not reported
Date Remediation Plan Submitted:	Not reported
Date Remedial Action Underway:	Not reported
Date Post Remedial Action Monitoring:	Not reported
Enter Date:	12/17/1999

WESTRA DAIRY FARMS (Continued) **S104405158**

GW Qualifies:	Not reported
Soil Qualifies:	Not reported
Operator:	Not reported
Facility Contact:	Not reported
Interim:	Not reported
Oversite Program:	LUST
Latitude:	33.989863
Longitude:	-117.560839
MTBE Date:	Not reported
Max MTBE GW:	Not reported
MTBE Concentration:	0
Max MTBE Soil:	Not reported
MTBE Fuel:	0
MTBE Tested:	Not Required to be Tested.
MTBE Class:	*
Staff:	NOM
Staff Initials:	JC3
Lead Agency:	Local Agency
Local Agency:	36000L
Hydr Basin #:	UPPER SANTA ANA VALL
Beneficial:	Not reported
Priority:	Not reported
Cleanup Fund Id:	Not reported
Work Suspended:	No

Summary: Not reported

CORTESE:

Name:	WESTRA DAIRY FARMS
Address:	11009 EUCALYPTUS AVE
City,State,Zip:	ONTARIO, CA 91710
Region:	CORTESE
Envirostor Id:	Not reported
Global ID:	T0607100611
Site/Facility Type:	LUST CLEANUP SITE
Cleanup Status:	COMPLETED - CASE CLOSED
Status Date:	Not reported
Site Code:	Not reported
Latitude:	Not reported
Longitude:	Not reported
Owner:	Not reported
Enf Type:	Not reported
Swat R:	Not reported
Flag:	active
Order No:	Not reported
Waste Discharge System No:	Not reported
Effective Date:	Not reported
Region 2:	Not reported
WID Id:	Not reported
Solid Waste Id No:	Not reported
Waste Management Uit Name:	Not reported
File Name:	Active Open

HIST CORTESE:

edr_fname:	WESTRA DAIRY FARMS
edr_fadd1:	11009
City,State,Zip:	ONTARIO, CA 91710

WESTRA DAIRY FARMS (Continued) **S104405158**

Region: CORTESE
Facility County Code: 36
Reg By: LTNKA
Reg Id: 083603584T

CERS:
Name: WESTRA DAIRY FARMS
Address: 11009 EUCALYPTUS AVE
City,State,Zip: ONTARIO, CA 91710
Site ID: 879549
CERS ID: T0607100611
CERS Description: Leaking Underground Storage Tank Cleanup Site

Affiliation:
Affiliation Type Desc: Local Agency Caseworker
Entity Name: JACKSON CRUTSINGER - SAN BERNARDINO COUNTY
Entity Title: Not reported
Affiliation Address: 620 SOUTH E STREET
Affiliation City: SAN BERNARDINO
Affiliation State: CA
Affiliation Country: Not reported
Affiliation Zip: Not reported
Affiliation Phone: ,

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3 **MILK MAID DAIRY** **ENF** **S102006045**
SW **10869 EUCALYPTUS AVE** **San Bern. Co. Permit** **N/A**
1/8-1/4 **ONTARIO, CA 91761** **WDS**
0.190 mi. **CIWQS**
1005 ft.

Relative:
Lower

Actual:
703 ft.

ENF:
Name: MILK MAID DAIRY
Address: 10869 EUCALYPTUS AVE
City,State,Zip: ONTARIO, CA
Region: 8
Facility Id: 258915
Agency Name: Case De Vries Case Vythuizen
Place Type: Growing
Place Subtype: Animal Feeding
Facility Type: Agricultural
Agency Type: Privately-Owned Business
Of Agencies: 1
Place Latitude: Not reported
Place Longitude: Not reported
SIC Code 1: Not reported
SIC Desc 1: Not reported
SIC Code 2: Not reported
SIC Desc 2: Not reported
SIC Code 3: Not reported
SIC Desc 3: Not reported
NAICS Code 1: Not reported
NAICS Desc 1: Not reported
NAICS Code 2: Not reported
NAICS Desc 2: Not reported
NAICS Code 3: Not reported
NAICS Desc 3: Not reported
Of Places: 1

MILK MAID DAIRY (Continued) **S102006045**

Source Of Facility:	Reg Meas
Design Flow:	0.0001
Threat To Water Quality:	2
Complexity:	C
Pretreatment:	X - Facility is not a POTW
Facility Waste Type:	Solid wastes, NEC
Facility Waste Type 2:	Stormwater runoff
Facility Waste Type 3:	Not reported
Facility Waste Type 4:	Not reported
Program:	ANIWSTCOWS
Program Category1:	ANIMALWASTE
Program Category2:	NPDESWW
# Of Programs:	1
WDID:	8 365420001
Reg Measure Id:	211667
Reg Measure Type:	Enrollee
Region:	8
Order #:	99-011
Npdes# CA#:	CAG018001
Major-Minor:	Not reported
Npdes Type:	Not reported
Reclamation:	N - No
Dredge Fill Fee:	Not reported
301H:	Not reported
Application Fee Amt Received:	Not reported
Status:	Historical
Status Date:	03/18/2014
Effective Date:	10/06/1972
Expiration/Review Date:	Not reported
Termination Date:	09/08/2000
WDR Review - Amend:	Not reported
WDR Review - Revise/Renew:	Not reported
WDR Review - Rescind:	Not reported
WDR Review - No Action Required:	Not reported
WDR Review - Pending:	Not reported
WDR Review - Planned:	Not reported
Status Enrollee:	Y
Individual/General:	I
Fee Code:	Not reported
Direction/Voice:	Passive
Enforcement Id(EID):	223411
Region:	8
Order / Resolution Number:	91-100
Enforcement Action Type:	Clean-up and Abatement Order
Effective Date:	07/09/1991
Adoption/Issuance Date:	Not reported
Achieve Date:	1/1/1994
Termination Date:	Not reported
ACL Issuance Date:	Not reported
EPL Issuance Date:	Not reported
Status:	Historical
Title:	Enforcement - 8 365420001
Description:	TIME SCHEDULE FOR DEVELOPMENT AND IMPLEMENTATION OF A WASTE MANAGEMENT PLAN
Program:	NPDNONMUNIPRCS
Latest Milestone Completion Date:	1/1/1994
# Of Programs1:	1

MILK MAID DAIRY (Continued) **S102006045**

Total Assessment Amount:	0
Initial Assessed Amount:	0
Liability $ Amount:	0
Project $ Amount:	0
Liability $ Paid:	0
Project $ Completed:	0
Total $ Paid/Completed Amount:	0

Name:	MILK MAID DAIRY
Address:	10869 EUCALYPTUS AVE
City,State,Zip:	ONTARIO, CA
Region:	8
Facility Id:	258915
Agency Name:	Case De Vries Case Vythuizen
Place Type:	Growing
Place Subtype:	Animal Feeding
Facility Type:	Agricultural
Agency Type:	Privately-Owned Business
# Of Agencies:	1
Place Latitude:	Not reported
Place Longitude:	Not reported
SIC Code 1:	Not reported
SIC Desc 1:	Not reported
SIC Code 2:	Not reported
SIC Desc 2:	Not reported
SIC Code 3:	Not reported
SIC Desc 3:	Not reported
NAICS Code 1:	Not reported
NAICS Desc 1:	Not reported
NAICS Code 2:	Not reported
NAICS Desc 2:	Not reported
NAICS Code 3:	Not reported
NAICS Desc 3:	Not reported
# Of Places:	1
Source Of Facility:	Reg Meas
Design Flow:	0.0001
Threat To Water Quality:	2
Complexity:	C
Pretreatment:	X - Facility is not a POTW
Facility Waste Type:	Solid wastes, NEC
Facility Waste Type 2:	Stormwater runoff
Facility Waste Type 3:	Not reported
Facility Waste Type 4:	Not reported
Program:	ANIWSTCOWS
Program Category1:	ANIMALWASTE
Program Category2:	NPDESWW
# Of Programs:	1
WDID:	8 365420001
Reg Measure Id:	211667
Reg Measure Type:	Enrollee
Region:	8
Order #:	99-011
Npdes# CA#:	CAG018001
Major-Minor:	Not reported
Npdes Type:	Not reported
Reclamation:	N - No
Dredge Fill Fee:	Not reported

MILK MAID DAIRY (Continued) **S102006045**

301H:	Not reported
Application Fee Amt Received:	Not reported
Status:	Historical
Status Date:	03/18/2014
Effective Date:	10/06/1972
Expiration/Review Date:	Not reported
Termination Date:	09/08/2000
WDR Review - Amend:	Not reported
WDR Review - Revise/Renew:	Not reported
WDR Review - Rescind:	Not reported
WDR Review - No Action Required:	Not reported
WDR Review - Pending:	Not reported
WDR Review - Planned:	Not reported
Status Enrollee:	Y
Individual/General:	I
Fee Code:	Not reported
Direction/Voice:	Passive
Enforcement Id(EID):	223087
Region:	8
Order / Resolution Number:	LT940705
Enforcement Action Type:	Clean-up and Abatement Order
Effective Date:	07/05/1994
Adoption/Issuance Date:	Not reported
Achieve Date:	Not reported
Termination Date:	Not reported
ACL Issuance Date:	Not reported
EPL Issuance Date:	Not reported
Status:	Historical
Title:	Enforcement - 8 365420001
Description:	RESCINDS CAO 91-100
Program:	NPDNONMUNIPRCS
Latest Milestone Completion Date:	Not reported
# Of Programs1:	1
Total Assessment Amount:	0
Initial Assessed Amount:	0
Liability $ Amount:	0
Project $ Amount:	0
Liability $ Paid:	0
Project $ Completed:	0
Total $ Paid/Completed Amount:	0

San Bern. Co. Permit:

Name:	MILK MAID DAIRY RANCH
Address:	10869 EUCALYPTUS AVE
City,State,Zip:	ONTARIO, CA 91761
Region:	SAN BERNARDINO
Facility ID:	FA0000570
Owner:	SCI ONTARIO VENTURES LLC
Permit Number:	PT0008765
Permit Category:	SPECIAL HANDLER
Facility Status:	INACTIVE
Expiration Date:	04/30/1997

Name:	MILK MAID DAIRY RANCH
Address:	10869 EUCALYPTUS AVE
City,State,Zip:	ONTARIO, CA 91761
Region:	SAN BERNARDINO

MILK MAID DAIRY (Continued) **S102006045**

Facility ID: FA0000570
Owner: SCI ONTARIO VENTURES LLC
Permit Number: PT0008766
Permit Category: SPECIAL GENERATOR
Facility Status: INACTIVE
Expiration Date: 04/30/1997

WDS:

Name:	GORZEMAN HEIFER RANCH - EUCALY
Address:	10869 EUCALYPTUS
City:	ONTARIO
Facility ID:	Santa Ana River 365899001
Facility Type:	Agricultural - Facility that treats and/or disposes of the wastes associated with confined and concentrated animal feeding, confined animal feeding, confined animal holding, confined and concentrated aquatic animal production facilities, and aquaculture. the treatment and/or disposal of agricultural return water is included in this category.
Facility Status:	Active - Any facility with a continuous or seasonal discharge that is under Waste Discharge Requirements.
NPDES Number:	CAG018001 The 1st 2 characters designate the state. The remaining 7 are assigned by the Regional Board
Subregion:	8
Facility Telephone:	9099476295
Facility Contact:	GLENN GORZEMAN
Agency Name:	GORZEMAN GLENN
Agency Address:	13948 WALKER AVENUE
Agency City,St,Zip:	CHINO 91710
Agency Contact:	GLENN GORZEMAN
Agency Telephone:	9099476295
Agency Type:	Private
SIC Code:	241
SIC Code 2:	Not reported
Primary Waste Type:	Designated/Influent or Solid Wastes that pose a significant threat to water quality because of their high concentrations (E.G., BOD, Hardness, TRF, Chloride). 'Manageable' hazardous wastes (E.G., inorganic salts and heavy metals) are included in this category.
Primary Waste:	STORMS
Waste Type2:	D
Waste2:	Stormwater Runoff
Primary Waste Type:	Designated/Influent or Solid Wastes that pose a significant threat to water quality because of their high concentrations (E.G., BOD, Hardness, TRF, Chloride). 'Manageable' hazardous wastes (E.G., inorganic salts and heavy metals) are included in this category.
Secondary Waste:	Solid Wastes
Secondary Waste Type:	Designated/Influent or Solid Wastes that pose a significant threat to water quality because of their high concentrations (E.G., BOD, Hardness, TRF, Chloride). 'Manageable' hazardous wastes (E.G., inorganic salts and heavy metals) are included in this category.
Design Flow:	0
Baseline Flow:	0
Reclamation:	No reclamation requirements associated with this facility.
POTW:	The facility is not a POTW.
Treat To Water:	Moderate Threat to Water Quality. A violation could have a major adverse impact on receiving biota, can cause aesthetic impairment to a significant human population, or render unusable a potential domestic or municipal water supply. Awsthetic impairment would include nuisance

MILK MAID DAIRY (Continued) **S102006045**

from a waste treatment facility.
Complexity: Category C - Facilities having no waste treatment systems, such as cooling water dischargers or thosewho must comply through best management practices, facilities with passive waste treatment and disposal systems, such as septic systems with subsurface disposal, or dischargers having waste storage systems with land disposal such as dairy waste ponds.

CIWQS:

Name:	Milk Maid Dairy
Address:	10869 EUCALYPTUS AVE
City,State,Zip:	ONTARIO, CA 91761
Agency:	Case De Vries Case Vythuizen
Agency Address:	10869 Eucalyptus Avenue, Ontario, CA 91761
Place/Project Type:	Animal Feeding Facility
SIC/NAICS:	Not reported
Region:	8
Program:	ANIWSTCOWS, ANIWSTOTH
Regulatory Measure Status:	Historical
Regulatory Measure Type:	WDR
Order Number:	72-072
WDID:	8 365420001
NPDES Number:	Not reported
Adoption Date:	10/06/1972
Effective Date:	10/06/1972
Termination Date:	Not reported
Expiration/Review Date:	10/03/1987
Design Flow:	0.0001
Major/Minor:	Not reported
Complexity:	C
TTWQ:	2
Enforcement Actions within 5 years:	0
Violations within 5 years:	0
Latitude:	Not reported
Longitude:	Not reported

Name:	Milk Maid Dairy
Address:	10869 EUCALYPTUS AVE
City,State,Zip:	ONTARIO, CA 91761
Agency:	Case De Vries Case Vythuizen
Agency Address:	10869 E Eucalyptus Ave, Ontario, CA 91761
Place/Project Type:	Industrial - Fluid Milk
SIC/NAICS:	2026
Region:	8
Program:	INDSTW
Regulatory Measure Status:	Terminated
Regulatory Measure Type:	Storm water industrial
Order Number:	2014-0057-DWQ
WDID:	8 36I000086
NPDES Number:	CAS000001
Adoption Date:	Not reported
Effective Date:	03/07/1994
Termination Date:	03/14/2000
Expiration/Review Date:	Not reported
Design Flow:	Not reported
Major/Minor:	Not reported
Complexity:	Not reported

MILK MAID DAIRY (Continued) **S102006045**

TTWQ:	Not reported
Enforcement Actions within 5 years:	0
Violations within 5 years:	0
Latitude:	Not reported
Longitude:	Not reported
Name:	Gorzeman Heifer Ranch - Eucaly
Address:	10869 EUCALYPTUS
City,State,Zip:	ONTARIO, CA 91761
Agency:	Gorzeman, Glenn
Agency Address:	13948 Walker Avenue, Ontario, CA 91762
Place/Project Type:	Animal Feeding Facility
SIC/NAICS:	241
Region:	8
Program:	ANIWSTCOWS
Regulatory Measure Status:	Historical
Regulatory Measure Type:	Enrollee
Order Number:	99-011
WDID:	8 365899001
NPDES Number:	CAG018001
Adoption Date:	Not reported
Effective Date:	02/25/2003
Termination Date:	02/07/2006
Expiration/Review Date:	Not reported
Design Flow:	0
Major/Minor:	Not reported
Complexity:	C
TTWQ:	2
Enforcement Actions within 5 years:	0
Violations within 5 years:	0
Latitude:	Not reported
Longitude:	Not reported

4
South
1/8-1/4
0.229 mi.
1207 ft.

WELL II-3 **PFAS** **S127520103**
JURUPA VALLEY, CA **N/A**

Relative:
Lower

Actual:
694 ft.

PFAS:

Name:	WELL II-3
Address:	Not reported
City,State,Zip:	JURUPA VALLEY, CA
Envirostor ID:	Not reported
Program Type:	Not reported
Status:	Not reported
Status Date:	Not reported
Enviroscreen Score:	Not reported
Site Code:	Not reported
Global ID:	W0603310083
Facility Region:	Not reported
Lead Agency:	Not reported
Case worker:	Not reported
Local Agency:	Not reported
Location Case Number:	Not reported
File Location:	Not reported
Potential Contaminants of Concern:	Not reported
Potential Media Affected:	Not reported

WELL II-3 (Continued) **S127520103**

Site History: Not reported

Begin Date: Not reported
RB Case Number: Not reported
source_type: All PFAS Chemicals
Location ID: CA3310083_004_004
Matrix: Liquid
Chemical: 11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid
Qualifier: <
Value: 2
Reporting Limit: 2
Detection Limit: Not reported
Lab Notes: Not reported
Quarterly Running Annual Average: Not reported
Units: NG/L
Date: 10/7/2020
Field Pt Class: PUBW
Site Use: Drinking Water Wells
Site Type: DDW Well
Latitude: 33.987366
Longitude: -117.563031
Geo Tracker URL: Not reported

Name: WELL II-3
Address: Not reported
City,State,Zip: JURUPA VALLEY, CA
Envirostor ID: Not reported
Program Type: Not reported
Status: Not reported
Status Date: Not reported
Enviroscreen Score: Not reported
Site Code: Not reported
Global ID: W0603310083
Facility Region: Not reported
Lead Agency: Not reported
Case worker: Not reported
Local Agency: Not reported
Location Case Number: Not reported
File Location: Not reported
Potential Contaminants of Concern: Not reported
Potential Media Affected: Not reported
Site History: Not reported

Begin Date: Not reported
RB Case Number: Not reported
source_type: All PFAS Chemicals
Location ID: CA3310083_004_004
Matrix: Liquid
Chemical: 11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid
Qualifier: <
Value: 2
Reporting Limit: 2
Detection Limit: Not reported
Lab Notes: Not reported
Quarterly Running Annual Average: Not reported
Units: NG/L
Date: 4/2/2021

WELL II-3 (Continued) **S127520103**

Field Pt Class:	PUBW
Site Use:	Drinking Water Wells
Site Type:	DDW Well
Latitude:	33.987366
Longitude:	-117.563031
Geo Tracker URL:	Not reported

Name:	WELL II-3
Address:	Not reported
City,State,Zip:	JURUPA VALLEY, CA
Envirostor ID:	Not reported
Program Type:	Not reported
Status:	Not reported
Status Date:	Not reported
Enviroscreen Score:	Not reported
Site Code:	Not reported
Global ID:	W0603310083
Facility Region:	Not reported
Lead Agency:	Not reported
Case worker:	Not reported
Local Agency:	Not reported
Location Case Number:	Not reported
File Location:	Not reported
Potential Contaminants of Concern:	Not reported
Potential Media Affected:	Not reported
Site History:	Not reported

Begin Date:	Not reported
RB Case Number:	Not reported
source_type:	All PFAS Chemicals
Location ID:	CA3310083_004_004
Matrix:	Liquid
Chemical:	11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid
Qualifier:	<
Value:	2
Reporting Limit:	2
Detection Limit:	Not reported
Lab Notes:	Not reported
Quarterly Running Annual Average:	Not reported
Units:	NG/L
Date:	4/29/2022
Field Pt Class:	PUBW
Site Use:	Drinking Water Wells
Site Type:	DDW Well
Latitude:	33.987366
Longitude:	-117.563031
Geo Tracker URL:	Not reported

Name:	WELL II-3
Address:	Not reported
City,State,Zip:	JURUPA VALLEY, CA
Envirostor ID:	Not reported
Program Type:	Not reported
Status:	Not reported
Status Date:	Not reported
Enviroscreen Score:	Not reported
Site Code:	Not reported

WELL II-3 (Continued) **S127520103**

Global ID:	W0603310083
Facility Region:	Not reported
Lead Agency:	Not reported
Case worker:	Not reported
Local Agency:	Not reported
Location Case Number:	Not reported
File Location:	Not reported
Potential Contaminants of Concern:	Not reported
Potential Media Affected:	Not reported
Site History:	Not reported
Begin Date:	Not reported
RB Case Number:	Not reported
source_type:	All PFAS Chemicals
Location ID:	CA3310083_004_004
Matrix:	Liquid
Chemical:	2,3,3,3-tetrafluoro-2-(1,1,2,2,3,3,3-heptafluoropropoxy) propanoic acid
Qualifier:	<
Value:	1.8
Reporting Limit:	1.8
Detection Limit:	Not reported
Lab Notes:	Not reported
Quarterly Running Annual Average:	Not reported
Units:	NG/L
Date:	4/3/2024
Field Pt Class:	PUBW
Site Use:	Drinking Water Wells
Site Type:	DDW Well
Latitude:	33.987366
Longitude:	-117.563031
Geo Tracker URL: Not reported	
Name:	WELL II-3
Address:	Not reported
City,State,Zip:	JURUPA VALLEY, CA
Envirostor ID:	Not reported
Program Type:	Not reported
Status:	Not reported
Status Date:	Not reported
Enviroscreen Score:	Not reported
Site Code:	Not reported
Global ID:	W0603310083
Facility Region:	Not reported
Lead Agency:	Not reported
Case worker:	Not reported
Local Agency:	Not reported
Location Case Number:	Not reported
File Location:	Not reported
Potential Contaminants of Concern:	Not reported
Potential Media Affected:	Not reported
Site History:	Not reported
Begin Date:	Not reported
RB Case Number:	Not reported
source_type:	All PFAS Chemicals
Location ID:	CA3310083_004_004

WELL II-3 (Continued) **S127520103**

Matrix:	Liquid
Chemical:	2,3,3,3-tetrafluoro-2-(1,1,2,2,3,3,3-heptafluoropropoxy) propanoic acid
Qualifier:	<
Value:	2
Reporting Limit:	2
Detection Limit:	Not reported
Lab Notes:	Not reported
Quarterly Running Annual Average:	Not reported
Units:	NG/L
Date:	1/19/2023
Field Pt Class:	PUBW
Site Use:	Drinking Water Wells
Site Type:	DDW Well
Latitude:	33.987366
Longitude:	-117.563031
Geo Tracker URL:	Not reported

Name:	WELL II-3
Address:	Not reported
City,State,Zip:	JURUPA VALLEY, CA
Envirostor ID:	Not reported
Program Type:	Not reported
Status:	Not reported
Status Date:	Not reported
Enviroscreen Score:	Not reported
Site Code:	Not reported
Global ID:	W0603310083
Facility Region:	Not reported
Lead Agency:	Not reported
Case worker:	Not reported
Local Agency:	Not reported
Location Case Number:	Not reported
File Location:	Not reported
Potential Contaminants of Concern:	Not reported
Potential Media Affected:	Not reported
Site History:	Not reported

Begin Date:	Not reported
RB Case Number:	Not reported
source_type:	All PFAS Chemicals
Location ID:	CA3310083_004_004
Matrix:	Liquid
Chemical:	2,3,3,3-tetrafluoro-2-(1,1,2,2,3,3,3-heptafluoropropoxy) propanoic acid
Qualifier:	<
Value:	2
Reporting Limit:	2
Detection Limit:	Not reported
Lab Notes:	Not reported
Quarterly Running Annual Average:	Not reported
Units:	NG/L
Date:	1/7/2021
Field Pt Class:	PUBW
Site Use:	Drinking Water Wells
Site Type:	DDW Well
Latitude:	33.987366

WELL II-3 (Continued) **S127520103**

Longitude:	-117.563031
Geo Tracker URL:	Not reported
Name:	WELL II-3
Address:	Not reported
City,State,Zip:	JURUPA VALLEY, CA
Envirostor ID:	Not reported
Program Type:	Not reported
Status:	Not reported
Status Date:	Not reported
Enviroscreen Score:	Not reported
Site Code:	Not reported
Global ID:	W0603310083
Facility Region:	Not reported
Lead Agency:	Not reported
Case worker:	Not reported
Local Agency:	Not reported
Location Case Number:	Not reported
File Location:	Not reported
Potential Contaminants of Concern:	Not reported
Potential Media Affected:	Not reported
Site History:	Not reported
Begin Date:	Not reported
RB Case Number:	Not reported
source_type:	All PFAS Chemicals
Location ID:	CA3310083_004_004
Matrix:	Liquid
Chemical:	2,3,3,3-tetrafluoro-2-(1,1,2,2,3,3,3-heptafluoropropoxy) propanoic acid
Qualifier:	<
Value:	2
Reporting Limit:	2
Detection Limit:	Not reported
Lab Notes:	Not reported
Quarterly Running Annual Average:	Not reported
Units:	NG/L
Date:	4/29/2022
Field Pt Class:	PUBW
Site Use:	Drinking Water Wells
Site Type:	DDW Well
Latitude:	33.987366
Longitude:	-117.563031
Geo Tracker URL:	Not reported
Name:	WELL II-3
Address:	Not reported
City,State,Zip:	JURUPA VALLEY, CA
Envirostor ID:	Not reported
Program Type:	Not reported
Status:	Not reported
Status Date:	Not reported
Enviroscreen Score:	Not reported
Site Code:	Not reported
Global ID:	W0603310083
Facility Region:	Not reported
Lead Agency:	Not reported

WELL II-3 (Continued) **S127520103**

Case worker:	Not reported
Local Agency:	Not reported
Location Case Number:	Not reported
File Location:	Not reported
Potential Contaminants of Concern:	Not reported
Potential Media Affected:	Not reported
Site History:	Not reported
Begin Date:	Not reported
RB Case Number:	Not reported
source_type:	All PFAS Chemicals
Location ID:	CA3310083_004_004
Matrix:	Liquid
Chemical:	4,8-Dioxa-3H-perfluorononanoic acid
Qualifier:	<
Value:	0.6
Reporting Limit:	0.6
Detection Limit:	Not reported
Lab Notes:	Not reported
Quarterly Running Annual Average:	Not reported
Units:	NG/L
Date:	7/22/2022
Field Pt Class:	PUBW
Site Use:	Drinking Water Wells
Site Type:	DDW Well
Latitude:	33.987366
Longitude:	-117.563031
Geo Tracker URL: Not reported	
Name:	WELL II-3
Address:	Not reported
City,State,Zip:	JURUPA VALLEY, CA
Envirostor ID:	Not reported
Program Type:	Not reported
Status:	Not reported
Status Date:	Not reported
Enviroscreen Score:	Not reported
Site Code:	Not reported
Global ID:	W0603310083
Facility Region:	Not reported
Lead Agency:	Not reported
Case worker:	Not reported
Local Agency:	Not reported
Location Case Number:	Not reported
File Location:	Not reported
Potential Contaminants of Concern:	Not reported
Potential Media Affected:	Not reported
Site History:	Not reported
Begin Date:	Not reported
RB Case Number:	Not reported
source_type:	All PFAS Chemicals
Location ID:	CA3310083_004_004
Matrix:	Liquid
Chemical:	4,8-Dioxa-3H-perfluorononanoic acid
Qualifier:	<
Value:	1.8

WELL II-3 (Continued) **S127520103**

Reporting Limit:	1.8
Detection Limit:	Not reported
Lab Notes:	Not reported
Quarterly Running Annual Average:	Not reported
Units:	NG/L
Date:	4/3/2024
Field Pt Class:	PUBW
Site Use:	Drinking Water Wells
Site Type:	DDW Well
Latitude:	33.987366
Longitude:	-117.563031
Geo Tracker URL:	Not reported

Name:	WELL II-3
Address:	Not reported
City,State,Zip:	JURUPA VALLEY, CA
Envirostor ID:	Not reported
Program Type:	Not reported
Status:	Not reported
Status Date:	Not reported
Enviroscreen Score:	Not reported
Site Code:	Not reported
Global ID:	W0603310083
Facility Region:	Not reported
Lead Agency:	Not reported
Case worker:	Not reported
Local Agency:	Not reported
Location Case Number:	Not reported
File Location:	Not reported
Potential Contaminants of Concern:	Not reported
Potential Media Affected:	Not reported
Site History:	Not reported

Begin Date:	Not reported
RB Case Number:	Not reported
source_type:	All PFAS Chemicals
Location ID:	CA3310083_004_004
Matrix:	Liquid
Chemical:	4,8-Dioxa-3H-perfluorononanoic acid
Qualifier:	<
Value:	2
Reporting Limit:	2
Detection Limit:	Not reported
Lab Notes:	Not reported
Quarterly Running Annual Average:	Not reported
Units:	NG/L
Date:	1/19/2023
Field Pt Class:	PUBW
Site Use:	Drinking Water Wells
Site Type:	DDW Well
Latitude:	33.987366
Longitude:	-117.563031
Geo Tracker URL:	Not reported

Name:	WELL II-3
Address:	Not reported
City,State,Zip:	JURUPA VALLEY, CA

WELL II-3 (Continued) **S127520103**

Envirostor ID:	Not reported
Program Type:	Not reported
Status:	Not reported
Status Date:	Not reported
Enviroscreen Score:	Not reported
Site Code:	Not reported
Global ID:	W0603310083
Facility Region:	Not reported
Lead Agency:	Not reported
Case worker:	Not reported
Local Agency:	Not reported
Location Case Number:	Not reported
File Location:	Not reported
Potential Contaminants of Concern:	Not reported
Potential Media Affected:	Not reported
Site History:	Not reported
Begin Date:	Not reported
RB Case Number:	Not reported
source_type:	All PFAS Chemicals
Location ID:	CA3310083_004_004
Matrix:	Liquid
Chemical:	4,8-Dioxa-3H-perfluorononanoic acid
Qualifier:	<
Value:	2
Reporting Limit:	2
Detection Limit:	Not reported
Lab Notes:	Not reported
Quarterly Running Annual Average:	Not reported
Units:	NG/L
Date:	1/7/2021
Field Pt Class:	PUBW
Site Use:	Drinking Water Wells
Site Type:	DDW Well
Latitude:	33.987366
Longitude:	-117.563031
Geo Tracker URL:	Not reported

Click this hyperlink while viewing on your computer to access
345 additional CA PFAS: record(s) in the EDR Site Report.

5
SE
1/4-1/2
0.286 mi.
1512 ft.

PROPOSED K-8 SCHOOL NO. 2
5240 AND 5380 HAMNER AVENUE
MIRA LOMA, CA 91752

ENVIROSTOR SCH **S108054398**
N/A

Relative:
Lower

Actual:
697 ft.

ENVIROSTOR:

Name:	PROPOSED K-8 SCHOOL NO. 2
Address:	5240 AND 5380 HAMNER AVENUE
City,State,Zip:	MIRA LOMA, CA 91752
Facility ID:	60000409
Status:	No Further Action
Status Date:	02/23/2007
Site Code:	404718
Site Type:	School Investigation
Site Type Detailed:	School
Acres:	16

PROPOSED K-8 SCHOOL NO. 2 (Continued) **S108054398**

NPL: NO
Regulatory Agencies: SMBRP
Lead Agency: SMBRP
Program Manager: Not reported
Supervisor: Shahir Haddad
Division Branch: Southern California Schools & Brownfields Outreach
Assembly: 58
Senate: 31
Special Program: Not reported
Restricted Use: NO
Site Mgmt Req: NONE SPECIFIED
Funding: School District
Latitude: 33.99648
Longitude: -117.5583
APN: 160-020-006, 160-020-007
Past Use: AGRICULTURAL - ROW CROPS
Potential COC: Arsenic Chlordane DDD DDE DDT Lead Methane
Confirmed COC: 30001-NO 30004-NO 30006-NO 30007-NO 30008-NO 30013-NO 30015-NO
Potential Description: SOIL
Alias Name: 160-020-006
Alias Type: APN
Alias Name: 160-020-007
Alias Type: APN
Alias Name: 404718
Alias Type: Project Code (Site Code)
Alias Name: 60000409
Alias Type: Envirostor ID Number

Completed Info:
Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Cost Recovery Closeout Memo
Completed Date: 02/23/2007
Comments: CRU memo for the site was completed.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Site Inspections/Visit (Non LUR)
Completed Date: 10/18/2006
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Environmental Oversight Agreement
Completed Date: 09/26/2006
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Site Inspections/Visit (Non LUR)
Completed Date: 10/25/2006
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Site Inspections/Visit (Non LUR)
Completed Date: 10/27/2006
Comments: Not reported

PROPOSED K-8 SCHOOL NO. 2 (Continued) **S108054398**

Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Site Inspections/Visit (Non LUR)
Completed Date:	11/15/2006
Comments:	Not reported

Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Preliminary Endangerment Assessment Workplan
Completed Date:	11/02/2006
Comments:	Conditional approval letter for the investigation was sent out to the District and their consultant.

Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Preliminary Endangerment Assessment Report
Completed Date:	02/23/2007
Comments:	PEA Report for the site was approved and no further action determination was rendered.

Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Other Report
Completed Date:	02/06/2007
Comments:	Not reported

Future Area Name:	Not reported
Future Sub Area Name:	Not reported
Future Document Type:	Not reported
Future Due Date:	Not reported
Schedule Area Name:	Not reported
Schedule Sub Area Name:	Not reported
Schedule Document Type:	Not reported
Schedule Due Date:	Not reported
Schedule Revised Date:	Not reported

SCH:

Name:	PROPOSED K-8 SCHOOL NO. 2
Address:	5240 AND 5380 HAMNER AVENUE
City,State,Zip:	MIRA LOMA, CA 91752
Facility ID:	60000409
Site Type:	School Investigation
Site Type Detail:	School
Site Mgmt. Req.:	NONE SPECIFIED
Acres:	16
National Priorities List:	NO
Cleanup Oversight Agencies:	SMBRP
Lead Agency:	SMBRP
Lead Agency Description:	DTSC - Site Cleanup Program
Project Manager:	Not reported
Supervisor:	Shahir Haddad
Division Branch:	Southern California Schools & Brownfields Outreach
Site Code:	404718
Assembly:	58
Senate:	31
Special Program Status:	Not reported

PROPOSED K-8 SCHOOL NO. 2 (Continued) **S108054398**

Status: No Further Action
Status Date: 02/23/2007
Restricted Use: NO
Funding: School District
Latitude: 33.99648
Longitude: -117.5583
APN: 160-020-006, 160-020-007
Past Use: AGRICULTURAL - ROW CROPS
Potential COC: Arsenic, Chlordane, DDD, DDE, DDT, Lead, Methane
Confirmed COC: 30001-NO, 30004-NO, 30006-NO, 30007-NO, 30008-NO, 30013-NO, 30015-NO
Potential Description: SOIL
Alias Name: 160-020-006
Alias Type: APN
Alias Name: 160-020-007
Alias Type: APN
Alias Name: 404718
Alias Type: Project Code (Site Code)
Alias Name: 60000409
Alias Type: Envirostor ID Number

Completed Info:

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Cost Recovery Closeout Memo
Completed Date: 02/23/2007
Comments: CRU memo for the site was completed.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Site Inspections/Visit (Non LUR)
Completed Date: 10/18/2006
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Environmental Oversight Agreement
Completed Date: 09/26/2006
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Site Inspections/Visit (Non LUR)
Completed Date: 10/25/2006
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Site Inspections/Visit (Non LUR)
Completed Date: 10/27/2006
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Site Inspections/Visit (Non LUR)
Completed Date: 11/15/2006
Comments: Not reported

Completed Area Name: PROJECT WIDE

PROPOSED K-8 SCHOOL NO. 2 (Continued) **S108054398**

Completed Sub Area Name:	Not reported
Completed Document Type:	Preliminary Endangerment Assessment Workplan
Completed Date:	11/02/2006
Comments:	Conditional approval letter for the investigation was sent out to the District and their consultant.
Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Preliminary Endangerment Assessment Report
Completed Date:	02/23/2007
Comments:	PEA Report for the site was approved and no further action determination was rendered.
Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Other Report
Completed Date:	02/06/2007
Comments:	Not reported
Future Area Name:	Not reported
Future Sub Area Name:	Not reported
Future Document Type:	Not reported
Future Due Date:	Not reported
Schedule Area Name:	Not reported
Schedule Sub Area Name:	Not reported
Schedule Document Type:	Not reported
Schedule Due Date:	Not reported
Schedule Revised Date:	Not reported

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6 **CHAFFEY HIGH SCHOOL NO. 10** **ENVIROSTOR** **S106665372**
WNW **EDISON AVENUE / HAVEN AVENUE** **SCH** **N/A**
1/2-1 **ONTARIO, CA 91710**
0.737 mi.
3893 ft.

Relative: **Higher**

Actual: **724 ft.**

ENVIROSTOR:

Name:	CHAFFEY HIGH SCHOOL NO. 10
Address:	EDISON AVENUE / HAVEN AVENUE
City,State,Zip:	ONTARIO, CA 91710
Facility ID:	36000007
Status:	No Further Action
Status Date:	06/06/2007
Site Code:	404573
Site Type:	School Investigation
Site Type Detailed:	School
Acres:	58
NPL:	NO
Regulatory Agencies:	SMBRP
Lead Agency:	SMBRP
Program Manager:	Not reported
Supervisor:	Shahir Haddad
Division Branch:	Southern California Schools & Brownfields Outreach
Assembly:	53
Senate:	22
Special Program:	Voluntary Agreement - Standard Voluntary Agreement
Restricted Use:	NO
Site Mgmt Req:	NONE SPECIFIED
Funding:	School District

CHAFFEY HIGH SCHOOL NO. 10 (Continued) **S106665372**

Latitude: 33.9957
Longitude: -117.5867
APN: NONE SPECIFIED
Past Use: * UNKNOWN
Potential COC: Chlordane DDD DDE DDT Toxaphene TPH-diesel Dieldrin Heptachlor
Confirmed COC: Toxaphene TPH-diesel Dieldrin Heptachlor Chlordane DDD DDE DDT
Potential Description: SOIL
Alias Name: CHAFFEY JOINT UNION SCHOOL DISTRICT
Alias Type: Alternate Name
Alias Name: CHAFFEY JUSD-PROPOSED CHAFFEY HS 10
Alias Type: Alternate Name
Alias Name: 404573
Alias Type: Project Code (Site Code)
Alias Name: 36000007
Alias Type: Envirostor ID Number

Completed Info:
Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Environmental Oversight Agreement
Completed Date: 10/13/2004
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Site Inspections/Visit (Non LUR)
Completed Date: 09/08/2005
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Cost Recovery Closeout Memo
Completed Date: 07/25/2006
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Preliminary Endangerment Assessment Report
Completed Date: 07/03/2006
Comments: DTSC issued a No Further Action determination based on a Preliminary Environmental Assessment Report.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Preliminary Endangerment Assessment Report
Completed Date: 06/06/2007
Comments: DTSC received notice on 5/25/2007, that site boundaries had changed. Based on a site visit on 5/23/2007, and information provided, DTSC issued a No Further Action determination for the additional site areas.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Preliminary Endangerment Assessment Workplan
Completed Date: 01/18/2006
Comments: Field Work Scheduled for 1/12/06 and 1/13/06

Completed Area Name: PROJECT WIDE

CHAFFEY HIGH SCHOOL NO. 10 (Continued) **S106665372**

Completed Sub Area Name:	Not reported
Completed Document Type:	Cost Recovery Closeout Memo
Completed Date:	08/16/2012
Comments:	Closeout memo for Revised PEA Determination re: change in Site boundaries; NFA
Future Area Name:	Not reported
Future Sub Area Name:	Not reported
Future Document Type:	Not reported
Future Due Date:	Not reported
Schedule Area Name:	Not reported
Schedule Sub Area Name:	Not reported
Schedule Document Type:	Not reported
Schedule Due Date:	Not reported
Schedule Revised Date:	Not reported

SCH:

Name:	CHAFFEY HIGH SCHOOL NO. 10
Address:	EDISON AVENUE / HAVEN AVENUE
City,State,Zip:	ONTARIO, CA 91710
Facility ID:	36000007
Site Type:	School Investigation
Site Type Detail:	School
Site Mgmt. Req.:	NONE SPECIFIED
Acres:	58
National Priorities List:	NO
Cleanup Oversight Agencies:	SMBRP
Lead Agency:	SMBRP
Lead Agency Description:	DTSC - Site Cleanup Program
Project Manager:	Not reported
Supervisor:	Shahir Haddad
Division Branch:	Southern California Schools & Brownfields Outreach
Site Code:	404573
Assembly:	53
Senate:	22
Special Program Status:	Voluntary Agreement - Standard Voluntary Agreement
Status:	No Further Action
Status Date:	06/06/2007
Restricted Use:	NO
Funding:	School District
Latitude:	33.9957
Longitude:	-117.5867
APN:	NONE SPECIFIED
Past Use:	* UNKNOWN
Potential COC:	Chlordane, DDD, DDE, DDT, Toxaphene, TPH-diesel, Dieldrin, Heptachlor Not reported
Confirmed COC:	Toxaphene, TPH-diesel, Dieldrin, Heptachlor, Chlordane, DDD, DDE, DDT Not reported
Potential Description:	SOIL
Alias Name:	CHAFFEY JOINT UNION SCHOOL DISTRICT
Alias Type:	Alternate Name
Alias Name:	CHAFFEY JUSD-PROPOSED CHAFFEY HS 10
Alias Type:	Alternate Name
Alias Name:	404573
Alias Type:	Project Code (Site Code)
Alias Name:	36000007

CHAFFEY HIGH SCHOOL NO. 10 (Continued) **S106665372**

Alias Type: Envirostor ID Number

Completed Info:

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Environmental Oversight Agreement
Completed Date: 10/13/2004
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Site Inspections/Visit (Non LUR)
Completed Date: 09/08/2005
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Cost Recovery Closeout Memo
Completed Date: 07/25/2006
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Preliminary Endangerment Assessment Report
Completed Date: 07/03/2006
Comments: DTSC issued a No Further Action determination based on a Preliminary Environmental Assessment Report.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Preliminary Endangerment Assessment Report
Completed Date: 06/06/2007
Comments: DTSC received notice on 5/25/2007, that site boundaries had changed. Based on a site visit on 5/23/2007, and information provided, DTSC issued a No Further Action determination for the additional site areas.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Preliminary Endangerment Assessment Workplan
Completed Date: 01/18/2006
Comments: Field Work Scheduled for 1/12/06 and 1/13/06

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Cost Recovery Closeout Memo
Completed Date: 08/16/2012
Comments: Closeout memo for Revised PEA Determination re: change in Site boundaries; NFA

Future Area Name: Not reported
Future Sub Area Name: Not reported
Future Document Type: Not reported
Future Due Date: Not reported
Schedule Area Name: Not reported
Schedule Sub Area Name: Not reported
Schedule Document Type: Not reported
Schedule Due Date: Not reported

CHAFFEY HIGH SCHOOL NO. 10 (Continued) **S106665372**

Schedule Revised Date: Not reported

7
SE
1/2-1
0.808 mi.
4268 ft.

SWAN LAKE TEXACO
5800 HAMMER AVENUE
MIRA LOMA, CA 91752

Notify 65 **S100178727**
N/A

Relative:
Lower

Actual:
677 ft.

NOTIFY 65:

Name:	SWAN LAKE TEXACO
Address:	5800 HAMMER AVENUE
City,State,Zip:	MIRA LOMA, CA 91752-1558
Date Reported:	Not reported
Staff Initials:	Not reported
Board File Number:	Not reported
Facility Type:	Not reported
Discharge Date:	Not reported
Issue Date:	Not reported
Incident Description:	Not reported
Global ID:	Not reported
Status:	Not reported

Count: 3 records. ORPHAN SUMMARY

City	EDR ID	Site Name	Site Address	Zip	Database(s)
ONTARIO	1009508586	SO CAL GAS/ONTARIO MGP	CORNER OF CAMPUS, MARTLAND, MO	91761	EDR MGP
ONTARIO	S101481941	MILLIKEN SANITARY LANDFILL	INTERSECTION: MILLIKEN AVE & M	91761	ENVIROSTOR
ONTARIO	2024013994	NOT PROVIDED	NOT PROVIDED	91761	HMIRS

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

To maintain currency of the following federal and state databases, EDR contacts the appropriate governmental agency on a monthly or quarterly basis, as required.

Number of Days to Update: Provides confirmation that EDR is reporting records that have been updated within 90 days from the date the government agency made the information available to the public.

STANDARD ENVIRONMENTAL RECORDS

Lists of Federal NPL (Superfund) sites

NPL: National Priority List

National Priorities List (Superfund). The NPL is a subset of CERCLIS and identifies over 1,200 sites for priority cleanup under the Superfund Program. NPL sites may encompass relatively large areas. As such, EDR provides polygon coverage for over 1,000 NPL site boundaries produced by EPA's Environmental Photographic Interpretation Center (EPIC) and regional EPA offices.

Date of Government Version: 12/19/2024
Date Data Arrived at EDR: 01/02/2025
Date Made Active in Reports: 01/21/2025
Number of Days to Update: 19

Source: EPA
Telephone: N/A
Last EDR Contact: 02/03/2025
Next Scheduled EDR Contact: 04/07/2025
Data Release Frequency: Quarterly

NPL Site Boundaries

Sources:

EPA's Environmental Photographic Interpretation Center (EPIC)
Telephone: 202-564-7333

EPA Region 1
Telephone 617-918-1143

EPA Region 3
Telephone 215-814-5418

EPA Region 4
Telephone 404-562-8033

EPA Region 5
Telephone 312-886-6686

EPA Region 10
Telephone 206-553-8665

EPA Region 6
Telephone: 214-655-6659

EPA Region 7
Telephone: 913-551-7247

EPA Region 8
Telephone: 303-312-6774

EPA Region 9
Telephone: 415-947-4246

Proposed NPL: Proposed National Priority List Sites

A site that has been proposed for listing on the National Priorities List through the issuance of a proposed rule in the Federal Register. EPA then accepts public comments on the site, responds to the comments, and places on the NPL those sites that continue to meet the requirements for listing.

Date of Government Version: 12/19/2024
Date Data Arrived at EDR: 01/02/2025
Date Made Active in Reports: 01/21/2025
Number of Days to Update: 19

Source: EPA
Telephone: N/A
Last EDR Contact: 02/03/2025
Next Scheduled EDR Contact: 04/07/2025
Data Release Frequency: Quarterly

NPL LIENS: Federal Superfund Liens

Federal Superfund Liens. Under the authority granted the USEPA by CERCLA of 1980, the USEPA has the authority to file liens against real property in order to recover remedial action expenditures or when the property owner received notification of potential liability. USEPA compiles a listing of filed notices of Superfund Liens.

Date of Government Version: 10/15/1991
Date Data Arrived at EDR: 02/02/1994
Date Made Active in Reports: 03/30/1994
Number of Days to Update: 56

Source: EPA
Telephone: 202-564-4267
Last EDR Contact: 08/15/2011
Next Scheduled EDR Contact: 11/28/2011
Data Release Frequency: No Update Planned

Lists of Federal Delisted NPL sites

Delisted NPL: National Priority List Deletions

The National Oil and Hazardous Substances Pollution Contingency Plan (NCP) establishes the criteria that the EPA uses to delete sites from the NPL. In accordance with 40 CFR 300.425.(e), sites may be deleted from the NPL where no further response is appropriate.

Date of Government Version: 12/19/2024
Date Data Arrived at EDR: 01/02/2025
Date Made Active in Reports: 01/21/2025
Number of Days to Update: 19

Source: EPA
Telephone: N/A
Last EDR Contact: 02/04/2025
Next Scheduled EDR Contact: 04/07/2025
Data Release Frequency: Quarterly

Lists of Federal sites subject to CERCLA removals and CERCLA orders

FEDERAL FACILITY: Federal Facility Site Information listing

A listing of National Priority List (NPL) and Base Realignment and Closure (BRAC) sites found in the Comprehensive Environmental Response, Compensation and Liability Information System (CERCLIS) Database where EPA Federal Facilities Restoration and Reuse Office is involved in cleanup activities.

Date of Government Version: 11/20/2024
Date Data Arrived at EDR: 12/18/2024
Date Made Active in Reports: 12/20/2024
Number of Days to Update: 2

Source: Environmental Protection Agency
Telephone: 703-603-8704
Last EDR Contact: 12/18/2024
Next Scheduled EDR Contact: 04/07/2025
Data Release Frequency: Varies

SEMS: Superfund Enterprise Management System

SEMS (Superfund Enterprise Management System) tracks hazardous waste sites, potentially hazardous waste sites, and remedial activities performed in support of EPA's Superfund Program across the United States. The list was formerly know as CERCLIS, renamed to SEMS by the EPA in 2015. The list contains data on potentially hazardous waste sites that have been reported to the USEPA by states, municipalities, private companies and private persons, pursuant to Section 103 of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA). This dataset also contains sites which are either proposed to or on the National Priorities List (NPL) and the sites which are in the screening and assessment phase for possible inclusion on the NPL.

Date of Government Version: 12/19/2024
Date Data Arrived at EDR: 01/02/2025
Date Made Active in Reports: 01/21/2025
Number of Days to Update: 19

Source: EPA
Telephone: 800-424-9346
Last EDR Contact: 02/03/2025
Next Scheduled EDR Contact: 04/21/2025
Data Release Frequency: Quarterly

Lists of Federal CERCLA sites with NFRAP

SEMS-ARCHIVE: Superfund Enterprise Management System Archive

SEMS-ARCHIVE (Superfund Enterprise Management System Archive) tracks sites that have no further interest under the Federal Superfund Program based on available information. The list was formerly known as the CERCLIS-NFRAP, renamed to SEMS ARCHIVE by the EPA in 2015. EPA may perform a minimal level of assessment work at a site while it is archived if site conditions change and/or new information becomes available. Archived sites have been removed and archived from the inventory of SEMS sites. Archived status indicates that, to the best of EPA's knowledge, assessment at a site has been completed and that EPA has determined no further steps will be taken to list the site on the National Priorities List (NPL), unless information indicates this decision was not appropriate or other considerations require a recommendation for listing at a later time. The decision does not necessarily mean that there is no hazard associated with a given site; it only means that. based upon available information, the location is not judged to be potential NPL site.

Date of Government Version: 12/19/2024
Date Data Arrived at EDR: 01/02/2025
Date Made Active in Reports: 01/21/2025
Number of Days to Update: 19

Source: EPA
Telephone: 800-424-9346
Last EDR Contact: 02/03/2025
Next Scheduled EDR Contact: 04/21/2025
Data Release Frequency: Quarterly

Lists of Federal RCRA facilities undergoing Corrective Action

CORRACTS: Corrective Action Report

CORRACTS identifies hazardous waste handlers with RCRA corrective action activity.

Date of Government Version: 09/16/2024
Date Data Arrived at EDR: 09/17/2024
Date Made Active in Reports: 12/06/2024
Number of Days to Update: 80

Source: EPA
Telephone: 800-424-9346
Last EDR Contact: 02/19/2025
Next Scheduled EDR Contact: 03/31/2025
Data Release Frequency: Quarterly

Lists of Federal RCRA TSD facilities

RCRA-TSDF: RCRA - Treatment, Storage and Disposal

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Transporters are individuals or entities that move hazardous waste from the generator offsite to a facility that can recycle, treat, store, or dispose of the waste. TSDFs treat, store, or dispose of the waste.

Date of Government Version: 09/16/2024
Date Data Arrived at EDR: 09/17/2024
Date Made Active in Reports: 12/06/2024
Number of Days to Update: 80

Source: Environmental Protection Agency
Telephone: (415) 495-8895
Last EDR Contact: 02/19/2025
Next Scheduled EDR Contact: 03/31/2025
Data Release Frequency: Quarterly

Lists of Federal RCRA generators

RCRA-LQG: RCRA - Large Quantity Generators

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Large quantity generators (LQGs) generate over 1,000 kilograms (kg) of hazardous waste, or over 1 kg of acutely hazardous waste per month.

Date of Government Version: 09/16/2024
Date Data Arrived at EDR: 09/17/2024
Date Made Active in Reports: 12/06/2024
Number of Days to Update: 80

Source: Environmental Protection Agency
Telephone: (415) 495-8895
Last EDR Contact: 02/19/2025
Next Scheduled EDR Contact: 03/31/2025
Data Release Frequency: Quarterly

RCRA-SQG: RCRA - Small Quantity Generators

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Small quantity generators (SQGs) generate between 100 kg and 1,000 kg of hazardous waste per month.

Date of Government Version: 09/16/2024
Date Data Arrived at EDR: 09/17/2024
Date Made Active in Reports: 12/06/2024
Number of Days to Update: 80

Source: Environmental Protection Agency
Telephone: (415) 495-8895
Last EDR Contact: 02/19/2025
Next Scheduled EDR Contact: 03/31/2025
Data Release Frequency: Quarterly

RCRA-VSQG: RCRA - Very Small Quantity Generators (Formerly Conditionally Exempt Small Quantity Generators)

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Very small quantity generators (VSQGs) generate less than 100 kg of hazardous waste, or less than 1 kg of acutely hazardous waste per month.

Date of Government Version: 09/16/2024
Date Data Arrived at EDR: 09/17/2024
Date Made Active in Reports: 12/06/2024
Number of Days to Update: 80

Source: Environmental Protection Agency
Telephone: (415) 495-8895
Last EDR Contact: 02/19/2025
Next Scheduled EDR Contact: 03/31/2025
Data Release Frequency: Quarterly

Federal institutional controls / engineering controls registries

LUCIS: Land Use Control Information System

LUCIS contains records of land use control information pertaining to the former Navy Base Realignment and Closure properties.

Date of Government Version: 11/11/2024
Date Data Arrived at EDR: 11/25/2024
Date Made Active in Reports: 02/18/2025
Number of Days to Update: 85

Source: Department of the Navy
Telephone: 843-820-7326
Last EDR Contact: 02/20/2025
Next Scheduled EDR Contact: 05/19/2025
Data Release Frequency: Varies

US ENG CONTROLS: Engineering Controls Sites List

A listing of sites with engineering controls in place. Engineering controls include various forms of caps, building foundations, liners, and treatment methods to create pathway elimination for regulated substances to enter environmental media or effect human health.

Date of Government Version: 11/04/2024
Date Data Arrived at EDR: 11/15/2024
Date Made Active in Reports: 02/11/2025
Number of Days to Update: 88

Source: Environmental Protection Agency
Telephone: 703-603-0695
Last EDR Contact: 02/18/2025
Next Scheduled EDR Contact: 12/02/2024
Data Release Frequency: Varies

US INST CONTROLS: Institutional Controls Sites List

A listing of sites with institutional controls in place. Institutional controls include administrative measures, such as groundwater use restrictions, construction restrictions, property use restrictions, and post remediation care requirements intended to prevent exposure to contaminants remaining on site. Deed restrictions are generally required as part of the institutional controls.

Date of Government Version: 11/04/2024
Date Data Arrived at EDR: 11/15/2024
Date Made Active in Reports: 02/11/2025
Number of Days to Update: 88

Source: Environmental Protection Agency
Telephone: 703-603-0695
Last EDR Contact: 02/18/2025
Next Scheduled EDR Contact: 06/02/2025
Data Release Frequency: Varies

Federal ERNS list

ERNS: Emergency Response Notification System

Emergency Response Notification System. ERNS records and stores information on reported releases of oil and hazardous substances.

Date of Government Version: 12/03/2024
Date Data Arrived at EDR: 12/11/2024
Date Made Active in Reports: 02/18/2025
Number of Days to Update: 69

Source: National Response Center, United States Coast Guard
Telephone: 202-267-2180
Last EDR Contact: 12/11/2024
Next Scheduled EDR Contact: 03/31/2025
Data Release Frequency: Quarterly

Lists of state- and tribal (Superfund) equivalent sites

RESPONSE: State Response Sites

Identifies confirmed release sites where DTSC is involved in remediation, either in a lead or oversight capacity. These confirmed release sites are generally high-priority and high potential risk.

Date of Government Version: 10/21/2024
Date Data Arrived at EDR: 10/22/2024
Date Made Active in Reports: 01/10/2025
Number of Days to Update: 80

Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 01/22/2025
Next Scheduled EDR Contact: 05/05/2025
Data Release Frequency: Quarterly

Lists of state- and tribal hazardous waste facilities

ENVIROSTOR: EnviroStor Database

The Department of Toxic Substances Control's (DTSC's) Site Mitigation and Brownfields Reuse Program's (SMBRP's) EnviroStor database identifes sites that have known contamination or sites for which there may be reasons to investigate further. The database includes the following site types: Federal Superfund sites (National Priorities List (NPL)); State Response, including Military Facilities and State Superfund; Voluntary Cleanup; and School sites. EnviroStor provides similar information to the information that was available in CalSites, and provides additional site information, including, but not limited to, identification of formerly-contaminated properties that have been released for reuse, properties where environmental deed restrictions have been recorded to prevent inappropriate land uses, and risk characterization information that is used to assess potential impacts to public health and the environment at contaminated sites.

Date of Government Version: 10/21/2024
Date Data Arrived at EDR: 10/22/2024
Date Made Active in Reports: 01/10/2025
Number of Days to Update: 80

Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 01/22/2025
Next Scheduled EDR Contact: 05/05/2025
Data Release Frequency: Quarterly

Lists of state and tribal landfills and solid waste disposal facilities

SWF/LF (SWIS): Solid Waste Information System

Active, Closed and Inactive Landfills. SWF/LF records typically contain an inve ntory of solid waste disposal facilities or landfills. These may be active or i nactive facilities or open dumps that failed to meet RCRA Section 4004 criteria for solid waste landfills or disposal sites.

Date of Government Version: 11/04/2024
Date Data Arrived at EDR: 11/06/2024
Date Made Active in Reports: 01/31/2025
Number of Days to Update: 86

Source: Department of Resources Recycling and Recovery
Telephone: 916-341-6320
Last EDR Contact: 02/04/2025
Next Scheduled EDR Contact: 05/19/2025
Data Release Frequency: Quarterly

Lists of state and tribal leaking storage tanks

LUST REG 1: Active Toxic Site Investigation

Del Norte, Humboldt, Lake, Mendocino, Modoc, Siskiyou, Sonoma, Trinity counties. For more current information, please refer to the State Water Resources Control Board's LUST database.

Date of Government Version: 02/01/2001
Date Data Arrived at EDR: 02/28/2001
Date Made Active in Reports: 03/29/2001
Number of Days to Update: 29

Source: California Regional Water Quality Control Board North Coast (1)
Telephone: 707-570-3769
Last EDR Contact: 08/01/2011
Next Scheduled EDR Contact: 11/14/2011
Data Release Frequency: No Update Planned

LUST REG 2: Fuel Leak List

Leaking Underground Storage Tank locations. Alameda, Contra Costa, Marin, Napa, San Francisco, San Mateo, Santa Clara, Solano, Sonoma counties.

Date of Government Version: 09/30/2004
Date Data Arrived at EDR: 10/20/2004
Date Made Active in Reports: 11/19/2004
Number of Days to Update: 30

Source: California Regional Water Quality Control Board San Francisco Bay Region (2)
Telephone: 510-622-2433
Last EDR Contact: 09/19/2011
Next Scheduled EDR Contact: 01/02/2012
Data Release Frequency: No Update Planned

LUST REG 3: Leaking Underground Storage Tank Database

Leaking Underground Storage Tank locations. Monterey, San Benito, San Luis Obispo, Santa Barbara, Santa Cruz counties.

Date of Government Version: 05/19/2003
Date Data Arrived at EDR: 05/19/2003
Date Made Active in Reports: 06/02/2003
Number of Days to Update: 14

Source: California Regional Water Quality Control Board Central Coast Region (3)
Telephone: 805-542-4786
Last EDR Contact: 07/18/2011
Next Scheduled EDR Contact: 10/31/2011
Data Release Frequency: No Update Planned

LUST REG 5: Leaking Underground Storage Tank Database

Leaking Underground Storage Tank locations. Alameda, Alpine, Amador, Butte, Colusa, Contra Costa, Calveras, El Dorado, Fresno, Glenn, Kern, Kings, Lake, Lassen, Madera, Mariposa, Merced, Modoc, Napa, Nevada, Placer, Plumas, Sacramento, San Joaquin, Shasta, Solano, Stanislaus, Sutter, Tehama, Tulare, Tuolumne, Yolo, Yuba counties.

Date of Government Version: 07/01/2008
Date Data Arrived at EDR: 07/22/2008
Date Made Active in Reports: 07/31/2008
Number of Days to Update: 9

Source: California Regional Water Quality Control Board Central Valley Region (5)
Telephone: 916-464-4834
Last EDR Contact: 07/01/2011
Next Scheduled EDR Contact: 10/17/2011
Data Release Frequency: No Update Planned

LUST REG 7: Leaking Underground Storage Tank Case Listing

Leaking Underground Storage Tank locations. Imperial, Riverside, San Diego, Santa Barbara counties.

Date of Government Version: 02/26/2004
Date Data Arrived at EDR: 02/26/2004
Date Made Active in Reports: 03/24/2004
Number of Days to Update: 27

Source: California Regional Water Quality Control Board Colorado River Basin Region (7)
Telephone: 760-776-8943
Last EDR Contact: 08/01/2011
Next Scheduled EDR Contact: 11/14/2011
Data Release Frequency: No Update Planned

LUST REG 8: Leaking Underground Storage Tanks

California Regional Water Quality Control Board Santa Ana Region (8). For more current information, please refer to the State Water Resources Control Board's LUST database.

Date of Government Version: 02/14/2005
Date Data Arrived at EDR: 02/15/2005
Date Made Active in Reports: 03/28/2005
Number of Days to Update: 41

Source: California Regional Water Quality Control Board Santa Ana Region (8)
Telephone: 909-782-4496
Last EDR Contact: 08/15/2011
Next Scheduled EDR Contact: 11/28/2011
Data Release Frequency: No Update Planned

LUST REG 9: Leaking Underground Storage Tank Report
Orange, Riverside, San Diego counties. For more current information, please refer to the State Water Resources Control Board's LUST database.

Date of Government Version: 03/01/2001
Date Data Arrived at EDR: 04/23/2001
Date Made Active in Reports: 05/21/2001
Number of Days to Update: 28

Source: California Regional Water Quality Control Board San Diego Region (9)
Telephone: 858-637-5595
Last EDR Contact: 09/26/2011
Next Scheduled EDR Contact: 01/09/2012
Data Release Frequency: No Update Planned

LUST REG 6V: Leaking Underground Storage Tank Case Listing
Leaking Underground Storage Tank locations. Inyo, Kern, Los Angeles, Mono, San Bernardino counties.

Date of Government Version: 06/07/2005
Date Data Arrived at EDR: 06/07/2005
Date Made Active in Reports: 06/29/2005
Number of Days to Update: 22

Source: California Regional Water Quality Control Board Victorville Branch Office (6)
Telephone: 760-241-7365
Last EDR Contact: 09/12/2011
Next Scheduled EDR Contact: 12/26/2011
Data Release Frequency: No Update Planned

LUST: Leaking Underground Fuel Tank Report (GEOTRACKER)
Leaking Underground Storage Tank (LUST) Sites included in GeoTracker. GeoTracker is the Water Boards data management system for sites that impact, or have the potential to impact, water quality in California, with emphasis on groundwater.

Date of Government Version: 08/28/2024
Date Data Arrived at EDR: 08/28/2024
Date Made Active in Reports: 08/30/2024
Number of Days to Update: 2

Source: State Water Resources Control Board
Telephone: see region list
Last EDR Contact: 02/24/2025
Next Scheduled EDR Contact: 03/17/2025
Data Release Frequency: Quarterly

LUST REG 6L: Leaking Underground Storage Tank Case Listing
For more current information, please refer to the State Water Resources Control Board's LUST database.

Date of Government Version: 09/09/2003
Date Data Arrived at EDR: 09/10/2003
Date Made Active in Reports: 10/07/2003
Number of Days to Update: 27

Source: California Regional Water Quality Control Board Lahontan Region (6)
Telephone: 530-542-5572
Last EDR Contact: 09/12/2011
Next Scheduled EDR Contact: 12/26/2011
Data Release Frequency: No Update Planned

LUST REG 4: Underground Storage Tank Leak List
Los Angeles, Ventura counties. For more current information, please refer to the State Water Resources Control Board's LUST database.

Date of Government Version: 09/07/2004
Date Data Arrived at EDR: 09/07/2004
Date Made Active in Reports: 10/12/2004
Number of Days to Update: 35

Source: California Regional Water Quality Control Board Los Angeles Region (4)
Telephone: 213-576-6710
Last EDR Contact: 09/06/2011
Next Scheduled EDR Contact: 12/19/2011
Data Release Frequency: No Update Planned

INDIAN LUST R1: Leaking Underground Storage Tanks on Indian Land
A listing of leaking underground storage tank locations on Indian Land.

Date of Government Version: 05/07/2024
Date Data Arrived at EDR: 05/30/2024
Date Made Active in Reports: 08/28/2024
Number of Days to Update: 90

Source: EPA Region 1
Telephone: 617-918-1313
Last EDR Contact: 01/16/2025
Next Scheduled EDR Contact: 04/28/2025
Data Release Frequency: Varies

INDIAN LUST R10: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in Alaska, Idaho, Oregon and Washington.

Date of Government Version: 05/07/2024
Date Data Arrived at EDR: 05/30/2024
Date Made Active in Reports: 08/28/2024
Number of Days to Update: 90

Source: EPA Region 10
Telephone: 206-553-2857
Last EDR Contact: 01/16/2025
Next Scheduled EDR Contact: 04/28/2025
Data Release Frequency: Varies

INDIAN LUST R4: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in Florida, Mississippi and North Carolina.

Date of Government Version: 05/07/2024
Date Data Arrived at EDR: 05/30/2024
Date Made Active in Reports: 08/28/2024
Number of Days to Update: 90

Source: EPA Region 4
Telephone: 404-562-8677
Last EDR Contact: 01/16/2025
Next Scheduled EDR Contact: 04/28/2025
Data Release Frequency: Varies

INDIAN LUST R6: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in New Mexico and Oklahoma.

Date of Government Version: 05/07/2024
Date Data Arrived at EDR: 05/30/2024
Date Made Active in Reports: 08/28/2024
Number of Days to Update: 90

Source: EPA Region 6
Telephone: 214-665-6597
Last EDR Contact: 01/16/2025
Next Scheduled EDR Contact: 04/28/2025
Data Release Frequency: Varies

INDIAN LUST R5: Leaking Underground Storage Tanks on Indian Land
Leaking underground storage tanks located on Indian Land in Michigan, Minnesota and Wisconsin.

Date of Government Version: 04/11/2024
Date Data Arrived at EDR: 05/30/2024
Date Made Active in Reports: 08/28/2024
Number of Days to Update: 90

Source: EPA, Region 5
Telephone: 312-886-7439
Last EDR Contact: 01/16/2025
Next Scheduled EDR Contact: 04/28/2025
Data Release Frequency: Varies

INDIAN LUST R9: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in Arizona, California, New Mexico and Nevada

Date of Government Version: 05/07/2024
Date Data Arrived at EDR: 05/30/2024
Date Made Active in Reports: 08/28/2024
Number of Days to Update: 90

Source: Environmental Protection Agency
Telephone: 415-972-3372
Last EDR Contact: 01/16/2025
Next Scheduled EDR Contact: 04/28/2025
Data Release Frequency: Varies

INDIAN LUST R7: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in Iowa, Kansas, and Nebraska

Date of Government Version: 05/07/2024
Date Data Arrived at EDR: 05/30/2024
Date Made Active in Reports: 08/28/2024
Number of Days to Update: 90

Source: EPA Region 7
Telephone: 913-551-7003
Last EDR Contact: 01/16/2025
Next Scheduled EDR Contact: 04/28/2025
Data Release Frequency: Varies

INDIAN LUST R8: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in Colorado, Montana, North Dakota, South Dakota, Utah and Wyoming.

Date of Government Version: 05/07/2024
Date Data Arrived at EDR: 05/30/2024
Date Made Active in Reports: 08/28/2024
Number of Days to Update: 90

Source: EPA Region 8
Telephone: 303-312-6271
Last EDR Contact: 01/16/2025
Next Scheduled EDR Contact: 04/28/2025
Data Release Frequency: Varies

CPS-SLIC: Statewide SLIC Cases (GEOTRACKER)

Cleanup Program Sites (CPS; also known as Site Cleanups [SC] and formerly known as Spills, Leaks, Investigations, and Cleanups [SLIC] sites) included in GeoTracker. GeoTracker is the Water Boards data management system for sites that impact, or have the potential to impact, water quality in California, with emphasis on groundwater.

Date of Government Version: 08/28/2024
Date Data Arrived at EDR: 08/28/2024
Date Made Active in Reports: 08/29/2024
Number of Days to Update: 1

Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 02/24/2025
Next Scheduled EDR Contact: 03/17/2025
Data Release Frequency: Varies

SLIC REG 1: Active Toxic Site Investigations

The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 04/03/2003
Date Data Arrived at EDR: 04/07/2003
Date Made Active in Reports: 04/25/2003
Number of Days to Update: 18

Source: California Regional Water Quality Control Board, North Coast Region (1)
Telephone: 707-576-2220
Last EDR Contact: 08/01/2011
Next Scheduled EDR Contact: 11/14/2011
Data Release Frequency: No Update Planned

SLIC REG 2: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing

The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 09/30/2004
Date Data Arrived at EDR: 10/20/2004
Date Made Active in Reports: 11/19/2004
Number of Days to Update: 30

Source: Regional Water Quality Control Board San Francisco Bay Region (2)
Telephone: 510-286-0457
Last EDR Contact: 09/19/2011
Next Scheduled EDR Contact: 01/02/2012
Data Release Frequency: No Update Planned

SLIC REG 3: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing

The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 05/18/2006
Date Data Arrived at EDR: 05/18/2006
Date Made Active in Reports: 06/15/2006
Number of Days to Update: 28

Source: California Regional Water Quality Control Board Central Coast Region (3)
Telephone: 805-549-3147
Last EDR Contact: 07/18/2011
Next Scheduled EDR Contact: 10/31/2011
Data Release Frequency: No Update Planned

SLIC REG 4: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing

The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 11/17/2004
Date Data Arrived at EDR: 11/18/2004
Date Made Active in Reports: 01/04/2005
Number of Days to Update: 47

Source: Region Water Quality Control Board Los Angeles Region (4)
Telephone: 213-576-6600
Last EDR Contact: 07/01/2011
Next Scheduled EDR Contact: 10/17/2011
Data Release Frequency: No Update Planned

SLIC REG 5: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing

The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 04/01/2005
Date Data Arrived at EDR: 04/05/2005
Date Made Active in Reports: 04/21/2005
Number of Days to Update: 16

Source: Regional Water Quality Control Board Central Valley Region (5)
Telephone: 916-464-3291
Last EDR Contact: 09/12/2011
Next Scheduled EDR Contact: 12/26/2011
Data Release Frequency: No Update Planned

SLIC REG 6V: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing
The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 05/24/2005
Date Data Arrived at EDR: 05/25/2005
Date Made Active in Reports: 06/16/2005
Number of Days to Update: 22

Source: Regional Water Quality Control Board, Victorville Branch
Telephone: 619-241-6583
Last EDR Contact: 08/15/2011
Next Scheduled EDR Contact: 11/28/2011
Data Release Frequency: No Update Planned

SLIC REG 6L: SLIC Sites
The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 09/07/2004
Date Data Arrived at EDR: 09/07/2004
Date Made Active in Reports: 10/12/2004
Number of Days to Update: 35

Source: California Regional Water Quality Control Board, Lahontan Region
Telephone: 530-542-5574
Last EDR Contact: 08/15/2011
Next Scheduled EDR Contact: 11/28/2011
Data Release Frequency: No Update Planned

SLIC REG 7: SLIC List
The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 11/24/2004
Date Data Arrived at EDR: 11/29/2004
Date Made Active in Reports: 01/04/2005
Number of Days to Update: 36

Source: California Regional Quality Control Board, Colorado River Basin Region
Telephone: 760-346-7491
Last EDR Contact: 08/01/2011
Next Scheduled EDR Contact: 11/14/2011
Data Release Frequency: No Update Planned

SLIC REG 8: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing
The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 04/03/2008
Date Data Arrived at EDR: 04/03/2008
Date Made Active in Reports: 04/14/2008
Number of Days to Update: 11

Source: California Region Water Quality Control Board Santa Ana Region (8)
Telephone: 951-782-3298
Last EDR Contact: 09/12/2011
Next Scheduled EDR Contact: 12/26/2011
Data Release Frequency: No Update Planned

SLIC REG 9: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing
The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 09/10/2007
Date Data Arrived at EDR: 09/11/2007
Date Made Active in Reports: 09/28/2007
Number of Days to Update: 17

Source: California Regional Water Quality Control Board San Diego Region (9)
Telephone: 858-467-2980
Last EDR Contact: 08/08/2011
Next Scheduled EDR Contact: 11/21/2011
Data Release Frequency: No Update Planned

Lists of state and tribal registered storage tanks

FEMA UST: Underground Storage Tank Listing
A listing of all FEMA owned underground storage tanks.

Date of Government Version: 08/12/2024
Date Data Arrived at EDR: 10/30/2024
Date Made Active in Reports: 01/14/2025
Number of Days to Update: 76

Source: FEMA
Telephone: 202-646-5797
Last EDR Contact: 12/23/2024
Next Scheduled EDR Contact: 04/14/2025
Data Release Frequency: Varies

UST CLOSURE: Proposed Closure of Underground Storage Tank (UST) Cases

UST cases that are being considered for closure by either the State Water Resources Control Board or the Executive Director have been posted for a 60-day public comment period. UST Case Closures being proposed for consideration by the State Water Resources Control Board. These are primarily UST cases that meet closure criteria under the decisional framework in State Water Board Resolution No. 92-49 and other Board orders. UST Case Closures proposed for consideration by the Executive Director pursuant to State Water Board Resolution No. 2012-0061. These are cases that meet the criteria of the Low-Threat UST Case Closure Policy. UST Case Closure Review Denials and Approved Orders.

Date of Government Version: 11/25/2024
Date Data Arrived at EDR: 12/03/2024
Date Made Active in Reports: 01/07/2025
Number of Days to Update: 35

Source: State Water Resources Control Board
Telephone: 916-327-7844
Last EDR Contact: 12/03/2024
Next Scheduled EDR Contact: 03/17/2025
Data Release Frequency: Varies

MILITARY UST SITES: Military UST Sites (GEOTRACKER)

Military ust sites

Date of Government Version: 08/28/2024
Date Data Arrived at EDR: 08/28/2024
Date Made Active in Reports: 08/29/2024
Number of Days to Update: 1

Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 02/24/2025
Next Scheduled EDR Contact: 03/17/2025
Data Release Frequency: Varies

UST: Active UST Facilities

Active UST facilities gathered from the local regulatory agencies

Date of Government Version: 11/26/2024
Date Data Arrived at EDR: 11/26/2024
Date Made Active in Reports: 02/20/2025
Number of Days to Update: 86

Source: SWRCB
Telephone: 916-341-5851
Last EDR Contact: 11/26/2024
Next Scheduled EDR Contact: 03/17/2025
Data Release Frequency: Semi-Annually

AST: Aboveground Petroleum Storage Tank Facilities

A listing of aboveground storage tank petroleum storage tank locations.

Date of Government Version: 07/06/2016
Date Data Arrived at EDR: 07/12/2016
Date Made Active in Reports: 09/19/2016
Number of Days to Update: 69

Source: California Environmental Protection Agency
Telephone: 916-327-5092
Last EDR Contact: 12/04/2024
Next Scheduled EDR Contact: 03/24/2025
Data Release Frequency: Varies

INDIAN UST R7: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 7 (Iowa, Kansas, Missouri, Nebraska, and 9 Tribal Nations).

Date of Government Version: 05/14/2024
Date Data Arrived at EDR: 05/30/2024
Date Made Active in Reports: 08/28/2024
Number of Days to Update: 90

Source: EPA Region 7
Telephone: 913-551-7003
Last EDR Contact: 01/16/2025
Next Scheduled EDR Contact: 04/28/2025
Data Release Frequency: Varies

INDIAN UST R1: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 1 (Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, Vermont and ten Tribal Nations).

Date of Government Version: 05/14/2024
Date Data Arrived at EDR: 05/30/2024
Date Made Active in Reports: 08/28/2024
Number of Days to Update: 90

Source: EPA, Region 1
Telephone: 617-918-1313
Last EDR Contact: 01/16/2025
Next Scheduled EDR Contact: 04/28/2025
Data Release Frequency: Varies

INDIAN UST R8: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 8 (Colorado, Montana, North Dakota, South Dakota, Utah, Wyoming and 27 Tribal Nations).

Date of Government Version: 05/14/2024
Date Data Arrived at EDR: 05/30/2024
Date Made Active in Reports: 08/28/2024
Number of Days to Update: 90

Source: EPA Region 8
Telephone: 303-312-6137
Last EDR Contact: 01/16/2025
Next Scheduled EDR Contact: 04/28/2025
Data Release Frequency: Varies

INDIAN UST R10: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 10 (Alaska, Idaho, Oregon, Washington, and Tribal Nations).

Date of Government Version: 05/14/2024
Date Data Arrived at EDR: 05/30/2024
Date Made Active in Reports: 08/28/2024
Number of Days to Update: 90

Source: EPA Region 10
Telephone: 206-553-2857
Last EDR Contact: 01/16/2025
Next Scheduled EDR Contact: 04/28/2025
Data Release Frequency: Varies

INDIAN UST R6: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 6 (Louisiana, Arkansas, Oklahoma, New Mexico, Texas and 65 Tribes).

Date of Government Version: 05/14/2024
Date Data Arrived at EDR: 05/30/2024
Date Made Active in Reports: 08/28/2024
Number of Days to Update: 90

Source: EPA Region 6
Telephone: 214-665-7591
Last EDR Contact: 01/16/2025
Next Scheduled EDR Contact: 04/28/2025
Data Release Frequency: Varies

INDIAN UST R5: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 5 (Michigan, Minnesota and Wisconsin and Tribal Nations).

Date of Government Version: 04/11/2024
Date Data Arrived at EDR: 05/30/2024
Date Made Active in Reports: 08/28/2024
Number of Days to Update: 90

Source: EPA Region 5
Telephone: 312-886-6136
Last EDR Contact: 01/16/2025
Next Scheduled EDR Contact: 04/28/2025
Data Release Frequency: Varies

INDIAN UST R9: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 9 (Arizona, California, Hawaii, Nevada, the Pacific Islands, and Tribal Nations).

Date of Government Version: 05/14/2024
Date Data Arrived at EDR: 05/30/2024
Date Made Active in Reports: 08/28/2024
Number of Days to Update: 90

Source: EPA Region 9
Telephone: 415-972-3368
Last EDR Contact: 01/16/2025
Next Scheduled EDR Contact: 04/28/2025
Data Release Frequency: Varies

INDIAN UST R4: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 4 (Alabama, Florida, Georgia, Kentucky, Mississippi, North Carolina, South Carolina, Tennessee and Tribal Nations)

Date of Government Version: 05/14/2024
Date Data Arrived at EDR: 05/30/2024
Date Made Active in Reports: 08/28/2024
Number of Days to Update: 90

Source: EPA Region 4
Telephone: 404-562-9424
Last EDR Contact: 01/16/2025
Next Scheduled EDR Contact: 07/29/2024
Data Release Frequency: Varies

Lists of state and tribal voluntary cleanup sites

INDIAN VCP R7: Voluntary Cleanup Priority Lisitng
A listing of voluntary cleanup priority sites located on Indian Land located in Region 7.

Date of Government Version: 03/20/2008
Date Data Arrived at EDR: 04/22/2008
Date Made Active in Reports: 05/19/2008
Number of Days to Update: 27

Source: EPA, Region 7
Telephone: 913-551-7365
Last EDR Contact: 07/08/2021
Next Scheduled EDR Contact: 07/20/2009
Data Release Frequency: Varies

INDIAN VCP R1: Voluntary Cleanup Priority Listing
A listing of voluntary cleanup priority sites located on Indian Land located in Region 1.

Date of Government Version: 07/27/2015
Date Data Arrived at EDR: 09/29/2015
Date Made Active in Reports: 02/18/2016
Number of Days to Update: 142

Source: EPA, Region 1
Telephone: 617-918-1102
Last EDR Contact: 12/10/2024
Next Scheduled EDR Contact: 03/31/2025
Data Release Frequency: Varies

VCP: Voluntary Cleanup Program Properties
Contains low threat level properties with either confirmed or unconfirmed releases and the project proponents have request that DTSC oversee investigation and/or cleanup activities and have agreed to provide coverage for DTSC's costs.

Date of Government Version: 10/21/2024
Date Data Arrived at EDR: 10/22/2024
Date Made Active in Reports: 01/10/2025
Number of Days to Update: 80

Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 01/22/2025
Next Scheduled EDR Contact: 05/05/2025
Data Release Frequency: Quarterly

Lists of state and tribal brownfield sites

BROWNFIELDS: Considered Brownfieds Sites Listing
A listing of sites the SWRCB considers to be Brownfields since these are sites have come to them through the MOA Process.

Date of Government Version: 09/16/2024
Date Data Arrived at EDR: 09/17/2024
Date Made Active in Reports: 12/02/2024
Number of Days to Update: 76

Source: State Water Resources Control Board
Telephone: 916-323-7905
Last EDR Contact: 12/11/2024
Next Scheduled EDR Contact: 03/31/2025
Data Release Frequency: Quarterly

ADDITIONAL ENVIRONMENTAL RECORDS

Local Brownfield lists

US BROWNFIELDS: A Listing of Brownfields Sites
Brownfields are real property, the expansion, redevelopment, or reuse of which may be complicated by the presence or potential presence of a hazardous substance, pollutant, or contaminant. Cleaning up and reinvesting in these properties takes development pressures off of undeveloped, open land, and both improves and protects the environment. Assessment, Cleanup and Redevelopment Exchange System (ACRES) stores information reported by EPA Brownfields grant recipients on brownfields properties assessed or cleaned up with grant funding as well as information on Targeted Brownfields Assessments performed by EPA Regions. A listing of ACRES Brownfield sites is obtained from Cleanups in My Community. Cleanups in My Community provides information on Brownfields properties for which information is reported back to EPA, as well as areas served by Brownfields grant programs.

Date of Government Version: 09/09/2024
Date Data Arrived at EDR: 09/11/2024
Date Made Active in Reports: 12/06/2024
Number of Days to Update: 86

Source: Environmental Protection Agency
Telephone: 202-566-2777
Last EDR Contact: 12/12/2024
Next Scheduled EDR Contact: 03/24/2025
Data Release Frequency: Semi-Annually

Local Lists of Landfill / Solid Waste Disposal Sites

WMUDS/SWAT: Waste Management Unit Database

Waste Management Unit Database System. WMUDS is used by the State Water Resources Control Board staff and the Regional Water Quality Control Boards for program tracking and inventory of waste management units. WMUDS is composed of the following databases: Facility Information, Scheduled Inspections Information, Waste Management Unit Information, SWAT Program Information, SWAT Report Summary Information, SWAT Report Summary Data, Chapter 15 (formerly Subchapter 15) Information, Chapter 15 Monitoring Parameters, TPCA Program Information, RCRA Program Information, Closure Information, and Interested Parties Information.

Date of Government Version: 04/01/2000
Date Data Arrived at EDR: 04/10/2000
Date Made Active in Reports: 05/10/2000
Number of Days to Update: 30

Source: State Water Resources Control Board
Telephone: 916-227-4448
Last EDR Contact: 01/15/2025
Next Scheduled EDR Contact: 05/05/2025
Data Release Frequency: No Update Planned

SWRCY: Recycler Database

A listing of recycling facilities in California.

Date of Government Version: 12/02/2024
Date Data Arrived at EDR: 12/03/2024
Date Made Active in Reports: 02/24/2025
Number of Days to Update: 83

Source: Department of Conservation
Telephone: 916-323-3836
Last EDR Contact: 12/03/2024
Next Scheduled EDR Contact: 03/17/2025
Data Release Frequency: Quarterly

HAULERS: Registered Waste Tire Haulers Listing

A listing of registered waste tire haulers.

Date of Government Version: 11/13/2024
Date Data Arrived at EDR: 11/15/2024
Date Made Active in Reports: 12/12/2024
Number of Days to Update: 27

Source: Integrated Waste Management Board
Telephone: 916-341-6422
Last EDR Contact: 01/30/2025
Next Scheduled EDR Contact: 05/19/2025
Data Release Frequency: Varies

INDIAN ODI: Report on the Status of Open Dumps on Indian Lands

Location of open dumps on Indian land.

Date of Government Version: 12/31/1998
Date Data Arrived at EDR: 12/03/2007
Date Made Active in Reports: 01/24/2008
Number of Days to Update: 52

Source: Environmental Protection Agency
Telephone: 703-308-8245
Last EDR Contact: 01/16/2025
Next Scheduled EDR Contact: 05/05/2025
Data Release Frequency: Varies

ODI: Open Dump Inventory

An open dump is defined as a disposal facility that does not comply with one or more of the Part 257 or Part 258 Subtitle D Criteria.

Date of Government Version: 06/30/1985
Date Data Arrived at EDR: 08/09/2004
Date Made Active in Reports: 09/17/2004
Number of Days to Update: 39

Source: Environmental Protection Agency
Telephone: 800-424-9346
Last EDR Contact: 06/09/2004
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

DEBRIS REGION 9: Torres Martinez Reservation Illegal Dump Site Locations

A listing of illegal dump sites location on the Torres Martinez Indian Reservation located in eastern Riverside County and northern Imperial County, California.

Date of Government Version: 01/12/2009
Date Data Arrived at EDR: 05/07/2009
Date Made Active in Reports: 09/21/2009
Number of Days to Update: 137

Source: EPA, Region 9
Telephone: 415-947-4219
Last EDR Contact: 01/23/2025
Next Scheduled EDR Contact: 04/28/2025
Data Release Frequency: No Update Planned

IHS OPEN DUMPS: Open Dumps on Indian Land
A listing of all open dumps located on Indian Land in the United States.

Date of Government Version: 02/07/2024
Date Data Arrived at EDR: 11/13/2024
Date Made Active in Reports: 11/19/2024
Number of Days to Update: 6

Source: Department of Health & Human Serivces, Indian Health Service
Telephone: 301-443-1452
Last EDR Contact: 12/09/2024
Next Scheduled EDR Contact: 05/05/2025
Data Release Frequency: Varies

Local Lists of Hazardous waste / Contaminated Sites

US HIST CDL: National Clandestine Laboratory Register
A listing of clandestine drug lab locations that have been removed from the DEAs National Clandestine Laboratory Register.

Date of Government Version: 05/20/2024
Date Data Arrived at EDR: 08/19/2024
Date Made Active in Reports: 10/09/2024
Number of Days to Update: 51

Source: Drug Enforcement Administration
Telephone: 202-307-1000
Last EDR Contact: 02/20/2025
Next Scheduled EDR Contact: 06/02/2025
Data Release Frequency: No Update Planned

HIST CAL-SITES: Calsites Database
The Calsites database contains potential or confirmed hazardous substance release properties. In 1996, California EPA reevaluated and significantly reduced the number of sites in the Calsites database. No longer updated by the state agency. It has been replaced by ENVIROSTOR.

Date of Government Version: 08/08/2005
Date Data Arrived at EDR: 08/03/2006
Date Made Active in Reports: 08/24/2006
Number of Days to Update: 21

Source: Department of Toxic Substance Control
Telephone: 916-323-3400
Last EDR Contact: 02/23/2009
Next Scheduled EDR Contact: 05/25/2009
Data Release Frequency: No Update Planned

SCH: School Property Evaluation Program
This category contains proposed and existing school sites that are being evaluated by DTSC for possible hazardous materials contamination. In some cases, these properties may be listed in the CalSites category depending on the level of threat to public health and safety or the environment they pose.

Date of Government Version: 10/21/2024
Date Data Arrived at EDR: 10/22/2024
Date Made Active in Reports: 01/10/2025
Number of Days to Update: 80

Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 01/22/2025
Next Scheduled EDR Contact: 05/05/2025
Data Release Frequency: Quarterly

CDL: Clandestine Drug Labs
A listing of drug lab locations. Listing of a location in this database does not indicate that any illegal drug lab materials were or were not present there, and does not constitute a determination that the location either requires or does not require additional cleanup work.

Date of Government Version: 12/31/2022
Date Data Arrived at EDR: 03/21/2024
Date Made Active in Reports: 06/12/2024
Number of Days to Update: 83

Source: Department of Toxic Substances Control
Telephone: 916-255-6504
Last EDR Contact: 12/23/2024
Next Scheduled EDR Contact: 05/12/2025
Data Release Frequency: Varies

CERS HAZ WASTE: California Environmental Reporting System Hazardous Waste
List of sites in the California Environmental Protection Agency (CalEPA) Regulated Site Portal which fall under the Hazardous Chemical Management, Hazardous Waste Onsite Treatment, Household Hazardous Waste Collection, Hazardous Waste Generator, and RCRA LQ HW Generator programs.

Date of Government Version: 10/15/2024
Date Data Arrived at EDR: 10/16/2024
Date Made Active in Reports: 12/31/2024
Number of Days to Update: 76

Source: CalEPA
Telephone: 916-323-2514
Last EDR Contact: 01/14/2025
Next Scheduled EDR Contact: 04/28/2025
Data Release Frequency: Quarterly

TOXIC PITS: Toxic Pits Cleanup Act Sites

Toxic PITS Cleanup Act Sites. TOXIC PITS identifies sites suspected of containing hazardous substances where cleanup has not yet been completed.

Date of Government Version: 07/01/1995
Date Data Arrived at EDR: 08/30/1995
Date Made Active in Reports: 09/26/1995
Number of Days to Update: 27

Source: State Water Resources Control Board
Telephone: 916-227-4364
Last EDR Contact: 01/26/2009
Next Scheduled EDR Contact: 04/27/2009
Data Release Frequency: No Update Planned

US CDL: Clandestine Drug Labs

A listing of clandestine drug lab locations. The U.S. Department of Justice ("the Department") provides this web site as a public service. It contains addresses of some locations where law enforcement agencies reported they found chemicals or other items that indicated the presence of either clandestine drug laboratories or dumpsites. In most cases, the source of the entries is not the Department, and the Department has not verified the entry and does not guarantee its accuracy. Members of the public must verify the accuracy of all entries by, for example, contacting local law enforcement and local health departments.

Date of Government Version: 05/20/2024
Date Data Arrived at EDR: 08/19/2024
Date Made Active in Reports: 10/09/2024
Number of Days to Update: 51

Source: Drug Enforcement Administration
Telephone: 202-307-1000
Last EDR Contact: 02/20/2025
Next Scheduled EDR Contact: 06/02/2025
Data Release Frequency: Quarterly

Local Lists of Registered Storage Tanks

SWEEPS UST: SWEEPS UST Listing

Statewide Environmental Evaluation and Planning System. This underground storage tank listing was updated and maintained by a company contacted by the SWRCB in the early 1990's. The listing is no longer updated or maintained. The local agency is the contact for more information on a site on the SWEEPS list.

Date of Government Version: 06/01/1994
Date Data Arrived at EDR: 07/07/2005
Date Made Active in Reports: 08/11/2005
Number of Days to Update: 35

Source: State Water Resources Control Board
Telephone: N/A
Last EDR Contact: 06/03/2005
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

HIST UST: Hazardous Substance Storage Container Database

The Hazardous Substance Storage Container Database is a historical listing of UST sites. Refer to local/county source for current data.

Date of Government Version: 10/15/1990
Date Data Arrived at EDR: 01/25/1991
Date Made Active in Reports: 02/12/1991
Number of Days to Update: 18

Source: State Water Resources Control Board
Telephone: 916-341-5851
Last EDR Contact: 07/26/2001
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

SAN FRANCISCO AST: Aboveground Storage Tank Site Listing

Aboveground storage tank sites

Date of Government Version: 07/29/2024
Date Data Arrived at EDR: 07/30/2024
Date Made Active in Reports: 10/17/2024
Number of Days to Update: 79

Source: San Francisco County Department of Public Health
Telephone: 415-252-3896
Last EDR Contact: 01/23/2025
Next Scheduled EDR Contact: 05/12/2025
Data Release Frequency: Varies

CERS TANKS: California Environmental Reporting System (CERS) Tanks

List of sites in the California Environmental Protection Agency (CalEPA) Regulated Site Portal which fall under the Aboveground Petroleum Storage and Underground Storage Tank regulatory programs.

Date of Government Version: 10/15/2024
Date Data Arrived at EDR: 10/16/2024
Date Made Active in Reports: 12/31/2024
Number of Days to Update: 76

Source: California Environmental Protection Agency
Telephone: 916-323-2514
Last EDR Contact: 01/14/2025
Next Scheduled EDR Contact: 04/28/2025
Data Release Frequency: Quarterly

CA FID UST: Facility Inventory Database

The Facility Inventory Database (FID) contains a historical listing of active and inactive underground storage tank locations from the State Water Resource Control Board. Refer to local/county source for current data.

Date of Government Version: 10/31/1994
Date Data Arrived at EDR: 09/05/1995
Date Made Active in Reports: 09/29/1995
Number of Days to Update: 24

Source: California Environmental Protection Agency
Telephone: 916-341-5851
Last EDR Contact: 12/28/1998
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

Local Land Records

LIENS: Environmental Liens Listing

A listing of property locations with environmental liens for California where DTSC is a lien holder.

Date of Government Version: 11/26/2024
Date Data Arrived at EDR: 12/03/2024
Date Made Active in Reports: 12/31/2024
Number of Days to Update: 28

Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 02/19/2025
Next Scheduled EDR Contact: 06/09/2025
Data Release Frequency: Varies

LIENS 2: CERCLA Lien Information

A Federal CERCLA ('Superfund') lien can exist by operation of law at any site or property at which EPA has spent Superfund monies. These monies are spent to investigate and address releases and threatened releases of contamination. CERCLIS provides information as to the identity of these sites and properties.

Date of Government Version: 12/19/2024
Date Data Arrived at EDR: 01/02/2025
Date Made Active in Reports: 01/21/2025
Number of Days to Update: 19

Source: Environmental Protection Agency
Telephone: 202-564-6023
Last EDR Contact: 02/03/2025
Next Scheduled EDR Contact: 04/07/2025
Data Release Frequency: Semi-Annually

DEED: Deed Restriction Listing

Site Mitigation and Brownfields Reuse Program Facility Sites with Deed Restrictions & Hazardous Waste Management Program Facility Sites with Deed / Land Use Restriction. The DTSC Site Mitigation and Brownfields Reuse Program (SMBRP) list includes sites cleaned up under the program's oversight and generally does not include current or former hazardous waste facilities that required a hazardous waste facility permit. The list represents deed restrictions that are active. Some sites have multiple deed restrictions. The DTSC Hazardous Waste Management Program (HWMP) has developed a list of current or former hazardous waste facilities that have a recorded land use restriction at the local county recorder's office. The land use restrictions on this list were required by the DTSC HWMP as a result of the presence of hazardous substances that remain on site after the facility (or part of the facility) has been closed or cleaned up. The types of land use restriction include deed notice, deed restriction, or a land use restriction that binds current and future owners.

Date of Government Version: 11/20/2024
Date Data Arrived at EDR: 11/20/2024
Date Made Active in Reports: 02/13/2025
Number of Days to Update: 85

Source: DTSC and SWRCB
Telephone: 916-323-3400
Last EDR Contact: 11/20/2024
Next Scheduled EDR Contact: 03/10/2025
Data Release Frequency: Semi-Annually

Records of Emergency Release Reports

HMIRS: Hazardous Materials Information Reporting System
Hazardous Materials Incident Report System. HMIRS contains hazardous material spill incidents reported to DOT.

Date of Government Version: 06/14/2024
Date Data Arrived at EDR: 06/17/2024
Date Made Active in Reports: 06/24/2024
Number of Days to Update: 7

Source: U.S. Department of Transportation
Telephone: 202-366-4555
Last EDR Contact: 12/11/2024
Next Scheduled EDR Contact: 03/31/2025
Data Release Frequency: Quarterly

CHMIRS: California Hazardous Material Incident Report System
California Hazardous Material Incident Reporting System. CHMIRS contains information on reported hazardous material incidents (accidental releases or spills).

Date of Government Version: 08/01/2024
Date Data Arrived at EDR: 10/16/2024
Date Made Active in Reports: 12/31/2024
Number of Days to Update: 76

Source: Office of Emergency Services
Telephone: 916-845-8400
Last EDR Contact: 01/14/2025
Next Scheduled EDR Contact: 04/28/2025
Data Release Frequency: Semi-Annually

LDS: Land Disposal Sites Listing (GEOTRACKER)
Land Disposal sites (Landfills) included in GeoTracker. GeoTracker is the Water Boards data management system for sites that impact, or have the potential to impact, water quality in California, with emphasis on groundwater.

Date of Government Version: 11/26/2024
Date Data Arrived at EDR: 11/26/2024
Date Made Active in Reports: 02/21/2025
Number of Days to Update: 87

Source: State Water Qualilty Control Board
Telephone: 866-480-1028
Last EDR Contact: 02/24/2025
Next Scheduled EDR Contact: 03/17/2025
Data Release Frequency: Quarterly

MCS: Military Cleanup Sites Listing (GEOTRACKER)
Military sites (consisting of: Military UST sites; Military Privatized sites; and Military Cleanup sites [formerly known as DoD non UST]) included in GeoTracker. GeoTracker is the Water Boards data management system for sites that impact, or have the potential to impact, water quality in California, with emphasis on groundwater.

Date of Government Version: 08/28/2024
Date Data Arrived at EDR: 08/28/2024
Date Made Active in Reports: 08/30/2024
Number of Days to Update: 2

Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 02/24/2025
Next Scheduled EDR Contact: 03/17/2025
Data Release Frequency: Quarterly

SPILLS 90: SPILLS90 data from FirstSearch
Spills 90 includes those spill and release records available exclusively from FirstSearch databases. Typically, they may include chemical, oil and/or hazardous substance spills recorded after 1990. Duplicate records that are already included in EDR incident and release records are not included in Spills 90.

Date of Government Version: 06/06/2012
Date Data Arrived at EDR: 01/03/2013
Date Made Active in Reports: 02/22/2013
Number of Days to Update: 50

Source: FirstSearch
Telephone: N/A
Last EDR Contact: 01/03/2013
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

Other Ascertainable Records

RCRA NonGen / NLR: RCRA - Non Generators / No Longer Regulated
RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Non-Generators do not presently generate hazardous waste.

Date of Government Version: 09/16/2024
Date Data Arrived at EDR: 09/17/2024
Date Made Active in Reports: 12/06/2024
Number of Days to Update: 80

Source: Environmental Protection Agency
Telephone: (415) 495-8895
Last EDR Contact: 02/19/2025
Next Scheduled EDR Contact: 03/31/2025
Data Release Frequency: Quarterly

FUDS: Formerly Used Defense Sites

The listing includes locations of Formerly Used Defense Sites properties where the US Army Corps of Engineers is actively working or will take necessary cleanup actions.

Date of Government Version: 10/01/2024
Date Data Arrived at EDR: 11/12/2024
Date Made Active in Reports: 01/21/2025
Number of Days to Update: 70

Source: U.S. Army Corps of Engineers
Telephone: 202-528-4285
Last EDR Contact: 02/11/2025
Next Scheduled EDR Contact: 05/26/2025
Data Release Frequency: Varies

DOD: Department of Defense Sites

This data set consists of federally owned or administered lands, administered by the Department of Defense, that have any area equal to or greater than 640 acres of the United States, Puerto Rico, and the U.S. Virgin Islands.

Date of Government Version: 06/07/2021
Date Data Arrived at EDR: 07/13/2021
Date Made Active in Reports: 03/09/2022
Number of Days to Update: 239

Source: USGS
Telephone: 888-275-8747
Last EDR Contact: 01/07/2025
Next Scheduled EDR Contact: 04/21/2025
Data Release Frequency: Varies

FEDLAND: Federal and Indian Lands

Federally and Indian administrated lands of the United States. Lands included are administrated by: Army Corps of Engineers, Bureau of Reclamation, National Wild and Scenic River, National Wildlife Refuge, Public Domain Land, Wilderness, Wilderness Study Area, Wildlife Management Area, Bureau of Indian Affairs, Bureau of Land Management, Department of Justice, Forest Service, Fish and Wildlife Service, National Park Service.

Date of Government Version: 04/02/2018
Date Data Arrived at EDR: 04/11/2018
Date Made Active in Reports: 11/06/2019
Number of Days to Update: 574

Source: U.S. Geological Survey
Telephone: 888-275-8747
Last EDR Contact: 12/30/2024
Next Scheduled EDR Contact: 04/14/2025
Data Release Frequency: N/A

SCRD DRYCLEANERS: State Coalition for Remediation of Drycleaners Listing

The State Coalition for Remediation of Drycleaners was established in 1998, with support from the U.S. EPA Office of Superfund Remediation and Technology Innovation. It is comprised of representatives of states with established drycleaner remediation programs. Currently the member states are Alabama, Connecticut, Florida, Illinois, Kansas, Minnesota, Missouri, North Carolina, Oregon, South Carolina, Tennessee, Texas, and Wisconsin.

Date of Government Version: 07/30/2021
Date Data Arrived at EDR: 02/03/2023
Date Made Active in Reports: 02/10/2023
Number of Days to Update: 7

Source: Environmental Protection Agency
Telephone: 615-532-8599
Last EDR Contact: 02/03/2025
Next Scheduled EDR Contact: 05/19/2025
Data Release Frequency: Varies

US FIN ASSUR: Financial Assurance Information

All owners and operators of facilities that treat, store, or dispose of hazardous waste are required to provide proof that they will have sufficient funds to pay for the clean up, closure, and post-closure care of their facilities.

Date of Government Version: 09/16/2024
Date Data Arrived at EDR: 09/17/2024
Date Made Active in Reports: 12/20/2024
Number of Days to Update: 94

Source: Environmental Protection Agency
Telephone: 202-566-1917
Last EDR Contact: 02/19/2025
Next Scheduled EDR Contact: 03/31/2025
Data Release Frequency: Quarterly

EPA WATCH LIST: EPA Watch List

EPA maintains a "Watch List" to facilitate dialogue between EPA, state and local environmental agencies on enforcement matters relating to facilities with alleged violations identified as either significant or high priority. Being on the Watch List does not mean that the facility has actually violated the law only that an investigation by EPA or a state or local environmental agency has led those organizations to allege that an unproven violation has in fact occurred. Being on the Watch List does not represent a higher level of concern regarding the alleged violations that were detected, but instead indicates cases requiring additional dialogue between EPA, state and local agencies - primarily because of the length of time the alleged violation has gone unaddressed or unresolved.

Date of Government Version: 08/30/2013
Date Data Arrived at EDR: 03/21/2014
Date Made Active in Reports: 06/17/2014
Number of Days to Update: 88

Source: Environmental Protection Agency
Telephone: 617-520-3000
Last EDR Contact: 01/27/2025
Next Scheduled EDR Contact: 05/12/2025
Data Release Frequency: No Update Planned

2020 COR ACTION: 2020 Corrective Action Program List

The EPA has set ambitious goals for the RCRA Corrective Action program by creating the 2020 Corrective Action Universe. This RCRA cleanup baseline includes facilities expected to need corrective action. The 2020 universe contains a wide variety of sites. Some properties are heavily contaminated while others were contaminated but have since been cleaned up. Still others have not been fully investigated yet, and may require little or no remediation. Inclusion in the 2020 Universe does not necessarily imply failure on the part of a facility to meet its RCRA obligations.

Date of Government Version: 09/30/2017
Date Data Arrived at EDR: 05/08/2018
Date Made Active in Reports: 07/20/2018
Number of Days to Update: 73

Source: Environmental Protection Agency
Telephone: 703-308-4044
Last EDR Contact: 01/30/2025
Next Scheduled EDR Contact: 05/12/2025
Data Release Frequency: Varies

TSCA: Toxic Substances Control Act

Toxic Substances Control Act. TSCA identifies manufacturers and importers of chemical substances included on the TSCA Chemical Substance Inventory list. It includes data on the production volume of these substances by plant site.

Date of Government Version: 12/31/2020
Date Data Arrived at EDR: 06/14/2022
Date Made Active in Reports: 03/24/2023
Number of Days to Update: 283

Source: EPA
Telephone: 202-260-5521
Last EDR Contact: 12/12/2024
Next Scheduled EDR Contact: 03/24/2025
Data Release Frequency: Every 4 Years

TRIS: Toxic Chemical Release Inventory System

Toxic Release Inventory System. TRIS identifies facilities which release toxic chemicals to the air, water and land in reportable quantities under SARA Title III Section 313.

Date of Government Version: 12/31/2023
Date Data Arrived at EDR: 02/11/2025
Date Made Active in Reports: 02/18/2025
Number of Days to Update: 7

Source: EPA
Telephone: 202-566-0250
Last EDR Contact: 02/11/2025
Next Scheduled EDR Contact: 05/26/2025
Data Release Frequency: Annually

SSTS: Section 7 Tracking Systems

Section 7 of the Federal Insecticide, Fungicide and Rodenticide Act, as amended (92 Stat. 829) requires all registered pesticide-producing establishments to submit a report to the Environmental Protection Agency by March 1st each year. Each establishment must report the types and amounts of pesticides, active ingredients and devices being produced, and those having been produced and sold or distributed in the past year.

Date of Government Version: 10/15/2024
Date Data Arrived at EDR: 10/16/2024
Date Made Active in Reports: 01/14/2025
Number of Days to Update: 90

Source: EPA
Telephone: 202-564-4203
Last EDR Contact: 01/15/2025
Next Scheduled EDR Contact: 04/28/2025
Data Release Frequency: Annually

ROD: Records Of Decision

Record of Decision. ROD documents mandate a permanent remedy at an NPL (Superfund) site containing technical and health information to aid in the cleanup.

Date of Government Version: 10/24/2024
Date Data Arrived at EDR: 11/01/2024
Date Made Active in Reports: 11/19/2024
Number of Days to Update: 18

Source: EPA
Telephone: 703-416-0223
Last EDR Contact: 02/03/2025
Next Scheduled EDR Contact: 03/10/2025
Data Release Frequency: Annually

RMP: Risk Management Plans

When Congress passed the Clean Air Act Amendments of 1990, it required EPA to publish regulations and guidance for chemical accident prevention at facilities using extremely hazardous substances. The Risk Management Program Rule (RMP Rule) was written to implement Section 112(r) of these amendments. The rule, which built upon existing industry codes and standards, requires companies of all sizes that use certain flammable and toxic substances to develop a Risk Management Program, which includes a(n): Hazard assessment that details the potential effects of an accidental release, an accident history of the last five years, and an evaluation of worst-case and alternative accidental releases; Prevention program that includes safety precautions and maintenance, monitoring, and employee training measures; and Emergency response program that spells out emergency health care, employee training measures and procedures for informing the public and response agencies (e.g the fire department) should an accident occur.

Date of Government Version: 10/01/2024
Date Data Arrived at EDR: 10/23/2024
Date Made Active in Reports: 01/14/2025
Number of Days to Update: 83

Source: Environmental Protection Agency
Telephone: 202-564-8600
Last EDR Contact: 01/09/2025
Next Scheduled EDR Contact: 04/28/2025
Data Release Frequency: Varies

RAATS: RCRA Administrative Action Tracking System

RCRA Administration Action Tracking System. RAATS contains records based on enforcement actions issued under RCRA pertaining to major violators and includes administrative and civil actions brought by the EPA. For administration actions after September 30, 1995, data entry in the RAATS database was discontinued. EPA will retain a copy of the database for historical records. It was necessary to terminate RAATS because a decrease in agency resources made it impossible to continue to update the information contained in the database.

Date of Government Version: 04/17/1995
Date Data Arrived at EDR: 07/03/1995
Date Made Active in Reports: 08/07/1995
Number of Days to Update: 35

Source: EPA
Telephone: 202-564-4104
Last EDR Contact: 06/02/2008
Next Scheduled EDR Contact: 09/01/2008
Data Release Frequency: No Update Planned

PRP: Potentially Responsible Parties

A listing of verified Potentially Responsible Parties

Date of Government Version: 09/19/2023
Date Data Arrived at EDR: 10/03/2023
Date Made Active in Reports: 10/19/2023
Number of Days to Update: 16

Source: EPA
Telephone: 202-564-6023
Last EDR Contact: 02/03/2025
Next Scheduled EDR Contact: 05/12/2025
Data Release Frequency: Quarterly

PADS: PCB Activity Database System

PCB Activity Database. PADS Identifies generators, transporters, commercial storers and/or brokers and disposers of PCB's who are required to notify the EPA of such activities.

Date of Government Version: 07/01/2024
Date Data Arrived at EDR: 10/02/2024
Date Made Active in Reports: 01/10/2025
Number of Days to Update: 100

Source: EPA
Telephone: 202-566-0500
Last EDR Contact: 01/02/2025
Next Scheduled EDR Contact: 04/14/2025
Data Release Frequency: Annually

ICIS: Integrated Compliance Information System

The Integrated Compliance Information System (ICIS) supports the information needs of the national enforcement and compliance program as well as the unique needs of the National Pollutant Discharge Elimination System (NPDES) program.

Date of Government Version: 11/18/2016
Date Data Arrived at EDR: 11/23/2016
Date Made Active in Reports: 02/10/2017
Number of Days to Update: 79

Source: Environmental Protection Agency
Telephone: 202-564-2501
Last EDR Contact: 12/23/2024
Next Scheduled EDR Contact: 04/14/2025
Data Release Frequency: Quarterly

FTTS: FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)

FTTS tracks administrative cases and pesticide enforcement actions and compliance activities related to FIFRA, TSCA and EPCRA (Emergency Planning and Community Right-to-Know Act). To maintain currency, EDR contacts the Agency on a quarterly basis.

Date of Government Version: 04/09/2009
Date Data Arrived at EDR: 04/16/2009
Date Made Active in Reports: 05/11/2009
Number of Days to Update: 25

Source: EPA/Office of Prevention, Pesticides and Toxic Substances
Telephone: 202-566-1667
Last EDR Contact: 08/18/2017
Next Scheduled EDR Contact: 12/04/2017
Data Release Frequency: No Update Planned

FTTS INSP: FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)

A listing of FIFRA/TSCA Tracking System (FTTS) inspections and enforcements.

Date of Government Version: 04/09/2009
Date Data Arrived at EDR: 04/16/2009
Date Made Active in Reports: 05/11/2009
Number of Days to Update: 25

Source: EPA
Telephone: 202-566-1667
Last EDR Contact: 08/18/2017
Next Scheduled EDR Contact: 12/04/2017
Data Release Frequency: No Update Planned

MLTS: Material Licensing Tracking System

MLTS is maintained by the Nuclear Regulatory Commission and contains a list of approximately 8,100 sites which possess or use radioactive materials and which are subject to NRC licensing requirements. To maintain currency, EDR contacts the Agency on a quarterly basis.

Date of Government Version: 10/12/2024
Date Data Arrived at EDR: 10/17/2024
Date Made Active in Reports: 11/19/2024
Number of Days to Update: 33

Source: Nuclear Regulatory Commission
Telephone: 301-415-0717
Last EDR Contact: 01/09/2025
Next Scheduled EDR Contact: 04/28/2025
Data Release Frequency: Quarterly

COAL ASH DOE: Steam-Electric Plant Operation Data

A listing of power plants that store ash in surface ponds.

Date of Government Version: 12/31/2023
Date Data Arrived at EDR: 10/16/2024
Date Made Active in Reports: 01/14/2025
Number of Days to Update: 90

Source: Department of Energy
Telephone: 202-586-8719
Last EDR Contact: 02/24/2025
Next Scheduled EDR Contact: 06/09/2025
Data Release Frequency: Varies

COAL ASH EPA: Coal Combustion Residues Surface Impoundments List

A listing of coal combustion residues surface impoundments with high hazard potential ratings.

Date of Government Version: 01/12/2017
Date Data Arrived at EDR: 03/05/2019
Date Made Active in Reports: 11/11/2019
Number of Days to Update: 251

Source: Environmental Protection Agency
Telephone: N/A
Last EDR Contact: 02/24/2025
Next Scheduled EDR Contact: 06/09/2025
Data Release Frequency: Varies

PCB TRANSFORMER: PCB Transformer Registration Database
The database of PCB transformer registrations that includes all PCB registration submittals.

Date of Government Version: 09/13/2019
Date Data Arrived at EDR: 11/06/2019
Date Made Active in Reports: 02/10/2020
Number of Days to Update: 96
Source: Environmental Protection Agency
Telephone: 202-566-0517
Last EDR Contact: 01/30/2025
Next Scheduled EDR Contact: 05/12/2025
Data Release Frequency: Varies

RADINFO: Radiation Information Database
The Radiation Information Database (RADINFO) contains information about facilities that are regulated by U.S. Environmental Protection Agency (EPA) regulations for radiation and radioactivity.

Date of Government Version: 07/01/2019
Date Data Arrived at EDR: 07/01/2019
Date Made Active in Reports: 09/23/2019
Number of Days to Update: 84
Source: Environmental Protection Agency
Telephone: 202-343-9775
Last EDR Contact: 12/17/2024
Next Scheduled EDR Contact: 04/07/2025
Data Release Frequency: Quarterly

HIST FTTS: FIFRA/TSCA Tracking System Administrative Case Listing
A complete administrative case listing from the FIFRA/TSCA Tracking System (FTTS) for all ten EPA regions. The information was obtained from the National Compliance Database (NCDB). NCDB supports the implementation of FIFRA (Federal Insecticide, Fungicide, and Rodenticide Act) and TSCA (Toxic Substances Control Act). Some EPA regions are now closing out records. Because of that, and the fact that some EPA regions are not providing EPA Headquarters with updated records, it was decided to create a HIST FTTS database. It included records that may not be included in the newer FTTS database updates. This database is no longer updated.

Date of Government Version: 10/19/2006
Date Data Arrived at EDR: 03/01/2007
Date Made Active in Reports: 04/10/2007
Number of Days to Update: 40
Source: Environmental Protection Agency
Telephone: 202-564-2501
Last EDR Contact: 12/17/2007
Next Scheduled EDR Contact: 03/17/2008
Data Release Frequency: No Update Planned

HIST FTTS INSP: FIFRA/TSCA Tracking System Inspection & Enforcement Case Listing
A complete inspection and enforcement case listing from the FIFRA/TSCA Tracking System (FTTS) for all ten EPA regions. The information was obtained from the National Compliance Database (NCDB). NCDB supports the implementation of FIFRA (Federal Insecticide, Fungicide, and Rodenticide Act) and TSCA (Toxic Substances Control Act). Some EPA regions are now closing out records. Because of that, and the fact that some EPA regions are not providing EPA Headquarters with updated records, it was decided to create a HIST FTTS database. It included records that may not be included in the newer FTTS database updates. This database is no longer updated.

Date of Government Version: 10/19/2006
Date Data Arrived at EDR: 03/01/2007
Date Made Active in Reports: 04/10/2007
Number of Days to Update: 40
Source: Environmental Protection Agency
Telephone: 202-564-2501
Last EDR Contact: 12/17/2008
Next Scheduled EDR Contact: 03/17/2008
Data Release Frequency: No Update Planned

DOT OPS: Incident and Accident Data
Department of Transporation, Office of Pipeline Safety Incident and Accident data.

Date of Government Version: 10/04/2024
Date Data Arrived at EDR: 10/16/2024
Date Made Active in Reports: 12/06/2024
Number of Days to Update: 51
Source: Department of Transporation, Office of Pipeline Safety
Telephone: 202-366-4595
Last EDR Contact: 01/22/2025
Next Scheduled EDR Contact: 05/05/2025
Data Release Frequency: Quarterly

CONSENT: Superfund (CERCLA) Consent Decrees
Major legal settlements that establish responsibility and standards for cleanup at NPL (Superfund) sites. Released periodically by United States District Courts after settlement by parties to litigation matters.

Date of Government Version: 09/30/2024
Date Data Arrived at EDR: 10/09/2024
Date Made Active in Reports: 01/10/2025
Number of Days to Update: 93

Source: Department of Justice, Consent Decree Library
Telephone: Varies
Last EDR Contact: 12/30/2024
Next Scheduled EDR Contact: 04/14/2025
Data Release Frequency: Varies

BRS: Biennial Reporting System

The Biennial Reporting System is a national system administered by the EPA that collects data on the generation and management of hazardous waste. BRS captures detailed data from two groups: Large Quantity Generators (LQG) and Treatment, Storage, and Disposal Facilities.

Date of Government Version: 12/31/2021
Date Data Arrived at EDR: 03/09/2023
Date Made Active in Reports: 03/20/2023
Number of Days to Update: 11

Source: EPA/NTIS
Telephone: 800-424-9346
Last EDR Contact: 12/12/2024
Next Scheduled EDR Contact: 03/31/2025
Data Release Frequency: Biennially

INDIAN RESERV: Indian Reservations

This map layer portrays Indian administered lands of the United States that have any area equal to or greater than 640 acres.

Date of Government Version: 12/31/2014
Date Data Arrived at EDR: 07/14/2015
Date Made Active in Reports: 01/10/2017
Number of Days to Update: 546

Source: USGS
Telephone: 202-208-3710
Last EDR Contact: 12/30/2024
Next Scheduled EDR Contact: 04/14/2025
Data Release Frequency: Semi-Annually

FUSRAP: Formerly Utilized Sites Remedial Action Program

DOE established the Formerly Utilized Sites Remedial Action Program (FUSRAP) in 1974 to remediate sites where radioactive contamination remained from Manhattan Project and early U.S. Atomic Energy Commission (AEC) operations.

Date of Government Version: 03/03/2023
Date Data Arrived at EDR: 03/03/2023
Date Made Active in Reports: 06/09/2023
Number of Days to Update: 98

Source: Department of Energy
Telephone: 202-586-3559
Last EDR Contact: 01/23/2025
Next Scheduled EDR Contact: 05/12/2025
Data Release Frequency: Varies

UMTRA: Uranium Mill Tailings Sites

Uranium ore was mined by private companies for federal government use in national defense programs. When the mills shut down, large piles of the sand-like material (mill tailings) remain after uranium has been extracted from the ore. Levels of human exposure to radioactive materials from the piles are low; however, in some cases tailings were used as construction materials before the potential health hazards of the tailings were recognized.

Date of Government Version: 05/08/2024
Date Data Arrived at EDR: 08/14/2024
Date Made Active in Reports: 08/28/2024
Number of Days to Update: 14

Source: Department of Energy
Telephone: 505-845-0011
Last EDR Contact: 02/06/2025
Next Scheduled EDR Contact: 05/26/2025
Data Release Frequency: Varies

LEAD SMELTER 1: Lead Smelter Sites

A listing of former lead smelter site locations.

Date of Government Version: 12/19/2024
Date Data Arrived at EDR: 01/02/2025
Date Made Active in Reports: 01/21/2025
Number of Days to Update: 19

Source: Environmental Protection Agency
Telephone: 703-603-8787
Last EDR Contact: 02/03/2025
Next Scheduled EDR Contact: 04/07/2025
Data Release Frequency: Varies

LEAD SMELTER 2: Lead Smelter Sites

A list of several hundred sites in the U.S. where secondary lead smelting was done from 1931and 1964. These sites may pose a threat to public health through ingestion or inhalation of contaminated soil or dust

Date of Government Version: 04/05/2001
Date Data Arrived at EDR: 10/27/2010
Date Made Active in Reports: 12/02/2010
Number of Days to Update: 36

Source: American Journal of Public Health
Telephone: 703-305-6451
Last EDR Contact: 12/02/2009
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

US AIRS (AFS): Aerometric Information Retrieval System Facility Subsystem (AFS)

The database is a sub-system of Aerometric Information Retrieval System (AIRS). AFS contains compliance data on air pollution point sources regulated by the U.S. EPA and/or state and local air regulatory agencies. This information comes from source reports by various stationary sources of air pollution, such as electric power plants, steel mills, factories, and universities, and provides information about the air pollutants they produce. Action, air program, air program pollutant, and general level plant data. It is used to track emissions and compliance data from industrial plants.

Date of Government Version: 10/12/2016
Date Data Arrived at EDR: 10/26/2016
Date Made Active in Reports: 02/03/2017
Number of Days to Update: 100

Source: EPA
Telephone: 202-564-2496
Last EDR Contact: 09/26/2017
Next Scheduled EDR Contact: 01/08/2018
Data Release Frequency: Annually

US AIRS MINOR: Air Facility System Data

A listing of minor source facilities.

Date of Government Version: 10/12/2016
Date Data Arrived at EDR: 10/26/2016
Date Made Active in Reports: 02/03/2017
Number of Days to Update: 100

Source: EPA
Telephone: 202-564-2496
Last EDR Contact: 09/26/2017
Next Scheduled EDR Contact: 01/08/2018
Data Release Frequency: Annually

US MINES: Mines Master Index File

Contains all mine identification numbers issued for mines active or opened since 1971. The data also includes violation information.

Date of Government Version: 11/01/2024
Date Data Arrived at EDR: 11/18/2024
Date Made Active in Reports: 02/11/2025
Number of Days to Update: 85

Source: Department of Labor, Mine Safety and Health Administration
Telephone: 303-231-5959
Last EDR Contact: 02/18/2025
Next Scheduled EDR Contact: 06/02/2025
Data Release Frequency: Semi-Annually

MINES VIOLATIONS: MSHA Violation Assessment Data

Mines violation and assessment information. Department of Labor, Mine Safety & Health Administration.

Date of Government Version: 10/01/2024
Date Data Arrived at EDR: 10/02/2024
Date Made Active in Reports: 10/09/2024
Number of Days to Update: 7

Source: DOL, Mine Safety & Health Admi
Telephone: 202-693-9424
Last EDR Contact: 02/19/2025
Next Scheduled EDR Contact: 06/02/2025
Data Release Frequency: Quarterly

US MINES 2: Ferrous and Nonferrous Metal Mines Database Listing

This map layer includes ferrous (ferrous metal mines are facilities that extract ferrous metals, such as iron ore or molybdenum) and nonferrous (Nonferrous metal mines are facilities that extract nonferrous metals, such as gold, silver, copper, zinc, and lead) metal mines in the United States.

Date of Government Version: 05/02/2024
Date Data Arrived at EDR: 08/20/2024
Date Made Active in Reports: 10/09/2024
Number of Days to Update: 50

Source: USGS
Telephone: 703-648-7709
Last EDR Contact: 02/20/2025
Next Scheduled EDR Contact: 06/02/2025
Data Release Frequency: Varies

US MINES 3: Active Mines & Mineral Plants Database Listing

Active Mines and Mineral Processing Plant operations for commodities monitored by the Minerals Information Team of the USGS.

Date of Government Version: 04/14/2011
Date Data Arrived at EDR: 06/08/2011
Date Made Active in Reports: 09/13/2011
Number of Days to Update: 97

Source: USGS
Telephone: 703-648-7709
Last EDR Contact: 02/20/2025
Next Scheduled EDR Contact: 06/02/2025
Data Release Frequency: Varies

ABANDONED MINES: Abandoned Mines

An inventory of land and water impacted by past mining (primarily coal mining) is maintained by OSMRE to provide information needed to implement the Surface Mining Control and Reclamation Act of 1977 (SMCRA). The inventory contains information on the location, type, and extent of AML impacts, as well as, information on the cost associated with the reclamation of those problems. The inventory is based upon field surveys by State, Tribal, and OSMRE program officials. It is dynamic to the extent that it is modified as new problems are identified and existing problems are reclaimed.

Date of Government Version: 12/10/2024
Date Data Arrived at EDR: 12/11/2024
Date Made Active in Reports: 02/18/2025
Number of Days to Update: 69

Source: Department of Interior
Telephone: 202-208-2609
Last EDR Contact: 12/10/2024
Next Scheduled EDR Contact: 03/17/2025
Data Release Frequency: Quarterly

MINES MRDS: Mineral Resources Data System

Mineral Resources Data System

Date of Government Version: 06/04/2024
Date Data Arrived at EDR: 11/22/2024
Date Made Active in Reports: 02/18/2025
Number of Days to Update: 88

Source: USGS
Telephone: 703-648-6533
Last EDR Contact: 02/20/2025
Next Scheduled EDR Contact: 06/02/2025
Data Release Frequency: Varies

FINDS: Facility Index System/Facility Registry System

Facility Index System. FINDS contains both facility information and 'pointers' to other sources that contain more detail. EDR includes the following FINDS databases in this report: PCS (Permit Compliance System), AIRS (Aerometric Information Retrieval System), DOCKET (Enforcement Docket used to manage and track information on civil judicial enforcement cases for all environmental statutes), FURS (Federal Underground Injection Control), C-DOCKET (Criminal Docket System used to track criminal enforcement actions for all environmental statutes), FFIS (Federal Facilities Information System), STATE (State Environmental Laws and Statutes), and PADS (PCB Activity Data System).

Date of Government Version: 11/11/2024
Date Data Arrived at EDR: 11/20/2024
Date Made Active in Reports: 02/18/2025
Number of Days to Update: 90

Source: EPA
Telephone: (415) 947-8000
Last EDR Contact: 11/20/2024
Next Scheduled EDR Contact: 03/10/2025
Data Release Frequency: Quarterly

DOCKET HWC: Hazardous Waste Compliance Docket Listing

A complete list of the Federal Agency Hazardous Waste Compliance Docket Facilities.

Date of Government Version: 05/06/2021
Date Data Arrived at EDR: 05/21/2021
Date Made Active in Reports: 08/11/2021
Number of Days to Update: 82

Source: Environmental Protection Agency
Telephone: 202-564-0527
Last EDR Contact: 02/12/2025
Next Scheduled EDR Contact: 06/02/2025
Data Release Frequency: Varies

ECHO: Enforcement & Compliance History Information

ECHO provides integrated compliance and enforcement information for about 800,000 regulated facilities nationwide.

Date of Government Version: 12/21/2024
Date Data Arrived at EDR: 12/27/2024
Date Made Active in Reports: 01/10/2025
Number of Days to Update: 14

Source: Environmental Protection Agency
Telephone: 202-564-2280
Last EDR Contact: 12/27/2024
Next Scheduled EDR Contact: 04/14/2025
Data Release Frequency: Quarterly

UXO: Unexploded Ordnance Sites

A listing of unexploded ordnance site locations

Date of Government Version: 09/06/2023
Date Data Arrived at EDR: 09/13/2023
Date Made Active in Reports: 12/11/2023
Number of Days to Update: 89

Source: Department of Defense
Telephone: 703-704-1564
Last EDR Contact: 01/06/2025
Next Scheduled EDR Contact: 04/21/2025
Data Release Frequency: Varies

FUELS PROGRAM: EPA Fuels Program Registered Listing

This listing includes facilities that are registered under the Part 80 (Code of Federal Regulations) EPA Fuels Programs. All companies now are required to submit new and updated registrations.

Date of Government Version: 11/08/2024
Date Data Arrived at EDR: 11/08/2024
Date Made Active in Reports: 01/14/2025
Number of Days to Update: 67

Source: EPA
Telephone: 800-385-6164
Last EDR Contact: 02/13/2025
Next Scheduled EDR Contact: 05/26/2025
Data Release Frequency: Quarterly

PFAS NPL: Superfund Sites with PFAS Detections Information

EPA's Office of Land and Emergency Management and EPA Regional Offices maintain data describing what is known about site investigations, contamination, and remedial actions under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) where PFAS is present in the environment.

Date of Government Version: 12/30/2024
Date Data Arrived at EDR: 01/02/2025
Date Made Active in Reports: 01/10/2025
Number of Days to Update: 8

Source: Environmental Protection Agency
Telephone: 703-603-8895
Last EDR Contact: 02/20/2025
Next Scheduled EDR Contact: 04/14/2025
Data Release Frequency: Varies

PFAS FEDERAL SITES: Federal Sites PFAS Information

Several federal entities, such as the federal Superfund program, Department of Defense, National Aeronautics and Space Administration, Department of Transportation, and Department of Energy provided information for sites with known or suspected detections at federal facilities.

Date of Government Version: 12/30/2024
Date Data Arrived at EDR: 01/02/2025
Date Made Active in Reports: 01/10/2025
Number of Days to Update: 8

Source: Environmental Protection Agency
Telephone: 202-272-0167
Last EDR Contact: 02/20/2025
Next Scheduled EDR Contact: 04/14/2025
Data Release Frequency: Varies

PFAS TSCA: PFAS Manufacture and Imports Information

EPA issued the Chemical Data Reporting (CDR) Rule under the Toxic Substances Control Act (TSCA) and requires chemical manufacturers and facilities that manufacture or import chemical substances to report data to EPA. EPA publishes non-confidential business information (non-CBI) and includes descriptive information about each site, corporate parent, production volume, other manufacturing information, and processing and use information.

Date of Government Version: 12/30/2024
Date Data Arrived at EDR: 01/02/2025
Date Made Active in Reports: 01/10/2025
Number of Days to Update: 8

Source: Environmental Protection Agency
Telephone: 202-272-0167
Last EDR Contact: 02/20/2025
Next Scheduled EDR Contact: 04/14/2025
Data Release Frequency: Varies

PFAS TRIS: List of PFAS Added to the TRI

Section 7321 of the National Defense Authorization Act for Fiscal Year 2020 (NDAA) immediately added certain per- and polyfluoroalkyl substances (PFAS) to the list of chemicals covered by the Toxics Release Inventory (TRI) under Section 313 of the Emergency Planning and Community Right-to-Know Act (EPCRA) and provided a framework for additional PFAS to be added to TRI on an annual basis.

Date of Government Version: 12/30/2024
Date Data Arrived at EDR: 01/02/2025
Date Made Active in Reports: 01/10/2025
Number of Days to Update: 8

Source: Environmental Protection Agency
Telephone: 202-566-0250
Last EDR Contact: 02/20/2025
Next Scheduled EDR Contact: 04/14/2025
Data Release Frequency: Varies

PFAS RCRA MANIFEST: PFAS Transfers Identified In the RCRA Database Listing

To work around the lack of PFAS waste codes in the RCRA database, EPA developed the PFAS Transfers dataset by mining e-Manifest records containing at least one of these common PFAS keywords: PFAS, PFOA, PFOS, PERFL, AFFF, GENX, GEN-X (plus the VT waste codes). These keywords were searched for in the following text fields: Manifest handling instructions (MANIFEST_HANDLING_INSTR), Non-hazardous waste description (NON_HAZ_WASTE_DESCRIPTION), DOT printed information (DOT_PRINTED_INFORMATION), Waste line handling instructions (WASTE_LINE_HANDLING_INSTR), Waste residue comments (WASTE_RESIDUE_COMMENTS).

Date of Government Version: 12/30/2024
Date Data Arrived at EDR: 01/02/2025
Date Made Active in Reports: 01/10/2025
Number of Days to Update: 8

Source: Environmental Protection Agency
Telephone: 202-272-0167
Last EDR Contact: 02/20/2025
Next Scheduled EDR Contact: 04/14/2025
Data Release Frequency: Varies

PFAS ATSDR: PFAS Contamination Site Location Listing

PFAS contamination site locations from the Department of Health & Human Services, Center for Disease Control & Prevention. ATSDR is involved at a number of PFAS-related sites, either directly or through assisting state and federal partners. As of now, most sites are related to drinking water contamination connected with PFAS production facilities or fire training areas where aqueous film-forming firefighting foam (AFFF) was regularly used.

Date of Government Version: 06/24/2020
Date Data Arrived at EDR: 03/17/2021
Date Made Active in Reports: 11/08/2022
Number of Days to Update: 601

Source: Department of Health & Human Services
Telephone: 202-741-5770
Last EDR Contact: 01/16/2025
Next Scheduled EDR Contact: 05/05/2025
Data Release Frequency: Varies

PFAS WQP: Ambient Environmental Sampling for PFAS

The Water Quality Portal (WQP) is a part of a modernized repository storing ambient sampling data for all environmental media and tissue samples. A wide range of federal, state, tribal and local governments, academic and non-governmental organizations and individuals submit project details and sampling results to this public repository. The information is commonly used for research and assessments of environmental quality.

Date of Government Version: 12/13/2024
Date Data Arrived at EDR: 01/02/2025
Date Made Active in Reports: 01/10/2025
Number of Days to Update: 8

Source: Environmental Protection Agency
Telephone: 202-272-0167
Last EDR Contact: 02/20/2025
Next Scheduled EDR Contact: 04/14/2025
Data Release Frequency: Varies

PFAS NPDES: Clean Water Act Discharge Monitoring Information

Any discharger of pollutants to waters of the United States from a point source must have a National Pollutant Discharge Elimination System (NPDES) permit. The process for obtaining limits involves the regulated entity (permittee) disclosing releases in a NPDES permit application and the permitting authority (typically the state but sometimes EPA) deciding whether to require monitoring or monitoring with limits. Caveats and Limitations: Less than half of states have required PFAS monitoring for at least one of their permittees and fewer states have established PFAS effluent limits for permittees. New rulemakings have been initiated that may increase the number of facilities monitoring for PFAS in the future.

Date of Government Version: 12/30/2024
Date Data Arrived at EDR: 01/02/2025
Date Made Active in Reports: 01/14/2025
Number of Days to Update: 12

Source: Environmental Protection Agency
Telephone: 202-272-0167
Last EDR Contact: 01/02/2025
Next Scheduled EDR Contact: 04/14/2025
Data Release Frequency: Varies

PFAS PROJECT: NORTHEASTERN UNIVERSITY PFAS PROJECT

The PFAS Contamination Site Tracker records qualitative and quantitative data from each site in a chart, specifically examining discovery, contamination levels, government response, litigation, health impacts, media coverage, and community characteristics. All data presented in the chart were extracted from government websites, such as state health departments or the Environmental Protection Agency, and news articles.

Date of Government Version: 05/19/2023
Date Data Arrived at EDR: 04/05/2024
Date Made Active in Reports: 06/06/2024
Number of Days to Update: 62

Source: Social Science Environmental Health Research Institute
Telephone: N/A
Last EDR Contact: 12/05/2024
Next Scheduled EDR Contact: 03/17/2025
Data Release Frequency: Varies

PFAS ECHO: Facilities in Industries that May Be Handling PFAS Listing

Regulators and the public have expressed interest in knowing which regulated entities may be using PFAS. EPA has developed a dataset from various sources that show which industries may be handling PFAS. Approximately 120,000 facilities subject to federal environmental programs have operated or currently operate in industry sectors with processes that may involve handling and/or release of PFAS.

Date of Government Version: 12/30/2024
Date Data Arrived at EDR: 01/02/2025
Date Made Active in Reports: 01/10/2025
Number of Days to Update: 8

Source: Environmental Protection Agency
Telephone: 202-272-0167
Last EDR Contact: 02/20/2025
Next Scheduled EDR Contact: 04/14/2025
Data Release Frequency: Varies

PFAS ECHO FIRE TRAIN: Facilities in Industries that May Be Handling PFAS Listing

A list of fire training sites was added to the Industry Sectors dataset using a keyword search on the permitted facilitys name to identify sites where fire-fighting foam may have been used in training exercises. Additionally, you may view an example spreadsheet of the subset of fire training facility data, as well as the keywords used in selecting or deselecting a facility for the subset. as well as the keywords used in selecting or deselecting a facility for the subset. These keywords were tested to maximize accuracy in selecting facilities that may use fire-fighting foam in training exercises, however, due to the lack of a required reporting field in the data systems for designating fire training sites, this methodology may not identify all fire training sites or may potentially misidentify them.

Date of Government Version: 12/30/2024
Date Data Arrived at EDR: 01/02/2025
Date Made Active in Reports: 01/10/2025
Number of Days to Update: 8

Source: Environmental Protection Agency
Telephone: 202-272-0167
Last EDR Contact: 02/20/2025
Next Scheduled EDR Contact: 04/14/2025
Data Release Frequency: Varies

PFAS PT 139 AIRPORT: All Certified Part 139 Airports PFAS Information Listing

Since July 1, 2006, all certified part 139 airports are required to have fire-fighting foam onsite that meet military specifications (MIL-F-24385) (14 CFR 139.317). To date, these military specification fire-fighting foams are fluorinated and have been historically used for training and extinguishing. The 2018 FAA Reauthorization Act has a provision stating that no later than October 2021, FAA shall not require the use of fluorinated AFFF. This provision does not prohibit the use of fluorinated AFFF at Part 139 civilian airports; it only prohibits FAA from mandating its use. The Federal Aviation Administration?s document AC 150/5210-6D - Aircraft Fire Extinguishing Agents provides guidance on Aircraft Fire Extinguishing Agents, which includes Aqueous Film Forming Foam (AFFF).

Date of Government Version: 12/30/2024
Date Data Arrived at EDR: 01/02/2025
Date Made Active in Reports: 01/10/2025
Number of Days to Update: 8

Source: Environmental Protection Agency
Telephone: 202-272-0167
Last EDR Contact: 02/20/2025
Next Scheduled EDR Contact: 04/14/2025
Data Release Frequency: Varies

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

AQUEOUS FOAM NRC: Aqueous Foam Related Incidents Listing

The National Response Center (NRC) serves as an emergency call center that fields initial reports for pollution and railroad incidents and forwards that information to appropriate federal/state agencies for response. The spreadsheets posted to the NRC website contain initial incident data that has not been validated or investigated by a federal/state response agency. Response center calls from 1990 to the most recent complete calendar year where there was indication of Aqueous Film Forming Foam (AFFF) usage are included in this dataset. NRC calls may reference AFFF usage in the ?Material Involved? or ?Incident Description? fields.

Date of Government Version: 12/30/2024
Date Data Arrived at EDR: 01/02/2025
Date Made Active in Reports: 01/10/2025
Number of Days to Update: 8

Source: Environmental Protection Agency
Telephone: 202-267-2675
Last EDR Contact: 02/20/2025
Next Scheduled EDR Contact: 04/14/2025
Data Release Frequency: Varies

PCS: Permit Compliance System

PCS is a computerized management information system that contains data on National Pollutant Discharge Elimination System (NPDES) permit holding facilities. PCS tracks the permit, compliance, and enforcement status of NPDES facilities.

Date of Government Version: 12/16/2016
Date Data Arrived at EDR: 01/06/2017
Date Made Active in Reports: 03/10/2017
Number of Days to Update: 63

Source: EPA, Office of Water
Telephone: 202-564-2496
Last EDR Contact: 12/23/2024
Next Scheduled EDR Contact: 04/14/2025
Data Release Frequency: No Update Planned

PCS ENF: Enforcement data

No description is available for this data

Date of Government Version: 12/31/2014
Date Data Arrived at EDR: 02/05/2015
Date Made Active in Reports: 03/06/2015
Number of Days to Update: 29

Source: EPA
Telephone: 202-564-2497
Last EDR Contact: 12/23/2024
Next Scheduled EDR Contact: 04/14/2025
Data Release Frequency: Varies

BIOSOLIDS: ICIS-NPDES Biosolids Facility Data

The data reflects compliance information about facilities in the biosolids program.

Date of Government Version: 10/13/2024
Date Data Arrived at EDR: 10/16/2024
Date Made Active in Reports: 10/23/2024
Number of Days to Update: 7

Source: Environmental Protection Agency
Telephone: 202-564-4700
Last EDR Contact: 01/14/2025
Next Scheduled EDR Contact: 04/28/2025
Data Release Frequency: Varies

UST FINDER RELEASE: UST Finder Releases Database

US EPA's UST Finder data is a national composite of leaking underground storage tanks. This data contains information about, and locations of, leaking underground storage tanks. Data was collected from state sources and standardized into a national profile by EPA's Office of Underground Storage Tanks, Office of Research and Development, and the Association of State and Territorial Solid Waste Management Officials.

Date of Government Version: 06/08/2023
Date Data Arrived at EDR: 10/31/2023
Date Made Active in Reports: 01/18/2024
Number of Days to Update: 79

Source: Environmental Protecton Agency
Telephone: 202-564-0394
Last EDR Contact: 02/06/2025
Next Scheduled EDR Contact: 05/19/2025
Data Release Frequency: Semi-Annually

UST FINDER: UST Finder Database

EPA developed UST Finder, a web map application containing a comprehensive, state-sourced national map of underground storage tank (UST) and leaking UST (LUST) data. It provides the attributes and locations of active and closed USTs, UST facilities, and LUST sites from states and from Tribal lands and US territories . UST Finder contains information about proximity of UST facilities and LUST sites to: surface and groundwater public drinking water protection areas; estimated number of private domestic wells and number of people living nearby; and flooding and wildfires.

Date of Government Version: 06/08/2023
Date Data Arrived at EDR: 10/04/2023
Date Made Active in Reports: 01/18/2024
Number of Days to Update: 106

Source: Environmental Protection Agency
Telephone: 202-564-0394
Last EDR Contact: 02/06/2025
Next Scheduled EDR Contact: 05/19/2025
Data Release Frequency: Varies

E MANIFEST: Hazardous Waste Electronic Manifest System

EPA established a national system for tracking hazardous waste shipments electronically. This system, known as ?e-Manifest,? will modernize the nation?s cradle-to-grave hazardous waste tracking process while saving valuable time, resources, and dollars for industry and states.

Date of Government Version: 09/16/2024
Date Data Arrived at EDR: 09/17/2024
Date Made Active in Reports: 12/20/2024
Number of Days to Update: 94

Source: Environmental Protection Agency
Telephone: 833-501-6826
Last EDR Contact: 02/19/2025
Next Scheduled EDR Contact: 03/31/2025
Data Release Frequency: Varies

PFAS: PFAS Contamination Site Location Listing

A listing of PFAS sites included in the Envirostor and GeoTracker databases. Locations of potential sources of per - and polyfluoroalkyl substances (PFAS). This does not mean that PFAS has been produced, used, or discharged at these sites.

Date of Government Version: 12/02/2024
Date Data Arrived at EDR: 12/03/2024
Date Made Active in Reports: 02/24/2025
Number of Days to Update: 83

Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 12/03/2024
Next Scheduled EDR Contact: 03/17/2025
Data Release Frequency: Varies

AQUEOUS FOAM: Former Fire Training Facility Assessments Listing

Airports shown on this list are those believed to use Aqueous Film Forming Foam (AFFF), and certified by the Federal Aviation Administration (FAA) under Title 14, Code of Federal Regulations (CFR), Part 139 (14 CFR Part 139). This list was created by SWRCB using information available from the FAA. Location points shown are from the latitude and longitude listed on the FAA airport master record.

Date of Government Version: 12/02/2024
Date Data Arrived at EDR: 12/03/2024
Date Made Active in Reports: 02/24/2025
Number of Days to Update: 83

Source: State Water Resources Control Board
Telephone: 916-341-5455
Last EDR Contact: 12/03/2024
Next Scheduled EDR Contact: 03/17/2025
Data Release Frequency: Varies

CA BOND EXP. PLAN: Bond Expenditure Plan

Department of Health Services developed a site-specific expenditure plan as the basis for an appropriation of Hazardous Substance Cleanup Bond Act funds. It is not updated.

Date of Government Version: 01/01/1989
Date Data Arrived at EDR: 07/27/1994
Date Made Active in Reports: 08/02/1994
Number of Days to Update: 6

Source: Department of Health Services
Telephone: 916-255-2118
Last EDR Contact: 05/31/1994
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

CHROME PLATING: Chrome Plating Facilities Listing

This listing represents chrome plating facilities the California State Water Resources Control Board staff identified as possibly being a source of Per- and polyfluoroalkyl substance (PFAS) contamination. Sites and locations were identified by staff with the Division of Water Quality in the California State Water Board. Data was collected from the CA Air Resources Board 2013 and 2018 - Cr VI emission survey, CA Emission Inventory, CA HAZ Waste discharge database and by reviewing storm water permits. Former chrome plating sites are also included that are open site investigation or remediation cases with the Regional Water Quality Control Boards and the Department of Toxic Substances Control.

Date of Government Version: 12/02/2024
Date Data Arrived at EDR: 12/03/2024
Date Made Active in Reports: 02/24/2025
Number of Days to Update: 83

Source: State Water Resources Control Board
Telephone: 916-341-5455
Last EDR Contact: 12/03/2024
Next Scheduled EDR Contact: 03/17/2025
Data Release Frequency: Varies

CORTESE: "Cortese" Hazardous Waste & Substances Sites List
The sites for the list are designated by the State Water Resource Control Board (LUST), the Integrated Waste Board (SWF/LS), and the Department of Toxic Substances Control (Cal-Sites).

Date of Government Version: 09/16/2024
Date Data Arrived at EDR: 09/17/2024
Date Made Active in Reports: 12/02/2024
Number of Days to Update: 76

Source: CAL EPA/Office of Emergency Information
Telephone: 916-323-3400
Last EDR Contact: 12/11/2024
Next Scheduled EDR Contact: 03/31/2025
Data Release Frequency: Quarterly

CUPA LIV-PLE: CUPA Facility Listing
list of facilities associated with the various CUPA programs in Livermore-Pleasanton

Date of Government Version: 09/19/2024
Date Data Arrived at EDR: 11/05/2024
Date Made Active in Reports: 01/31/2025
Number of Days to Update: 87

Source: Livermore-Pleasanton Fire Department
Telephone: 925-454-2361
Last EDR Contact: 02/06/2025
Next Scheduled EDR Contact: 05/19/2025
Data Release Frequency: Varies

DRYCLEAN CALAVERAS: Calaveras County Environmental Management Agency Drycleaner Facility Listing
A listing of drycleaner facility locations, for the Calaveras County Environmental Management Agency.

Date of Government Version: 06/17/2019
Date Data Arrived at EDR: 06/19/2019
Date Made Active in Reports: 05/01/2023
Number of Days to Update: 1412

Source: Calaveras County Environmental Management Agency
Telephone: 209-754-6399
Last EDR Contact: 08/21/2024
Next Scheduled EDR Contact: 09/16/2019
Data Release Frequency: Varies

DRYCLEAN BAY AREA: Bay Area Air Quality Management District Drycleaner Facility Listing
Bay Area Air Quality Management District Drycleaner Facility Listing.

Date of Government Version: 02/20/2019
Date Data Arrived at EDR: 05/30/2019
Date Made Active in Reports: 05/01/2023
Number of Days to Update: 1432

Source: Bay Area Air Quality Management District
Telephone: 415-516-1916
Last EDR Contact: 08/21/2024
Next Scheduled EDR Contact: 09/11/2023
Data Release Frequency: Varies

DRYCLEAN PLACER: Placer County Air Quality Management District Drycleaner Facility Listing
A listing of drycleaner facility locations, for the Placer County Air Quality Management District.

Date of Government Version: 05/15/2023
Date Data Arrived at EDR: 05/17/2023
Date Made Active in Reports: 08/14/2023
Number of Days to Update: 89

Source: Placer County Air Quality Management District
Telephone: 530-745-2335
Last EDR Contact: 08/21/2024
Next Scheduled EDR Contact: 09/11/2023
Data Release Frequency: Varies

DRYCLEAN SAN LUIS OB: San Luis Obispo County Air Pollution Control District Drycleaner Facility Listing
A listing of drycleaner facility locations, for the San Luis Obispo County Air Pollution Control District.

Date of Government Version: 01/03/2024
Date Data Arrived at EDR: 01/04/2024
Date Made Active in Reports: 03/20/2024
Number of Days to Update: 76

Source: San Luis Obispo County Air Pollution Control District
Telephone: 805-781-5756
Last EDR Contact: 08/21/2024
Next Scheduled EDR Contact: 09/11/2023
Data Release Frequency: Varies

DRYCLEAN IMPERIAL: Imperial County Air Pollution Control District Drycleaner Facility Listing
A listing of drycleaner facility locations, for the Imperial County Air Pollution Control District

Date of Government Version: 10/02/2024
Date Data Arrived at EDR: 10/03/2024
Date Made Active in Reports: 12/20/2024
Number of Days to Update: 78

Source: Imperial County Air Pollution Control District
Telephone: 442-265-1800
Last EDR Contact: 08/21/2024
Next Scheduled EDR Contact: 09/11/2023
Data Release Frequency: Varies

DRYCLEAN SACRAMENTO: Sacramento Metropolitan Air Quality Management DistrictDrycleaner Facility Listing
A listing of drycleaner facility locations, for the Sacramento Metropolitan Air Quality Management District.

Date of Government Version: 09/03/2024
Date Data Arrived at EDR: 09/05/2024
Date Made Active in Reports: 11/13/2024
Number of Days to Update: 69

Source: Sacramento Metropolitan Air Quality Management District
Telephone: 916-874-3958
Last EDR Contact: 08/21/2024
Next Scheduled EDR Contact: 09/11/2023
Data Release Frequency: Varies

DRYCLEAN MENDOCINO: Mendocino County Air Quality Management District Drycleaner Facility Listing
A listing of drycleaner facility locations, for the Mendocino County Air Quality Management District.

Date of Government Version: 08/26/2024
Date Data Arrived at EDR: 09/03/2024
Date Made Active in Reports: 11/13/2024
Number of Days to Update: 71

Source: Mendocino County Air Quality Management District
Telephone: 707-463-4354
Last EDR Contact: 08/21/2024
Next Scheduled EDR Contact: 09/11/2023
Data Release Frequency: Varies

DRYCLEAN SAN DIEGO: San Diego County Air Pollution Control District Drycleaner Facility Listing
A listing of drycleaner facility locations, for the San Diego County Air Pollution Control District.

Date of Government Version: 08/21/2024
Date Data Arrived at EDR: 08/28/2024
Date Made Active in Reports: 11/13/2024
Number of Days to Update: 77

Source: San Diego County Air Pollution Control District
Telephone: 858-586-2616
Last EDR Contact: 08/21/2024
Next Scheduled EDR Contact: 09/11/2023
Data Release Frequency: Varies

DRYCLEAN LAKE: Lake County Air Quality Management District Drycleaner Facility Listing
A listing of drycleaner facility locations, for the Lake County Air Quality Management District,

Date of Government Version: 02/15/2024
Date Data Arrived at EDR: 02/16/2024
Date Made Active in Reports: 05/02/2024
Number of Days to Update: 76

Source: Lake County Air Quality Management District
Telephone: 707-263-7000
Last EDR Contact: 08/21/2024
Next Scheduled EDR Contact: 09/11/2023
Data Release Frequency: Varies

DRYCLEAN YOLO-SOLANO: Yolo-Solano Air Quality Management District Drycleaner Facility Listing
A listing of drycleaner facility locations, for the Yolo-Solano Air Quality Management District.

Date of Government Version: 08/21/2024
Date Data Arrived at EDR: 08/26/2024
Date Made Active in Reports: 11/06/2024
Number of Days to Update: 72

Source: Yolo-Solano Air Quality Management District
Telephone: 530-757-3650
Last EDR Contact: 08/21/2024
Next Scheduled EDR Contact: 09/11/2023
Data Release Frequency: Varies

DRYCLEAN GRANT: Grant Recipients List
Assembly Bill 998 (AB 998) established the Non-Toxic Dry Cleaning Incentive Program to provide financial assistance to the dry cleaning industry to switch from systems using perchloroethylene (Perc), an identified toxic air contaminant and potential human carcinogen, to non-toxic and non-smog forming alternatives.

Date of Government Version: 12/31/2021
Date Data Arrived at EDR: 01/26/2024
Date Made Active in Reports: 04/16/2024
Number of Days to Update: 81

Source: California Air Resources Board
Telephone: 916-323-0006
Last EDR Contact: 01/23/2025
Next Scheduled EDR Contact: 05/05/2025
Data Release Frequency: Varies

DRYCLEAN N SONOMA: Norther Sonoma County County Air Pollution Control District Drycleaner Facility Listing
A listing of drycleaner facility locations, for the Northern Sonoma County Air Pollution Control District.,

Date of Government Version: 08/23/2024
Date Data Arrived at EDR: 08/26/2024
Date Made Active in Reports: 11/05/2024
Number of Days to Update: 71

Source: Santa Barbara County Air Pollution Control District
Telephone: 707-433-5911
Last EDR Contact: 08/21/2024
Next Scheduled EDR Contact: 09/11/2023
Data Release Frequency: Varies

DRYCLEAN AVAQMD: Antelope Valley Air Quality Management District Drycleaner Listing
A listing of dry cleaners in the Antelope Valley Air Quality Management District.

Date of Government Version: 05/29/2024
Date Data Arrived at EDR: 11/07/2024
Date Made Active in Reports: 11/22/2024
Number of Days to Update: 15

Source: Antelope Valley Air Quality Management District
Telephone: 661-723-8070
Last EDR Contact: 02/19/2025
Next Scheduled EDR Contact: 06/09/2025
Data Release Frequency: Varies

DRYCLEAN FEATHER RVR: Feather River Air Quality Management District Drycleaner Facility Listing
A listing of drycleaner facility locations, for the Feather River Air Quality Management District.

Date of Government Version: 03/08/2023
Date Data Arrived at EDR: 03/09/2023
Date Made Active in Reports: 06/05/2023
Number of Days to Update: 88

Source: Feather River Air Quality Management District
Telephone: 530-634-7659
Last EDR Contact: 08/21/2024
Next Scheduled EDR Contact: 09/11/2023
Data Release Frequency: Varies

DRYCLEAN SHASTA: Shasta County Air Quality Management District District Drycleaner Facility Listing
A listing of drycleaner facility locations, for the Shasta County Air Quality Management District.

Date of Government Version: 08/29/2024
Date Data Arrived at EDR: 09/05/2024
Date Made Active in Reports: 11/13/2024
Number of Days to Update: 69

Source: Shasta County Air Quality Management District
Telephone: 530-225-5674
Last EDR Contact: 08/21/2024
Next Scheduled EDR Contact: 09/11/2023
Data Release Frequency: Varies

DRYCLEANERS: Cleaner Facilities
A list of drycleaner related facilities that have EPA ID numbers. These are facilities with certain SIC codes: power laundries, family and commercial; garment pressing and cleaner's agents; linen supply; coin-operated laundries and cleaning; drycleaning plants, except rugs; carpet and upholster cleaning; industrial launderers; laundry and garment services.

Date of Government Version: 08/28/2024
Date Data Arrived at EDR: 09/05/2024
Date Made Active in Reports: 11/13/2024
Number of Days to Update: 69

Source: Department of Toxic Substance Control
Telephone: 916-327-4498
Last EDR Contact: 02/19/2025
Next Scheduled EDR Contact: 06/09/2025
Data Release Frequency: Annually

DRYCLEAN TEHAMA: Tehama County Air Pollution Control District Drycleaner Facility Listing
A listing of drycleaner facility locations, for the Tehama County Air Pollution Control District.

Date of Government Version: 04/24/2019
Date Data Arrived at EDR: 04/24/2019
Date Made Active in Reports: 05/01/2023
Number of Days to Update: 1468

Source: Tehama County Air Pollution Control District
Telephone: 530-527-3717
Last EDR Contact: 08/21/2024
Next Scheduled EDR Contact: 09/11/2023
Data Release Frequency: Varies

DRYCLEAN SOUTH COAST: South Coast Air Quality Management District Drycleaner Listing
A listing of dry cleaners in the South Coast Air Quality Management District

Date of Government Version: 11/14/2024
Date Data Arrived at EDR: 11/15/2024
Date Made Active in Reports: 02/05/2025
Number of Days to Update: 82

Source: South Coast Air Quality Management District
Telephone: 909-396-3211
Last EDR Contact: 02/12/2025
Next Scheduled EDR Contact: 06/02/2025
Data Release Frequency: Varies

DRYCLEAN BUTTE: Butte County Air Quality Management DistrictDrycleaner Facility Listing
Butte County Air Quality Management DistrictDrycleaner Facility Listing.

Date of Government Version: 09/10/2024
Date Data Arrived at EDR: 09/11/2024
Date Made Active in Reports: 11/25/2024
Number of Days to Update: 75

Source: Butte County Air Quality Management District
Telephone: 530-332-9400
Last EDR Contact: 08/21/2024
Next Scheduled EDR Contact: 09/11/2023
Data Release Frequency: Varies

DRYCLEAN GLENN: Glenn County Air Pollution Control District Drycleaner Facility Listing
A listing of drycleaner facility locations, for the Glenn County Air Pollution Control District.

Date of Government Version: 08/26/2024
Date Data Arrived at EDR: 08/28/2024
Date Made Active in Reports: 11/13/2024
Number of Days to Update: 77

Source: Glenn County Air Pollution Control District
Telephone: 530-934-6500
Last EDR Contact: 08/21/2024
Next Scheduled EDR Contact: 09/11/2023
Data Release Frequency: Varies

DRYCLEAN SAN JOAQUIN: San Joaquin Valley Air Pollution Control District District Drycleaner Facility Listing
A listing of drycleaner facility locations, for the San Joaquin Valley Air Pollution Control District.

Date of Government Version: 08/22/2024
Date Data Arrived at EDR: 08/22/2024
Date Made Active in Reports: 11/05/2024
Number of Days to Update: 75

Source: San Joaquin Valley Air Pollution Control District
Telephone: 559-230-6001
Last EDR Contact: 08/21/2024
Next Scheduled EDR Contact: 09/11/2023
Data Release Frequency: Varies

DRYCLEAN EAST KERN: Eastern Kern Air Pollution Control District District Drycleaner Facility Listing
A listing of drycleaner facility locations, for the Eastern Kern Air Pollution Control District.

Date of Government Version: 08/21/2024
Date Data Arrived at EDR: 08/22/2024
Date Made Active in Reports: 11/05/2024
Number of Days to Update: 75

Source: Eastern Kern Air Pollution Control District
Telephone: 661-862-9684
Last EDR Contact: 08/21/2024
Next Scheduled EDR Contact: 09/11/2023
Data Release Frequency: Varies

DRYCLEAN VENTURA: Drycleaner Facility Listing
A listing of drycleaner facility locations, for the Ventura County Air Pollution Control District.

Date of Government Version: 08/26/2024
Date Data Arrived at EDR: 08/28/2024
Date Made Active in Reports: 11/14/2024
Number of Days to Update: 78

Source: Ventura County Air Pollution Control District
Telephone: 805-645-1421
Last EDR Contact: 08/21/2024
Next Scheduled EDR Contact: 09/11/2023
Data Release Frequency: Varies

DRYCLEAN AMADOR: Amador Air District Drycleaner Facility Listing
A listing of drycleaner facility locations, for the Amador Air Quality Management District

Date of Government Version: 04/26/2023
Date Data Arrived at EDR: 04/27/2023
Date Made Active in Reports: 07/13/2023
Number of Days to Update: 77

Source: Amador Air Quality Management District
Telephone: 209-257-0112
Last EDR Contact: 08/21/2024
Next Scheduled EDR Contact: 09/11/2023
Data Release Frequency: Varies

DRYCLEAN MONTERY BAY: Monterey Bay Air Quality Management District Drycleaner Facility Listing
A listing of drycleaner facility locations, for the Monterey Bay Air Quality Management District.

Date of Government Version: 09/09/2024
Date Data Arrived at EDR: 09/11/2024
Date Made Active in Reports: 11/26/2024
Number of Days to Update: 76

Source: Monterey Bay Air Quality Management District
Telephone: 831-647-9411
Last EDR Contact: 08/21/2024
Next Scheduled EDR Contact: 09/11/2023
Data Release Frequency: Varies

DRYCLEAN N COAST: North Coast Unified Air Quality Management District Drycleaner Facility Listing
A listing of drycleaner facility locations, for the North Coast Unified Air Quality Management District.

Date of Government Version: 11/30/2016
Date Data Arrived at EDR: 04/19/2019
Date Made Active in Reports: 05/01/2023
Number of Days to Update: 1473

Source: North Coast Unified Air Quality Management District
Telephone: 707-443-3093
Last EDR Contact: 08/21/2024
Next Scheduled EDR Contact: 09/11/2023
Data Release Frequency: Varies

DRYCLEAN SANTA BARB: Santa Barbara County Air Pollution Control District Drycleaner Facility Listing
A listing of drycleaner facility locations, for the Santa Barbara County Air Pollution Control District.

Date of Government Version: 02/19/2019
Date Data Arrived at EDR: 04/17/2019
Date Made Active in Reports: 05/01/2023
Number of Days to Update: 1475

Source: Santa Barbara County Air Pollution Control District
Telephone: 805-961-8867
Last EDR Contact: 08/21/2024
Next Scheduled EDR Contact: 09/11/2023
Data Release Frequency: Varies

DRYCLEAN MOJAVE: Mojave Desert Air Quality Management District Drycleaner Facility Listing
A listing of drycleaner facility locations, for the Mojave Desert Air Quality Management District.

Date of Government Version: 08/21/2024
Date Data Arrived at EDR: 08/22/2024
Date Made Active in Reports: 11/05/2024
Number of Days to Update: 75

Source: Mojave Desert Air Quality Management District
Telephone: 760-245-1661
Last EDR Contact: 08/21/2024
Next Scheduled EDR Contact: 09/11/2023
Data Release Frequency: Varies

DRYCLEAN N SIERRA: Northern Sierra Air Quality Management District Drycleaner Facility Listing
A listing of drycleaner facility locations, for the Northern Sierra Air Quality Management District,

Date of Government Version: 08/22/2024
Date Data Arrived at EDR: 08/22/2024
Date Made Active in Reports: 11/05/2024
Number of Days to Update: 75

Source: Northern Sierra Air Quality Management District
Telephone: 530-274-9350
Last EDR Contact: 08/21/2024
Next Scheduled EDR Contact: 09/11/2023
Data Release Frequency: Varies

EMI: Emissions Inventory Data
Toxics and criteria pollutant emissions data collected by the ARB and local air pollution agencies.

Date of Government Version: 12/31/2022
Date Data Arrived at EDR: 06/11/2024
Date Made Active in Reports: 09/03/2024
Number of Days to Update: 84

Source: California Air Resources Board
Telephone: 916-322-2990
Last EDR Contact: 12/12/2024
Next Scheduled EDR Contact: 03/24/2025
Data Release Frequency: Varies

ENF: Enforcement Action Listing
A listing of Water Board Enforcement Actions. Formal is everything except Oral/Verbal Communication, Notice of Violation, Expedited Payment Letter, and Staff Enforcement Letter.

Date of Government Version: 10/15/2024
Date Data Arrived at EDR: 10/16/2024
Date Made Active in Reports: 12/31/2024
Number of Days to Update: 76

Source: State Water Resoruces Control Board
Telephone: 916-445-9379
Last EDR Contact: 01/14/2025
Next Scheduled EDR Contact: 04/28/2025
Data Release Frequency: Varies

FIN ASSURANCE 1: Financial Assurance Information Listing
Financial Assurance information

Date of Government Version: 10/09/2024
Date Data Arrived at EDR: 10/10/2024
Date Made Active in Reports: 12/30/2024
Number of Days to Update: 81

Source: Department of Toxic Substances Control
Telephone: 916-255-3628
Last EDR Contact: 01/09/2025
Next Scheduled EDR Contact: 04/28/2025
Data Release Frequency: Varies

FIN ASSURANCE 2: Financial Assurance Information Listing
A listing of financial assurance information for solid waste facilities. Financial assurance is intended to ensure that resources are available to pay for the cost of closure, post-closure care, and corrective measures if the owner or operator of a regulated facility is unable or unwilling to pay.

Date of Government Version: 11/06/2024
Date Data Arrived at EDR: 11/08/2024
Date Made Active in Reports: 01/31/2025
Number of Days to Update: 84

Source: California Integrated Waste Management Board
Telephone: 916-341-6066
Last EDR Contact: 01/30/2025
Next Scheduled EDR Contact: 05/19/2025
Data Release Frequency: Varies

ICE: Inspection, Compliance and Enforcement
Contains data pertaining to the Permitted Facilities with Inspections / Enforcements sites tracked in Envirostor.

Date of Government Version: 11/08/2024
Date Data Arrived at EDR: 11/08/2024
Date Made Active in Reports: 02/03/2025
Number of Days to Update: 87

Source: Department of Toxic Subsances Control
Telephone: 877-786-9427
Last EDR Contact: 02/11/2025
Next Scheduled EDR Contact: 05/26/2025
Data Release Frequency: Quarterly

HIST CORTESE: Hazardous Waste & Substance Site List
The sites for the list are designated by the State Water Resource Control Board [LUST], the Integrated Waste Board [SWF/LS], and the Department of Toxic Substances Control [CALSITES]. This listing is no longer updated by the state agency.

Date of Government Version: 04/01/2001
Date Data Arrived at EDR: 01/22/2009
Date Made Active in Reports: 04/08/2009
Number of Days to Update: 76

Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 01/22/2009
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

HWP: EnviroStor Permitted Facilities Listing
Detailed information on permitted hazardous waste facilities and corrective action ("cleanups") tracked in EnviroStor.

Date of Government Version: 11/08/2024
Date Data Arrived at EDR: 11/08/2024
Date Made Active in Reports: 02/03/2025
Number of Days to Update: 87

Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 02/11/2025
Next Scheduled EDR Contact: 05/26/2025
Data Release Frequency: Quarterly

HWT: Registered Hazardous Waste Transporter Database
A listing of hazardous waste transporters. In California, unless specifically exempted, it is unlawful for any person to transport hazardous wastes unless the person holds a valid registration issued by DTSC. A hazardous waste transporter registration is valid for one year and is assigned a unique registration number.

Date of Government Version: 09/30/2024
Date Data Arrived at EDR: 10/01/2024
Date Made Active in Reports: 12/13/2024
Number of Days to Update: 73

Source: Department of Toxic Substances Control
Telephone: 916-440-7145
Last EDR Contact: 12/27/2024
Next Scheduled EDR Contact: 04/14/2025
Data Release Frequency: Quarterly

HWTS: Hazardous Waste Tracking System

DTSC maintains the Hazardous Waste Tracking System that stores ID number information since the early 1980s and manifest data since 1993. The system collects both manifest copies from the generator and destination facility.

Date of Government Version: 07/19/2024
Date Data Arrived at EDR: 07/30/2024
Date Made Active in Reports: 08/28/2024
Number of Days to Update: 29

Source: Department of Toxic Substances Control
Telephone: 916-324-2444
Last EDR Contact: 01/02/2025
Next Scheduled EDR Contact: 04/14/2025
Data Release Frequency: Varies

HAZNET: Facility and Manifest Data

Facility and Manifest Data. The data is extracted from the copies of hazardous waste manifests received each year by the DTSC. The annual volume of manifests is typically 700,000 - 1,000,000 annually, representing approximately 350,000 - 500,000 shipments. Data are from the manifests submitted without correction, and therefore many contain some invalid values for data elements such as generator ID, TSD ID, waste category, and disposal method. This database begins with calendar year 1993.

Date of Government Version: 12/31/2023
Date Data Arrived at EDR: 07/02/2024
Date Made Active in Reports: 09/25/2024
Number of Days to Update: 85

Source: California Environmental Protection Agency
Telephone: 916-255-1136
Last EDR Contact: 01/03/2025
Next Scheduled EDR Contact: 04/14/2025
Data Release Frequency: Annually

MINES: Mines Site Location Listing

A listing of mine site locations from the Office of Mine Reclamation.

Date of Government Version: 12/02/2024
Date Data Arrived at EDR: 12/03/2024
Date Made Active in Reports: 02/24/2025
Number of Days to Update: 83

Source: Department of Conservation
Telephone: 916-322-1080
Last EDR Contact: 12/03/2024
Next Scheduled EDR Contact: 03/17/2025
Data Release Frequency: Quarterly

MWMP: Medical Waste Management Program Listing

The Medical Waste Management Program (MWMP) ensures the proper handling and disposal of medical waste by permitting and inspecting medical waste Offsite Treatment Facilities (PDF) and Transfer Stations (PDF) throughout the state. MWMP also oversees all Medical Waste Transporters.

Date of Government Version: 10/07/2024
Date Data Arrived at EDR: 11/20/2024
Date Made Active in Reports: 02/13/2025
Number of Days to Update: 85

Source: Department of Public Health
Telephone: 916-558-1784
Last EDR Contact: 11/20/2024
Next Scheduled EDR Contact: 03/10/2025
Data Release Frequency: Varies

NPDES: NPDES Permits Listing

A listing of NPDES permits, including stormwater.

Date of Government Version: 11/04/2024
Date Data Arrived at EDR: 11/05/2024
Date Made Active in Reports: 01/31/2025
Number of Days to Update: 87

Source: State Water Resources Control Board
Telephone: 916-445-9379
Last EDR Contact: 02/04/2025
Next Scheduled EDR Contact: 05/19/2025
Data Release Frequency: Quarterly

PEST LIC: Pesticide Regulation Licenses Listing

A listing of licenses and certificates issued by the Department of Pesticide Regulation. The DPR issues licenses and/or certificates to: Persons and businesses that apply or sell pesticides; Pest control dealers and brokers; Persons who advise on agricultural pesticide applications.

Date of Government Version: 11/20/2024
Date Data Arrived at EDR: 11/20/2024
Date Made Active in Reports: 02/13/2025
Number of Days to Update: 85

Source: Department of Pesticide Regulation
Telephone: 916-445-4038
Last EDR Contact: 11/20/2024
Next Scheduled EDR Contact: 03/10/2025
Data Release Frequency: Quarterly

PROC: Certified Processors Database
A listing of certified processors.

Date of Government Version: 12/02/2024
Date Data Arrived at EDR: 12/03/2024
Date Made Active in Reports: 02/24/2025
Number of Days to Update: 83
Source: Department of Conservation
Telephone: 916-323-3836
Last EDR Contact: 12/03/2024
Next Scheduled EDR Contact: 03/17/2025
Data Release Frequency: Quarterly

NOTIFY 65: Proposition 65 Records
Listings of all Proposition 65 incidents reported to counties by the State Water Resources Control Board and the Regional Water Quality Control Board. This database is no longer updated by the reporting agency.

Date of Government Version: 09/05/2024
Date Data Arrived at EDR: 09/06/2024
Date Made Active in Reports: 11/13/2024
Number of Days to Update: 68
Source: State Water Resources Control Board
Telephone: 916-445-3846
Last EDR Contact: 12/04/2024
Next Scheduled EDR Contact: 03/24/2025
Data Release Frequency: No Update Planned

SAN JOSE HAZMAT: Hazardous Material Facilities
Hazardous material facilities, including underground storage tank sites.

Date of Government Version: 11/03/2020
Date Data Arrived at EDR: 11/05/2020
Date Made Active in Reports: 01/26/2021
Number of Days to Update: 82
Source: City of San Jose Fire Department
Telephone: 408-535-7694
Last EDR Contact: 01/22/2025
Next Scheduled EDR Contact: 05/12/2025
Data Release Frequency: Annually

UIC: UIC Listing
A listing of wells identified as underground injection wells, in the California Oil and Gas Wells database.

Date of Government Version: 09/02/2024
Date Data Arrived at EDR: 09/04/2024
Date Made Active in Reports: 09/05/2024
Number of Days to Update: 1
Source: Deaprtment of Conservation
Telephone: 916-445-2408
Last EDR Contact: 12/03/2024
Next Scheduled EDR Contact: 03/17/2025
Data Release Frequency: Varies

UIC GEO: Underground Injection Control Sites (GEOTRACKER)
Underground control injection sites

Date of Government Version: 08/28/2024
Date Data Arrived at EDR: 08/28/2024
Date Made Active in Reports: 08/29/2024
Number of Days to Update: 1
Source: State Water Resource Control Board
Telephone: 866-480-1028
Last EDR Contact: 02/24/2025
Next Scheduled EDR Contact: 03/17/2025
Data Release Frequency: Varies

WASTEWATER PITS: Oil Wastewater Pits Listing
Water officials discovered that oil producers have been dumping chemical-laden wastewater into hundreds of unlined pits that are operating without proper permits. Inspections completed by the Central Valley Regional Water Quality Control Board revealed the existence of previously unidentified waste sites. The water boards review found that more than one-third of the region's active disposal pits are operating without permission.

Date of Government Version: 02/11/2021
Date Data Arrived at EDR: 07/01/2021
Date Made Active in Reports: 09/29/2021
Number of Days to Update: 90
Source: RWQCB, Central Valley Region
Telephone: 559-445-5577
Last EDR Contact: 01/02/2025
Next Scheduled EDR Contact: 04/14/2025
Data Release Frequency: Varies

WDS: Waste Discharge System
Sites which have been issued waste discharge requirements.

Date of Government Version: 06/19/2007
Date Data Arrived at EDR: 06/20/2007
Date Made Active in Reports: 06/29/2007
Number of Days to Update: 9

Source: State Water Resources Control Board
Telephone: 916-341-5227
Last EDR Contact: 02/05/2025
Next Scheduled EDR Contact: 05/26/2025
Data Release Frequency: No Update Planned

WIP: Well Investigation Program Case List
Well Investigation Program case in the San Gabriel and San Fernando Valley area.

Date of Government Version: 07/03/2009
Date Data Arrived at EDR: 07/21/2009
Date Made Active in Reports: 08/03/2009
Number of Days to Update: 13

Source: Los Angeles Water Quality Control Board
Telephone: 213-576-6726
Last EDR Contact: 12/10/2024
Next Scheduled EDR Contact: 03/31/2025
Data Release Frequency: No Update Planned

MILITARY PRIV SITES: Military Privatized Sites (GEOTRACKER)
Military privatized sites

Date of Government Version: 08/28/2024
Date Data Arrived at EDR: 08/28/2024
Date Made Active in Reports: 08/29/2024
Number of Days to Update: 1

Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 02/24/2025
Next Scheduled EDR Contact: 03/17/2025
Data Release Frequency: Varies

PROJECT: Project Sites (GEOTRACKER)
Projects sites

Date of Government Version: 08/28/2024
Date Data Arrived at EDR: 08/28/2024
Date Made Active in Reports: 08/29/2024
Number of Days to Update: 1

Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 02/24/2025
Next Scheduled EDR Contact: 03/17/2025
Data Release Frequency: Varies

WDR: Waste Discharge Requirements Listing
In general, the Waste Discharge Requirements (WDRs) Program (sometimes also referred to as the "Non Chapter 15 (Non 15) Program") regulates point discharges that are exempt pursuant to Subsection 20090 of Title 27 and not subject to the Federal Water Pollution Control Act. Exemptions from Title 27 may be granted for nine categories of discharges (e.g., sewage, wastewater, etc.) that meet, and continue to meet, the preconditions listed for each specific exemption. The scope of the WDRs Program also includes the discharge of wastes classified as inert, pursuant to section 20230 of Title 27.

Date of Government Version: 09/03/2024
Date Data Arrived at EDR: 09/04/2024
Date Made Active in Reports: 11/13/2024
Number of Days to Update: 70

Source: State Water Resources Control Board
Telephone: 916-341-5810
Last EDR Contact: 12/03/2024
Next Scheduled EDR Contact: 03/17/2025
Data Release Frequency: Quarterly

CIWQS: California Integrated Water Quality System
The California Integrated Water Quality System (CIWQS) is a computer system used by the State and Regional Water Quality Control Boards to track information about places of environmental interest, manage permits and other orders, track inspections, and manage violations and enforcement activities.

Date of Government Version: 11/20/2024
Date Data Arrived at EDR: 11/20/2024
Date Made Active in Reports: 02/12/2025
Number of Days to Update: 84

Source: State Water Resources Control Board
Telephone: 866-794-4977
Last EDR Contact: 11/20/2024
Next Scheduled EDR Contact: 03/10/2025
Data Release Frequency: Varies

CERS: CalEPA Regulated Site Portal Data
The CalEPA Regulated Site Portal database combines data about environmentally regulated sites and facilities in California into a single database. It combines data from a variety of state and federal databases, and provides an overview of regulated activities across the spectrum of environmental programs for any given location in California. These activities include hazardous materials and waste, state and federal cleanups, impacted ground and surface waters, and toxic materials

Date of Government Version: 10/15/2024
Date Data Arrived at EDR: 10/16/2024
Date Made Active in Reports: 12/31/2024
Number of Days to Update: 76

Source: California Environmental Protection Agency
Telephone: 916-323-2514
Last EDR Contact: 01/14/2025
Next Scheduled EDR Contact: 04/28/2025
Data Release Frequency: Varies

NON-CASE INFO: Non-Case Information Sites (GEOTRACKER)
Non-Case Information sites

Date of Government Version: 08/28/2024
Date Data Arrived at EDR: 08/28/2024
Date Made Active in Reports: 08/29/2024
Number of Days to Update: 1

Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 02/24/2025
Next Scheduled EDR Contact: 03/17/2025
Data Release Frequency: Varies

OTHER OIL GAS: Other Oil & Gas Projects Sites (GEOTRACKER)
Other Oil & Gas Projects sites

Date of Government Version: 08/28/2024
Date Data Arrived at EDR: 08/28/2024
Date Made Active in Reports: 08/29/2024
Number of Days to Update: 1

Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 02/24/2025
Next Scheduled EDR Contact: 03/17/2025
Data Release Frequency: Varies

PROD WATER PONDS: Produced Water Ponds Sites (GEOTRACKER)
Produced water ponds sites

Date of Government Version: 08/28/2024
Date Data Arrived at EDR: 08/28/2024
Date Made Active in Reports: 08/29/2024
Number of Days to Update: 1

Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 02/24/2025
Next Scheduled EDR Contact: 03/17/2025
Data Release Frequency: Varies

SAMPLING POINT: Sampling Point ? Public Sites (GEOTRACKER)
Sampling point - public sites

Date of Government Version: 08/28/2024
Date Data Arrived at EDR: 08/28/2024
Date Made Active in Reports: 08/29/2024
Number of Days to Update: 1

Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 02/24/2025
Next Scheduled EDR Contact: 03/17/2025
Data Release Frequency: Varies

WELL STIM PROJ: Well Stimulation Project (GEOTRACKER)
Includes areas of groundwater monitoring plans, a depiction of the monitoring network, and the facilities, boundaries, and subsurface characteristics of the oilfield and the features (oil and gas wells, produced water ponds, UIC wells, water supply wells, etc?) being monitored

Date of Government Version: 08/28/2024
Date Data Arrived at EDR: 08/28/2024
Date Made Active in Reports: 08/29/2024
Number of Days to Update: 1

Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 02/24/2025
Next Scheduled EDR Contact: 03/17/2025
Data Release Frequency: Varies

EDR HIGH RISK HISTORICAL RECORDS

EDR Exclusive Records

EDR MGP: EDR Proprietary Manufactured Gas Plants
The EDR Proprietary Manufactured Gas Plant Database includes records of coal gas plants (manufactured gas plants) compiled by EDR's researchers. Manufactured gas sites were used in the United States from the 1800's to 1950's to produce a gas that could be distributed and used as fuel. These plants used whale oil, rosin, coal, or a mixture of coal, oil, and water that also produced a significant amount of waste. Many of the byproducts of the gas production, such as coal tar (oily waste containing volatile and non-volatile chemicals), sludges, oils and other compounds are potentially hazardous to human health and the environment. The byproduct from this process was frequently disposed of directly at the plant site and can remain or spread slowly, serving as a continuous source of soil and groundwater contamination.

Date of Government Version: N/A
Date Data Arrived at EDR: N/A
Date Made Active in Reports: N/A
Number of Days to Update: N/A

Source: EDR, Inc.
Telephone: N/A
Last EDR Contact: N/A
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

EDR Hist Auto: EDR Exclusive Historical Auto Stations

EDR has searched selected national collections of business directories and has collected listings of potential gas station/filling station/service station sites that were available to EDR researchers. EDR's review was limited to those categories of sources that might, in EDR's opinion, include gas station/filling station/service station establishments. The categories reviewed included, but were not limited to gas, gas station, gasoline station, filling station, auto, automobile repair, auto service station, service station, etc. This database falls within a category of information EDR classifies as "High Risk Historical Records", or HRHR. EDR's HRHR effort presents unique and sometimes proprietary data about past sites and operations that typically create environmental concerns, but may not show up in current government records searches.

Date of Government Version: N/A
Date Data Arrived at EDR: N/A
Date Made Active in Reports: N/A
Number of Days to Update: N/A

Source: EDR, Inc.
Telephone: N/A
Last EDR Contact: N/A
Next Scheduled EDR Contact: N/A
Data Release Frequency: Varies

EDR Hist Cleaner: EDR Exclusive Historical Cleaners

EDR has searched selected national collections of business directories and has collected listings of potential dry cleaner sites that were available to EDR researchers. EDR's review was limited to those categories of sources that might, in EDR's opinion, include dry cleaning establishments. The categories reviewed included, but were not limited to dry cleaners, cleaners, laundry, laundromat, cleaning/laundry, wash & dry etc. This database falls within a category of information EDR classifies as "High Risk Historical Records", or HRHR. EDR's HRHR effort presents unique and sometimes proprietary data about past sites and operations that typically create environmental concerns, but may not show up in current government records searches.

Date of Government Version: N/A
Date Data Arrived at EDR: N/A
Date Made Active in Reports: N/A
Number of Days to Update: N/A

Source: EDR, Inc.
Telephone: N/A
Last EDR Contact: N/A
Next Scheduled EDR Contact: N/A
Data Release Frequency: Varies

EDR RECOVERED GOVERNMENT ARCHIVES

Exclusive Recovered Govt. Archives

RGA LF: Recovered Government Archive Solid Waste Facilities List

The EDR Recovered Government Archive Landfill database provides a list of landfills derived from historical databases and includes many records that no longer appear in current government lists. Compiled from Records formerly available from the Department of Resources Recycling and Recovery in California.

Date of Government Version: N/A
Date Data Arrived at EDR: 07/01/2013
Date Made Active in Reports: 01/13/2014
Number of Days to Update: 196

Source: Department of Resources Recycling and Recovery
Telephone: N/A
Last EDR Contact: 06/01/2012
Next Scheduled EDR Contact: N/A
Data Release Frequency: Varies

RGA LUST: Recovered Government Archive Leaking Underground Storage Tank

The EDR Recovered Government Archive Leaking Underground Storage Tank database provides a list of LUST incidents derived from historical databases and includes many records that no longer appear in current government lists. Compiled from Records formerly available from the State Water Resources Control Board in California.

Date of Government Version: N/A
Date Data Arrived at EDR: 07/01/2013
Date Made Active in Reports: 12/30/2013
Number of Days to Update: 182

Source: State Water Resources Control Board
Telephone: N/A
Last EDR Contact: 06/01/2012
Next Scheduled EDR Contact: N/A
Data Release Frequency: Varies

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

COUNTY RECORDS

ALAMEDA COUNTY:

CS ALAMEDA: Contaminated Sites
A listing of contaminated sites overseen by the Toxic Release Program (oil and groundwater contamination from chemical releases and spills) and the Leaking Underground Storage Tank Program (soil and ground water contamination from leaking petroleum USTs).

Date of Government Version: 01/09/2019
Date Data Arrived at EDR: 01/11/2019
Date Made Active in Reports: 03/05/2019
Number of Days to Update: 53

Source: Alameda County Environmental Health Services
Telephone: 510-567-6700
Last EDR Contact: 12/23/2024
Next Scheduled EDR Contact: 04/14/2025
Data Release Frequency: Semi-Annually

UST ALAMEDA: Underground Tanks
Underground storage tank sites located in Alameda county.

Date of Government Version: 12/26/2023
Date Data Arrived at EDR: 12/26/2023
Date Made Active in Reports: 03/19/2024
Number of Days to Update: 84

Source: Alameda County Environmental Health Services
Telephone: 510-567-6700
Last EDR Contact: 12/23/2024
Next Scheduled EDR Contact: 04/14/2025
Data Release Frequency: Semi-Annually

AMADOR COUNTY:

CUPA AMADOR: CUPA Facility List
Cupa Facility List

Date of Government Version: 04/27/2023
Date Data Arrived at EDR: 04/27/2023
Date Made Active in Reports: 07/13/2023
Number of Days to Update: 77

Source: Amador County Environmental Health
Telephone: 209-223-6439
Last EDR Contact: 01/22/2025
Next Scheduled EDR Contact: 05/12/2025
Data Release Frequency: Varies

BUTTE COUNTY:

CUPA BUTTE: CUPA Facility Listing
Cupa facility list.

Date of Government Version: 04/21/2017
Date Data Arrived at EDR: 04/25/2017
Date Made Active in Reports: 08/09/2017
Number of Days to Update: 106

Source: Public Health Department
Telephone: 530-538-7149
Last EDR Contact: 12/23/2024
Next Scheduled EDR Contact: 04/14/2025
Data Release Frequency: No Update Planned

CALVERAS COUNTY:

CUPA CALVERAS: CUPA Facility Listing
Cupa Facility Listing

Date of Government Version: 09/25/2024
Date Data Arrived at EDR: 09/26/2024
Date Made Active in Reports: 12/12/2024
Number of Days to Update: 77

Source: Calveras County Environmental Health
Telephone: 209-754-6399
Last EDR Contact: 12/10/2024
Next Scheduled EDR Contact: 03/31/2025
Data Release Frequency: Quarterly

COLUSA COUNTY:

CUPA COLUSA: CUPA Facility List
Cupa facility list.

Date of Government Version: 04/06/2020
Date Data Arrived at EDR: 04/23/2020
Date Made Active in Reports: 07/10/2020
Number of Days to Update: 78

Source: Health & Human Services
Telephone: 530-458-0396
Last EDR Contact: 01/22/2025
Next Scheduled EDR Contact: 05/12/2025
Data Release Frequency: Semi-Annually

CONTRA COSTA COUNTY:

SL CONTRA COSTA: Site List
List includes sites from the underground tank, hazardous waste generator and business plan/2185 programs.

Date of Government Version: 10/21/2024
Date Data Arrived at EDR: 10/23/2024
Date Made Active in Reports: 01/13/2025
Number of Days to Update: 82

Source: Contra Costa Health Services Department
Telephone: 925-646-2286
Last EDR Contact: 01/15/2025
Next Scheduled EDR Contact: 05/05/2025
Data Release Frequency: Semi-Annually

DEL NORTE COUNTY:

CUPA DEL NORTE: CUPA Facility List
Cupa Facility list

Date of Government Version: 02/05/2024
Date Data Arrived at EDR: 02/08/2024
Date Made Active in Reports: 04/26/2024
Number of Days to Update: 78

Source: Del Norte County Environmental Health Division
Telephone: 707-465-0426
Last EDR Contact: 01/15/2025
Next Scheduled EDR Contact: 05/05/2025
Data Release Frequency: Varies

EL DORADO COUNTY:

CUPA EL DORADO: CUPA Facility List
CUPA facility list.

Date of Government Version: 08/08/2022
Date Data Arrived at EDR: 08/09/2022
Date Made Active in Reports: 09/01/2022
Number of Days to Update: 23

Source: El Dorado County Environmental Management Department
Telephone: 530-621-6623
Last EDR Contact: 01/15/2025
Next Scheduled EDR Contact: 05/05/2025
Data Release Frequency: Varies

FRESNO COUNTY:

CUPA FRESNO: CUPA Resources List
Certified Unified Program Agency. CUPA's are responsible for implementing a unified hazardous materials and hazardous waste management regulatory program. The agency provides oversight of businesses that deal with hazardous materials, operate underground storage tanks or aboveground storage tanks.

Date of Government Version: 06/28/2021
Date Data Arrived at EDR: 12/21/2021
Date Made Active in Reports: 03/03/2022
Number of Days to Update: 72

Source: Dept. of Community Health
Telephone: 559-445-3271
Last EDR Contact: 12/19/2024
Next Scheduled EDR Contact: 04/07/2025
Data Release Frequency: Semi-Annually

GLENN COUNTY:

CUPA GLENN: CUPA Facility List
Cupa facility list

Date of Government Version: 01/22/2018
Date Data Arrived at EDR: 01/24/2018
Date Made Active in Reports: 03/14/2018
Number of Days to Update: 49

Source: Glenn County Air Pollution Control District
Telephone: 830-934-6500
Last EDR Contact: 01/08/2025
Next Scheduled EDR Contact: 04/28/2025
Data Release Frequency: No Update Planned

HUMBOLDT COUNTY:

CUPA HUMBOLDT: CUPA Facility List
CUPA facility list.

Date of Government Version: 08/12/2021
Date Data Arrived at EDR: 08/12/2021
Date Made Active in Reports: 11/08/2021
Number of Days to Update: 88

Source: Humboldt County Environmental Health
Telephone: N/A
Last EDR Contact: 02/05/2025
Next Scheduled EDR Contact: 05/26/2025
Data Release Frequency: Semi-Annually

IMPERIAL COUNTY:

CUPA IMPERIAL: CUPA Facility List
Cupa facility list.

Date of Government Version: 10/09/2024
Date Data Arrived at EDR: 10/11/2024
Date Made Active in Reports: 12/30/2024
Number of Days to Update: 80

Source: San Diego Border Field Office
Telephone: 760-339-2777
Last EDR Contact: 01/09/2025
Next Scheduled EDR Contact: 04/28/2025
Data Release Frequency: Varies

INYO COUNTY:

CUPA INYO: CUPA Facility List
Cupa facility list.

Date of Government Version: 04/02/2018
Date Data Arrived at EDR: 04/03/2018
Date Made Active in Reports: 06/14/2018
Number of Days to Update: 72

Source: Inyo County Environmental Health Services
Telephone: 760-878-0238
Last EDR Contact: 02/05/2025
Next Scheduled EDR Contact: 05/26/2025
Data Release Frequency: Varies

KERN COUNTY:

CUPA KERN: CUPA Facility List
A listing of sites included in the Kern County Hazardous Material Business Plan.

Date of Government Version: 01/27/2025
Date Data Arrived at EDR: 01/29/2025
Date Made Active in Reports: 01/31/2025
Number of Days to Update: 2

Source: Kern County Public Health
Telephone: 661-321-3000
Last EDR Contact: 01/22/2025
Next Scheduled EDR Contact: 05/12/2025
Data Release Frequency: Varies

UST KERN: Underground Storage Tank Sites & Tank Listing
Kern County Sites and Tanks Listing.

Date of Government Version: 01/27/2025
Date Data Arrived at EDR: 01/29/2025
Date Made Active in Reports: 01/31/2025
Number of Days to Update: 2

Source: Kern County Environment Health Services Department
Telephone: 661-862-8700
Last EDR Contact: 01/22/2025
Next Scheduled EDR Contact: 05/12/2025
Data Release Frequency: Quarterly

KINGS COUNTY:

CUPA KINGS: CUPA Facility List

A listing of sites included in the county's Certified Unified Program Agency database. California's Secretary for Environmental Protection established the unified hazardous materials and hazardous waste regulatory program as required by chapter 6.11 of the California Health and Safety Code. The Unified Program consolidates the administration, permits, inspections, and enforcement activities.

Date of Government Version: 12/03/2020
Date Data Arrived at EDR: 01/26/2021
Date Made Active in Reports: 04/14/2021
Number of Days to Update: 78

Source: Kings County Department of Public Health
Telephone: 559-584-1411
Last EDR Contact: 02/05/2025
Next Scheduled EDR Contact: 05/26/2025
Data Release Frequency: Varies

LAKE COUNTY:

CUPA LAKE: CUPA Facility List

Cupa facility list

Date of Government Version: 10/31/2024
Date Data Arrived at EDR: 11/01/2024
Date Made Active in Reports: 01/17/2025
Number of Days to Update: 77

Source: Lake County Environmental Health
Telephone: 707-263-1164
Last EDR Contact: 01/03/2025
Next Scheduled EDR Contact: 04/21/2025
Data Release Frequency: Varies

LASSEN COUNTY:

CUPA LASSEN: CUPA Facility List

Cupa facility list

Date of Government Version: 07/31/2020
Date Data Arrived at EDR: 08/21/2020
Date Made Active in Reports: 11/09/2020
Number of Days to Update: 80

Source: Lassen County Environmental Health
Telephone: 530-251-8528
Last EDR Contact: 01/08/2025
Next Scheduled EDR Contact: 04/28/2025
Data Release Frequency: Varies

LOS ANGELES COUNTY:

AOCONCERN: Key Areas of Concerns in Los Angeles County

San Gabriel Valley areas where VOC contamination is at or above the MCL as designated by region 9 EPA office. Date of Government Version: 3/30/2009 Exide Site area is a cleanup plan of lead-impacted soil surrounding the former Exide Facility as designated by the DTSC. Date of Government Version: 7/17/2017

Date of Government Version: 03/30/2009
Date Data Arrived at EDR: 03/31/2009
Date Made Active in Reports: 10/23/2009
Number of Days to Update: 206

Source: N/A
Telephone: N/A
Last EDR Contact: 12/04/2024
Next Scheduled EDR Contact: 03/24/2025
Data Release Frequency: No Update Planned

HMS LOS ANGELES: HMS: Street Number List
Industrial Waste and Underground Storage Tank Sites.

Date of Government Version: 09/26/2024
Date Data Arrived at EDR: 10/01/2024
Date Made Active in Reports: 12/12/2024
Number of Days to Update: 72

Source: Department of Public Works
Telephone: 626-458-3517
Last EDR Contact: 01/09/2025
Next Scheduled EDR Contact: 04/14/2025
Data Release Frequency: Semi-Annually

LF LOS ANGELES: List of Solid Waste Facilities
Solid Waste Facilities in Los Angeles County.

Date of Government Version: 10/04/2024
Date Data Arrived at EDR: 10/04/2024
Date Made Active in Reports: 12/23/2024
Number of Days to Update: 80

Source: La County Department of Public Works
Telephone: 818-458-5185
Last EDR Contact: 01/07/2025
Next Scheduled EDR Contact: 04/21/2025
Data Release Frequency: Varies

LF LOS ANGELES CITY: City of Los Angeles Landfills
Landfills owned and maintained by the City of Los Angeles.

Date of Government Version: 12/31/2023
Date Data Arrived at EDR: 10/03/2024
Date Made Active in Reports: 12/17/2024
Number of Days to Update: 75

Source: Engineering & Construction Division
Telephone: 213-473-7869
Last EDR Contact: 01/03/2025
Next Scheduled EDR Contact: 04/21/2025
Data Release Frequency: Varies

LOS ANGELES AST: Active & Inactive AST Inventory
A listing of active & inactive above ground petroleum storage tank site locations, located in the City of Los Angeles.

Date of Government Version: 06/01/2019
Date Data Arrived at EDR: 06/25/2019
Date Made Active in Reports: 08/22/2019
Number of Days to Update: 58

Source: Los Angeles Fire Department
Telephone: 213-978-3800
Last EDR Contact: 12/10/2024
Next Scheduled EDR Contact: 03/31/2025
Data Release Frequency: Varies

LOS ANGELES CO LF METHANE: Methane Producing Landfills
This data was created on April 30, 2012 to represent known disposal sites in Los Angeles County that may produce and emanate methane gas. The shapefile contains disposal sites within Los Angeles County that once accepted degradable refuse material. Information used to create this data was extracted from a landfill survey performed by County Engineers (Major Waste System Map, 1973) as well as historical records from CalRecycle, Regional Water Quality Control Board, and Los Angeles County Department of Public Health

Date of Government Version: 05/14/2024
Date Data Arrived at EDR: 07/09/2024
Date Made Active in Reports: 09/27/2024
Number of Days to Update: 80

Source: Los Angeles County Department of Public Works
Telephone: 626-458-6973
Last EDR Contact: 01/09/2025
Next Scheduled EDR Contact: 04/21/2025
Data Release Frequency: No Update Planned

LOS ANGELES HM: Active & Inactive Hazardous Materials Inventory
A listing of active & inactive hazardous materials facility locations, located in the City of Los Angeles.

Date of Government Version: 09/01/2024
Date Data Arrived at EDR: 09/17/2024
Date Made Active in Reports: 12/02/2024
Number of Days to Update: 76

Source: Los Angeles Fire Department
Telephone: 213-978-3800
Last EDR Contact: 12/11/2024
Next Scheduled EDR Contact: 03/31/2025
Data Release Frequency: Varies

LOS ANGELES UST: Active & Inactive UST Inventory
A listing of active & inactive underground storage tank site locations and underground storage tank historical sites, located in the City of Los Angeles.

Date of Government Version: 09/01/2024
Date Data Arrived at EDR: 09/17/2024
Date Made Active in Reports: 12/02/2024
Number of Days to Update: 76
Source: Los Angeles Fire Department
Telephone: 213-978-3800
Last EDR Contact: 12/11/2024
Next Scheduled EDR Contact: 03/31/2025
Data Release Frequency: Varies

SITE MIT LOS ANGELES: Site Mitigation LA County List
Industrial sites that have had some sort of spill or complaint.

Date of Government Version: 05/21/2024
Date Data Arrived at EDR: 07/16/2024
Date Made Active in Reports: 10/07/2024
Number of Days to Update: 83
Source: Community Health Services
Telephone: 323-890-7806
Last EDR Contact: 01/14/2025
Next Scheduled EDR Contact: 04/28/2025
Data Release Frequency: Annually

UST EL SEGUNDO: City of El Segundo Underground Storage Tank
Underground storage tank sites located in El Segundo city.

Date of Government Version: 01/21/2017
Date Data Arrived at EDR: 04/19/2017
Date Made Active in Reports: 05/10/2017
Number of Days to Update: 21
Source: City of El Segundo Fire Department
Telephone: 310-524-2236
Last EDR Contact: 01/03/2025
Next Scheduled EDR Contact: 04/21/2025
Data Release Frequency: No Update Planned

UST LONG BEACH: City of Long Beach Underground Storage Tank
Underground storage tank sites located in the city of Long Beach.

Date of Government Version: 04/22/2019
Date Data Arrived at EDR: 04/23/2019
Date Made Active in Reports: 06/27/2019
Number of Days to Update: 65
Source: City of Long Beach Fire Department
Telephone: 562-570-2563
Last EDR Contact: 01/08/2025
Next Scheduled EDR Contact: 04/28/2025
Data Release Frequency: Varies

UST TORRANCE: City of Torrance Underground Storage Tank
Underground storage tank sites located in the city of Torrance.

Date of Government Version: 10/15/2024
Date Data Arrived at EDR: 10/17/2024
Date Made Active in Reports: 01/07/2025
Number of Days to Update: 82
Source: City of Torrance Fire Department
Telephone: 310-618-2973
Last EDR Contact: 01/09/2025
Next Scheduled EDR Contact: 04/28/2025
Data Release Frequency: Semi-Annually

MADERA COUNTY:

CUPA MADERA: CUPA Facility List
A listing of sites included in the county's Certified Unified Program Agency database. California's Secretary for Environmental Protection established the unified hazardous materials and hazardous waste regulatory program as required by chapter 6.11 of the California Health and Safety Code. The Unified Program consolidates the administration, permits, inspections, and enforcement activities.

Date of Government Version: 08/10/2020
Date Data Arrived at EDR: 08/12/2020
Date Made Active in Reports: 10/23/2020
Number of Days to Update: 72
Source: Madera County Environmental Health
Telephone: 559-675-7823
Last EDR Contact: 02/05/2025
Next Scheduled EDR Contact: 05/26/2025
Data Release Frequency: Varies

MARIN COUNTY:

UST MARIN: Underground Storage Tank Sites
Currently permitted USTs in Marin County.

Date of Government Version: 09/26/2018
Date Data Arrived at EDR: 10/04/2018
Date Made Active in Reports: 11/02/2018
Number of Days to Update: 29

Source: Public Works Department Waste Management
Telephone: 415-473-6647
Last EDR Contact: 12/16/2024
Next Scheduled EDR Contact: 04/07/2025
Data Release Frequency: Semi-Annually

MENDOCINO COUNTY:

UST MENDOCINO: Mendocino County UST Database
A listing of underground storage tank locations in Mendocino County.

Date of Government Version: 09/22/2021
Date Data Arrived at EDR: 11/18/2021
Date Made Active in Reports: 11/22/2021
Number of Days to Update: 4

Source: Department of Public Health
Telephone: 707-463-4466
Last EDR Contact: 02/12/2025
Next Scheduled EDR Contact: 06/02/2025
Data Release Frequency: Annually

MERCED COUNTY:

CUPA MERCED: CUPA Facility List
CUPA facility list.

Date of Government Version: 10/08/2024
Date Data Arrived at EDR: 10/09/2024
Date Made Active in Reports: 10/31/2024
Number of Days to Update: 22

Source: Merced County Environmental Health
Telephone: 209-381-1094
Last EDR Contact: 02/05/2025
Next Scheduled EDR Contact: 05/26/2025
Data Release Frequency: Varies

MONO COUNTY:

CUPA MONO: CUPA Facility List
CUPA Facility List

Date of Government Version: 02/22/2021
Date Data Arrived at EDR: 03/02/2021
Date Made Active in Reports: 05/19/2021
Number of Days to Update: 78

Source: Mono County Health Department
Telephone: 760-932-5580
Last EDR Contact: 02/12/2025
Next Scheduled EDR Contact: 06/02/2025
Data Release Frequency: Varies

MONTEREY COUNTY:

CUPA MONTEREY: CUPA Facility Listing
CUPA Program listing from the Environmental Health Division.

Date of Government Version: 01/10/2025
Date Data Arrived at EDR: 01/14/2025
Date Made Active in Reports: 02/20/2025
Number of Days to Update: 37

Source: Monterey County Health Department
Telephone: 831-796-1297
Last EDR Contact: 12/16/2024
Next Scheduled EDR Contact: 04/07/2025
Data Release Frequency: Varies

NAPA COUNTY:

LUST NAPA: Sites With Reported Contamination
A listing of leaking underground storage tank sites located in Napa county.

Date of Government Version: 01/09/2017
Date Data Arrived at EDR: 01/11/2017
Date Made Active in Reports: 03/02/2017
Number of Days to Update: 50

Source: Napa County Department of Environmental Management
Telephone: 707-253-4269
Last EDR Contact: 02/12/2025
Next Scheduled EDR Contact: 06/02/2025
Data Release Frequency: No Update Planned

UST NAPA: Closed and Operating Underground Storage Tank Sites
Underground storage tank sites located in Napa county.

Date of Government Version: 09/05/2019
Date Data Arrived at EDR: 09/09/2019
Date Made Active in Reports: 10/31/2019
Number of Days to Update: 52

Source: Napa County Department of Environmental Management
Telephone: 707-253-4269
Last EDR Contact: 02/12/2025
Next Scheduled EDR Contact: 06/02/2025
Data Release Frequency: No Update Planned

NEVADA COUNTY:

CUPA NEVADA: CUPA Facility List
CUPA facility list.

Date of Government Version: 01/27/2025
Date Data Arrived at EDR: 01/27/2025
Date Made Active in Reports: 02/03/2025
Number of Days to Update: 7

Source: Community Development Agency
Telephone: 530-265-1467
Last EDR Contact: 01/15/2025
Next Scheduled EDR Contact: 05/05/2025
Data Release Frequency: Varies

ORANGE COUNTY:

IND_SITE ORANGE: List of Industrial Site Cleanups Orange County
Petroleum and non-petroleum spills.

Date of Government Version: 10/31/2024
Date Data Arrived at EDR: 10/31/2024
Date Made Active in Reports: 01/24/2025
Number of Days to Update: 85

Source: Health Care Agency
Telephone: 714-834-3446
Last EDR Contact: 01/27/2025
Next Scheduled EDR Contact: 05/12/2025
Data Release Frequency: Annually

LUST ORANGE: List of Underground Storage Tank Cleanups
Orange County Underground Storage Tank Cleanups (LUST).

Date of Government Version: 10/31/2024
Date Data Arrived at EDR: 10/31/2024
Date Made Active in Reports: 01/24/2025
Number of Days to Update: 85

Source: Health Care Agency
Telephone: 714-834-3446
Last EDR Contact: 01/27/2025
Next Scheduled EDR Contact: 05/12/2025
Data Release Frequency: Quarterly

UST ORANGE: List of Underground Storage Tank Facilities
Orange County Underground Storage Tank Facilities (UST).

Date of Government Version: 08/06/2024
Date Data Arrived at EDR: 08/08/2024
Date Made Active in Reports: 10/29/2024
Number of Days to Update: 82

Source: Health Care Agency
Telephone: 714-834-3446
Last EDR Contact: 01/27/2025
Next Scheduled EDR Contact: 05/12/2025
Data Release Frequency: Quarterly

PLACER COUNTY:

MS PLACER: Master List of Facilities
List includes aboveground tanks, underground tanks and cleanup sites.

Date of Government Version: 11/19/2024
Date Data Arrived at EDR: 11/20/2024
Date Made Active in Reports: 02/13/2025
Number of Days to Update: 85

Source: Placer County Health and Human Services
Telephone: 530-745-2363
Last EDR Contact: 02/19/2025
Next Scheduled EDR Contact: 06/09/2025
Data Release Frequency: Semi-Annually

PLUMAS COUNTY:

CUPA PLUMAS: CUPA Facility List
Plumas County CUPA Program facilities.

Date of Government Version: 03/31/2019
Date Data Arrived at EDR: 04/23/2019
Date Made Active in Reports: 06/26/2019
Number of Days to Update: 64

Source: Plumas County Environmental Health
Telephone: 530-283-6355
Last EDR Contact: 01/08/2025
Next Scheduled EDR Contact: 04/28/2025
Data Release Frequency: Varies

RIVERSIDE COUNTY:

LUST RIVERSIDE: Listing of Underground Tank Cleanup Sites
Riverside County Underground Storage Tank Cleanup Sites (LUST).

Date of Government Version: 06/11/2024
Date Data Arrived at EDR: 06/12/2024
Date Made Active in Reports: 06/27/2024
Number of Days to Update: 15

Source: Department of Environmental Health
Telephone: 951-358-5055
Last EDR Contact: 12/04/2024
Next Scheduled EDR Contact: 03/24/2025
Data Release Frequency: Quarterly

UST RIVERSIDE: Underground Storage Tank Tank List
Underground storage tank sites located in Riverside county.

Date of Government Version: 12/05/2024
Date Data Arrived at EDR: 12/05/2024
Date Made Active in Reports: 12/31/2024
Number of Days to Update: 26

Source: Department of Environmental Health
Telephone: 951-358-5055
Last EDR Contact: 12/04/2024
Next Scheduled EDR Contact: 03/24/2025
Data Release Frequency: Quarterly

SACRAMENTO COUNTY:

CS SACRAMENTO: Toxic Site Clean-Up List
List of sites where unauthorized releases of potentially hazardous materials have occurred.

Date of Government Version: 11/07/2022
Date Data Arrived at EDR: 12/21/2022
Date Made Active in Reports: 03/16/2023
Number of Days to Update: 85

Source: Sacramento County Environmental Management
Telephone: 916-875-8406
Last EDR Contact: 12/16/2024
Next Scheduled EDR Contact: 04/07/2025
Data Release Frequency: Quarterly

ML SACRAMENTO: Master Hazardous Materials Facility List
Any business that has hazardous materials on site - hazardous material storage sites, underground storage tanks, waste generators.

Date of Government Version: 11/07/2022
Date Data Arrived at EDR: 12/09/2022
Date Made Active in Reports: 03/01/2023
Number of Days to Update: 82

Source: Sacramento County Environmental Management
Telephone: 916-875-8406
Last EDR Contact: 12/16/2024
Next Scheduled EDR Contact: 04/07/2025
Data Release Frequency: Quarterly

SAN BENITO COUNTY:

CUPA SAN BENITO: CUPA Facility List
Cupa facility list

Date of Government Version: 10/25/2024
Date Data Arrived at EDR: 10/29/2024
Date Made Active in Reports: 01/17/2025
Number of Days to Update: 80

Source: San Benito County Environmental Health
Telephone: N/A
Last EDR Contact: 01/22/2025
Next Scheduled EDR Contact: 05/12/2025
Data Release Frequency: Varies

SAN BERNARDINO COUNTY:

PERMITS SAN BERNARDINO: Hazardous Material Permits
This listing includes underground storage tanks, medical waste handlers/generators, hazardous materials handlers, hazardous waste generators, and waste oil generators/handlers.

Date of Government Version: 08/13/2024
Date Data Arrived at EDR: 08/14/2024
Date Made Active in Reports: 08/20/2024
Number of Days to Update: 6

Source: San Bernardino County Fire Department Hazardous Materials Division
Telephone: 909-387-3041
Last EDR Contact: 01/28/2025
Next Scheduled EDR Contact: 05/12/2025
Data Release Frequency: Quarterly

SAN DIEGO COUNTY:

HMMD SAN DIEGO: Hazardous Materials Management Division Database
The database includes: HE58 - This report contains the business name, site address, business phone number, establishment 'H' permit number, type of permit, and the business status. HE17 - In addition to providing the same information provided in the HE58 listing, HE17 provides inspection dates, violations received by the establishment, hazardous waste generated, the quantity, method of storage, treatment/disposal of waste and the hauler, and information on underground storage tanks. Unauthorized Release List - Includes a summary of environmental contamination cases in San Diego County (underground tank cases, non-tank cases, groundwater contamination, and soil contamination are included.)

Date of Government Version: 11/20/2024
Date Data Arrived at EDR: 11/20/2024
Date Made Active in Reports: 02/13/2025
Number of Days to Update: 85

Source: Hazardous Materials Management Division
Telephone: 619-338-2268
Last EDR Contact: 11/20/2024
Next Scheduled EDR Contact: 03/10/2025
Data Release Frequency: Quarterly

LF SAN DIEGO: Solid Waste Facilities
San Diego County Solid Waste Facilities.

Date of Government Version: 10/01/2023
Date Data Arrived at EDR: 01/31/2024
Date Made Active in Reports: 04/17/2024
Number of Days to Update: 77

Source: Department of Health Services
Telephone: 619-338-2209
Last EDR Contact: 01/09/2025
Next Scheduled EDR Contact: 04/28/2025
Data Release Frequency: Varies

SAN DIEGO CO LOP: Local Oversight Program Listing
A listing of all LOP release sites that are or were under the County of San Diego's jurisdiction. Included are closed or transferred cases, open cases, and cases that did not have a case type indicated. The cases without a case type are mostly complaints; however, some of them could be LOP cases.

Date of Government Version: 07/22/2021
Date Data Arrived at EDR: 10/19/2021
Date Made Active in Reports: 01/13/2022
Number of Days to Update: 86

Source: Department of Environmental Health
Telephone: 858-505-6874
Last EDR Contact: 01/09/2025
Next Scheduled EDR Contact: 04/28/2025
Data Release Frequency: Varies

SAN DIEGO CO SAM: Environmental Case Listing
The listing contains all underground tank release cases and projects pertaining to properties contaminated with hazardous substances that are actively under review by the Site Assessment and Mitigation Program.

Date of Government Version: 03/23/2010
Date Data Arrived at EDR: 06/15/2010
Date Made Active in Reports: 07/09/2010
Number of Days to Update: 24
Source: San Diego County Department of Environmental Health
Telephone: 619-338-2371
Last EDR Contact: 02/19/2025
Next Scheduled EDR Contact: 06/09/2025
Data Release Frequency: No Update Planned

SAN FRANCISCO COUNTY:

CUPA SAN FRANCISCO CO: CUPA Facility Listing
Cupa facilities

Date of Government Version: 10/28/2024
Date Data Arrived at EDR: 10/30/2024
Date Made Active in Reports: 01/21/2025
Number of Days to Update: 83
Source: San Francisco County Department of Environmental Health
Telephone: 415-252-3896
Last EDR Contact: 01/23/2025
Next Scheduled EDR Contact: 05/12/2025
Data Release Frequency: Varies

LUST SAN FRANCISCO: Local Oversite Facilities
A listing of leaking underground storage tank sites located in San Francisco county.

Date of Government Version: 09/19/2008
Date Data Arrived at EDR: 09/19/2008
Date Made Active in Reports: 09/29/2008
Number of Days to Update: 10
Source: Department Of Public Health San Francisco County
Telephone: 415-252-3920
Last EDR Contact: 01/22/2025
Next Scheduled EDR Contact: 05/12/2025
Data Release Frequency: No Update Planned

UST SAN FRANCISCO: Underground Storage Tank Information
Underground storage tank sites located in San Francisco county.

Date of Government Version: 10/28/2024
Date Data Arrived at EDR: 10/30/2024
Date Made Active in Reports: 01/24/2025
Number of Days to Update: 86
Source: Department of Public Health
Telephone: 415-252-3920
Last EDR Contact: 01/23/2025
Next Scheduled EDR Contact: 05/12/2025
Data Release Frequency: Quarterly

SAN FRANCISO COUNTY:

SAN FRANCISCO MAHER: Maher Ordinance Property Listing
a listing of properties that fall within a Maher Ordinance, for all of San Francisco

Date of Government Version: 10/15/2024
Date Data Arrived at EDR: 10/16/2024
Date Made Active in Reports: 01/06/2025
Number of Days to Update: 82
Source: San Francisco Planning
Telephone: 628-652-7483
Last EDR Contact: 01/14/2025
Next Scheduled EDR Contact: 04/28/2025
Data Release Frequency: Varies

SAN JOAQUIN COUNTY:

UST SAN JOAQUIN: San Joaquin Co. UST
A listing of underground storage tank locations in San Joaquin county.

Date of Government Version: 06/22/2018
Date Data Arrived at EDR: 06/26/2018
Date Made Active in Reports: 07/11/2018
Number of Days to Update: 15
Source: Environmental Health Department
Telephone: N/A
Last EDR Contact: 12/04/2024
Next Scheduled EDR Contact: 03/24/2025
Data Release Frequency: Semi-Annually

SAN LUIS OBISPO COUNTY:

CUPA SAN LUIS OBISPO: CUPA Facility List
Cupa Facility List.

Date of Government Version: 11/12/2024
Date Data Arrived at EDR: 11/13/2024
Date Made Active in Reports: 02/06/2025
Number of Days to Update: 85

Source: San Luis Obispo County Public Health Department
Telephone: 805-781-5596
Last EDR Contact: 02/05/2025
Next Scheduled EDR Contact: 05/26/2025
Data Release Frequency: Varies

SAN MATEO COUNTY:

BI SAN MATEO: Business Inventory
List includes Hazardous Materials Business Plan, hazardous waste generators, and underground storage tanks.

Date of Government Version: 02/20/2020
Date Data Arrived at EDR: 02/20/2020
Date Made Active in Reports: 04/24/2020
Number of Days to Update: 64

Source: San Mateo County Environmental Health Services Division
Telephone: 650-363-1921
Last EDR Contact: 12/05/2024
Next Scheduled EDR Contact: 03/17/2025
Data Release Frequency: Annually

LUST SAN MATEO: Fuel Leak List
A listing of leaking underground storage tank sites located in San Mateo county.

Date of Government Version: 03/29/2019
Date Data Arrived at EDR: 03/29/2019
Date Made Active in Reports: 05/29/2019
Number of Days to Update: 61

Source: San Mateo County Environmental Health Services Division
Telephone: 650-363-1921
Last EDR Contact: 11/26/2024
Next Scheduled EDR Contact: 03/17/2025
Data Release Frequency: Semi-Annually

SANTA BARBARA COUNTY:

CUPA SANTA BARBARA: CUPA Facility Listing
CUPA Program Listing from the Environmental Health Services division.

Date of Government Version: 09/08/2011
Date Data Arrived at EDR: 09/09/2011
Date Made Active in Reports: 10/07/2011
Number of Days to Update: 28

Source: Santa Barbara County Public Health Department
Telephone: 805-686-8167
Last EDR Contact: 02/05/2025
Next Scheduled EDR Contact: 05/26/2025
Data Release Frequency: No Update Planned

SANTA CLARA COUNTY:

CUPA SANTA CLARA: Cupa Facility List
Cupa facility list

Date of Government Version: 11/18/2024
Date Data Arrived at EDR: 11/19/2024
Date Made Active in Reports: 02/12/2025
Number of Days to Update: 85

Source: Department of Environmental Health
Telephone: 408-918-1973
Last EDR Contact: 02/05/2025
Next Scheduled EDR Contact: 05/26/2025
Data Release Frequency: Varies

HIST LUST SANTA CLARA: HIST LUST - Fuel Leak Site Activity Report
A listing of open and closed leaking underground storage tanks. This listing is no longer updated by the county. Leaking underground storage tanks are now handled by the Department of Environmental Health.

Date of Government Version: 03/29/2005
Date Data Arrived at EDR: 03/30/2005
Date Made Active in Reports: 04/21/2005
Number of Days to Update: 22

Source: Santa Clara Valley Water District
Telephone: 408-265-2600
Last EDR Contact: 03/23/2009
Next Scheduled EDR Contact: 06/22/2009
Data Release Frequency: No Update Planned

LUST SANTA CLARA: LOP Listing
A listing of leaking underground storage tanks located in Santa Clara county.

Date of Government Version: 03/03/2014
Date Data Arrived at EDR: 03/05/2014
Date Made Active in Reports: 03/18/2014
Number of Days to Update: 13

Source: Department of Environmental Health
Telephone: 408-918-3417
Last EDR Contact: 02/12/2025
Next Scheduled EDR Contact: 06/02/2025
Data Release Frequency: No Update Planned

SANTA CRUZ COUNTY:

CUPA SANTA CRUZ: CUPA Facility List
CUPA facility listing.

Date of Government Version: 01/21/2017
Date Data Arrived at EDR: 02/22/2017
Date Made Active in Reports: 05/23/2017
Number of Days to Update: 90

Source: Santa Cruz County Environmental Health
Telephone: 831-464-2761
Last EDR Contact: 02/05/2025
Next Scheduled EDR Contact: 05/26/2025
Data Release Frequency: Varies

SITE MIT SANTA CRUZ: Site Mitigation Santa Cruz County List
Sites may become contaminated with toxic chemicals through illegal dumping or disposal, from leaking underground storage tanks, or through industrial or commercial activities.The goal of the site mitigation program is to protect the public health and the environment while facilitating completion of contaminated site clean-up projects in a timely manner.

Date of Government Version: 12/03/2018
Date Data Arrived at EDR: 06/23/2023
Date Made Active in Reports: 07/13/2023
Number of Days to Update: 20

Source: Santa Cruz Environmental Health Services
Telephone: 831-454-2761
Last EDR Contact: 02/05/2025
Next Scheduled EDR Contact: 05/26/2025
Data Release Frequency: Varies

SHASTA COUNTY:

CUPA SHASTA: CUPA Facility List
Cupa Facility List.

Date of Government Version: 06/15/2017
Date Data Arrived at EDR: 06/19/2017
Date Made Active in Reports: 08/09/2017
Number of Days to Update: 51

Source: Shasta County Department of Resource Management
Telephone: 530-225-5789
Last EDR Contact: 02/05/2025
Next Scheduled EDR Contact: 05/26/2025
Data Release Frequency: Varies

SOLANO COUNTY:

LUST SOLANO: Leaking Underground Storage Tanks
A listing of leaking underground storage tank sites located in Solano county.

Date of Government Version: 06/04/2019
Date Data Arrived at EDR: 06/06/2019
Date Made Active in Reports: 08/13/2019
Number of Days to Update: 68

Source: Solano County Department of Environmental Management
Telephone: 707-784-6770
Last EDR Contact: 02/12/2025
Next Scheduled EDR Contact: 06/02/2025
Data Release Frequency: Quarterly

UST SOLANO: Underground Storage Tanks
Underground storage tank sites located in Solano county.

Date of Government Version: 09/15/2021
Date Data Arrived at EDR: 09/16/2021
Date Made Active in Reports: 12/09/2021
Number of Days to Update: 84

Source: Solano County Department of Environmental Management
Telephone: 707-784-6770
Last EDR Contact: 02/12/2025
Next Scheduled EDR Contact: 06/02/2025
Data Release Frequency: Quarterly

SONOMA COUNTY:

CUPA SONOMA: Cupa Facility List
Cupa Facility list

Date of Government Version: 07/02/2021
Date Data Arrived at EDR: 07/06/2021
Date Made Active in Reports: 07/14/2021
Number of Days to Update: 8

Source: County of Sonoma Fire & Emergency Services Department
Telephone: 707-565-1174
Last EDR Contact: 12/10/2024
Next Scheduled EDR Contact: 03/31/2025
Data Release Frequency: Varies

LUST SONOMA: Leaking Underground Storage Tank Sites
A listing of leaking underground storage tank sites located in Sonoma county.

Date of Government Version: 06/30/2021
Date Data Arrived at EDR: 06/30/2021
Date Made Active in Reports: 09/24/2021
Number of Days to Update: 86

Source: Department of Health Services
Telephone: 707-565-6565
Last EDR Contact: 12/10/2024
Next Scheduled EDR Contact: 03/31/2025
Data Release Frequency: Quarterly

STANISLAUS COUNTY:

CUPA STANISLAUS: CUPA Facility List
Cupa facility list

Date of Government Version: 02/08/2022
Date Data Arrived at EDR: 02/10/2022
Date Made Active in Reports: 05/04/2022
Number of Days to Update: 83

Source: Stanislaus County Department of Ennvironmental Protection
Telephone: 209-525-6751
Last EDR Contact: 01/03/2025
Next Scheduled EDR Contact: 04/21/2025
Data Release Frequency: Varies

SUTTER COUNTY:

UST SUTTER: Underground Storage Tanks
Underground storage tank sites located in Sutter county.

Date of Government Version: 11/05/2024
Date Data Arrived at EDR: 11/20/2024
Date Made Active in Reports: 02/13/2025
Number of Days to Update: 85

Source: Sutter County Environmental Health Services
Telephone: 530-822-7500
Last EDR Contact: 02/12/2025
Next Scheduled EDR Contact: 06/02/2025
Data Release Frequency: Semi-Annually

TEHAMA COUNTY:

CUPA TEHAMA: CUPA Facility List
Cupa facilities

Date of Government Version: 08/27/2024
Date Data Arrived at EDR: 08/28/2024
Date Made Active in Reports: 11/12/2024
Number of Days to Update: 76

Source: Tehama County Department of Environmental Health
Telephone: 530-527-8020
Last EDR Contact: 02/05/2025
Next Scheduled EDR Contact: 05/12/2025
Data Release Frequency: Varies

TRINITY COUNTY:

CUPA TRINITY: CUPA Facility List
Cupa facility list

Date of Government Version: 10/09/2024
Date Data Arrived at EDR: 10/11/2024
Date Made Active in Reports: 12/30/2024
Number of Days to Update: 80

Source: Department of Toxic Substances Control
Telephone: 760-352-0381
Last EDR Contact: 01/09/2025
Next Scheduled EDR Contact: 04/28/2025
Data Release Frequency: Varies

TULARE COUNTY:

CUPA TULARE: CUPA Facility List
Cupa program facilities

Date of Government Version: 10/07/2022
Date Data Arrived at EDR: 10/07/2022
Date Made Active in Reports: 12/21/2022
Number of Days to Update: 75

Source: Tulare County Environmental Health Services Division
Telephone: 559-624-7400
Last EDR Contact: 01/22/2025
Next Scheduled EDR Contact: 05/12/2025
Data Release Frequency: Varies

TUOLUMNE COUNTY:

CUPA TUOLUMNE: CUPA Facility List
Cupa facility list

Date of Government Version: 04/23/2018
Date Data Arrived at EDR: 04/25/2018
Date Made Active in Reports: 06/25/2018
Number of Days to Update: 61

Source: Divison of Environmental Health
Telephone: 209-533-5633
Last EDR Contact: 01/08/2025
Next Scheduled EDR Contact: 04/28/2025
Data Release Frequency: Varies

VENTURA COUNTY:

BWT VENTURA: Business Plan, Hazardous Waste Producers, and Operating Underground Tanks
The BWT list indicates by site address whether the Environmental Health Division has Business Plan (B), Waste Producer (W), and/or Underground Tank (T) information.

Date of Government Version: 07/02/2024
Date Data Arrived at EDR: 07/17/2024
Date Made Active in Reports: 07/23/2024
Number of Days to Update: 6

Source: Ventura County Environmental Health Division
Telephone: 805-654-2813
Last EDR Contact: 01/13/2025
Next Scheduled EDR Contact: 04/28/2025
Data Release Frequency: Quarterly

LF VENTURA: Inventory of Illegal Abandoned and Inactive Sites
Ventura County Inventory of Closed, Illegal Abandoned, and Inactive Sites.

Date of Government Version: 12/01/2011
Date Data Arrived at EDR: 12/01/2011
Date Made Active in Reports: 01/19/2012
Number of Days to Update: 49

Source: Environmental Health Division
Telephone: 805-654-2813
Last EDR Contact: 12/16/2024
Next Scheduled EDR Contact: 04/07/2025
Data Release Frequency: No Update Planned

LUST VENTURA: Listing of Underground Tank Cleanup Sites
Ventura County Underground Storage Tank Cleanup Sites (LUST).

Date of Government Version: 05/29/2008
Date Data Arrived at EDR: 06/24/2008
Date Made Active in Reports: 07/31/2008
Number of Days to Update: 37

Source: Environmental Health Division
Telephone: 805-654-2813
Last EDR Contact: 01/30/2025
Next Scheduled EDR Contact: 05/19/2025
Data Release Frequency: No Update Planned

MED WASTE VENTURA: Medical Waste Program List
To protect public health and safety and the environment from potential exposure to disease causing agents, the Environmental Health Division Medical Waste Program regulates the generation, handling, storage, treatment and disposal of medical waste throughout the County.

Date of Government Version: 07/02/2024
Date Data Arrived at EDR: 07/18/2024
Date Made Active in Reports: 07/23/2024
Number of Days to Update: 5
Source: Ventura County Resource Management Agency
Telephone: 805-654-2813
Last EDR Contact: 01/13/2025
Next Scheduled EDR Contact: 04/28/2025
Data Release Frequency: Quarterly

UST VENTURA: Underground Tank Closed Sites List
Ventura County Operating Underground Storage Tank Sites (UST)/Underground Tank Closed Sites List.

Date of Government Version: 08/27/2024
Date Data Arrived at EDR: 09/04/2024
Date Made Active in Reports: 11/13/2024
Number of Days to Update: 70
Source: Environmental Health Division
Telephone: 805-654-2813
Last EDR Contact: 12/05/2024
Next Scheduled EDR Contact: 03/17/2025
Data Release Frequency: Quarterly

YOLO COUNTY:

UST YOLO: Underground Storage Tank Comprehensive Facility Report
Underground storage tank sites located in Yolo county.

Date of Government Version: 09/18/2024
Date Data Arrived at EDR: 09/25/2024
Date Made Active in Reports: 12/13/2024
Number of Days to Update: 79
Source: Yolo County Department of Health
Telephone: 530-666-8646
Last EDR Contact: 01/09/2025
Next Scheduled EDR Contact: 04/07/2025
Data Release Frequency: Annually

YUBA COUNTY:

CUPA YUBA: CUPA Facility List
CUPA facility listing for Yuba County.

Date of Government Version: 10/17/2024
Date Data Arrived at EDR: 10/22/2024
Date Made Active in Reports: 01/10/2025
Number of Days to Update: 80
Source: Yuba County Environmental Health Department
Telephone: 530-749-7523
Last EDR Contact: 01/15/2025
Next Scheduled EDR Contact: 05/05/2025
Data Release Frequency: Varies

OTHER DATABASE(S)

Depending on the geographic area covered by this report, the data provided in these specialty databases may or may not be complete. For example, the existence of wetlands information data in a specific report does not mean that all wetlands in the area covered by the report are included. Moreover, the absence of any reported wetlands information does not necessarily mean that wetlands do not exist in the area covered by the report.

CT MANIFEST: Hazardous Waste Manifest Data
Facility and manifest data. Manifest is a document that lists and tracks hazardous waste from the generator through transporters to a tsd facility.

Date of Government Version: 11/04/2024
Date Data Arrived at EDR: 11/05/2024
Date Made Active in Reports: 01/27/2025
Number of Days to Update: 83
Source: Department of Energy & Environmental Protection
Telephone: 860-424-3375
Last EDR Contact: 02/04/2025
Next Scheduled EDR Contact: 05/19/2025
Data Release Frequency: No Update Planned

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

NJ MANIFEST: Manifest Information
Hazardous waste manifest information.

Date of Government Version: 12/31/2018
Date Data Arrived at EDR: 04/10/2019
Date Made Active in Reports: 05/16/2019
Number of Days to Update: 36

Source: Department of Environmental Protection
Telephone: N/A
Last EDR Contact: 12/23/2024
Next Scheduled EDR Contact: 04/14/2025
Data Release Frequency: Annually

NY MANIFEST: Facility and Manifest Data
Manifest is a document that lists and tracks hazardous waste from the generator through transporters to a TSD facility.

Date of Government Version: 12/31/2019
Date Data Arrived at EDR: 11/30/2023
Date Made Active in Reports: 12/01/2023
Number of Days to Update: 1

Source: Department of Environmental Conservation
Telephone: 518-402-8651
Last EDR Contact: 01/23/2025
Next Scheduled EDR Contact: 05/05/2025
Data Release Frequency: Quarterly

PA MANIFEST: Manifest Information
Hazardous waste manifest information.

Date of Government Version: 06/30/2018
Date Data Arrived at EDR: 07/19/2019
Date Made Active in Reports: 09/10/2019
Number of Days to Update: 53

Source: Department of Environmental Protection
Telephone: 717-783-8990
Last EDR Contact: 01/06/2025
Next Scheduled EDR Contact: 04/21/2025
Data Release Frequency: Annually

RI MANIFEST: Manifest information
Hazardous waste manifest information

Date of Government Version: 12/31/2020
Date Data Arrived at EDR: 11/30/2021
Date Made Active in Reports: 02/18/2022
Number of Days to Update: 80

Source: Department of Environmental Management
Telephone: 401-222-2797
Last EDR Contact: 02/06/2025
Next Scheduled EDR Contact: 05/26/2025
Data Release Frequency: Annually

WI MANIFEST: Manifest Information
Hazardous waste manifest information.

Date of Government Version: 05/31/2018
Date Data Arrived at EDR: 06/19/2019
Date Made Active in Reports: 09/03/2019
Number of Days to Update: 76

Source: Department of Natural Resources
Telephone: N/A
Last EDR Contact: 11/27/2024
Next Scheduled EDR Contact: 03/17/2025
Data Release Frequency: Annually

Oil/Gas Pipelines
Source: Endeavor Business Media
Petroleum Bundle (Crude Oil, Refined Products, Petrochemicals, Gas Liquids (LPG/NGL), and Specialty Gases (Miscellaneous)) N = Natural Gas Bundle (Natural Gas, Gas Liquids (LPG/NGL), and Specialty Gases (Miscellaneous)). This map includes information copyrighted by Endeavor Business Media. This information is provided on a best effort basis and Endeavor Business Media does not guarantee its accuracy nor warrant its fitness for any particular purpose. Such information has been reprinted with the permission of Endeavor Business Media.

Electric Power Transmission Line Data
Source: Endeavor Business Media
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Sensitive Receptors: There are individuals deemed sensitive receptors due to their fragile immune systems and special sensitivity to environmental discharges. These sensitive receptors typically include the elderly, the sick, and children. While the location of all sensitive receptors cannot be determined, EDR indicates those buildings and facilities - schools, daycares, hospitals, medical centers, and nursing homes - where individuals who are sensitive receptors are likely to be located.

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

AHA Hospitals:
Source: American Hospital Association, Inc.
Telephone: 312-280-5991
The database includes a listing of hospitals based on the American Hospital Association's annual survey of hospitals.

Medical Centers: Provider of Services Listing
Source: Centers for Medicare & Medicaid Services
Telephone: 410-786-3000
A listing of hospitals with Medicare provider number, produced by Centers of Medicare & Medicaid Services, a federal agency within the U.S. Department of Health and Human Services.

Nursing Homes
Source: National Institutes of Health
Telephone: 301-594-6248
Information on Medicare and Medicaid certified nursing homes in the United States.

Public Schools
Source: National Center for Education Statistics
Telephone: 202-502-7300
The National Center for Education Statistics' primary database on elementary and secondary public education in the United States. It is a comprehensive, annual, national statistical database of all public elementary and secondary schools and school districts, which contains data that are comparable across all states.

Private Schools
Source: National Center for Education Statistics
Telephone: 202-502-7300
The National Center for Education Statistics' primary database on private school locations in the United States.

Daycare Centers: Licensed Facilities
Source: Department of Social Services
Telephone: 916-657-4041

Flood Zone Data: This data was obtained from the Federal Emergency Management Agency (FEMA). It depicts 100-year and 500-year flood zones as defined by FEMA. It includes the National Flood Hazard Layer (NFHL) which incorporates Flood Insurance Rate Map (FIRM) data and Q3 data from FEMA in areas not covered by NFHL.
Source: FEMA
Telephone: 877-336-2627
Date of Government Version: 2003, 2015

NWI: National Wetlands Inventory. This data, available in select counties across the country, was obtained by EDR in 2002, 2005, 2010 and 2015 from the U.S. Fish and Wildlife Service.

State Wetlands Data: Wetland Inventory
Source: Department of Fish and Wildlife
Telephone: 916-445-0411

Current USGS 7.5 Minute Topographic Map
Source: U.S. Geological Survey

STREET AND ADDRESS INFORMATION

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GEOCHECK ®- PHYSICAL SETTING SOURCE ADDENDUM

TARGET PROPERTY ADDRESS

NOT REPORTED
NOT REPORTED
ONTARIO, CA 91761

TARGET PROPERTY COORDINATES

Latitude (North):	33.992206 - 33° 59' 31.94''
Longitude (West):	117.562857 - 117° 33' 46.29''
Universal Tranverse Mercator:	Zone 11
UTM X (Meters):	448015.2
UTM Y (Meters):	3761240.2
Elevation:	713 ft. above sea level

USGS TOPOGRAPHIC MAP

Target Property Map:	50005749 CORONA NORTH, CA
Version Date:	2022
North Map:	50005338 GUASTI, CA
Version Date:	2021

EDR's GeoCheck Physical Setting Source Addendum is provided to assist the environmental professional in forming an opinion about the impact of potential contaminant migration.

Assessment of the impact of contaminant migration generally has two principle investigative components:

1. Groundwater flow direction, and
2. Groundwater flow velocity.

Groundwater flow direction may be impacted by surface topography, hydrology, hydrogeology, characteristics of the soil, and nearby wells. Groundwater flow velocity is generally impacted by the nature of the geologic strata.

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

GROUNDWATER FLOW DIRECTION INFORMATION

Groundwater flow direction for a particular site is best determined by a qualified environmental professional using site-specific well data. If such data is not reasonably ascertainable, it may be necessary to rely on other sources of information, such as surface topographic information, hydrologic information, hydrogeologic data collected on nearby properties, and regional groundwater flow information (from deep aquifers).

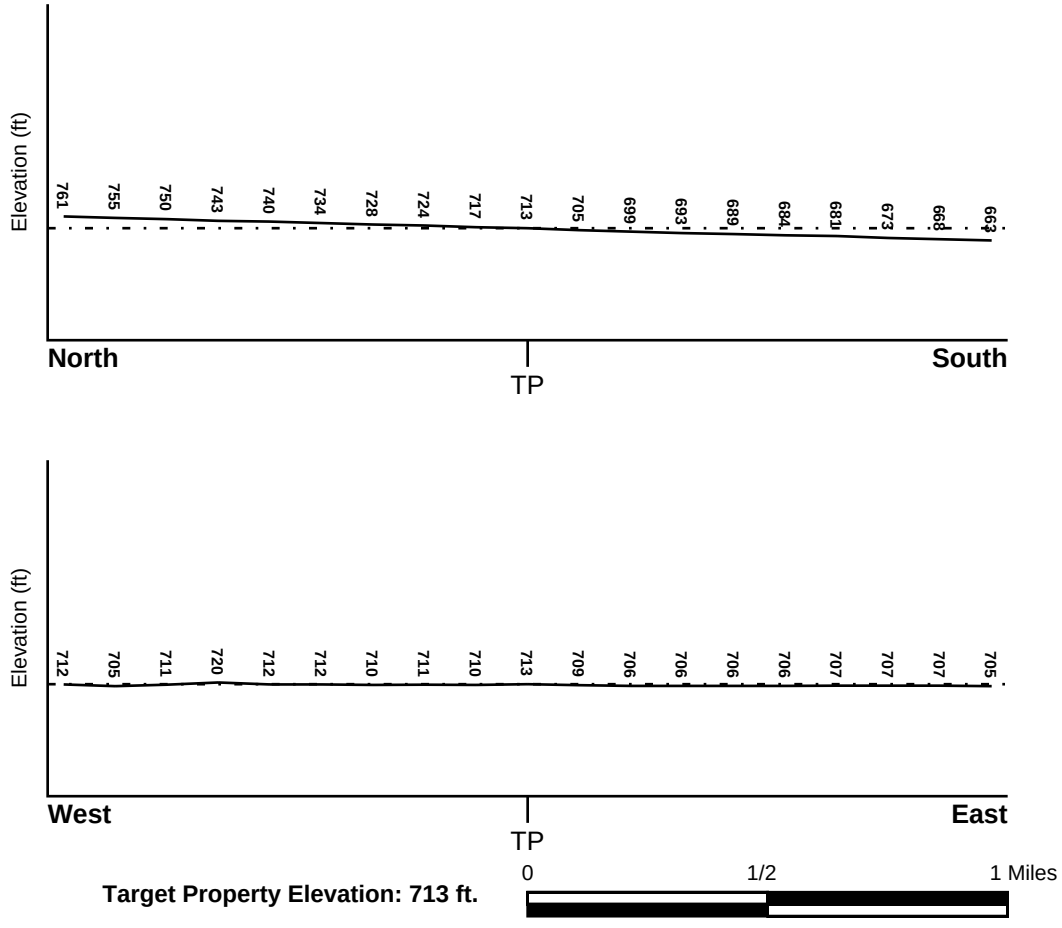
TOPOGRAPHIC INFORMATION

Surface topography may be indicative of the direction of surficial groundwater flow. This information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

TARGET PROPERTY TOPOGRAPHY

General Topographic Gradient: General South

SURROUNDING TOPOGRAPHY: ELEVATION PROFILES



Source: Topography has been determined from the USGS 7.5' Digital Elevation Model and should be evaluated on a relative (not an absolute) basis. Relative elevation information between sites of close proximity should be field verified.

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

HYDROLOGIC INFORMATION

Surface water can act as a hydrologic barrier to groundwater flow. Such hydrologic information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

Refer to the Physical Setting Source Map following this summary for hydrologic information (major waterways and bodies of water).

FEMA FLOOD ZONE

Flood Plain Panel at Target Property	FEMA Source Type
06071C9375H	FEMA FIRM Flood data

Additional Panels in search area:	FEMA Source Type
06071C8639H	FEMA FIRM Flood data
06071C8643H	FEMA FIRM Flood data
06065C0681G	FEMA FIRM Flood data

NATIONAL WETLAND INVENTORY

NWI Quad at Target Property	NWI Electronic Data Coverage
CORONA NORTH	YES - refer to the Overview Map and Detail Map

HYDROGEOLOGIC INFORMATION

Hydrogeologic information obtained by installation of wells on a specific site can often be an indicator of groundwater flow direction in the immediate area. Such hydrogeologic information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

Site-Specific Hydrogeological Data*:

Search Radius:	1.25 miles
Status:	Not found

AQUIFLOW®

Search Radius: 1.000 Mile.

EDR has developed the AQUIFLOW Information System to provide data on the general direction of groundwater flow at specific points. EDR has reviewed reports submitted by environmental professionals to regulatory authorities at select sites and has extracted the date of the report, groundwater flow direction as determined hydrogeologically, and the depth to water table.

MAP ID	LOCATION FROM TP	GENERAL DIRECTION GROUNDWATER FLOW
Not Reported		

* ©1996 Site−specific hydrogeological data gathered by CERCLIS Alerts, Inc., Bainbridge Island, WA. All rights reserved. All of the information and opinions presented are those of the cited EPA report(s), which were completed under a Comprehensive Environmental Response Compensation and Liability Information System (CERCLIS) investigation.

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

GROUNDWATER FLOW VELOCITY INFORMATION

Groundwater flow velocity information for a particular site is best determined by a qualified environmental professional using site specific geologic and soil strata data. If such data are not reasonably ascertainable, it may be necessary to rely on other sources of information, including geologic age identification, rock stratigraphic unit and soil characteristics data collected on nearby properties and regional soil information. In general, contaminant plumes move more quickly through sandy-gravelly types of soils than silty-clayey types of soils.

GEOLOGIC INFORMATION IN GENERAL AREA OF TARGET PROPERTY

Geologic information can be used by the environmental professional in forming an opinion about the relative speed at which contaminant migration may be occurring.

ROCK STRATIGRAPHIC UNIT

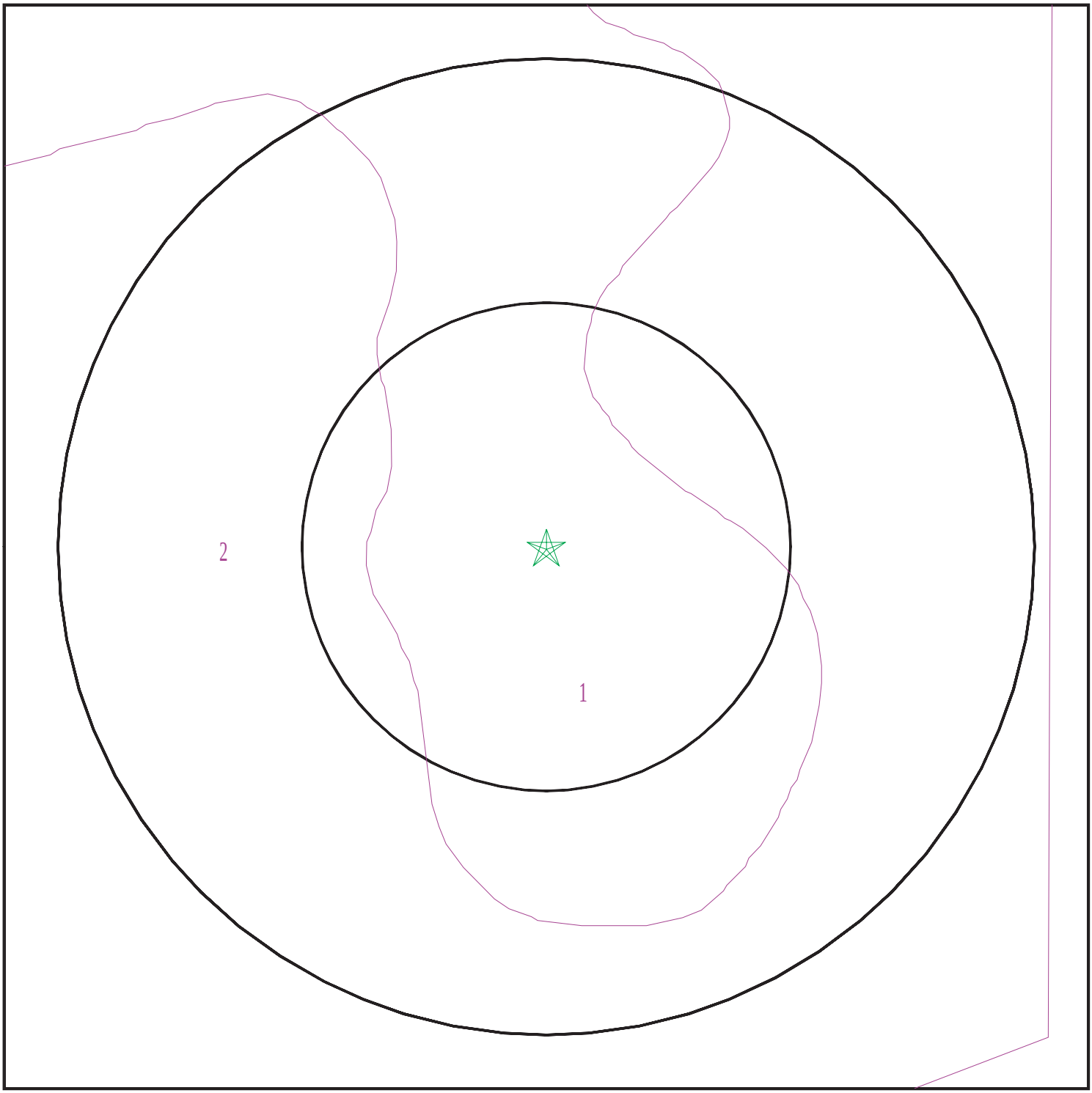
Era:	Cenozoic
System:	Quaternary
Series:	Quaternary
Code:	Q *(decoded above as Era, System & Series)*

GEOLOGIC AGE IDENTIFICATION

Category: Stratifed Sequence

Geologic Age and Rock Stratigraphic Unit Source: P.G. Schruben, R.E. Arndt and W.J. Bawiec, Geology of the Conterminous U.S. at 1:2,500,000 Scale - a digital representation of the 1974 P.B. King and H.M. Beikman Map, USGS Digital Data Series DDS - 11 (1994).

SSURGO SOIL MAP - 07908232.2r



Target Property
SSURGO Soil
Water

0 1/16 1/8 1/4 Miles

N

SITE NAME:	Not Reported	CLIENT:	SCS Engineers
ADDRESS:	Not Reported Ontario CA 91761	CONTACT:	Jose William Padua
LAT/LONG:	33.992206 / 117.562857	INQUIRY #:	07908232.2r
		DATE:	February 25, 2025 1:28 pm

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GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

DOMINANT SOIL COMPOSITION IN GENERAL AREA OF TARGET PROPERTY

The U.S. Department of Agriculture's (USDA) Soil Conservation Service (SCS) leads the National Cooperative Soil Survey (NCSS) and is responsible for collecting, storing, maintaining and distributing soil survey information for privately owned lands in the United States. A soil map in a soil survey is a representation of soil patterns in a landscape. The following information is based on Soil Conservation Service SSURGO data.

Soil Map ID: 1

Soil Component Name: DELHI

Soil Surface Texture: fine sand

Hydrologic Group: Class A - High infiltration rates. Soils are deep, well drained to excessively drained sands and gravels.

Soil Drainage Class: Somewhat excessively drained

Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: Moderate

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

Soil Layer Information							
	Boundary			Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		
1	0 inches	18 inches	fine sand	Granular materials (35 pct. or less passing No. 200), Silty, or Clayey Gravel and Sand.	COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 141 Min: 42	Max: 7.8 Min: 6.1
2	18 inches	59 inches	sand	Granular materials (35 pct. or less passing No. 200), Silty, or Clayey Gravel and Sand.	COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 141 Min: 42	Max: 7.8 Min: 6.1

Soil Map ID: 2

Soil Component Name: HILMAR

Soil Surface Texture: loamy fine sand

Hydrologic Group: Class C - Slow infiltration rates. Soils with layers impeding downward movement of water, or soils with moderately fine or fine textures.

Soil Drainage Class: Somewhat poorly drained

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: High

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

Soil Layer Information							
	Boundary			Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		
1	0 inches	22 inches	loamy fine sand	Granular materials (35 pct. or less passing No. 200), Silty, or Clayey Gravel and Sand.	FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), Lean Clay. FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), silt.	Max: 1.4 Min: 0.42	Max: 8.4 Min: 7.9
2	22 inches	59 inches	stratified loamy sand to loam	Granular materials (35 pct. or less passing No. 200), Silty, or Clayey Gravel and Sand.	FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), Lean Clay. FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), silt.	Max: 1.4 Min: 0.42	Max: 8.4 Min: 7.9

LOCAL / REGIONAL WATER AGENCY RECORDS

EDR Local/Regional Water Agency records provide water well information to assist the environmental professional in assessing sources that may impact ground water flow direction, and in forming an opinion about the impact of contaminant migration on nearby drinking water wells.

WELL SEARCH DISTANCE INFORMATION

DATABASE	SEARCH DISTANCE (miles)
Federal USGS	1.000
Federal FRDS PWS	Nearest PWS within 1 mile
State Database	1.000

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

FEDERAL USGS WELL INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
A11	USGS40000139597	1/4 - 1/2 Mile WSW
A12	USGS40000139596	1/4 - 1/2 Mile WSW
A13	USGS40000139595	1/4 - 1/2 Mile WSW
A14	USGS40000139598	1/4 - 1/2 Mile WSW
A15	USGS40000139601	1/4 - 1/2 Mile WSW
A16	USGS40000139600	1/4 - 1/2 Mile WSW
A17	USGS40000139599	1/4 - 1/2 Mile WSW
A18	USGS40000139594	1/4 - 1/2 Mile WSW
A19	USGS40000139590	1/4 - 1/2 Mile WSW
A20	USGS40000139589	1/4 - 1/2 Mile WSW
A21	USGS40000139591	1/4 - 1/2 Mile WSW
A22	USGS40000139593	1/4 - 1/2 Mile WSW
A23	USGS40000139592	1/4 - 1/2 Mile WSW
40	USGS40000139537	1/2 - 1 Mile SSE
G44	USGS40000139530	1/2 - 1 Mile SE

FEDERAL FRDS PUBLIC WATER SUPPLY SYSTEM INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
No PWS System Found		

Note: PWS System location is not always the same as well location.

STATE DATABASE WELL INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
A1	CAUSGSN00007457	1/4 - 1/2 Mile WSW
A2	CAUSGSN00009264	1/4 - 1/2 Mile WSW
A3	CAUSGSN00000786	1/4 - 1/2 Mile WSW
A4	CAUSGSN00011131	1/4 - 1/2 Mile WSW
A5	CAUSGSN00007464	1/4 - 1/2 Mile WSW
A6	CAUSGSN00003256	1/4 - 1/2 Mile WSW
A7	CAUSGSN00019045	1/4 - 1/2 Mile WSW
A8	CAUSGSN00011745	1/4 - 1/2 Mile WSW
A9	CAUSGSN00016031	1/4 - 1/2 Mile WSW
A10	CAUSGSN00002619	1/4 - 1/2 Mile WSW
B24	CAPFAS000000575	1/4 - 1/2 Mile South
B25	CADDW2000022934	1/4 - 1/2 Mile South
C26	CAPFAS000000725	1/4 - 1/2 Mile SE
C27	CADDW2000013259	1/4 - 1/2 Mile SE
D28	CADWR9000006336	1/4 - 1/2 Mile WSW
D29	CADWR9000006337	1/4 - 1/2 Mile WSW
D30	CADWR9000006338	1/4 - 1/2 Mile WSW
31	CADWR0000011820	1/4 - 1/2 Mile SW
E32	CAPFAS000000511	1/4 - 1/2 Mile SSW
E33	CADDW2000017547	1/4 - 1/2 Mile SSW
F34	CADDW2000001020	1/2 - 1 Mile SSE
F35	2581	1/2 - 1 Mile SSE

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

STATE DATABASE WELL INFORMATION

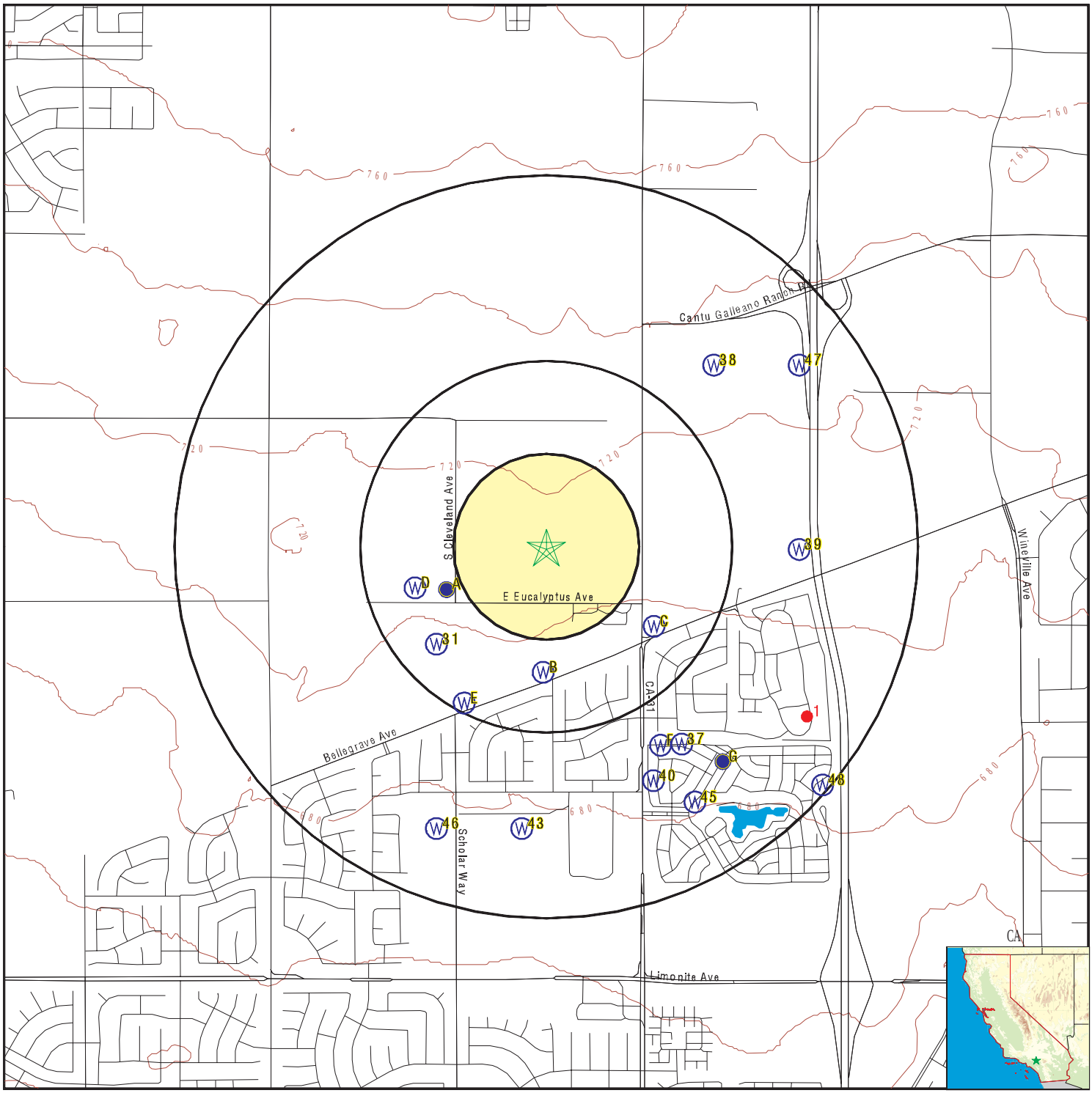
MAP ID	WELL ID	LOCATION FROM TP
F36	CADDW2000024450	1/2 - 1 Mile SSE
37	CADDW2000022321	1/2 - 1 Mile SE
38	CADWR0000006180	1/2 - 1 Mile NE
39	CADWR0000001457	1/2 - 1 Mile East
G41	2582	1/2 - 1 Mile SE
G42	CADDW2000010898	1/2 - 1 Mile SE
43	CADWR0000036121	1/2 - 1 Mile South
45	2583	1/2 - 1 Mile SSE
46	CADWR0000036853	1/2 - 1 Mile SSW
47	CADWR0000024137	1/2 - 1 Mile NE
48	CADDW2000003534	1/2 - 1 Mile SE

OTHER STATE DATABASE INFORMATION

STATE OIL/GAS WELL INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
1	CAOG17000011417	1/2 - 1 Mile ESE

PHYSICAL SETTING SOURCE MAP - 07908232.2r



- County Boundary
- Major Roads
- Contour Lines
- Earthquake Fault Lines
- Earthquake epicenter, Richter 5 or greater
- Water Wells
- Public Water Supply Wells
- Cluster of Multiple Icons
- Groundwater Flow Direction
- GI Indeterminate Groundwater Flow at Location
- GV Groundwater Flow Varies at Location
- HD Closest Hydrogeological Data
- Oil, gas or related wells

SITE NAME:	Not Reported	CLIENT:	SCS Engineers
ADDRESS:	Not Reported Ontario CA 91761	CONTACT:	Jose William Padua
		INQUIRY #:	07908232.2r
LAT/LONG:	33.992206 / 117.562857	DATE:	February 25, 2025 1:28 pm

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GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID
Direction
Distance
Elevation | Database | EDR ID Number

A1
WSW
1/4 - 1/2 Mile
Lower

CA WELLS **CAUSGSN00007457**

Well ID:	USGS-335926117340002	Well Type:	UNK
Source:	United States Geological Survey		
Other Name:	USGS-335926117340002	GAMA PFAS Testing:	Not Reported
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=USGSNEW&samp_date=&global_id=&assigned_name=USGS-335926117340002&store_num=		
GeoTracker Data:	Not Reported		

A2
WSW
1/4 - 1/2 Mile
Lower

CA WELLS **CAUSGSN00009264**

Well ID:	USGS-335926117340001	Well Type:	UNK
Source:	United States Geological Survey		
Other Name:	USGS-335926117340001	GAMA PFAS Testing:	Not Reported
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=USGSNEW&samp_date=&global_id=&assigned_name=USGS-335926117340001&store_num=		
GeoTracker Data:	Not Reported		

A3
WSW
1/4 - 1/2 Mile
Lower

CA WELLS **CAUSGSN00000786**

Well ID:	USGS-335926117340009	Well Type:	UNK
Source:	United States Geological Survey		
Other Name:	USGS-335926117340009	GAMA PFAS Testing:	Not Reported
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=USGSNEW&samp_date=&global_id=&assigned_name=USGS-335926117340009&store_num=		
GeoTracker Data:	Not Reported		

A4
WSW
1/4 - 1/2 Mile
Lower

CA WELLS **CAUSGSN00011131**

Well ID:	USGS-335926117340012	Well Type:	UNK
Source:	United States Geological Survey		
Other Name:	USGS-335926117340012	GAMA PFAS Testing:	Not Reported
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=USGSNEW&samp_date=&global_id=&assigned_name=USGS-335926117340012&store_num=		
GeoTracker Data:	Not Reported		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID
Direction
Distance
Elevation | Database | EDR ID Number

A5
WSW
1/4 - 1/2 Mile
Lower

CA WELLS **CAUSGSN00007464**

Well ID:	USGS-335926117340008	Well Type:	UNK
Source:	United States Geological Survey		
Other Name:	USGS-335926117340008	GAMA PFAS Testing:	Not Reported
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=USGSNEW&samp_date=&global_id=&assigned_name=USGS-335926117340008&store_num=		
GeoTracker Data:	Not Reported		

A6
WSW
1/4 - 1/2 Mile
Lower

CA WELLS **CAUSGSN00003256**

Well ID:	USGS-335926117340011	Well Type:	UNK
Source:	United States Geological Survey		
Other Name:	USGS-335926117340011	GAMA PFAS Testing:	Not Reported
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=USGSNEW&samp_date=&global_id=&assigned_name=USGS-335926117340011&store_num=		
GeoTracker Data:	Not Reported		

A7
WSW
1/4 - 1/2 Mile
Lower

CA WELLS **CAUSGSN00019045**

Well ID:	USGS-335926117340003	Well Type:	UNK
Source:	United States Geological Survey		
Other Name:	USGS-335926117340003	GAMA PFAS Testing:	Not Reported
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=USGSNEW&samp_date=&global_id=&assigned_name=USGS-335926117340003&store_num=		
GeoTracker Data:	Not Reported		

A8
WSW
1/4 - 1/2 Mile
Lower

CA WELLS **CAUSGSN00011745**

Well ID:	USGS-335926117340010	Well Type:	UNK
Source:	United States Geological Survey		
Other Name:	USGS-335926117340010	GAMA PFAS Testing:	Not Reported
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=USGSNEW&samp_date=&global_id=&assigned_name=USGS-335926117340010&store_num=		
GeoTracker Data:	Not Reported		

Map ID
Direction
Distance
Elevation | Database | EDR ID Number

A9
WSW
1/4 - 1/2 Mile
Lower

CA WELLS **CAUSGSN00016031**

Well ID:	USGS-335926117340007	Well Type:	UNK
Source:	United States Geological Survey		
Other Name:	USGS-335926117340007	GAMA PFAS Testing:	Not Reported
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=USGSNEW&samp_date=&global_id=&assigned_name=USGS-335926117340007&store_num=		
GeoTracker Data:	Not Reported		

A10
WSW
1/4 - 1/2 Mile
Lower

CA WELLS **CAUSGSN00002619**

Well ID:	USGS-335926117340013	Well Type:	UNK
Source:	United States Geological Survey		
Other Name:	USGS-335926117340013	GAMA PFAS Testing:	Not Reported
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=USGSNEW&samp_date=&global_id=&assigned_name=USGS-335926117340013&store_num=		
GeoTracker Data:	Not Reported		

A11
WSW
1/4 - 1/2 Mile
Lower

FED USGS **USGS40000139597**

Organization ID:	USGS-CA		
Organization Name:	USGS California Water Science Center		
Monitor Location:	002S007W13P010SLYS		
Type:	Well: Test hole not completed as a well		
Description:	CHINO DAIRY DEEP BLUE LYSIMETER AT 50 FT		
HUC:	18070203	Drainage Area:	Not Reported
Drainage Area Units:	Not Reported	Contrib Drainage Area:	Not Reported
Contrib Drainage Area Unts:	Not Reported	Aquifer:	California Coastal Basin aquifers
Formation Type:	Not Reported	Aquifer Type:	Not Reported
Construction Date:	Not Reported	Well Depth:	Not Reported
Well Depth Units:	Not Reported	Well Hole Depth:	102
Well Hole Depth Units:	ft		

A12
WSW
1/4 - 1/2 Mile
Lower

FED USGS **USGS40000139596**

Organization ID:	USGS-CA		
Organization Name:	USGS California Water Science Center		
Monitor Location:	002S007W13P009SLYS		
Type:	Well: Test hole not completed as a well		
Description:	CHINO DAIRY DEEP YELLOW LYSIMETER AT 75 FT.		
HUC:	18070203	Drainage Area:	Not Reported
Drainage Area Units:	Not Reported	Contrib Drainage Area:	Not Reported

Contrib Drainage Area Unts:	Not Reported	Aquifer:	California Coastal Basin aquifers
Formation Type:	Not Reported	Aquifer Type:	Not Reported
Construction Date:	Not Reported	Well Depth:	Not Reported
Well Depth Units:	Not Reported	Well Hole Depth:	102
Well Hole Depth Units:	ft		

A13
WSW **FED USGS** **USGS40000139595**
1/4 - 1/2 Mile
Lower

Organization ID:	USGS-CA		
Organization Name:	USGS California Water Science Center		
Monitor Location:	002S007W13P008SLYS		
Type:	Well: Test hole not completed as a well		
Description:	CHINO DAIRY DEEP RED LYSIMETER AT 100 FT.		
HUC:	18070203	Drainage Area:	Not Reported
Drainage Area Units:	Not Reported	Contrib Drainage Area:	Not Reported
Contrib Drainage Area Unts:	Not Reported	Aquifer:	California Coastal Basin aquifers
Formation Type:	Not Reported	Aquifer Type:	Not Reported
Construction Date:	Not Reported	Well Depth:	Not Reported
Well Depth Units:	Not Reported	Well Hole Depth:	102
Well Hole Depth Units:	ft		

A14
WSW **FED USGS** **USGS40000139598**
1/4 - 1/2 Mile
Lower

Organization ID:	USGS-CA		
Organization Name:	USGS California Water Science Center		
Monitor Location:	002S007W13P011SLYS		
Type:	Well: Test hole not completed as a well		
Description:	CHINO DAIRY SHALLOW RED LYSIMETER AT 25 FT		
HUC:	18070203	Drainage Area:	Not Reported
Drainage Area Units:	Not Reported	Contrib Drainage Area:	Not Reported
Contrib Drainage Area Unts:	Not Reported	Aquifer:	California Coastal Basin aquifers
Formation Type:	Not Reported	Aquifer Type:	Not Reported
Construction Date:	Not Reported	Well Depth:	Not Reported
Well Depth Units:	Not Reported	Well Hole Depth:	102
Well Hole Depth Units:	ft		

A15
WSW **FED USGS** **USGS40000139601**
1/4 - 1/2 Mile
Lower

Organization ID:	USGS-CA		
Organization Name:	USGS California Water Science Center		
Monitor Location:	002S007W13P014SLYS		
Type:	Well: Test hole not completed as a well		
Description:	CHINO CAIRY SHALLOW BLUE LYSIMETER AT 5 FT		
HUC:	18070203	Drainage Area:	Not Reported
Drainage Area Units:	Not Reported	Contrib Drainage Area:	Not Reported
Contrib Drainage Area Unts:	Not Reported	Aquifer:	California Coastal Basin aquifers
Formation Type:	Not Reported	Aquifer Type:	Not Reported

Construction Date:	Not Reported	Well Depth:	Not Reported
Well Depth Units:	Not Reported	Well Hole Depth:	102
Well Hole Depth Units:	ft		

A16
WSW
1/4 - 1/2 Mile
Lower

FED USGS **USGS40000139600**

Organization ID:	USGS-CA		
Organization Name:	USGS California Water Science Center		
Monitor Location:	002S007W13P013SLYS		
Type:	Well: Test hole not completed as a well		
Description:	CHINO DAIRY SHALLOW GREEN LYSIMETER AT 10 FT		
HUC:	18070203	Drainage Area:	Not Reported
Drainage Area Units:	Not Reported	Contrib Drainage Area:	Not Reported
Contrib Drainage Area Unts:	Not Reported	Aquifer:	California Coastal Basin aquifers
Formation Type:	Not Reported	Aquifer Type:	Not Reported
Construction Date:	Not Reported	Well Depth:	Not Reported
Well Depth Units:	Not Reported	Well Hole Depth:	102
Well Hole Depth Units:	ft		

A17
WSW
1/4 - 1/2 Mile
Lower

FED USGS **USGS40000139599**

Organization ID:	USGS-CA		
Organization Name:	USGS California Water Science Center		
Monitor Location:	002S007W13P012SLYS		
Type:	Well: Test hole not completed as a well		
Description:	CHINO DAIRY SHALLOW YELLOW LYSIMETER AT 15 FT		
HUC:	18070203	Drainage Area:	Not Reported
Drainage Area Units:	Not Reported	Contrib Drainage Area:	Not Reported
Contrib Drainage Area Unts:	Not Reported	Aquifer:	California Coastal Basin aquifers
Formation Type:	Not Reported	Aquifer Type:	Not Reported
Construction Date:	Not Reported	Well Depth:	Not Reported
Well Depth Units:	Not Reported	Well Hole Depth:	102
Well Hole Depth Units:	ft		

A18
WSW
1/4 - 1/2 Mile
Lower

FED USGS **USGS40000139594**

Organization ID:	USGS-CA		
Organization Name:	USGS California Water Science Center		
Monitor Location:	002S007W13P007S	Type:	Well
Description:	Not Reported	HUC:	18070203
Drainage Area:	Not Reported	Drainage Area Units:	Not Reported
Contrib Drainage Area:	Not Reported	Contrib Drainage Area Unts:	Not Reported
Aquifer:	California Coastal Basin aquifers		
Formation Type:	Not Reported	Aquifer Type:	Not Reported
Construction Date:	19901201	Well Depth:	187
Well Depth Units:	ft	Well Hole Depth:	455
Well Hole Depth Units:	ft		

Map ID
Direction
Distance
Elevation | Database | EDR ID Number

A19
WSW
1/4 - 1/2 Mile
Lower

FED USGS **USGS40000139590**

Organization ID:	USGS-CA		
Organization Name:	USGS California Water Science Center		
Monitor Location:	002S007W13P003S	Type:	Well
Description:	Not Reported	HUC:	18070203
Drainage Area:	Not Reported	Drainage Area Units:	Not Reported
Contrib Drainage Area:	Not Reported	Contrib Drainage Area Unts:	Not Reported
Aquifer:	California Coastal Basin aquifers		
Formation Type:	Not Reported	Aquifer Type:	Not Reported
Construction Date:	19901201	Well Depth:	370
Well Depth Units:	ft	Well Hole Depth:	455
Well Hole Depth Units:	ft		

Ground water levels,Number of Measurements:	10	Level reading date:	1992-08-11
Feet below surface:	123.64	Feet to sea level:	Not Reported
Note:	Not Reported		
Level reading date:	1992-06-11	Feet below surface:	121.34
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1992-02-19	Feet below surface:	122.53
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1992-02-05	Feet below surface:	123.07
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1991-09-04	Feet below surface:	126.79
Feet to sea level:	Not Reported		
Note:	A nearby site that taps the same aquifer was being pumped.		
Level reading date:	1991-06-19	Feet below surface:	124.79
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1991-06-18	Feet below surface:	124.78
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1991-04-05	Feet below surface:	124.34
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1991-02-22	Feet below surface:	126.42
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1991-02-21	Feet below surface:	126.32
Feet to sea level:	Not Reported	Note:	Not Reported

A20
WSW
1/4 - 1/2 Mile
Lower

FED USGS **USGS40000139589**

Organization ID:	USGS-CA		
Organization Name:	USGS California Water Science Center		
Monitor Location:	002S007W13P002S	Type:	Well
Description:	Not Reported	HUC:	18070203

Drainage Area:	Not Reported	Drainage Area Units:	Not Reported
Contrib Drainage Area:	Not Reported	Contrib Drainage Area Unts:	Not Reported
Aquifer:	California Coastal Basin aquifers		
Formation Type:	Not Reported	Aquifer Type:	Not Reported
Construction Date:	19901201	Well Depth:	450
Well Depth Units:	ft	Well Hole Depth:	455
Well Hole Depth Units:	ft		

Ground water levels,Number of Measurements:	10	Level reading date:	1992-08-11
Feet below surface:	124.86	Feet to sea level:	Not Reported
Note:	Not Reported		
Level reading date:	1992-06-11	Feet below surface:	122.38
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1992-02-19	Feet below surface:	124.19
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1992-02-05	Feet below surface:	124.74
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1991-09-04	Feet below surface:	127.93
Feet to sea level:	Not Reported		
Note:	A nearby site that taps the same aquifer was being pumped.		
Level reading date:	1991-06-19	Feet below surface:	125.81
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1991-06-18	Feet below surface:	125.70
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1991-04-05	Feet below surface:	126.00
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1991-02-22	Feet below surface:	127.73
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1991-02-21	Feet below surface:	127.86
Feet to sea level:	Not Reported	Note:	Not Reported

A21
WSW
1/4 - 1/2 Mile
Lower

FED USGS **USGS40000139591**

Organization ID:	USGS-CA		
Organization Name:	USGS California Water Science Center		
Monitor Location:	002S007W13P004S	Type:	Well
Description:	Not Reported	HUC:	18070203
Drainage Area:	Not Reported	Drainage Area Units:	Not Reported
Contrib Drainage Area:	Not Reported	Contrib Drainage Area Unts:	Not Reported
Aquifer:	California Coastal Basin aquifers		
Formation Type:	Not Reported	Aquifer Type:	Not Reported
Construction Date:	19901201	Well Depth:	320
Well Depth Units:	ft	Well Hole Depth:	455
Well Hole Depth Units:	ft		

Ground water levels,Number of Measurements:	10	Level reading date:	1992-08-11
Feet below surface:	123.79	Feet to sea level:	Not Reported

Note:	Not Reported		
Level reading date:	1992-06-11	Feet below surface:	121351
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1992-02-19	Feet below surface:	122.50
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1992-02-05	Feet below surface:	123.06
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1991-09-04	Feet below surface:	127.01
Feet to sea level:	Not Reported		
Note:	A nearby site that taps the same aquifer was being pumped.		
Level reading date:	1991-06-19	Feet below surface:	124.97
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1991-06-18	Feet below surface:	124.91
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1991-04-05	Feet below surface:	124.34
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1991-02-22	Feet below surface:	126.48
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1991-02-21	Feet below surface:	126.39
Feet to sea level:	Not Reported	Note:	Not Reported

A22
WSW **FED USGS** **USGS40000139593**
1/4 - 1/2 Mile
Lower

Organization ID:	USGS-CA		
Organization Name:	USGS California Water Science Center		
Monitor Location:	002S007W13P006S	Type:	Well
Description:	Not Reported	HUC:	18070203
Drainage Area:	Not Reported	Drainage Area Units:	Not Reported
Contrib Drainage Area:	Not Reported	Contrib Drainage Area Unts:	Not Reported
Aquifer:	California Coastal Basin aquifers		
Formation Type:	Not Reported	Aquifer Type:	Not Reported
Construction Date:	19901201	Well Depth:	215
Well Depth Units:	ft	Well Hole Depth:	455
Well Hole Depth Units:	ft		

A23
WSW **FED USGS** **USGS40000139592**
1/4 - 1/2 Mile
Lower

Organization ID:	USGS-CA		
Organization Name:	USGS California Water Science Center		
Monitor Location:	002S007W13P005S	Type:	Well
Description:	Not Reported	HUC:	18070203
Drainage Area:	Not Reported	Drainage Area Units:	Not Reported
Contrib Drainage Area:	Not Reported	Contrib Drainage Area Unts:	Not Reported
Aquifer:	California Coastal Basin aquifers		

Formation Type:	Not Reported	Aquifer Type:	Not Reported
Construction Date:	19901201	Well Depth:	255
Well Depth Units:	ft	Well Hole Depth:	455
Well Hole Depth Units:	ft		

B24
South
1/4 - 1/2 Mile
Lower

CA WELLS **CAPFAS000000575**

Well ID:	3310083-004	Well Type:	MUNICIPAL
Source:	Department of Health Services		
Other Name:	WELL II-3	GAMA PFAS Testing:	Yes
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=DHS&samp_date=&global_id=&assigned_name=3310083-004&store_num=		
GeoTracker Data:	Not Reported		

B25
South
1/4 - 1/2 Mile
Lower

CA WELLS **CADDW2000022934**

GAMA:

Well ID:	CA3310083_004_004	Well Type:	MUNICIPAL
Source:	DDW	Other Names:	3310083-004
GAMA Pfas testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=DHS&samp_date=&global_id=&assigned_name=CA3310083_004_004&store_num=		
GeoTracker Data:	Not Reported		

C26
SE
1/4 - 1/2 Mile
Lower

CA WELLS **CAPFAS000000725**

Well ID:	3310083-005	Well Type:	MUNICIPAL
Source:	Department of Health Services		
Other Name:	WELL II-4	GAMA PFAS Testing:	Yes
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=DHS&samp_date=&global_id=&assigned_name=3310083-005&store_num=		
GeoTracker Data:	Not Reported		

C27
SE
1/4 - 1/2 Mile
Lower

CA WELLS **CADDW2000013259**

GAMA:

Well ID:	CA3310083_005_005	Well Type:	MUNICIPAL
Source:	DDW	Other Names:	3310083-005
GAMA Pfas testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=DHS&samp_date=&global_id=&assigned_name=CA3310083_005_005&store_num=		

GeoTracker Data: Not Reported

D28
WSW **CA WELLS** **CADWR9000006336**
1/4 - 1/2 Mile
Lower

State Well #:	02S07W13P002S	Station ID:	3710
Well Name:	Not Reported	Basin Name:	Chino
Well Use:	Unknown	Well Type:	Unknown
Well Depth:	0	Well Completion Rpt #:	Not Reported

D29
WSW **CA WELLS** **CADWR9000006337**
1/4 - 1/2 Mile
Lower

State Well #:	02S07W13P003S	Station ID:	26217
Well Name:	Not Reported	Basin Name:	Chino
Well Use:	Unknown	Well Type:	Unknown
Well Depth:	0	Well Completion Rpt #:	Not Reported

D30
WSW **CA WELLS** **CADWR9000006338**
1/4 - 1/2 Mile
Lower

State Well #:	02S07W13P004S	Station ID:	3711
Well Name:	Not Reported	Basin Name:	Chino
Well Use:	Unknown	Well Type:	Unknown
Well Depth:	0	Well Completion Rpt #:	Not Reported

31
SW **CA WELLS** **CADWR0000011820**
1/4 - 1/2 Mile
Lower

Well ID:	02S07W24C001S	Well Type:	UNK
Source:	Department of Water Resources		
Other Name:	02S07W24C001S	GAMA PFAS Testing:	Not Reported
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=DWR&samp_date=&global_id=&assigned_name=02S07W24C001S&store_num=		
GeoTracker Data:	Not Reported		

E32
SSW **CA WELLS** **CAPFAS000000511**
1/4 - 1/2 Mile
Lower

Well ID:	3310083-003	Well Type:	MUNICIPAL
Source:	Department of Health Services		
Other Name:	WELL II-2	GAMA PFAS Testing:	Yes
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=DHS&samp_date=&global_id=&assigned_name=3310083-003&store_num=		

GeoTracker Data: Not Reported

E33
SSW **CA WELLS** **CADDW2000017547**
1/4 - 1/2 Mile
Lower

GAMA:

Well ID:	CA3310083_003_003	Well Type:	MUNICIPAL
Source:	DDW	Other Names:	3310083-003
GAMA Pfas testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=DHS&samp_date=&global_id=&assigned_name=CA3310083_003_003&store_num=		
GeoTracker Data:	Not Reported		

F34
SSE **CA WELLS** **CADDW2000001020**
1/2 - 1 Mile
Lower

GAMA:

Well ID:	CA3310021_042_042	Well Type:	MUNICIPAL
Source:	DDW	Other Names:	3310021-042
GAMA Pfas testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=DHS&samp_date=&global_id=&assigned_name=CA3310021_042_042&store_num=		
GeoTracker Data:	Not Reported		

F35
SSE **CA WELLS** **2581**
1/2 - 1 Mile
Lower

Seq:	2581	Prim sta c:	02S/06W-19E01 S
Frds no:	3310025009	County:	33
District:	14	User id:	WAT
System no:	3310025	Water type:	G
Source nam:	WELL 09 - INACTIVE	Station ty:	WELL/AMBNT
Latitude:	335904.0	Longitude:	1173324.8
Precision:	1	Status:	IR
Comment 1:	Not Reported	Comment 2:	Not Reported
Comment 3:	Not Reported	Comment 4:	Not Reported
Comment 5:	Not Reported	Comment 6:	Not Reported
Comment 7:	Not Reported		

System no:	3310025	System nam:	Norco, City Of
Hqname:	Not Reported	Address:	P.O. BOX 428
City:	NORCO	State:	CA
Zip:	91760	Zip ext:	Not Reported
Pop serv:	24704	Connection:	6153
Area serve:	NORCO CITY		

Map ID
Direction
Distance
Elevation | Database | EDR ID Number

F36
SSE
1/2 - 1 Mile
Lower

CA WELLS **CADDW2000024450**

GAMA:

Well ID:	CA3310025_009_009	Well Type:	MUNICIPAL
Source:	DDW	Other Names:	3310025-009
GAMA Pfas testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=DHS&samp_date=&global_id=&assigned_name=CA3310025_009_009&store_num=		
GeoTracker Data:	Not Reported		

37
SE
1/2 - 1 Mile
Lower

CA WELLS **CADDW2000022321**

GAMA:

Well ID:	CA3310025_011_011	Well Type:	MUNICIPAL
Source:	DDW	Other Names:	3310025-011
GAMA Pfas testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=DHS&samp_date=&global_id=&assigned_name=CA3310025_011_011&store_num=		
GeoTracker Data:	Not Reported		

38
NE
1/2 - 1 Mile
Higher

CA WELLS **CADWR0000006180**

Well ID:	02S06W18E001S	Well Type:	UNK
Source:	Department of Water Resources		
Other Name:	02S06W18E001S	GAMA PFAS Testing:	Not Reported
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=DWR&samp_date=&global_id=&assigned_name=02S06W18E001S&store_num=		
GeoTracker Data:	Not Reported		

39
East
1/2 - 1 Mile
Lower

CA WELLS **CADWR0000001457**

Well ID:	02S06W18P001S	Well Type:	UNK
Source:	Department of Water Resources		
Other Name:	02S06W18P001S	GAMA PFAS Testing:	Not Reported
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=DWR&samp_date=&global_id=&assigned_name=02S06W18P001S&store_num=		
GeoTracker Data:	Not Reported		

Map ID
Direction
Distance
Elevation | Database | EDR ID Number

40
SSE
1/2 - 1 Mile
Lower

FED USGS **USGS40000139537**

Organization ID:	USGS-CA		
Organization Name:	USGS California Water Science Center		
Monitor Location:	002S006W19E001S	Type:	Well
Description:	Not Reported	HUC:	18070203
Drainage Area:	Not Reported	Drainage Area Units:	Not Reported
Contrib Drainage Area:	Not Reported	Contrib Drainage Area Unts:	Not Reported
Aquifer:	California Coastal Basin aquifers		
Formation Type:	Not Reported	Aquifer Type:	Not Reported
Construction Date:	Not Reported	Well Depth:	370
Well Depth Units:	ft	Well Hole Depth:	Not Reported
Well Hole Depth Units:	Not Reported		

G41
SE
1/2 - 1 Mile
Lower

CA WELLS **2582**

Seq:	2582	Prim sta c:	02S/06W-19E02 S
Frds no:	3310025010	County:	33
District:	14	User id:	WAT
System no:	3310025	Water type:	G
Source nam:	WELL 10	Station ty:	WELL/AMBNT
Latitude:	335903.4	Longitude:	1173314.2
Precision:	1	Status:	AR
Comment 1:	Not Reported	Comment 2:	Not Reported
Comment 3:	Not Reported	Comment 4:	Not Reported
Comment 5:	Not Reported	Comment 6:	Not Reported
Comment 7:	Not Reported		

System no:	3310025	System nam:	Norco, City Of
Hqname:	Not Reported	Address:	P.O. BOX 428
City:	NORCO	State:	CA
Zip:	91760	Zip ext:	Not Reported
Pop serv:	24704	Connection:	6153
Area serve:	NORCO CITY		

G42
SE
1/2 - 1 Mile
Lower

CA WELLS **CADDW2000010898**

GAMA:

Well ID:	CA3310025_010_010	Well Type:	MUNICIPAL
Source:	DDW	Other Names:	3310025-010
GAMA Pfas testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=DHS&samp_date=&global_id=&assigned_name=CA3310025_010_010&store_num=		
GeoTracker Data:	Not Reported		

Map ID
Direction
Distance
Elevation | Database | EDR ID Number

43
South
1/2 - 1 Mile
Lower

CA WELLS **CADWR0000036121**

Well ID:	02S07W24K001S	Well Type:	UNK
Source:	Department of Water Resources		
Other Name:	02S07W24K001S	GAMA PFAS Testing:	Not Reported
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=DWR&samp_date=&global_id=&assigned_name=02S07W24K001S&store_num=		
GeoTracker Data:	Not Reported		

G44
SE
1/2 - 1 Mile
Lower

FED USGS **USGS40000139530**

Organization ID:	USGS-CA		
Organization Name:	USGS California Water Science Center		
Monitor Location:	002S006W19E002S	Type:	Well
Description:	Not Reported	HUC:	18070203
Drainage Area:	Not Reported	Drainage Area Units:	Not Reported
Contrib Drainage Area:	Not Reported	Contrib Drainage Area Unts:	Not Reported
Aquifer:	California Coastal Basin aquifers		
Formation Type:	Not Reported	Aquifer Type:	Not Reported
Construction Date:	Not Reported	Well Depth:	345
Well Depth Units:	ft	Well Hole Depth:	Not Reported
Well Hole Depth Units:	Not Reported		

45
SSE
1/2 - 1 Mile
Lower

CA WELLS **2583**

Seq:	2583	Prim sta c:	02S/06W-19E03 S
Frds no:	3310025011	County:	33
District:	14	User id:	WAT
System no:	3310025	Water type:	G
Source nam:	WELL 11	Station ty:	WELL/AMBNT/MUN/INTAKE
Latitude:	335856.6	Longitude:	1173318.3
Precision:	1	Status:	AR
Comment 1:	Not Reported	Comment 2:	Not Reported
Comment 3:	Not Reported	Comment 4:	Not Reported
Comment 5:	Not Reported	Comment 6:	Not Reported
Comment 7:	Not Reported		

System no:	3310025	System nam:	Norco, City Of
Hqname:	Not Reported	Address:	P.O. BOX 428
City:	NORCO	State:	CA
Zip:	91760	Zip ext:	Not Reported
Pop serv:	24704	Connection:	6153
Area serve:	NORCO CITY		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID
Direction
Distance
Elevation | Database | EDR ID Number

46
SSW
1/2 - 1 Mile
Lower

CA WELLS **CADWR0000036853**

Well ID:	02S07W24L001S	Well Type:	UNK
Source:	Department of Water Resources		
Other Name:	02S07W24L001S	GAMA PFAS Testing:	Not Reported
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=DWR&samp_date=&global_id=&assigned_name=02S07W24L001S&store_num=		
GeoTracker Data:	Not Reported		

47
NE
1/2 - 1 Mile
Higher

CA WELLS **CADWR0000024137**

Well ID:	02S06W18F001S	Well Type:	UNK
Source:	Department of Water Resources		
Other Name:	02S06W18F001S	GAMA PFAS Testing:	Not Reported
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=DWR&samp_date=&global_id=&assigned_name=02S06W18F001S&store_num=		
GeoTracker Data:	Not Reported		

48
SE
1/2 - 1 Mile
Lower

CA WELLS **CADDW2000003534**

GAMA:

Well ID:	CA3301654_001_001	Well Type:	MUNICIPAL
Source:	DDW	Other Names:	3301654-001
GAMA Pfas testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=DHS&samp_date=&global_id=&assigned_name=CA3301654_001_001&store_num=		
GeoTracker Data:	Not Reported		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID
Direction
Distance

Database EDR ID Number

1
ESE
1/2 - 1 Mile

OIL_GAS **CAOG17000011417**

OIL_GAS:

API #:	0406500137	Well #:	2
Well Type:	Dry Hole	Well Status:	Plugged
Lease Name:	Smith & Scott	Well Design:	Smith & Scott 2
Operator ID:	06950	Operator Name:	Prosper D. Smith
Field Name:	Any Field	Area Name:	Any Area
Place:	Eastvale	GIS Source:	hud
Confidential Well:	N	Directionally Drilled:	N
Spud Date:	Not Reported		
Well Record Request URL:	https://filerequest.conservation.ca.gov/WellRecord?api=06500137		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS
RADON

AREA RADON INFORMATION

State Database: CA Radon

Radon Test Results

Zipcode	Num Tests	> 4 pCi/L
91761	7	0

Federal EPA Radon Zone for SAN BERNARDINO County: 2

Note: Zone 1 indoor average level > 4 pCi/L.
: Zone 2 indoor average level >= 2 pCi/L and <= 4 pCi/L.
: Zone 3 indoor average level < 2 pCi/L.

Federal Area Radon Information for SAN BERNARDINO COUNTY, CA

Number of sites tested: 18

Area	Average Activity	% <4 pCi/L	% 4-20 pCi/L	% >20 pCi/L
Living Area - 1st Floor	0.678 pCi/L	100%	0%	0%
Living Area - 2nd Floor	Not Reported	Not Reported	Not Reported	Not Reported
Basement	Not Reported	Not Reported	Not Reported	Not Reported

PHYSICAL SETTING SOURCE RECORDS SEARCHED

TOPOGRAPHIC INFORMATION

USGS 7.5' Digital Elevation Model (DEM)
Source: United States Geologic Survey
EDR acquired the USGS 7.5' Digital Elevation Model in 2002 and updated it in 2006. The 7.5 minute DEM corresponds to the USGS 1:24,000- and 1:25,000-scale topographic quadrangle maps. The DEM provides elevation data with consistent elevation units and projection.

Current USGS 7.5 Minute Topographic Map
Source: U.S. Geological Survey

HYDROLOGIC INFORMATION

Flood Zone Data: This data was obtained from the Federal Emergency Management Agency (FEMA). It depicts 100-year and 500-year flood zones as defined by FEMA. It includes the National Flood Hazard Layer (NFHL) which incorporates Flood Insurance Rate Map (FIRM) data and Q3 data from FEMA in areas not covered by NFHL.
Source: FEMA
Telephone: 877-336-2627
Date of Government Version: 2003, 2015

NWI: National Wetlands Inventory. This data, available in select counties across the country, was obtained by EDR in 2002, 2005, 2010 and 2015 from the U.S. Fish and Wildlife Service.

State Wetlands Data: Wetland Inventory
Source: Department of Fish and Wildlife
Telephone: 916-445-0411

HYDROGEOLOGIC INFORMATION

AQUIFLOW^{R} Information System
Source: EDR proprietary database of groundwater flow information
EDR has developed the AQUIFLOW Information System (AIS) to provide data on the general direction of groundwater flow at specific points. EDR has reviewed reports submitted to regulatory authorities at select sites and has extracted the date of the report, hydrogeologically determined groundwater flow direction and depth to water table information.

GEOLOGIC INFORMATION

Geologic Age and Rock Stratigraphic Unit
Source: P.G. Schruben, R.E. Arndt and W.J. Bawiec, Geology of the Conterminous U.S. at 1:2,500,000 Scale - A digital representation of the 1974 P.B. King and H.M. Beikman Map, USGS Digital Data Series DDS - 11 (1994).

STATSGO: State Soil Geographic Database
Source: Department of Agriculture, Natural Resources Conservation Service (NRCS)
The U.S. Department of Agriculture's (USDA) Natural Resources Conservation Service (NRCS) leads the national Conservation Soil Survey (NCSS) and is responsible for collecting, storing, maintaining and distributing soil survey information for privately owned lands in the United States. A soil map in a soil survey is a representation of soil patterns in a landscape. Soil maps for STATSGO are compiled by generalizing more detailed (SSURGO) soil survey maps.

SSURGO: Soil Survey Geographic Database
Source: Department of Agriculture, Natural Resources Conservation Service (NRCS)
Telephone: 800-672-5559
SSURGO is the most detailed level of mapping done by the Natural Resources Conservation Service, mapping scales generally range from 1:12,000 to 1:63,360. Field mapping methods using national standards are used to construct the soil maps in the Soil Survey Geographic (SSURGO) database. SSURGO digitizing duplicates the original soil survey maps. This level of mapping is designed for use by landowners, townships and county natural resource planning and management.

PHYSICAL SETTING SOURCE RECORDS SEARCHED

LOCAL / REGIONAL WATER AGENCY RECORDS

FEDERAL WATER WELLS

PWS: Public Water Systems
Source: EPA/Office of Drinking Water
Telephone: 202-564-3750
Public Water System data from the Federal Reporting Data System. A PWS is any water system which provides water to at least 25 people for at least 60 days annually. PWSs provide water from wells, rivers and other sources.

PWS ENF: Public Water Systems Violation and Enforcement Data
Source: EPA/Office of Drinking Water
Telephone: 202-564-3750
Violation and Enforcement data for Public Water Systems from the Safe Drinking Water Information System (SDWIS) after August 1995. Prior to August 1995, the data came from the Federal Reporting Data System (FRDS).

USGS Water Wells: USGS National Water Inventory System (NWIS)
This database contains descriptive information on sites where the USGS collects or has collected data on surface water and/or groundwater. The groundwater data includes information on wells, springs, and other sources of groundwater.

OTHER STATE DATABASE INFORMATION

Groundwater Ambient Monitoring & Assessment Program
State Water Resources Control Board
Telephone: 916-341-5577
The GAMA Program is Californias comprehensive groundwater quality monitoring program. GAMA collects data by testing the untreated, raw water in different types of wells for naturally-occurring and man-made chemicals. The GAMA data includes Domestic, Monitoring and Municipal well types from the following sources, Department of Water Resources, Department of Heath Services, EDF, Agricultural Lands, Lawrence Livermore National Laboratory, Department of Pesticide Regulation, United States Geological Survey, Groundwater Ambient Monitoring and Assessment Program and Local Groundwater Projects.

Water Well Database
Source: Department of Water Resources
Telephone: 916-651-9648

California Drinking Water Quality Database
Source: Department of Public Health
Telephone: 916-324-2319
The database includes all drinking water compliance and special studies monitoring for the state of California since 1984. It consists of over 3,200,000 individual analyses along with well and water system information.

Geothermal Wells Listing
Department of Conservation
Telephone: 916-445-9686
Geothermal well means a well constructed to extract or return water to the ground after it has been used for heating or cooling purposes. Geothermal wells in California (except for wells on federal leases which are administered by the Bureau of Land Management) are permitted, drilled, operated, and permanently sealed and closed (plugged and abandoned) under requirements and procedures administered by the Geothermal Section of the Department of Conservations Geologic Energy Management Division (CalGEM, formerly DOGGR).

California Oil and Gas Well Locations
Source: Dept of Conservation, Geologic Energy Management Division
Telephone: 916-323-1779
Oil and Gas well locations in the state.

PHYSICAL SETTING SOURCE RECORDS SEARCHED

California Earthquake Fault Lines
Source: California Division of Mines and Geology
The fault lines displayed on EDR's Topographic map are digitized quaternary fault lines prepared in 1975 by the United State Geological Survey. Additional information (also from 1975) regarding activity at specific fault lines comes from California's Preliminary Fault Activity Map prepared by the California Division of Mines and Geology.

RADON

State Database: CA Radon
Source: Department of Public Health
Telephone: 916-210-8558
Radon Database for California

Area Radon Information
Source: USGS
Telephone: 703-356-4020
The National Radon Database has been developed by the U.S. Environmental Protection Agency (USEPA) and is a compilation of the EPA/State Residential Radon Survey and the National Residential Radon Survey. The study covers the years 1986 - 1992. Where necessary data has been supplemented by information collected at private sources such as universities and research institutions.

EPA Radon Zones
Source: EPA
Telephone: 703-356-4020
Sections 307 & 309 of IRAA directed EPA to list and identify areas of U.S. with the potential for elevated indoor radon levels.

OTHER

Airport Landing Facilities: Private and public use landing facilities
Source: Federal Aviation Administration, 800-457-6656

Epicenters: World earthquake epicenters, Richter 5 or greater
Source: Department of Commerce, National Oceanic and Atmospheric Administration

California Earthquake Fault Lines: The fault lines displayed on EDR's Topographic map are digitized quaternary fault lines, prepared in 1975 by the United State Geological Survey. Additional information (also from 1975) regarding activity at specific fault lines comes from California's Preliminary Fault Activity Map prepared by the California Division of Mines and Geology.

STREET AND ADDRESS INFORMATION

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Appendix F

Owner and User Questionnaires

Project No.:
Project Name:

OWNER/OPERATOR QUESTIONNAIRE

Site Name: Esperanza PA-11

Site Address: Tract 18380, Lot 1
NWC of Eucalyptus and Clifton

Interviewee: David Waters

Title: VP California

Date: 3/7/25

SECTION I – Undeveloped Property (If this site is developed, go to SECTION II)

1. How long have you owned (or been involved in) this property?

   Since 2010 (15 years)

2. To the best of your knowledge, has there ever been any development on this property? If yes, what and when was the nature of that development?

   The site was historically a dairy farm operation, however operations ceased so

3. To the best of your knowledge, have there ever been any environmental or soils investigations conducted on this Property? If yes, what kind and when? Are there any reports available?

   There was a Phase 1 completed in 1998 by SID Geotech, in 2004 by Petra and

4. Are you aware of any environmental liens or deed restrictions associated with this property? If yes, please describe.

   No

5. To the best of your knowledge, have there ever been any incidents of chemical spills/dumping or waste disposal on or close to this property?

   No

6. Are there any wells on the site? If yes, what are they used for?

   Historically, but were all abandoned during grading.

SECTION II – Developed Property

1. What is your involvement with this property and when did that involvement begin?

   Ownership representative since 2010

2. To the best of your knowledge, how long has the current development been on the property? What was there before the current development?

   Last improvements completed on or around 2018 (perimeter and mass grading)

3. Does this facility use, store, manufacture, or dispose of chemicals or petroleum products? What types (be as specific as possible)?

   No

4. If the answer to Question 3 above was "Yes," may we review MSDS, business plans, hazardous material inventories, manifest files, SPCC plans (whatever is applicable)?

   n/a

5. Do you have any environmental permits (wastewater discharge, air emissions, hazardous material storage, etc.)? Have there ever been any Notices of Violation in regards to any of these permits?

   No

6. Have any environmental investigations ever been conducted on this property? When and why? Are there any reports available that we can review?

   Phase 1/2 referenced above are available.

7. Has the facility ever been subject to an environmental health and safety regulatory action, complaint, or lawsuit? When and why? What was the outcome?

   No

8. Have there been any know chemical spills or releases on this property?

   No

9. Are there any underground or aboveground storage tanks on this property? How many? Sizes? Ages?

   No

10. Where is wastewater discharged to? To the best of your knowledge, have there ever been any on-site wastewater disposal systems (septic tank, leach field, cesspool, dry well, etc.)?

    No wastewater improvements on site.

11. To the best of your knowledge, are there any environmental liens or deed restrictions associated with this property? If yes, please describe.

    No

Project No.:
Project Name:

USER QUESTIONNAIRE[1]

Site Name: Esperanza PA-11

Site Address: Tract 18380, Lot 1
NWC of Eucalyptus and Clifton

Interviewee: David Waters

Title: VP California

Date: 3/7/25

In reference to Section 6, User Responsibilities, of the ASTM E1527-21 Standard Practice, the Environmental Professional (SCS Engineers) for this Phase I ESA is required to inquire with the user (Client) regarding their knowledge or possession of information that may assist in identifying recognized environmental conditions (RECs) pertaining to the Subject Property.

In order to qualify for one of the Landowner Liability Protections (LLPs) offered by the Small Business Liability Relief and Brownfields Revitalization Act of 2001 (the "Brownfields Amendments"), the user must conduct the following inquiries required by 40 CFR §312.25, §312.28, §312.29, §312.30, and §312.31. These inquiries must also be conducted by U.S. EPA Brownfield Assessment and Characterization grantees. The user should provide the following information to the Environmental Professional overseeing this Phase I ESA. Failure to conduct these inquiries could result in a determination that "all appropriate inquiries" is not complete.

(1) Environmental Cleanup Liens (40 CFR §312.25). Did a search of land title records (or judicial records where appropriate) identify any environmental liens filed or recorded against the Subject Property under federal, tribal, state or local law? ☐ Yes ■ No

If Yes, explain and/or provide information:

(2) Activity and Use Limitations (40 CFR §312.26(a)(1)(v) and (vi)). Did a search of land title records (or judicial records, where appropriate) identify any Activity Use Limitations (AULs) such as engineering controls, land use restrictions, or institutional controls that are in place at the Subject Property and/or have been filed or recorded against the Subject Property under federal, tribal, state or local law? ☐ Yes ■ No

☐ Yes ☐ No

If Yes, explain and/or provide information:

Since 2010 (15 years)

[1] The document is designed to comply with Appendix X3, User Questionnaire, of ASTM E1527-21, Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process, and the U.S. EPA AAI regulations (40 CFR §312).

(3) Specialized Knowledge or Experience (40 CFR §312.28). Do you have any specialized knowledge or experience related to the Subject Property or nearby properties? For example, are you involved in the same line of business as the current or former occupants of the Subject Property or an adjoining property so that you would have specialized knowledge of the chemicals and processes used by this type of business? ■ Yes ☐ No

If Yes, explain and/or provide information:

The site was historically a dairy farm operation, however operations ceased sometime i

(4) Purchase Price vs. Fair Market Value (40 CFR §312.29). Does the purchase price being paid for this Subject Property reasonably reflect its fair market value? ■ Yes ☐ No

If you conclude that there is a difference, have you considered whether the lower purchase price is because contamination is known or believed to be present at the Subject Property?

☐ Yes ☐ No

If Yes, explain and/or provide information:

There was a Phase 1 completed in 1998 by SID Geotech, in 2004 by Petra and in 2010

(5) Commonly Known or Reasonably Ascertainable Information (40 CFR §312.30). Are you aware of commonly known or reasonably ascertainable information about the Subject Property that would help the Environmental Professional to identify conditions indicative of releases or threatened releases? For example:

(a) Do you know the past use of the Subject Property?

(b) Do you know specific chemicals that are present or once were present at the Subject Property?

(c) Do you know of spills or other chemical releases that have taken place at the Subject Property?

(d) Do you know of any environmental cleanups that have taken place at the Subject Property?

■ Yes ☐ No to all

If Yes, explain and/or provide information:

No

(6) Obvious Indications of Contamination (40 CFR §312.31). Based on your knowledge and experience related to the Subject Property, are there any obvious indicators that point to the presence or likely presence of releases at the Subject Property? ☐ Yes ■ No

If Yes, explain and/or provide information:

No

Appendix G

Project Personnel Resumes

J. JUSTIN RAUZON, REPA

Justin Rauzon, REPA

Education

MEM – Environmental Management, Duke University, 2014
BS – Zoology (Double Emphasis: Human and Marine Biology), Brigham Young University, 2004

Professional Licenses

Registered Environmental Property Assessor (REPA), National Registry of Environmental Professionals (No. 485639)

Specialty Certifications

OSHA 40-Hour Health and Safety Training for Hazardous Waste Workers
8-Hour Annual Refresher Training for Hazardous Waste Site Activities
OSHA 16-Hour Initial Asbestos Operations and Maintenance Training
Thermo Scientific Niton XRF Analyzer Operator's Training
First-Aid and CPR Training

Professional Affiliations

National Ground Water Association, Member (2015 to Present)
Industrial Environmental Association, Member (2018 to Present)

Professional Experience

Mr. Rauzon has more than 16 years of environmental services experience, all with SCS. Fluent in Spanish, Mr. Rauzon is an SCS Project Manager with a diverse background in biological and environmental sciences, and regularly performs environmental assessments and compliance audits at sites in the U.S. and in Latin America. He has technical and management experience with soil, soil vapor, and groundwater investigations at industrial, commercial, landfill, greenfield, and residential properties. He has extensive experience with environmental laws and regulations in both the U.S. and Mexico. His work experience includes all project phases, from development of cost estimates for various site assessment and cleanup programs to implementing remediation programs and interfacing with regulatory agencies. His experience with and understanding of these issues led to his appointment as a National Partner in Environmental Due Diligence in 2021.

Selected projects in which he has participated are described below.

Environmental Management

Due Diligence Assessments of Properties Prior to Real Estate Transfer of Properties in California, Arizona, New Jersey, Mexico, Puerto Rico, and the Dominican Republic. Mr. Rauzon has completed numerous due diligence assessments of properties prior to acquisition, disposition, or loan financing by investment banks, insurance companies, corporations, non-profit entities, real

estate developers, and private parties. Projects have included Phase I assessments that meet federal All Appropriate Investigation (AAI) regulations, American Society for Testing and Materials (ASTM) standards, and client-specific guidelines; inspections for asbestos and lead-based paint; Phase II investigations; preparation of abatement and remediation cost estimates; and regulatory agency coordination. These projects frequently involve review of previous environmental reports and investigation of current and past on-site operations, regulatory agency records searches, evaluation of historical property use information, identification of nearby potentially contaminated sites, and development of appropriate conclusions about environmental risks. Investigations involve preparation of work plans, soil boring and subsequent sampling, groundwater well installation and sampling, soil gas probe installation and sampling, precision mapping, evaluation of contaminants in accordance with regulatory requirements or generally accepted guidelines, preparation of investigation report, and analysis of applicable remedial alternatives. Mr. Rauzon has served as the Project Manager for sites that have received regulatory closure from various regulatory agencies.

Planning, Coordinating, and Supervising Remedial Actions That Included Excavation, Transport, and Disposal of Contaminated Soils and Water. Investigations involve preparation of Remedial Action Plans (RAPs), direction of fieldwork, oversight of confirmatory sampling, and interfacing with regulatory agencies.

Groundwater Monitoring and Reporting for Simi Valley Landfill and Recycling Center, Simi Valley, CA. Mr. Rauzon is a key team member for the sampling and monitoring of 10 groundwater wells and 5 leachate locations to evaluate potential releases from waste units affecting groundwater at Simi Valley Landfill. He also prepares the annual leachate control system's effectiveness reports and documents results of resampling of groundwater wells based on initial statistical indications of a release.

The Characterization of Hazardous Waste Materials. These projects include collection of soil and/or liquid samples to profile the waste materials, interpretation of laboratory results, and evaluation of disposal/recycling options to minimize the costs and liabilities to clients associated with the removal of wastes.

Assessment and Certification of Hazardous Waste Tank Systems. These investigations involve working with a Professional Engineer to complete field inspections of hazardous waste tanks, associated ancillary equipment, leak-detection systems, and secondary containment devices, as well as interfacing with regulatory agencies.

Project Management

Project Manager for Environmental Due Diligence Assessment and Health and Safety Program Review of Six Geothermal Power Plants Located in California, Nevada, New Mexico, and Utah. SCS services included time-sensitive field inspection, environmental document and permit review, and preparation of environmental risk evaluation reports. Mr. Rauzon reviewed and assessed plant health and safety plans and procedures; facility response plans; incident reports; and arrangements for plant selection, appointment, and management of support contractors. SCS provided support consulting services in the successful client plant acquisition and integration support.

Project Manager for Due Diligence Investigations at Dry Mill and Biofuel Distillery Plant, Madera, CA. SCS services included Phase I environmental assessment and Phase II soil, soil vapor, and groundwater investigation to support client's acquisition of an ethanol production plant at which a lumber mill was historically located. SCS provided additional consulting services related to remediation cost analysis and management of ongoing environmental issues.

Project Manager for Due Diligence Investigation of a Portfolio With More Than 300 Industrial Sites Throughout Mexico. SCS services included conducting Phase I and Phase II environmental assessments within the strict timeline of the $1.2 billion industrial real estate transaction. Subsequent to the closing of the deal, SCS provided ongoing consulting services to facilitate integration and management of various facilities with ongoing environmental issues.

Project Manager for Hazardous Materials Consulting Services in Support of the State Route 91 Corridor Improvement Project in Orange and Riverside Counties, CA. SCS services included sampling and inventory of potentially hazardous materials associated with more than 25 bridges along the SR-91 and I-15 freeways; environmental assessments on properties within the proposed freeway expansion area; and soil testing for herbicides, pesticides, and fungicides on several land parcels.

Project Manager for Investigation and Remediation of Industrial Facility Located in Fontana, CA. SCS conducted a series of environmental assessments, investigations, and remedial activities that provided sufficient information to identify environmental issues and business risks, and facilitate the client's successful purchase of property. A number of recognized environmental conditions, including releases of coal tar, solvents, heavy metals, and total petroleum hydrocarbons, were identified. Project activities conducted during the acquisition and redevelopment of the property included shallow and deep soil and soil vapor investigations; installation of groundwater monitoring wells and subsequent groundwater sampling; subsequent remedial excavation under San Bernardino County Fire Department (SBCFD) oversight to obtain closure; and excavation and off-site disposition of contaminated soil.

Health and Safety

Mr. Rauzon has participated in a certified health and safety program in compliance with OSHA Standard 29 CFR 1910.120. He is knowledgeable in incident response operations, team functions, personnel safety, and field equipment. He is able to recognize and evaluate potential chemical and physical hazards and associated risks in field operations; discuss and use personal protective equipment (PPE), such as respiratory protection and protective clothing; use and interpret direct-reading instruments; and examine and establish Standard Operating Safety Guidelines to ensure safe and effective response operations.

Publications

Rauzon, J. J., "Mexico: Environmental Due Diligence and the Mexican Waste Law," EHS Journal, November 13, 2010.

MADDIE PETERSON

Education

BA – Environmental Science and Policy, California State University, Long Beach, 2022
AA – Liberal Arts and Sciences/Communications, College of the Canyons, 2017

Specialty Certifications

40-Hour HAZWOPER Trained
SCAQMD Dust Control Officer Trained (Rule 403)

Professional Experience

Ms. Peterson is an Associate Professional who has participated in Phase I and II site investigations, sampling and monitoring at landfills, methane assessments, geophysical surveys and monitoring well installations, and pesticide and heavy metal evaluations. She has a background in environmental law and policy and sustainability. As an undergraduate, she performed heavy metal analysis and research regarding lead and zinc concentrations in soil samples for the Environmental Science and Policy Capstone Project in Long Beach (2022), and has volunteered for habitat restoration and other environmental improvement projects in Southern California.

Her SCS project work includes:

Phase I Environmental Site Assessments (ESAs). Ms. Peterson has contributed to Phase I Environmental Site Assessments (ESAs), completed in accordance with various lender, American Society for Testing and Materials (ASTM), or government guidelines. Activities consisted of evaluating current and past on-site operations, generating historical property use information, identifying potentially contaminated sites in the surrounding areas, reviewing previous reports and/or files maintained by regulatory agencies, and developing conclusions regarding the presence of Recognized Environmental Conditions (RECs) and recommendations for further investigation.

Site Investigations. Ms. Peterson has conducted soil gas surveys and soil sampling with precision mapping of sites, installation of soil borings, lithologic logging, collection of soil samples, and evaluation of subsurface contaminants in soil and groundwater in accordance with regulatory agency requirements or generally accepted guidelines.

Quarterly and Semiannual Groundwater Monitoring Reports. Ms. Peterson has assisted in preparation of numerous routine monitoring reports for various sites with oversight of various regulatory agencies. Facilities have included landfills across California and manufacturing sites.

Construction Quality Assurance (CQA). Ms. Peterson has assisted in CQA and oversight of the construction of gas collection and control system (GCCS) vertical well installation at Simi Valley, Antelope Valley, and El Sobrante Landfills.

Investigation and Remediation for Industrial Facility Redevelopment, Downey, CA. SCS conducted a series of environmental assessments, investigations, and remedial activities that provided sufficient information to identify the environmental issues, and business risks to facilitate the client's successful purchase of property for redevelopment to a commercial warehouse and office. A number of Recognized Environmental Conditions (RECs) were identified. Ms. Peterson provided oversight for numerous activities conducted concurrently with the redevelopment of the property, including the installation of groundwater monitoring wells, both on and off site; oversight of well development; soil vapor extraction (SVE) network monitoring; and permitting and removal of clarifiers.

WALDEN & ASSOCIATES

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CIVIL ENGINEERS - PLANNERS - LAND SURVEYORS

DRAINAGE STUDY

FOR

TRACT NO. 20730

ESPERANZA – PA II

EUCALYPTUS AVENUE & AMHERST AVENUE

ONTARIO, CA

MARCH 2025

PREPARED BY:

WALDEN & ASSOCIATES
2552 WHITE ROAD, SUITE B
IRVINE, CA 92614

JN: 2175-996-001

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SECTION 1

DISCUSSION

PURPOSE:

This report was prepared to supplement the preliminary grading plan for Esperanza – PA II, Tentative Tract No. 20730 in the City of Ontario, County of San Beranrdino.

The project is bounded by Clifton Avenue to the north, Eucalyptus Avenue to the east, Amherst Avenue to the south and Chatham Street to the west, in the City of Ontario. This report includes the existing and proposed Q100 for the10.0-acre project site. The study abides by the most current City of Ontario requirements and the San Bernardino County Hydrology Manual procedures.

DESCRIPTION OF WATERSHED:

The existing site is undeveloped and relatively flat and surface flows in a southwesterly direction towards the intersection of Eucalyptus Avenue and Amherst Avenue where an onsite detention basin is located. The basin has a 36-inch inlet that joins a public storm drain in Amherst Avenue. The proposed site will drain in a similar direction with its own storm drain system throughout the development and will join the Amherst storm drain as stated above.

	Acreage	100-Year
Existing		
A	10.02 ac	20.34 cfs
Proposed		
A	8.42 ac	27.60 cfs
B	1.60 ac	6.92 cfs
Total	10.02 ac	34.52 cfs
Difference	**-**	**<-14.18> cfs**

Mitigation is required when the proposed exceeds the existing as shown in the table above; however, the city has confirmed that there is a more restrictive Q that must be used in place of the existing Q that was established by this study. The Q to be used was established by Tract 17931, at line 'D', using a Q100 of15.64 cfs.as the maximum flow allowed from the site into the public storm drain.

The tract's private onsite storm drain system will function with the necessary flow restriction as established by the City. This will be accomplished by over-sizing the private onsite storm drain system to provide on-site storage and installing a stainless-steel plate with a 16"x24" opening (orifice) over the downstream side of the junction structure, before entering the public system. This will restrict the outflow from the site to no more than 15.64 cfs at any time. The volume to be stored is approximately 5,100 cubic feet (cf) (See Table A) as determined by the hydrograph in this study

All proposed inlets and storm drain piping have been designed for a Q100 storm event, and emergency overflow drain patterns have been considered if drainage clogging should occur.

METHODOLOGY:

This Hydrology Study was performed using the rational Hydrology Method Program by CivilCADD / Civil Design Engineering software based on the San Bernardino County Hydrology Manual dated August 1986. The soil has been identified from the maps accompanying the San Bernardino County Hydrology Manual as being of Hydrologic Soil Group B. The calculations were done for a 100-year storm frequency for the storm drain system.

SUMMARY:

The plans for which this report supports has been prepared to meet the standards of rainstorm protection as adopted by the City of Ontario. Positive overflow is available throughout the development for protection of habitable areas against the 100-year storm when drainage obstructions occur, and there will be no adverse impact to the existing conditions.

TABLE A VOLUME STORAGE CALCULATIONS FOR THE PRIVATE ONSITE STORM DRAIN PIPE

TRACT 20730 2175 – 996 - 001

ON SITE PIPE SUMMARY (MAIN LINE ONLY)

	PIPE SIZE ESTIMATED (IN)	LENGTH OF PIPE (FT)	INTERNAL AREA- STARTING (SQ FT)	PIPE VOLUME- STARTING (CU FT)	PIPE SIZE FOR STORAGE (IN)	PIPE INTERNAL AREA - (SQ FT)	STORAGE PIPE VOLUME (CU FT)	PIPE INTERNAL AREA -GAINED (SQ FT)	PIPE VOLUME GAINED (CU FT)
LINE 'A'	18	710	1.8	1,280	36	7.1	5,045	5.3	3,765
LINE 'A'	24	380	3.1	1,180	36	7.1	2,700	4	1,520
LINE 'B'	8	185	0.4	75	-	-	-	-	0
LINE 'C'	12	155	0.8	125	-	-	-	-	0
LINE 'C'	18	570	1.8	1,030	24	3.1	1,770	1.3	740
	TOTAL	2,000		3,690			9,515		6,025

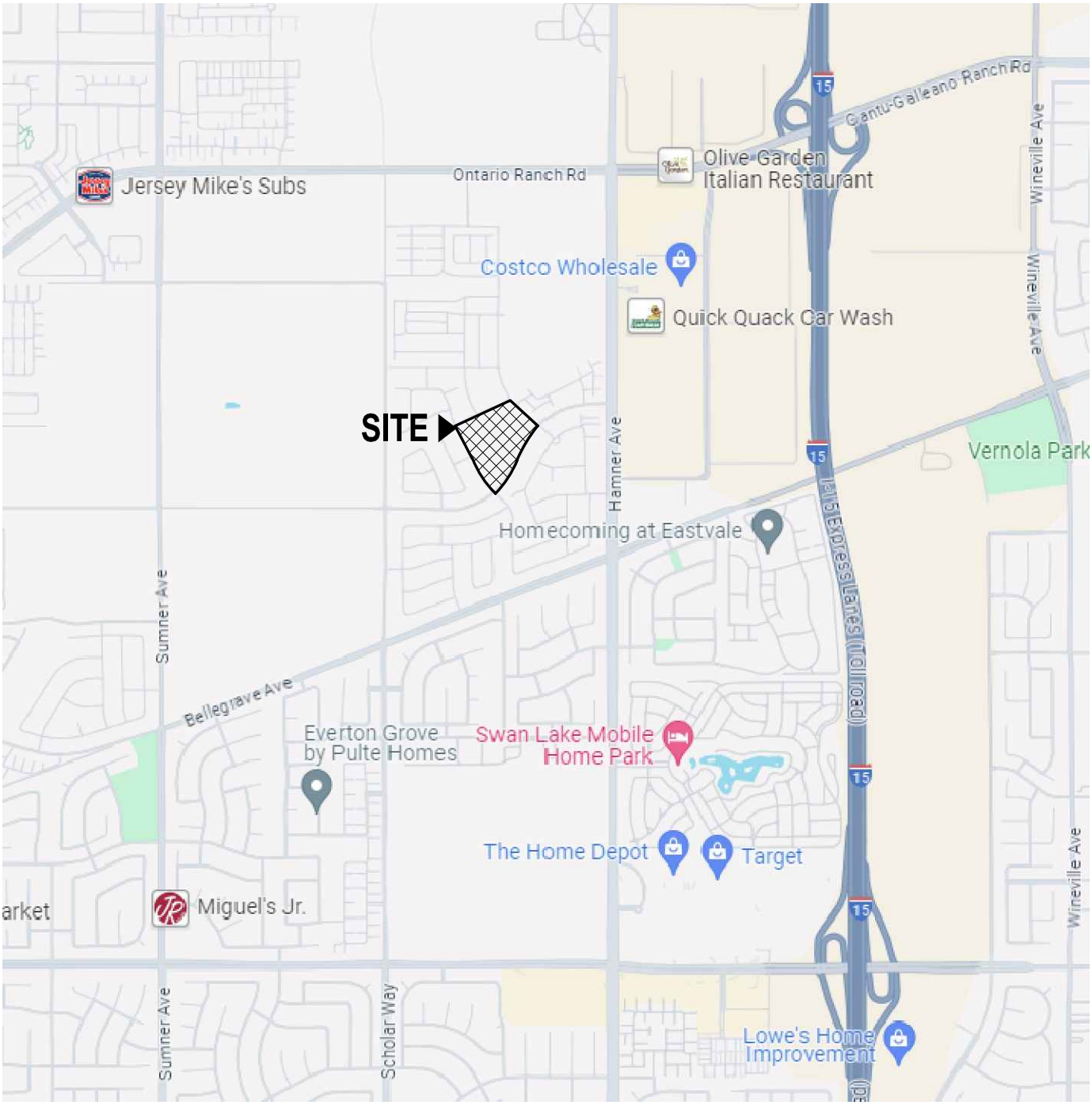
STORAGE REQUIRED = 5,100

STORAGE PROVIDED = 6,025

3138

SECTION 2

VICINITY MAP



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WALDEN & ASSOCIATES
CIVIL ENGINEERS - LAND SURVEYORS - PLANNERS
2552 WHITE ROAD, SUITE B • IRVINE, CA 92614-6236
(949) 660-0110 FAX: 660-0418

VICINITY MAP

EUCALYPTUS AVE. AND S. AMHERST AVE.
ONTARIO, CA

W.O. No. 2175-996-001 Date 05/22/2024
Engr. MP Chk'd. DB Sheet 1 of 1

SECTION 3

HYDROLOGIC CLASSIFICATION OF SOIL PER SAN BERNARDINO COUNTY HYDROLOGY MANUAL

NEWTOWN	C	NORTON	C	OKAW	D	ORELLA	D	PACK	C
NEWVILLE	C	NORTONVILLE	C	OKAY	B	OREM	A	PACKARD	B
NEZ PERCE	C	NORTUNE	D	OKEECHOBEE	A/D	ORESTIMBA	C	PACKER	C
NIAGARA	C	NORWALK	B	OKEELANTA	A/D	ORFORD	C	PACKHAM	B
NIART	B	NORWAY FLAT	B	OKEMAH	C	ORIDIA	C	PACKSADDLE	B
NIBLEY	C	NORWELL	C	OKLARED	B	ORIF	A	PACKWOOD	D
NICHOLSON	C	NORWICH	D	OKLAWAHA	A/D	ORIO	C	PACOLET	B
NICHOLVILLE	C	NORWOOD	B	OKMOX	B	ORION	B	PACTOLUS	C
NICKEL	B	NOTI	D	OKO	D	ORITA	B	PADEN	C
NICODEMUS	B	NOTUS	A/C	OKOBOJI	C	ORLAND	B	PADRONI	B
NICOLAUS	C	NOUQUE	D	OKOLONA	D	ORLANDO	A	PADUCAH	B
NICOLLET	B	NOVARA	B	OKREEK	D	ORMAN	C	PAJUS	B
NIELSEN	D	NOVARY	B	OKTIBBEHA	D	ORMSBY	B/C	PAESL	B
NIGHTHAWK	B	NOWOOD	C	OLA	C	ORODELL	C	PAGET	B
NIHILL	B	NOYO	C	OLAA	A	ORO FINO	B	PAGODA	C
NIKABUNA	D	NOYSON	C	OLALLA	C	ORO GRANDE	C	PAHRANAGAT	C
NIKEY	B	NUBY	C/D	OLANTA	B	ORONO	D	PAHREAH	D
NIKISHKA	A	NUCKOLLS	C	OLATHE	C	OROVADA	C	PAHROC	D
NIKLASON	B	NUCLA	B	OLD CAMP	D	ORPHANT	D	PAIA	C
NIKOLAI	D	NUECES	C	OLDHAM	C	ORR	C	PAIGE	C
NILAND	C	NUGENT	A	OLDS	D	ORRVILLE	C	PAINESVILLE	C
NILES	C	NUGGET	C	OLDSMAR	B/D	ORSA	A	PAINTROCK	C
NIMROD	C	NUMA	C	OLDWICK	B	ORSINO	A	PAIT	B
NINCH	C	NUNDA	C	OLELO	B	ORTELLO	A	PAJARITO	B
NINEMILE	D	NUNICA	C	OLENA	B	ORTIGALITA	C	PAJARO	C
NINEVEH	B	NUNN	C	OLEQUA	B	ORTING	C	PAKA	B
NINIGRET	B	NUSS	D	OLETE	C	ORTIZ	C	PAKALA	B
NININGER	B	NUTLEY	C	OLEX	B	ORTLEY	B	PAKINI	B
NINNESCAH	E	NUTRAS	C	OLGA	C	ORWET	A	PALA	B
NIOBELL	C	NUTRIOSO	B	OLI	B	ORWOOD	B	PALACIO	B
NIOTA	D	NUVALDE	C	OLIAGA	B/D	OSAGE	D	PALAPALAI	B
NIPE	B	NYALA	D	OLINDA	B	OSAKIS	B	PALATINE	B
NIPPERSINK	B	NYMORE	A	OLIPHANT	B	OSCAR	D	PALESTINE	B
NIPPT	A	NYSSA	C	OLIVENHAIN	D	OSCURA	C	PALISADE	B
NIPSUM	C	NYSSATON	B	OLIVER	B	OSGOOD	B	PALMA	B
NIRA	B	NYSTROM	C	OLIVIER	C	OSHA	B	PALMAREJO	C
NISHNA	C			OLJETO	A	OSHAWA	D	PALM BEACH	A
NISHON	D	OAHE	B	OLMITO	D	O'SHEA	C	PALMER	D
NISQUALLY	A	OAKDALE	B	OLMITZ	B	OSHKOSH	C	PALMER CANYON	B
NISSWA	B	OAKDEN	D	OLMOS	C	OSHTEMO	B	PALMICH	B
NIU	B	OAKFORD	B	OLMSTED	B/D	OSIER	B/D	PALMS	D
NIULII	C	OAK GLEN	B	OLNEY	B	OSKA	C	PALMYRA	B
NIVLOC	D	OAK GROVE	C	OLOKUI	D	OSMUND	B	PALO	B
NIWOT	C	OAK LAKE	B	OLPE	C	OSO	B	PALODURO	B
NIXA	C	OAKLAND	C	OLSON	D	OSOBB	D	PALOMAS	B
NIXON	B	OAKS RIDGE	C	OLTON	C	OSORIDGE	D	PALOMINO	D
NIXONTON	B	OAKVILLE	A	OLUSTEE	B/D	OSOTE	B	PALOS VERDES	B
NIZINA	A	OAKWOOD	D	OLYIC	B	OSSIAN	C	PALOUSE	B
NOBE	D	OANAPUKA	B	OLYMPIC	B	OST	B	PALSGROVE	B
NOBLE	B	OASIS	B	OMADI	B	OSTRANDER	B	PAMLICO	D
NOBSCOTT	A	OATMAN	B	OMAHA	B	OTERO	B	PAMOA	C
NOCKEN	C	OBAN	C	OMAK	C	OTHELLO	D	PAMSDEL	D
NODAWAY	B	OBARC	B	OMEGA	A	OTIS	C	PAMUNKEY	C
NOEL	D	OBEN	C	OMENA	B	OTISCO	A	PANA	B
NOHILI	D	OBRAST	D	OMNI	C	OTISVILLE	A	PANACA	D
NOKASIPPI	D	OBRAY	D	ONA	A/D	OTLEY	B	PANAEMA	D
NOKAY	C	OBURN	D	ONALASKA	B	OTSEGO	C	PANASOFFKEE	D
NOKOMIS	B	OCALA	D	ONAMIA	B	OTTER	B/D	PANCHERI	B
NOLAM	B	OCEANET	D	ONARGA	B	OTTERBEIN	C	PANCHUELA	C
NOLICHUCKY	B	OCEANO	A	ONAWA	D	OTTERHOLT	B	PANDO	B
NOLIN	B	OCHEYEDAN	B	ONAWAY	B	OTTOKEE	A	PANDOAH	C
NOLO	B	OCHLOCKONEE	B	ONDAWA	B	OTWAY	D	PANDORA	D
NOME	D	OCHO	D	ONEIDA	B	OTWELL	C	PANDURA	D
NONDALTON	B	OCHOCO	C	O'NEILL	B	OUACHITA	C	PANE	B
NONOPAHU	D	OCHOPEE	B/D	ONEONTA	B	OURAY	A	PANGUITCH	B
NOOKACHAMPS	C/D	OCILLA	C	ONITA	C	OUTLET	C	PANHILL	B
NOOKSACK	B	OCKLEY	B	ONITE	B	OVALL	C	PANIOGUE	B
NOONAN	D	OCOEE	A/D	ONGTA	C	OVERGAARD	C	PANKY	C
NORA	B	OCONEE	C	ONOVA	D	OVERLAND	C	PANOCHE	B
NORAD	B	OCONTO	B	ONRAY	C	OVERLY	C	PANOLA	D
NORBERT	D	OCOSTA	D	ONSLOW	B	OVERTON	D	PANSEY	D
NORBORNE	B	OCQUEOC	B	ONTARIO	B	OVID	C	PANTEGO	D
NORBY	B	OCTAGON	B	ONTRO	B/D	OVINA	B	PANTHER	D
NORD	B	ODEE	D	ONTONAGON	D	OWEGO	D	PANTON	D
NORDBY	B	ODELL	B	ONYX	B	OWEN CREEK	C	PAOLA	A
NORDEN	B	ODEM	A	OOKALA	A	OWENS	D	PAOLI	B
NORDNESS	B	ODERMOTT	C	OPAL	D	OWHI	B	PAONIA	C
NORFOLK	B	ODESSA	D	OPEQUON	C/D	OWOSSO	B	PAPAA	D
NORGE	B	ODIN	C	OPHIR	C	OWYHEE	B	PAPAI	A
NORKA	B	ODNE	C	OPIHIKAO	D	OXALIS	C	PAPAKATING	D
NORMA	B/C	O'FALLON	D	OPPIO	D	OXBOW	C	PAPOOSE	C
NORMANGEE	D	OGDEN	D	OQUAGA	C	OXERINE	C	PARADISE	C
NORREST	C	OGEECHEE	C	ORA	C	OXFORD	D	PARADOX	B
NORRIS	C	OGEMAW	C	ORAN	B	OZAMIS	B/D	PARALOMA	C
NORRISTON	B	OGILVIE	C	ORANGE	D	OZAN	D	PARAMORE	D
NORTE	B	OGLALA	B	ORANGEBURG	B	OZAUKEE	C	PARASOL	B
NORTHDALE	C	OGLE	B	ORCAS	D			PARCELAS	D
NORTHFIELD	B	OHAYSI	D	ORCHARD	B	PAAIKI	B	PARDEE	D
NORTHMORE	C	OHIA	A	ORD	A	PAALOA	B	PAREHAT	C
NORTHPORT		OJAI	B	ORDNANCE	C	PAAUHAU	A	PARENT	C
NORTH POWDER	C	OJATA	D	ORDWAY	D	PACHAPPA	B	PARIETTE	C
NORTHUMBERLAND	C/D	OKANOGAN	B	ORELIA	D	PACHECO	B/C	PARIS	

NOTES: A BLANK HYDROLOGIC SOIL GROUP INDICATES THE SOIL GROUP HAS NOT BEEN DETERMINED
TWO SOIL GROUPS SUCH AS B/C INDICATES THE DRAINED/UNDRAINED SITUATION

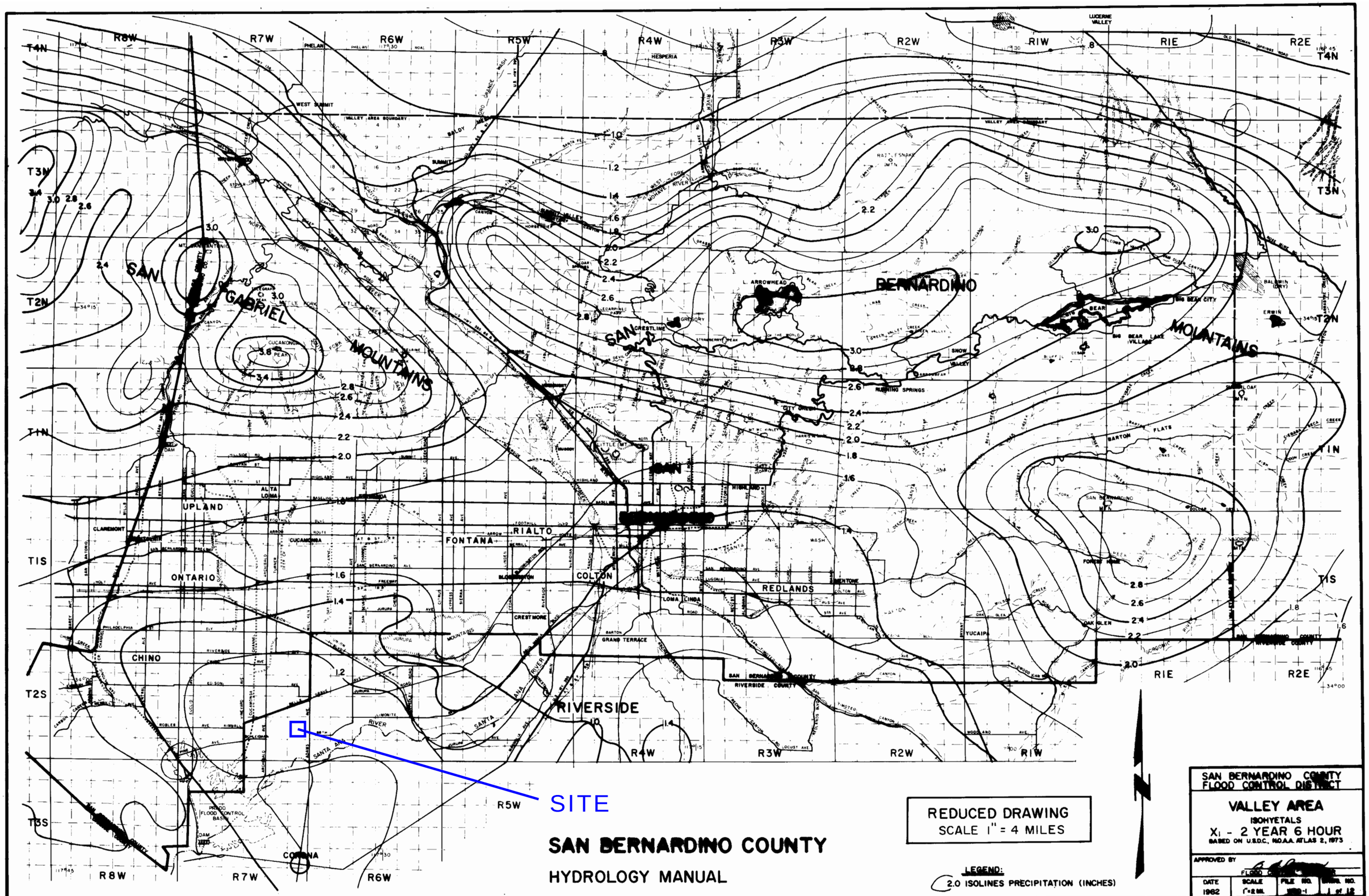
SAN BERNARDINO COUNTY
HYDROLOGY MANUAL

S.C.S. SOIL NAMES FOR HYDROLOGIC CLASSIFICATIONS

(14 03142 56

SECTION 4

ISOHYETAL MAP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SAN BERNARDINO COUNTY
HYDROLOGY MANUAL
REDUCED DRAWING
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LEGEND:
2.0 ISOLINES PRECIPITATION (INCHES)
SAN BERNARDINO COUNTY FLOOD CONTROL DISTRICT
VALLEY AREA
ISOHYETALS
X1 - 2 YEAR 6 HOUR
BASED ON U.S.D.C., N.O.A.A. ATLAS 2, 1973
APPROVED BY
DATE 1982
SCALE 1"=2 MI.
FILE NO. H29-1
DRWG. NO. 1 of 12
SAN BERNARDINO MOUNTAINS
SAN GABRIEL MOUNTAINS
SAN BERNARDINO
RIVERSIDE
UPLAND
ONTARIO
CHINO
CLAREMONT
RIALTO
FONTANA
COLTON
REDLANDS
YUCAIPA
CORONA
PRADO FLOOD CONTROL BASIN
BIG BEAR LAKE
BIG BEAR CITY
RUNNING SPRINGS
L. ARROWHEAD
SAN BERNARDINO COUNTY
RIVERSIDE COUNTY
R8W
R7W
R6W
R5W
R4W
R3W
R2W
R1W
R1E
R2E
T4N
T3N
T2N
T1N
T1S
T2S
T3S

FIGURE B-1

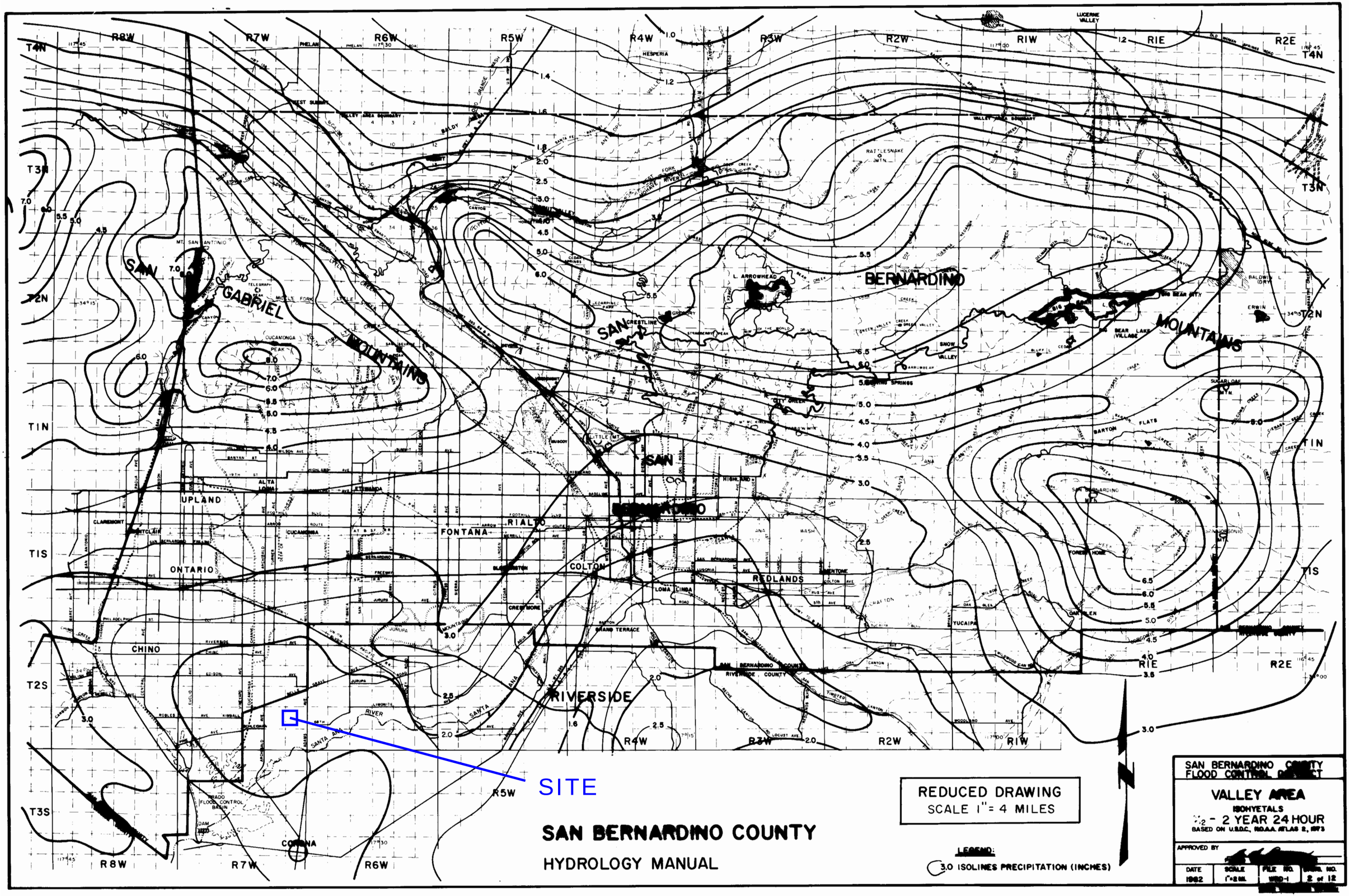

R8W
R7W
R6W
R5W
R4W
R3W
R2W
R1W
R1E
R2E
T4N
T3N
T2N
T1N
T1S
T2S
T3S
SAN GABRIEL MOUNTAINS
SAN BERNARDINO MOUNTAINS
UPLAND
ONTARIO
CHINO
FONTANA
RIALTO
COLTON
REDLANDS
SAN BERNARDINO
RIVERSIDE
CORONA
CRESTLINE
LAKE ARROWHEAD
BIG BEAR CITY
BIG BEAR LAKE
SNOW VALLEY
HESPERIA
VICTORVILLE
LUCERNE VALLEY
YUCAIPA
SAN TIMOTEO CANYON
SAN BERNARDINO COUNTY
RIVERSIDE COUNTY
SITE
1.0
1.2
1.4
1.6
1.8
2.0
2.5
3.0
3.5
4.0
4.5
5.0
5.5
6.0
6.5
7.0
SAN BERNARDINO COUNTY
HYDROLOGY MANUAL
REDUCED DRAWING
SCALE 1" = 4 MILES
LEGEND:
3.0 ISOLINES PRECIPITATION (INCHES)
SAN BERNARDINO COUNTY FLOOD CONTROL DISTRICT
VALLEY AREA
ISOHYETALS
2 - 2 YEAR 24 HOUR
BASED ON U.S.D.C., N.O.A.A. ATLAS 2, 1973
APPROVED BY
DATE 1982
SCALE 1"=2 MI.
FILE NO. HYD-1
DRWG. NO. 2 of 12

FIGURE B-2

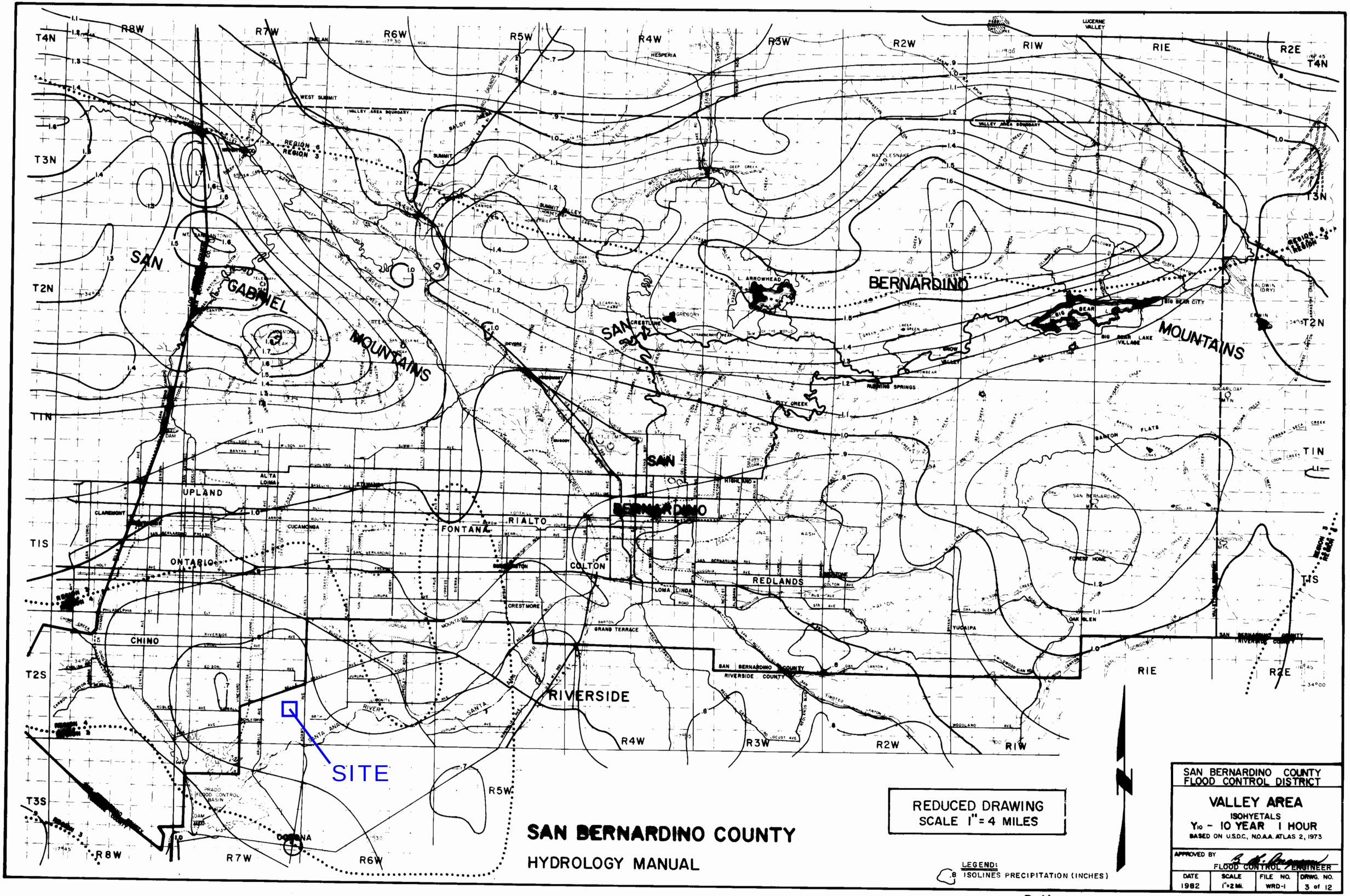
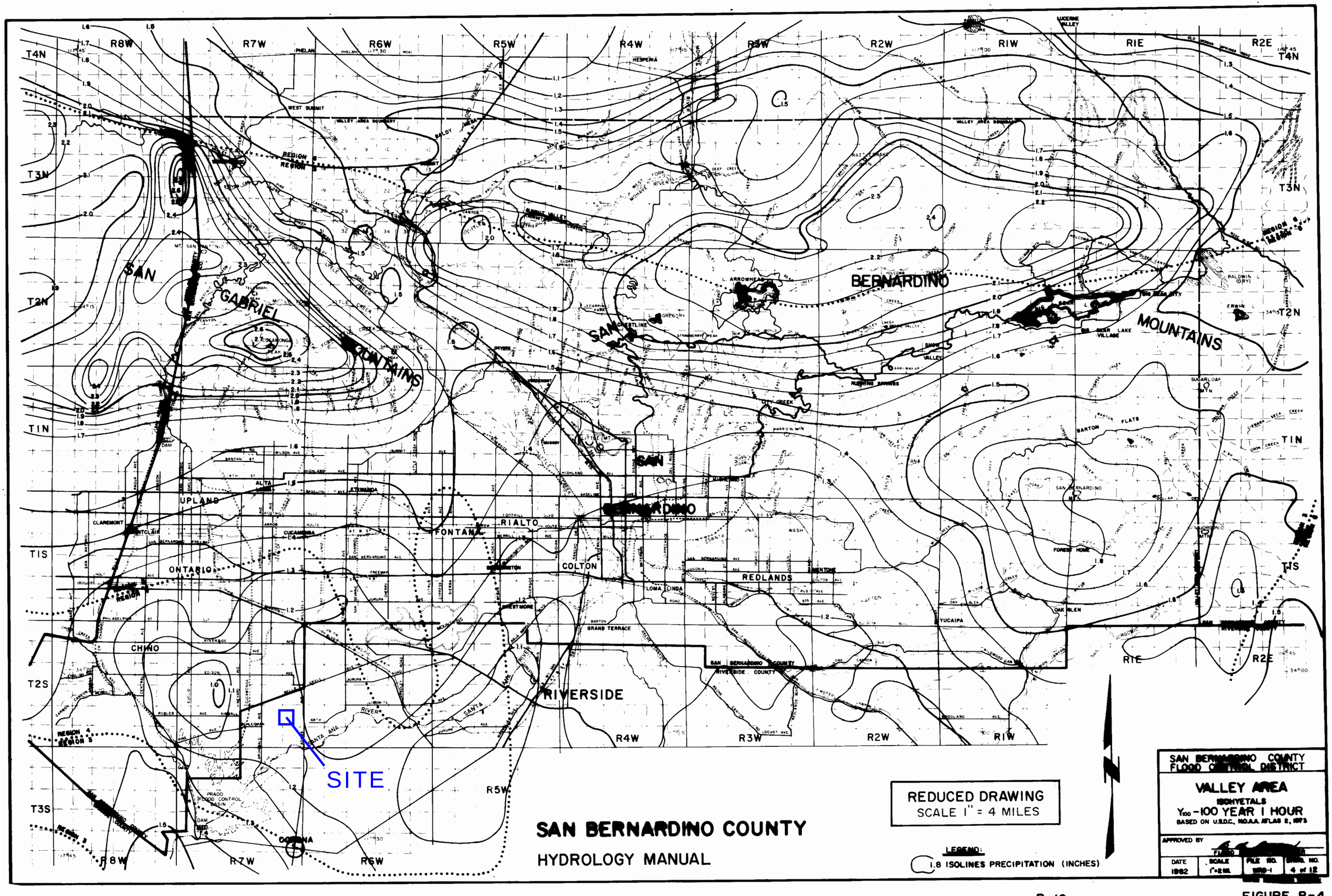

SAN GABRIEL MOUNTAINS
SAN BERNARDINO MOUNTAINS
SAN BERNARDINO
RIVERSIDE
SITE
SAN BERNARDINO COUNTY
HYDROLOGY MANUAL
REDUCED DRAWING
SCALE 1" = 4 MILES
LEGEND:
.8 ISOLINES PRECIPITATION (INCHES)
SAN BERNARDINO COUNTY
FLOOD CONTROL DISTRICT
VALLEY AREA
ISOHYETALS
Y10 - 10 YEAR 1 HOUR
BASED ON U.S.D.C., N.O.A.A. ATLAS 2, 1973
APPROVED BY
FLOOD CONTROL ENGINEER
DATE 1982
SCALE 1"=2 Mi.
FILE NO. WRD-1
DRWG. NO. 3 of 12

FIGURE B-3


SAN GABRIEL MOUNTAINS
SAN BERNARDINO MOUNTAINS
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UPLAND
CLAREMONT
ONTARIO
CHINO
FONTANA
RIALTO
COLTON
REDLANDS
LOMA LINDA
GRAND TERRACE
YUCAIPA
OAK GLEN
RIVERSIDE
CORONA
PRADO FLOOD CONTROL BASIN
SITE
R8W
R7W
R6W
R5W
R4W
R3W
R2W
R1W
R1E
R2E
T4N
T3N
T2N
T1N
T1S
T2S
T3S
REDUCED DRAWING
SCALE 1" = 4 MILES
LEGEND:
1.8 ISOLINES PRECIPITATION (INCHES)
SAN BERNARDINO COUNTY
HYDROLOGY MANUAL
SAN BERNARDINO COUNTY FLOOD CONTROL DISTRICT
VALLEY AREA
ISOHYETALS
Y100 - 100 YEAR 1 HOUR
BASED ON U.S.D.C., NOAA ATLAS 2, 1973
APPROVED BY
DATE 1982
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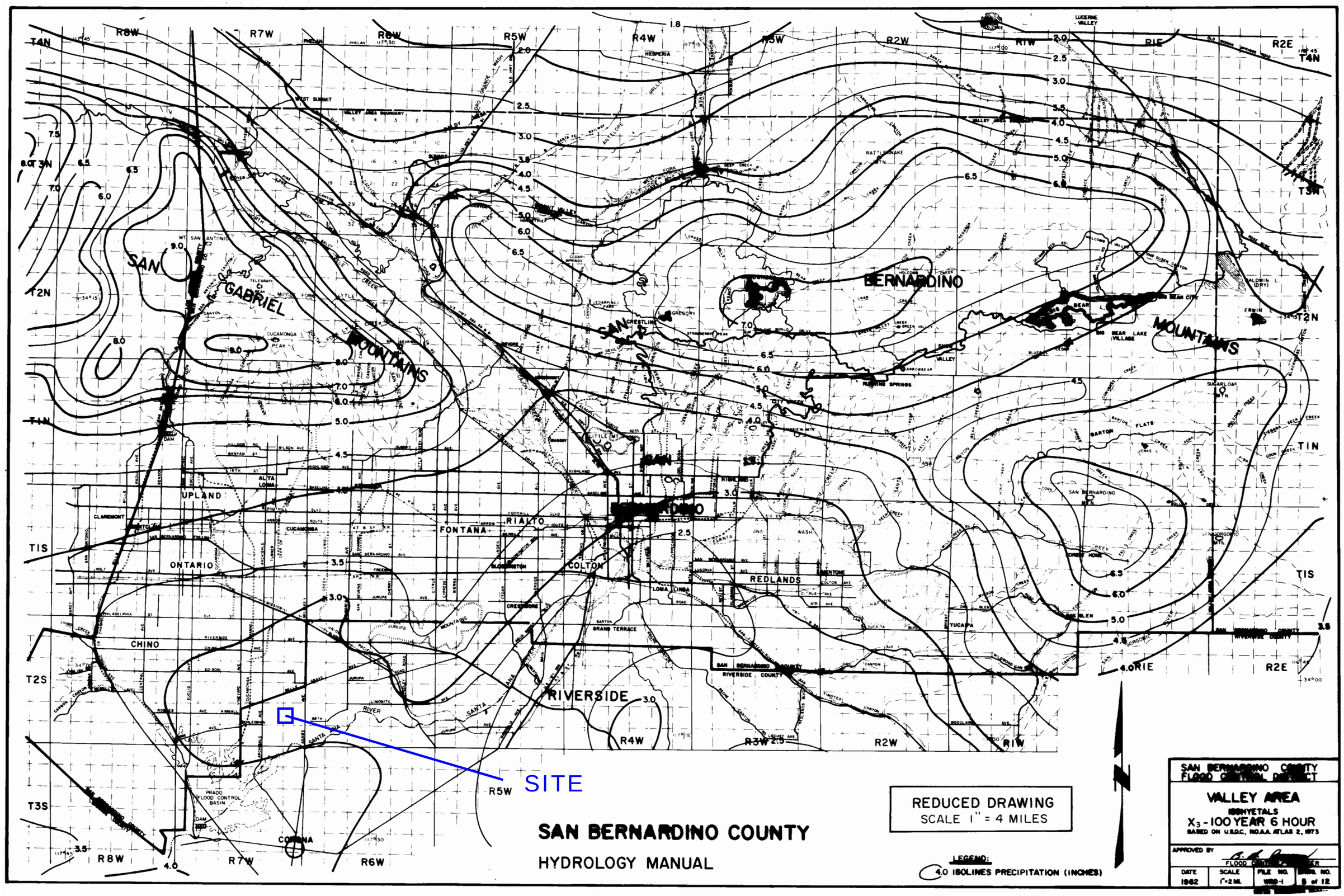
FILE NO. SBD-1
DWG. NO. 4 of 12

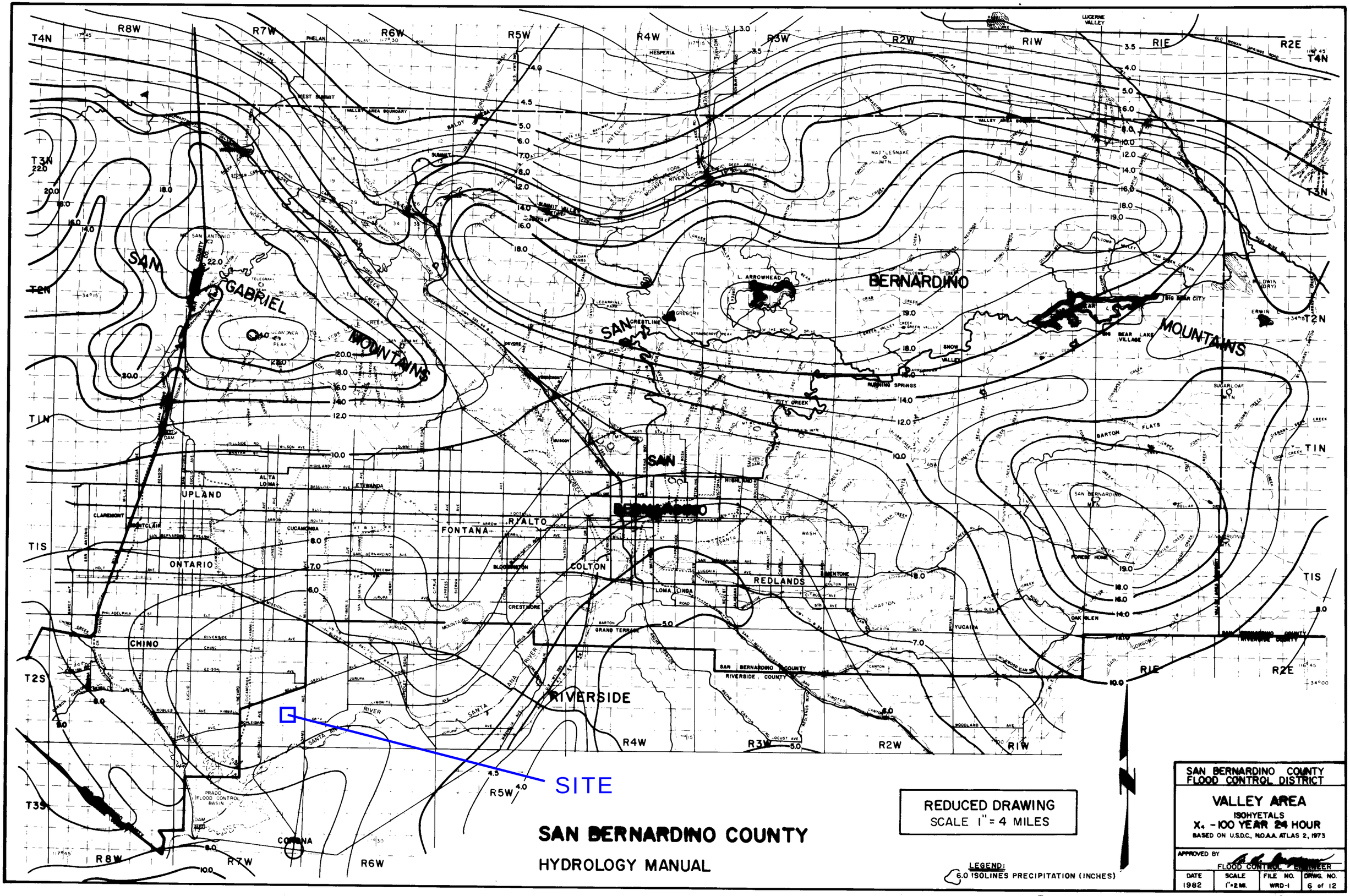
FIGURE B-4



B-13

FIGURE B-5

3148


SAN BERNARDINO COUNTY
HYDROLOGY MANUAL
SITE
REDUCED DRAWING
SCALE 1" = 4 MILES
LEGEND:
6.0 ISOLINES PRECIPITATION (INCHES)
SAN BERNARDINO COUNTY FLOOD CONTROL DISTRICT
VALLEY AREA
ISOHYETALS
X₆ - 100 YEAR 24 HOUR
BASED ON U.S.D.C., N.O.A.A. ATLAS 2, 1973
APPROVED BY
FLOOD CONTROL ENGINEER
DATE 1982
SCALE 1"=2 MI.
FILE NO. WRD-1
DRWG. NO. 6 of 12
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SAN BERNARDINO MOUNTAINS
RIVERSIDE
UPLAND
ONTARIO
CHINO
CLAREMONT
ALTA LOMA
CUCAMONGA
FONTANA
RIALTO
COLTON
REDLANDS
LOMA LINDA
GRAND TERRACE
CRESTLINE
LAKE ARROWHEAD
RUNNING SPRINGS
SNOW VALLEY
BIG BEAR CITY
BEAR LAKE VILLAGE
ERWIN
FAWNSKIN
SUGARLOAF
HESPERIA
APPLE VALLEY
LUCERNE VALLEY
YUCAIPA
OAK GLEN
CORONA
PRADO FLOOD CONTROL BASIN
SAN ANTONIO DAM
T4N
T3N
T2N
T1N
T1S
T2S
T3S
R8W
R7W
R6W
R5W
R4W
R3W
R2W
R1W
R1E
R2E

SECTION 5.1

HYDROLOGY STUDY
100-YEAR - EXISTING

San Bernardino County Rational Hydrology Program

(Hydrology Manual Date - August 1986)

CIVILCADD/CIVILDESIGN Engineering Software, (c) 1989-2012 Version 7.2
Rational Hydrology Study Date: 07/11/24

Program License Serial Number 6293

********* Hydrology Study Control Information **********

Rational hydrology study storm event year is 100.0
Computed rainfall intensity:
Storm year = 100.00 1 hour rainfall = 1.200 (In.)
Slope used for rainfall intensity curve b = 0.6000
Soil antecedent moisture condition (AMC) = 3

++

Process from Point/Station 1.000 to Point/Station 2.000
**** INITIAL AREA EVALUATION ****A-1

UNDEVELOPED (poor cover) subarea
Decimal fraction soil group A = 0.000
Decimal fraction soil group B = 1.000
Decimal fraction soil group C = 0.000
Decimal fraction soil group D = 0.000
SCS curve number for soil(AMC 2) = 78.00
Adjusted SCS curve number for AMC 3 = 92.80
Pervious ratio(Ap) = 1.0000 Max loss rate(Fm)= 0.140(In/Hr)
Initial subarea data:
Initial area flow distance = 420.000(Ft.)
Top (of initial area) elevation = 711.000(Ft.)
Bottom (of initial area) elevation = 705.000(Ft.)
Difference in elevation = 6.000(Ft.)
Slope = 0.01429 s(%)= 1.43
TC = k(0.525)*[(length^3)/(elevation change)]^0.2
Initial area time of concentration = 13.756 min.
Rainfall intensity = 2.904(In/Hr) for a 100.0 year storm
Effective runoff coefficient used for area (Q=KCIA) is C = 0.857
Subarea runoff = 3.259(CFS)
Total initial stream area = 1.310(Ac.)
Pervious area fraction = 1.000
Initial area Fm value = 0.140(In/Hr)

++

Process from Point/Station 2.000 to Point/Station 3.000
**** IRREGULAR CHANNEL FLOW TRAVEL TIME ****A-2

Estimated mean flow rate at midpoint of channel = 0.000(CFS)
Depth of flow = 0.901(Ft.), Average velocity = 2.372(Ft/s)
******* Irregular Channel Data **********

Information entered for subchannel number 1 :

Point number	'X' coordinate	'Y' coordinate
1	0.00	5.00
2	3.80	4.00

```
      3              6.30              3.00
      4             10.20              2.00
      5             15.40              1.00
      6             22.60              0.00
      7             27.70              1.00
      8             35.50              2.00
      9             41.40              3.00
      10             50.50              4.00
      11             68.20              4.00
Manning's 'N' friction factor =   0.030
-----------------------------------------------------------------
Sub-Channel flow  =     11.843(CFS)
  '     '    flow top width =     11.083(Ft.)
  '     '    velocity=    2.372(Ft/s)
  '     '    area =      4.994(Sq.Ft)
  '     '    Froude number =     0.623

Upstream point elevation =   705.000(Ft.)
Downstream point elevation =   700.000(Ft.)
Flow length =   740.000(Ft.)
Travel time  =    5.20 min.
Time of concentration =   18.96 min.
Depth of flow =   0.901(Ft.)
Average velocity =   2.372(Ft/s)
Total irregular channel flow =    11.843(CFS)
Irregular channel normal depth above invert elev. =   0.901(Ft.)
Average velocity of channel(s) =   2.372(Ft/s)
 Adding area flow to channel
UNDEVELOPED (poor cover) subarea
Decimal fraction soil group A = 0.000
Decimal fraction soil group B = 1.000
Decimal fraction soil group C = 0.000
Decimal fraction soil group D = 0.000
SCS curve number for soil(AMC 2)  = 78.00
Adjusted SCS curve number for AMC 3 = 92.80
Pervious ratio(Ap) = 1.0000     Max loss rate(Fm)=     0.140(In/Hr)
Rainfall intensity =      2.396(In/Hr) for a   100.0 year storm
Effective runoff coefficient used for area,(total area with modified
rational method)(Q=KCIA) is C = 0.847
Subarea runoff =     17.083(CFS) for    8.710(Ac.)
Total runoff =     20.341(CFS)
Effective area this stream =       10.02(Ac.)
Total Study Area (Main Stream No. 1) =       10.02(Ac.)
Area averaged Fm value =    0.140(In/Hr)
Depth of flow =   1.105(Ft.), Average velocity =   2.708(Ft/s)
End of computations, Total Study Area =           10.02 (Ac.)
The following figures may
be used for a unit hydrograph study of the same area.
Note: These figures do not consider reduced effective area
effects caused by confluences in the rational equation.

Area averaged pervious area fraction(Ap) = 1.000
Area averaged SCS curve number =  78.0
```

SECTION 5.2

HYDROLOGY STUDY
100-YEAR - PROPOSED

San Bernardino County Rational Hydrology Program

(Hydrology Manual Date - August 1986)

CIVILCADD/CIVILDESIGN Engineering Software, (c) 1989-2012 Version 7.2
Rational Hydrology Study Date: 07/18/24

ESPERANZA - PA II
EUCALYPTUS AVENUE & AMHERST AVENUE
PROPOSED Q100
ONTARIO, CALIFORNIA

Program License Serial Number 6293

********* Hydrology Study Control Information **********

Rational hydrology study storm event year is 100.0
Computed rainfall intensity:
Storm year = 100.00 1 hour rainfall = 1.200 (In.)
Slope used for rainfall intensity curve b = 0.6000
Soil antecedent moisture condition (AMC) = 3

++

Process from Point/Station 1.000 to Point/Station 2.000
**** INITIAL AREA EVALUATION ****A-1

RESIDENTIAL(11+ dwl/acre)
Decimal fraction soil group A = 0.000
Decimal fraction soil group B = 1.000
Decimal fraction soil group C = 0.000
Decimal fraction soil group D = 0.000
SCS curve number for soil(AMC 2) = 56.00
Adjusted SCS curve number for AMC 3 = 75.80
Pervious ratio(Ap) = 0.2000 Max loss rate(Fm)= 0.088(In/Hr)
Initial subarea data:
Initial area flow distance = 100.000(Ft.)
Top (of initial area) elevation = 710.510(Ft.)
Bottom (of initial area) elevation = 709.000(Ft.)
Difference in elevation = 1.510(Ft.)
Slope = 0.01510 s(%)= 1.51
TC = k(0.324)*[(length^3)/(elevation change)]^0.2
Initial area time of concentration = 4.729 min.
Rainfall intensity = 5.511(In/Hr) for a 100.0 year storm
Effective runoff coefficient used for area (Q=KCIA) is C = 0.886
Subarea runoff = 0.586(CFS)
Total initial stream area = 0.120(Ac.)
Pervious area fraction = 0.200
Initial area Fm value = 0.088(In/Hr)

++

Process from Point/Station 2.000 to Point/Station 3.000
**** PIPEFLOW TRAVEL TIME (Program estimated size) ****

Upstream point/station elevation = 706.000(Ft.)
Downstream point/station elevation = 705.240(Ft.)
Pipe length = 117.00(Ft.) Manning's N = 0.012

No. of pipes = 1 Required pipe flow =   0.586(CFS)
Nearest computed pipe diameter =   9.00(In.)
Calculated individual pipe flow =   0.586(CFS)
Normal flow depth in pipe =   3.99(In.)
Flow top width inside pipe =   8.94(In.)
Critical Depth =   4.16(In.)
Pipe flow velocity =   3.10(Ft/s)
Travel time through pipe =   0.63 min.
Time of concentration (TC) =   5.36 min.

++
Process from Point/Station   3.000 to Point/Station   3.000
**** SUBAREA FLOW ADDITION **** **A-2**

RESIDENTIAL(11+ dwl/acre)
Decimal fraction soil group A = 0.000
Decimal fraction soil group B = 1.000
Decimal fraction soil group C = 0.000
Decimal fraction soil group D = 0.000
SCS curve number for soil(AMC 2) = 56.00
Adjusted SCS curve number for AMC 3 = 75.80
Pervious ratio(Ap) = 0.2000   Max loss rate(Fm)=   0.088(In/Hr)
Time of concentration =   5.36 min.
Rainfall intensity =   5.113(In/Hr) for a   100.0 year storm
Effective runoff coefficient used for area,(total area with modified
rational method)(Q=KCIA) is C = 0.885
Subarea runoff =   0.590(CFS) for   0.140(Ac.)
Total runoff =   1.176(CFS)
Effective area this stream =   0.26(Ac.)
Total Study Area (Main Stream No. 1) =   0.26(Ac.)
Area averaged Fm value =   0.088(In/Hr)

++
Process from Point/Station   3.000 to Point/Station   4.000
**** PIPEFLOW TRAVEL TIME (Program estimated size) ****

Upstream point/station elevation =   705.240(Ft.)
Downstream point/station elevation =   704.690(Ft.)
Pipe length =   110.00(Ft.)   Manning's N = 0.012
No. of pipes = 1 Required pipe flow =   1.176(CFS)
Nearest computed pipe diameter =   9.00(In.)
Calculated individual pipe flow =   1.176(CFS)
Normal flow depth in pipe =   6.86(In.)
Flow top width inside pipe =   7.67(In.)
Critical Depth =   5.98(In.)
Pipe flow velocity =   3.26(Ft/s)
Travel time through pipe =   0.56 min.
Time of concentration (TC) =   5.92 min.

++
Process from Point/Station   4.000 to Point/Station   4.000
**** SUBAREA FLOW ADDITION **** **A-3**

RESIDENTIAL(11+ dwl/acre)
Decimal fraction soil group A = 0.000
Decimal fraction soil group B = 1.000
Decimal fraction soil group C = 0.000
Decimal fraction soil group D = 0.000
SCS curve number for soil(AMC 2) = 56.00
Adjusted SCS curve number for AMC 3 = 75.80

```
Pervious ratio(Ap) = 0.2000     Max loss rate(Fm)=     0.088(In/Hr)
Time of concentration =     5.92 min.
Rainfall intensity =      4.816(In/Hr) for a   100.0 year storm
Effective runoff coefficient used for area,(total area with modified
rational method)(Q=KCIA) is C = 0.884
Subarea runoff =      0.781(CFS) for    0.200(Ac.)
Total runoff =      1.957(CFS)
Effective area this stream =        0.46(Ac.)
Total Study Area (Main Stream No. 1) =        0.46(Ac.)
Area averaged Fm value =    0.088(In/Hr)


++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station        4.000 to Point/Station        5.000
**** PIPEFLOW TRAVEL TIME (Program estimated size) ****
------------------------------------------------------------------------
Upstream point/station elevation =   704.690(Ft.)
Downstream point/station elevation =   704.610(Ft.)
Pipe length  =    15.00(Ft.)   Manning's N = 0.012
No. of pipes = 1  Required pipe flow  =     1.957(CFS)
Nearest computed pipe diameter  =     12.00(In.)
Calculated individual pipe flow  =     1.957(CFS)
Normal flow depth in pipe =    7.36(In.)
Flow top width inside pipe =   11.69(In.)
Critical Depth =    7.15(In.)
Pipe flow velocity =      3.88(Ft/s)
Travel time through pipe =    0.06 min.
Time of concentration (TC) =     5.99 min.


++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station        5.000 to Point/Station        5.000
**** SUBAREA FLOW ADDITION ****
```

A-4

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------------------------------------------------------------------------
RESIDENTIAL(11+ dwl/acre)
Decimal fraction soil group A = 0.000
Decimal fraction soil group B = 1.000
Decimal fraction soil group C = 0.000
Decimal fraction soil group D = 0.000
SCS curve number for soil(AMC 2)  = 56.00
Adjusted SCS curve number for AMC 3 = 75.80
Pervious ratio(Ap) = 0.2000     Max loss rate(Fm)=     0.088(In/Hr)
Time of concentration =     5.99 min.
Rainfall intensity =      4.784(In/Hr) for a   100.0 year storm
Effective runoff coefficient used for area,(total area with modified
rational method)(Q=KCIA) is C = 0.883
Subarea runoff =      1.889(CFS) for    0.450(Ac.)
Total runoff =      3.846(CFS)
Effective area this stream =        0.91(Ac.)
Total Study Area (Main Stream No. 1) =        0.91(Ac.)
Area averaged Fm value =    0.088(In/Hr)


++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station        5.000 to Point/Station        6.000
**** PIPEFLOW TRAVEL TIME (Program estimated size) ****
------------------------------------------------------------------------
Upstream point/station elevation =   704.610(Ft.)
Downstream point/station elevation =   703.830(Ft.)
Pipe length  =   156.00(Ft.)   Manning's N = 0.012
No. of pipes = 1  Required pipe flow  =     3.846(CFS)
Nearest computed pipe diameter  =     15.00(In.)
Calculated individual pipe flow  =     3.846(CFS)
```

```
Normal flow depth in pipe =    9.94(In.)
Flow top width inside pipe =   14.19(In.)
Critical Depth =    9.52(In.)
Pipe flow velocity =      4.46(Ft/s)
Travel time through pipe =    0.58 min.
Time of concentration (TC) =     6.57 min.


++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station        6.000 to Point/Station        6.000
**** SUBAREA FLOW ADDITION **** A-5
------------------------------------------------------------------------------
RESIDENTIAL(11+ dwl/acre)
Decimal fraction soil group A = 0.000
Decimal fraction soil group B = 1.000
Decimal fraction soil group C = 0.000
Decimal fraction soil group D = 0.000
SCS curve number for soil(AMC 2)  = 56.00
Adjusted SCS curve number for AMC 3 = 75.80
Pervious ratio(Ap) = 0.2000     Max loss rate(Fm)=     0.088(In/Hr)
Time of concentration =     6.57 min.
Rainfall intensity =      4.525(In/Hr) for a   100.0 year storm
Effective runoff coefficient used for area,(total area with modified
rational method)(Q=KCIA) is C = 0.882
Subarea runoff =      1.664(CFS) for    0.470(Ac.)
Total runoff =      5.510(CFS)
Effective area this stream =        1.38(Ac.)
Total Study Area (Main Stream No. 1) =        1.38(Ac.)
Area averaged Fm value =    0.088(In/Hr)


++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station        6.000 to Point/Station        7.000
**** PIPEFLOW TRAVEL TIME (Program estimated size) ****
------------------------------------------------------------------------------
Upstream point/station elevation =   703.830(Ft.)
Downstream point/station elevation =   703.710(Ft.)
Pipe length  =    15.00(Ft.)   Manning's N = 0.012
No. of pipes = 1  Required pipe flow  =     5.510(CFS)
Nearest computed pipe diameter  =     15.00(In.)
Calculated individual pipe flow  =     5.510(CFS)
Normal flow depth in pipe =   10.92(In.)
Flow top width inside pipe =   13.35(In.)
Critical Depth =   11.41(In.)
Pipe flow velocity =      5.76(Ft/s)
Travel time through pipe =    0.04 min.
Time of concentration (TC) =     6.61 min.


++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station        7.000 to Point/Station        7.000
**** SUBAREA FLOW ADDITION **** A-6
------------------------------------------------------------------------------
RESIDENTIAL(11+ dwl/acre)
Decimal fraction soil group A = 0.000
Decimal fraction soil group B = 1.000
Decimal fraction soil group C = 0.000
Decimal fraction soil group D = 0.000
SCS curve number for soil(AMC 2)  = 56.00
Adjusted SCS curve number for AMC 3 = 75.80
Pervious ratio(Ap) = 0.2000     Max loss rate(Fm)=     0.088(In/Hr)
Time of concentration =     6.61 min.
Rainfall intensity =      4.507(In/Hr) for a   100.0 year storm
```

```
Effective runoff coefficient used for area,(total area with modified
rational method)(Q=KCIA) is C = 0.882
Subarea runoff =      2.364(CFS) for    0.600(Ac.)
Total runoff =      7.874(CFS)
Effective area this stream =        1.98(Ac.)
Total Study Area (Main Stream No. 1) =        1.98(Ac.)
Area averaged Fm value =    0.088(In/Hr)


++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station        7.000 to Point/Station        8.000
**** PIPEFLOW TRAVEL TIME (Program estimated size) ****
------------------------------------------------------------------------
Upstream point/station elevation =   703.710(Ft.)
Downstream point/station elevation =   703.270(Ft.)
Pipe length  =    90.00(Ft.)   Manning's N = 0.012
No. of pipes = 1  Required pipe flow  =     7.874(CFS)
Nearest computed pipe diameter  =     18.00(In.)
Calculated individual pipe flow  =     7.874(CFS)
Normal flow depth in pipe =   14.58(In.)
Flow top width inside pipe =   14.13(In.)
Critical Depth =   13.04(In.)
Pipe flow velocity =      5.13(Ft/s)
Travel time through pipe =    0.29 min.
Time of concentration (TC) =     6.90 min.


++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station        8.000 to Point/Station        8.000
**** SUBAREA FLOW ADDITION ****
```

A-7

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------------------------------------------------------------------------
RESIDENTIAL(11+ dwl/acre)
Decimal fraction soil group A = 0.000
Decimal fraction soil group B = 1.000
Decimal fraction soil group C = 0.000
Decimal fraction soil group D = 0.000
SCS curve number for soil(AMC 2)  = 56.00
Adjusted SCS curve number for AMC 3 = 75.80
Pervious ratio(Ap) = 0.2000     Max loss rate(Fm)=     0.088(In/Hr)
Time of concentration =     6.90 min.
Rainfall intensity =      4.391(In/Hr) for a   100.0 year storm
Effective runoff coefficient used for area,(total area with modified
rational method)(Q=KCIA) is C = 0.882
Subarea runoff =      0.763(CFS) for    0.250(Ac.)
Total runoff =      8.637(CFS)
Effective area this stream =        2.23(Ac.)
Total Study Area (Main Stream No. 1) =        2.23(Ac.)
Area averaged Fm value =    0.088(In/Hr)


++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station        8.000 to Point/Station        9.000
**** PIPEFLOW TRAVEL TIME (Program estimated size) ****
------------------------------------------------------------------------
Upstream point/station elevation =   703.270(Ft.)
Downstream point/station elevation =   702.910(Ft.)
Pipe length  =    72.00(Ft.)   Manning's N = 0.012
No. of pipes = 1  Required pipe flow  =     8.637(CFS)
Nearest computed pipe diameter  =     21.00(In.)
Calculated individual pipe flow  =     8.637(CFS)
Normal flow depth in pipe =   13.09(In.)
Flow top width inside pipe =   20.35(In.)
Critical Depth =   13.11(In.)
```

```
Pipe flow velocity =      5.48(Ft/s)
Travel time through pipe =    0.22 min.
Time of concentration (TC) =     7.12 min.


++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station        9.000 to Point/Station        9.000
**** SUBAREA FLOW ADDITION **** A-8
----------------------------------------------------------------------
RESIDENTIAL(11+ dwl/acre)
Decimal fraction soil group A = 0.000
Decimal fraction soil group B = 1.000
Decimal fraction soil group C = 0.000
Decimal fraction soil group D = 0.000
SCS curve number for soil(AMC 2)  = 56.00
Adjusted SCS curve number for AMC 3 = 75.80
Pervious ratio(Ap) = 0.2000     Max loss rate(Fm)=     0.088(In/Hr)
Time of concentration =     7.12 min.
Rainfall intensity =      4.310(In/Hr) for a   100.0 year storm
Effective runoff coefficient used for area,(total area with modified
rational method)(Q=KCIA) is C = 0.882
Subarea runoff =      2.268(CFS) for    0.640(Ac.)
Total runoff =     10.905(CFS)
Effective area this stream =        2.87(Ac.)
Total Study Area (Main Stream No. 1) =        2.87(Ac.)
Area averaged Fm value =    0.088(In/Hr)


++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station        9.000 to Point/Station        9.500
**** PIPEFLOW TRAVEL TIME (Program estimated size) ****
----------------------------------------------------------------------
Upstream point/station elevation =   702.910(Ft.)
Downstream point/station elevation =   702.660(Ft.)
Pipe length  =    50.00(Ft.)   Manning's N = 0.012
No. of pipes = 1  Required pipe flow  =    10.905(CFS)
Nearest computed pipe diameter  =     21.00(In.)
Calculated individual pipe flow  =    10.905(CFS)
Normal flow depth in pipe =   15.56(In.)
Flow top width inside pipe =   18.40(In.)
Critical Depth =   14.77(In.)
Pipe flow velocity =      5.71(Ft/s)
Travel time through pipe =    0.15 min.
Time of concentration (TC) =     7.27 min.


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Process from Point/Station        9.500 to Point/Station        9.500
**** SUBAREA FLOW ADDITION **** A-9
----------------------------------------------------------------------
RESIDENTIAL(11+ dwl/acre)
Decimal fraction soil group A = 0.000
Decimal fraction soil group B = 1.000
Decimal fraction soil group C = 0.000
Decimal fraction soil group D = 0.000
SCS curve number for soil(AMC 2)  = 56.00
Adjusted SCS curve number for AMC 3 = 75.80
Pervious ratio(Ap) = 0.2000     Max loss rate(Fm)=     0.088(In/Hr)
Time of concentration =     7.27 min.
Rainfall intensity =      4.258(In/Hr) for a   100.0 year storm
Effective runoff coefficient used for area,(total area with modified
rational method)(Q=KCIA) is C = 0.881
Subarea runoff =      1.742(CFS) for    0.500(Ac.)
```

```
Total runoff =     12.647(CFS)
Effective area this stream =        3.37(Ac.)
Total Study Area (Main Stream No. 1) =        3.37(Ac.)
Area averaged Fm value =    0.088(In/Hr)


++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station        9.500 to Point/Station       14.000
**** PIPEFLOW TRAVEL TIME (Program estimated size) ****
------------------------------------------------------------------------
Upstream point/station elevation =   702.660(Ft.)
Downstream point/station elevation =   702.560(Ft.)
Pipe length  =    20.00(Ft.)   Manning's N = 0.012
No. of pipes = 1  Required pipe flow  =    12.647(CFS)
Nearest computed pipe diameter  =     24.00(In.)
Calculated individual pipe flow  =    12.647(CFS)
Normal flow depth in pipe =   15.21(In.)
Flow top width inside pipe =   23.12(In.)
Critical Depth =   15.36(In.)
Pipe flow velocity =      6.02(Ft/s)
Travel time through pipe =    0.06 min.
Time of concentration (TC) =     7.32 min.


++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station       14.000 to Point/Station       14.000
**** CONFLUENCE OF MAIN STREAMS ****
------------------------------------------------------------------------
The following data inside Main Stream is listed:
In Main Stream number: 1
Stream flow area =      3.370(Ac.)
Runoff from this stream =     12.647(CFS)
Time of concentration =    7.32 min.
Rainfall intensity =     4.238(In/Hr)
Area averaged loss rate (Fm) =    0.0880(In/Hr)
Area averaged Pervious ratio (Ap) = 0.2000
Program is now starting with Main Stream No. 2


++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station       10.000 to Point/Station       11.000
**** INITIAL AREA EVALUATION **** A-10
------------------------------------------------------------------------
RESIDENTIAL(11+ dwl/acre)
Decimal fraction soil group A = 0.000
Decimal fraction soil group B = 1.000
Decimal fraction soil group C = 0.000
Decimal fraction soil group D = 0.000
SCS curve number for soil(AMC 2)  = 56.00
Adjusted SCS curve number for AMC 3 = 75.80
Pervious ratio(Ap) = 0.2000     Max loss rate(Fm)=     0.088(In/Hr)
Initial subarea data:
Initial area flow distance =   180.000(Ft.)
Top (of initial area) elevation =   708.390(Ft.)
Bottom (of initial area) elevation =   707.500(Ft.)
Difference in elevation =     0.890(Ft.)
Slope =    0.00494  s(%)=       0.49
TC = k(0.324)*[(length^3)/(elevation change)]^0.2
Initial area time of concentration =    7.479 min.
Rainfall intensity =      4.186(In/Hr) for a   100.0 year storm
Effective runoff coefficient used for area (Q=KCIA) is C = 0.881
Subarea runoff =      0.590(CFS)
Total initial stream area =        0.160(Ac.)
```

```
Pervious area fraction = 0.200
Initial area Fm value =    0.088(In/Hr)


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Process from Point/Station       11.000 to Point/Station       12.000
**** PIPEFLOW TRAVEL TIME (Program estimated size) ****
------------------------------------------------------------------------
Upstream point/station elevation =   705.000(Ft.)
Downstream point/station elevation =   704.200(Ft.)
Pipe length  =   158.00(Ft.)   Manning's N = 0.012
No. of pipes = 1  Required pipe flow  =     0.590(CFS)
Nearest computed pipe diameter  =      9.00(In.)
Calculated individual pipe flow  =     0.590(CFS)
Normal flow depth in pipe =    4.30(In.)
Flow top width inside pipe =    8.99(In.)
Critical Depth =    4.18(In.)
Pipe flow velocity =      2.83(Ft/s)
Travel time through pipe =    0.93 min.
Time of concentration (TC) =     8.41 min.


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Process from Point/Station       12.000 to Point/Station       12.000
**** SUBAREA FLOW ADDITION ****
------------------------------------------------------------------------
RESIDENTIAL(11+ dwl/acre)
Decimal fraction soil group A = 0.000
Decimal fraction soil group B = 1.000
Decimal fraction soil group C = 0.000
Decimal fraction soil group D = 0.000
SCS curve number for soil(AMC 2)  = 56.00
Adjusted SCS curve number for AMC 3 = 75.80
Pervious ratio(Ap) = 0.2000     Max loss rate(Fm)=     0.088(In/Hr)
Time of concentration =     8.41 min.
Rainfall intensity =      3.901(In/Hr) for a   100.0 year storm
Effective runoff coefficient used for area,(total area with modified
rational method)(Q=KCIA) is C = 0.880
Subarea runoff =      1.092(CFS) for    0.330(Ac.)
Total runoff =      1.682(CFS)
Effective area this stream =        0.49(Ac.)
Total Study Area (Main Stream No. 2) =        3.86(Ac.)
Area averaged Fm value =    0.088(In/Hr)


++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station       12.000 to Point/Station       13.000
**** PIPEFLOW TRAVEL TIME (Program estimated size) ****
------------------------------------------------------------------------
Upstream point/station elevation =   704.200(Ft.)
Downstream point/station elevation =   702.810(Ft.)
Pipe length  =   130.00(Ft.)   Manning's N = 0.012
No. of pipes = 1  Required pipe flow  =     1.682(CFS)
Nearest computed pipe diameter  =      9.00(In.)
Calculated individual pipe flow  =     1.682(CFS)
Normal flow depth in pipe =    6.73(In.)
Flow top width inside pipe =    7.82(In.)
Critical Depth =    7.15(In.)
Pipe flow velocity =      4.75(Ft/s)
Travel time through pipe =    0.46 min.
Time of concentration (TC) =     8.87 min.
```

A-11

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++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station       13.000 to Point/Station       13.000
**** SUBAREA FLOW ADDITION **** A-12
------------------------------------------------------------------------
RESIDENTIAL(11+ dwl/acre)
Decimal fraction soil group A = 0.000
Decimal fraction soil group B = 1.000
Decimal fraction soil group C = 0.000
Decimal fraction soil group D = 0.000
SCS curve number for soil(AMC 2)  = 56.00
Adjusted SCS curve number for AMC 3 = 75.80
Pervious ratio(Ap) = 0.2000     Max loss rate(Fm)=     0.088(In/Hr)
Time of concentration =     8.87 min.
Rainfall intensity =      3.780(In/Hr) for a   100.0 year storm
Effective runoff coefficient used for area,(total area with modified
rational method)(Q=KCIA) is C = 0.879
Subarea runoff =      0.378(CFS) for    0.130(Ac.)
Total runoff =      2.060(CFS)
Effective area this stream =        0.62(Ac.)
Total Study Area (Main Stream No. 2) =        3.99(Ac.)
Area averaged Fm value =    0.088(In/Hr)


++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station       13.000 to Point/Station       14.000
**** PIPEFLOW TRAVEL TIME (Program estimated size) ****
------------------------------------------------------------------------
Upstream point/station elevation =   702.810(Ft.)
Downstream point/station elevation =   702.560(Ft.)
Pipe length  =    50.00(Ft.)   Manning's N = 0.012
No. of pipes = 1  Required pipe flow  =     2.060(CFS)
Nearest computed pipe diameter  =     12.00(In.)
Calculated individual pipe flow  =     2.060(CFS)
Normal flow depth in pipe =    7.79(In.)
Flow top width inside pipe =   11.45(In.)
Critical Depth =    7.36(In.)
Pipe flow velocity =      3.82(Ft/s)
Travel time through pipe =    0.22 min.
Time of concentration (TC) =     9.08 min.


++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station       14.000 to Point/Station       14.000
**** CONFLUENCE OF MAIN STREAMS ****
------------------------------------------------------------------------
The following data inside Main Stream is listed:
In Main Stream number: 2
Stream flow area =      0.620(Ac.)
Runoff from this stream =      2.060(CFS)
Time of concentration =    9.08 min.
Rainfall intensity =     3.725(In/Hr)
Area averaged loss rate (Fm) =    0.0880(In/Hr)
Area averaged Pervious ratio (Ap) = 0.2000
Summary of stream data:

Stream Flow rate    Area    TC     Fm       Rainfall Intensity
 No.    (CFS)   (Ac.)       (min) (In/Hr)     (In/Hr)


1     12.65     3.370      7.32    0.088      4.238
2      2.06     0.620      9.08    0.088      3.725
Qmax(1) =
         1.000 *    1.000 *    12.647) +
```

```
         1.141 *    0.806 *     2.060) + =      14.542
Qmax(2) =
         0.876 *    1.000 *    12.647) +
         1.000 *    1.000 *     2.060) + =      13.143

Total of 2 main streams to confluence:
Flow rates before confluence point:
      13.647       3.060
Maximum flow rates at confluence using above data:
       14.542       13.143
Area of streams before confluence:
        3.370        0.620
Effective area values after confluence:
        3.870        3.990


Results of confluence:
Total flow rate =     14.542(CFS)
Time of concentration =     7.325 min.
Effective stream area after confluence  =      3.870(Ac.)
Study area average Pervious fraction(Ap) =  0.200
Study area average soil loss rate(Fm) =    0.088(In/Hr)
Study area total =       3.99(Ac.)


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Process from Point/Station       14.000 to Point/Station       15.000
**** PIPEFLOW TRAVEL TIME (Program estimated size) ****
------------------------------------------------------------------------
Upstream point/station elevation =   702.560(Ft.)
Downstream point/station elevation =   702.000(Ft.)
Pipe length  =    80.00(Ft.)   Manning's N = 0.012
No. of pipes = 1  Required pipe flow  =    14.542(CFS)
Nearest computed pipe diameter  =     24.00(In.)
Calculated individual pipe flow  =    14.542(CFS)
Normal flow depth in pipe =   14.93(In.)
Flow top width inside pipe =   23.27(In.)
Critical Depth =   16.48(In.)
Pipe flow velocity =      7.08(Ft/s)
Travel time through pipe =    0.19 min.
Time of concentration (TC) =     7.51 min.


++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station       15.000 to Point/Station       15.000
**** SUBAREA FLOW ADDITION ****
------------------------------------------------------------------------
RESIDENTIAL(11+ dwl/acre)
Decimal fraction soil group A = 0.000
Decimal fraction soil group B = 1.000
Decimal fraction soil group C = 0.000
Decimal fraction soil group D = 0.000
SCS curve number for soil(AMC 2)  = 56.00
Adjusted SCS curve number for AMC 3 = 75.80
Pervious ratio(Ap) = 0.2000     Max loss rate(Fm)=     0.088(In/Hr)
Time of concentration =     7.51 min.
Rainfall intensity =      4.174(In/Hr) for a   100.0 year storm
Effective runoff coefficient used for area,(total area with modified
rational method)(Q=KCIA) is C = 0.881
Subarea runoff =      0.573(CFS) for    0.240(Ac.)
Total runoff =     15.115(CFS)
Effective area this stream =        4.11(Ac.)
Total Study Area (Main Stream No. 1) =        4.23(Ac.)
```

A-13

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Area averaged Fm value =    0.088(In/Hr)


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Process from Point/Station       15.000 to Point/Station       26.000
**** PIPEFLOW TRAVEL TIME (Program estimated size) ****
----------------------------------------------------------------------
Upstream point/station elevation =   702.000(Ft.)
Downstream point/station elevation =   701.870(Ft.)
Pipe length  =    26.00(Ft.)   Manning's N = 0.012
No. of pipes = 1  Required pipe flow  =    15.115(CFS)
Nearest computed pipe diameter  =     24.00(In.)
Calculated individual pipe flow  =    15.115(CFS)
Normal flow depth in pipe =   17.34(In.)
Flow top width inside pipe =   21.49(In.)
Critical Depth =   16.82(In.)
Pipe flow velocity =      6.22(Ft/s)
Travel time through pipe =    0.07 min.
Time of concentration (TC) =     7.58 min.


++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station       26.000 to Point/Station       26.000
**** CONFLUENCE OF MAIN STREAMS ****
----------------------------------------------------------------------
The following data inside Main Stream is listed:
In Main Stream number: 1
Stream flow area =      4.110(Ac.)
Runoff from this stream =     15.115(CFS)
Time of concentration =    7.58 min.
Rainfall intensity =     4.151(In/Hr)
Area averaged loss rate (Fm) =    0.0880(In/Hr)
Area averaged Pervious ratio (Ap) = 0.2000
Program is now starting with Main Stream No. 2


++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station       16.000 to Point/Station       17.000
**** INITIAL AREA EVALUATION **** A-14
----------------------------------------------------------------------
RESIDENTIAL(11+ dwl/acre)
Decimal fraction soil group A = 0.000
Decimal fraction soil group B = 1.000
Decimal fraction soil group C = 0.000
Decimal fraction soil group D = 0.000
SCS curve number for soil(AMC 2)  = 56.00
Adjusted SCS curve number for AMC 3 = 75.80
Pervious ratio(Ap) = 0.2000     Max loss rate(Fm)=     0.088(In/Hr)
Initial subarea data:
Initial area flow distance =   235.000(Ft.)
Top (of initial area) elevation =   710.700(Ft.)
Bottom (of initial area) elevation =   707.930(Ft.)
Difference in elevation =     2.770(Ft.)
Slope =    0.01179  s(%)=       1.18
TC = k(0.324)*[(length^3)/(elevation change)]^0.2
Initial area time of concentration =    6.993 min.
Rainfall intensity =      4.358(In/Hr) for a   100.0 year storm
Effective runoff coefficient used for area (Q=KCIA) is C = 0.882
Subarea runoff =      2.306(CFS)
Total initial stream area =        0.600(Ac.)
Pervious area fraction = 0.200
Initial area Fm value =    0.088(In/Hr)
```

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++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station       17.000 to Point/Station       18.000
**** PIPEFLOW TRAVEL TIME (Program estimated size) ****
----------------------------------------------------------------------
Upstream point/station elevation =   705.500(Ft.)
Downstream point/station elevation =   704.940(Ft.)
Pipe length  =    50.00(Ft.)   Manning's N = 0.012
No. of pipes = 1  Required pipe flow  =     2.306(CFS)
Nearest computed pipe diameter  =     12.00(In.)
Calculated individual pipe flow  =     2.306(CFS)
Normal flow depth in pipe =    6.45(In.)
Flow top width inside pipe =   11.97(In.)
Critical Depth =    7.79(In.)
Pipe flow velocity =      5.36(Ft/s)
Travel time through pipe =    0.16 min.
Time of concentration (TC) =     7.15 min.


++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station       18.000 to Point/Station       18.000
**** SUBAREA FLOW ADDITION **** A-15
----------------------------------------------------------------------
RESIDENTIAL(11+ dwl/acre)
Decimal fraction soil group A = 0.000
Decimal fraction soil group B = 1.000
Decimal fraction soil group C = 0.000
Decimal fraction soil group D = 0.000
SCS curve number for soil(AMC 2)  = 56.00
Adjusted SCS curve number for AMC 3 = 75.80
Pervious ratio(Ap) = 0.2000     Max loss rate(Fm)=     0.088(In/Hr)
Time of concentration =     7.15 min.
Rainfall intensity =      4.301(In/Hr) for a   100.0 year storm
Effective runoff coefficient used for area,(total area with modified
rational method)(Q=KCIA) is C = 0.882
Subarea runoff =      1.258(CFS) for    0.340(Ac.)
Total runoff =      3.564(CFS)
Effective area this stream =        0.94(Ac.)
Total Study Area (Main Stream No. 2) =        5.17(Ac.)
Area averaged Fm value =    0.088(In/Hr)


++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station       18.000 to Point/Station       19.000
**** PIPEFLOW TRAVEL TIME (Program estimated size) ****
----------------------------------------------------------------------
Upstream point/station elevation =   704.940(Ft.)
Downstream point/station elevation =   704.410(Ft.)
Pipe length  =   106.00(Ft.)   Manning's N = 0.012
No. of pipes = 1  Required pipe flow  =     3.564(CFS)
Nearest computed pipe diameter  =     15.00(In.)
Calculated individual pipe flow  =     3.564(CFS)
Normal flow depth in pipe =    9.42(In.)
Flow top width inside pipe =   14.50(In.)
Critical Depth =    9.15(In.)
Pipe flow velocity =      4.39(Ft/s)
Travel time through pipe =    0.40 min.
Time of concentration (TC) =     7.55 min.
```

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++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station       19.000 to Point/Station       19.000
**** SUBAREA FLOW ADDITION **** A-16
------------------------------------------------------------------------
RESIDENTIAL(11+ dwl/acre)
Decimal fraction soil group A = 0.000
Decimal fraction soil group B = 1.000
Decimal fraction soil group C = 0.000
Decimal fraction soil group D = 0.000
SCS curve number for soil(AMC 2)  = 56.00
Adjusted SCS curve number for AMC 3 = 75.80
Pervious ratio(Ap) = 0.2000     Max loss rate(Fm)=     0.088(In/Hr)
Time of concentration =     7.55 min.
Rainfall intensity =      4.162(In/Hr) for a   100.0 year storm
Effective runoff coefficient used for area,(total area with modified
rational method)(Q=KCIA) is C = 0.881
Subarea runoff =      0.652(CFS) for    0.210(Ac.)
Total runoff =      4.216(CFS)
Effective area this stream =        1.15(Ac.)
Total Study Area (Main Stream No. 2) =        5.38(Ac.)
Area averaged Fm value =    0.088(In/Hr)


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Process from Point/Station       19.000 to Point/Station       20.000
**** PIPEFLOW TRAVEL TIME (Program estimated size) ****
------------------------------------------------------------------------
Upstream point/station elevation =   704.410(Ft.)
Downstream point/station elevation =   704.150(Ft.)
Pipe length  =    47.00(Ft.)   Manning's N = 0.012
No. of pipes = 1  Required pipe flow  =     4.216(CFS)
Nearest computed pipe diameter  =     15.00(In.)
Calculated individual pipe flow  =     4.216(CFS)
Normal flow depth in pipe =   10.24(In.)
Flow top width inside pipe =   13.96(In.)
Critical Depth =    9.97(In.)
Pipe flow velocity =      4.72(Ft/s)
Travel time through pipe =    0.17 min.
Time of concentration (TC) =     7.72 min.


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Process from Point/Station       20.000 to Point/Station       20.000
**** SUBAREA FLOW ADDITION **** A-17
------------------------------------------------------------------------
RESIDENTIAL(11+ dwl/acre)
Decimal fraction soil group A = 0.000
Decimal fraction soil group B = 1.000
Decimal fraction soil group C = 0.000
Decimal fraction soil group D = 0.000
SCS curve number for soil(AMC 2)  = 56.00
Adjusted SCS curve number for AMC 3 = 75.80
Pervious ratio(Ap) = 0.2000     Max loss rate(Fm)=     0.088(In/Hr)
Time of concentration =     7.72 min.
Rainfall intensity =      4.108(In/Hr) for a   100.0 year storm
Effective runoff coefficient used for area,(total area with modified
rational method)(Q=KCIA) is C = 0.881
Subarea runoff =      1.572(CFS) for    0.450(Ac.)
Total runoff =      5.788(CFS)
Effective area this stream =        1.60(Ac.)
Total Study Area (Main Stream No. 2) =        5.83(Ac.)
```

```
Area averaged Fm value =    0.088(In/Hr)


++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station       20.000 to Point/Station       21.000
**** PIPEFLOW TRAVEL TIME (Program estimated size) ****
----------------------------------------------------------------------
Upstream point/station elevation =   704.150(Ft.)
Downstream point/station elevation =   703.670(Ft.)
Pipe length  =    88.00(Ft.)   Manning's N = 0.012
No. of pipes = 1  Required pipe flow  =     5.788(CFS)
Nearest computed pipe diameter  =     18.00(In.)
Calculated individual pipe flow  =     5.788(CFS)
Normal flow depth in pipe =   10.98(In.)
Flow top width inside pipe =   17.56(In.)
Critical Depth =   11.15(In.)
Pipe flow velocity =      5.13(Ft/s)
Travel time through pipe =    0.29 min.
Time of concentration (TC) =     8.00 min.


++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station       21.000 to Point/Station       21.000
**** SUBAREA FLOW ADDITION **** A-18
----------------------------------------------------------------------
RESIDENTIAL(11+ dwl/acre)
Decimal fraction soil group A = 0.000
Decimal fraction soil group B = 1.000
Decimal fraction soil group C = 0.000
Decimal fraction soil group D = 0.000
SCS curve number for soil(AMC 2)  = 56.00
Adjusted SCS curve number for AMC 3 = 75.80
Pervious ratio(Ap) = 0.2000     Max loss rate(Fm)=     0.088(In/Hr)
Time of concentration =     8.00 min.
Rainfall intensity =      4.019(In/Hr) for a   100.0 year storm
Effective runoff coefficient used for area,(total area with modified
rational method)(Q=KCIA) is C = 0.880
Subarea runoff =      0.969(CFS) for    0.310(Ac.)
Total runoff =      6.757(CFS)
Effective area this stream =        1.91(Ac.)
Total Study Area (Main Stream No. 2) =        6.14(Ac.)
Area averaged Fm value =    0.088(In/Hr)


++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station       21.000 to Point/Station       22.000
**** PIPEFLOW TRAVEL TIME (Program estimated size) ****
----------------------------------------------------------------------
Upstream point/station elevation =   703.670(Ft.)
Downstream point/station elevation =   703.290(Ft.)
Pipe length  =    70.00(Ft.)   Manning's N = 0.012
No. of pipes = 1  Required pipe flow  =     6.757(CFS)
Nearest computed pipe diameter  =     18.00(In.)
Calculated individual pipe flow  =     6.757(CFS)
Normal flow depth in pipe =   12.25(In.)
Flow top width inside pipe =   16.79(In.)
Critical Depth =   12.08(In.)
Pipe flow velocity =      5.28(Ft/s)
Travel time through pipe =    0.22 min.
Time of concentration (TC) =     8.22 min.
```

++
Process from Point/Station 22.000 to Point/Station 22.000
**** SUBAREA FLOW ADDITION **** **A-19**

RESIDENTIAL(11+ dwl/acre)
Decimal fraction soil group A = 0.000
Decimal fraction soil group B = 1.000
Decimal fraction soil group C = 0.000
Decimal fraction soil group D = 0.000
SCS curve number for soil(AMC 2) = 56.00
Adjusted SCS curve number for AMC 3 = 75.80
Pervious ratio(Ap) = 0.2000 Max loss rate(Fm)= 0.088(In/Hr)
Time of concentration = 8.22 min.
Rainfall intensity = 3.954(In/Hr) for a 100.0 year storm
Effective runoff coefficient used for area,(total area with modified rational method)(Q=KCIA) is C = 0.880
Subarea runoff = 0.827(CFS) for 0.270(Ac.)
Total runoff = 7.585(CFS)
Effective area this stream = 2.18(Ac.)
Total Study Area (Main Stream No. 2) = 6.41(Ac.)
Area averaged Fm value = 0.088(In/Hr)

++
Process from Point/Station 22.000 to Point/Station 23.000
**** PIPEFLOW TRAVEL TIME (Program estimated size) ****

Upstream point/station elevation = 703.290(Ft.)
Downstream point/station elevation = 702.930(Ft.)
Pipe length = 66.00(Ft.) Manning's N = 0.012
No. of pipes = 1 Required pipe flow = 7.585(CFS)
Nearest computed pipe diameter = 18.00(In.)
Calculated individual pipe flow = 7.585(CFS)
Normal flow depth in pipe = 13.38(In.)
Flow top width inside pipe = 15.72(In.)
Critical Depth = 12.81(In.)
Pipe flow velocity = 5.38(Ft/s)
Travel time through pipe = 0.20 min.
Time of concentration (TC) = 8.43 min.

++
Process from Point/Station 23.000 to Point/Station 23.000
**** SUBAREA FLOW ADDITION **** **A-20**

RESIDENTIAL(11+ dwl/acre)
Decimal fraction soil group A = 0.000
Decimal fraction soil group B = 1.000
Decimal fraction soil group C = 0.000
Decimal fraction soil group D = 0.000
SCS curve number for soil(AMC 2) = 56.00
Adjusted SCS curve number for AMC 3 = 75.80
Pervious ratio(Ap) = 0.2000 Max loss rate(Fm)= 0.088(In/Hr)
Time of concentration = 8.43 min.
Rainfall intensity = 3.896(In/Hr) for a 100.0 year storm
Effective runoff coefficient used for area,(total area with modified rational method)(Q=KCIA) is C = 0.880
Subarea runoff = 0.949(CFS) for 0.310(Ac.)
Total runoff = 8.534(CFS)
Effective area this stream = 2.49(Ac.)
Total Study Area (Main Stream No. 2) = 6.72(Ac.)
Area averaged Fm value = 0.088(In/Hr)

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++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station       23.000 to Point/Station       24.000
**** PIPEFLOW TRAVEL TIME (Program estimated size) ****
----------------------------------------------------------------------
Upstream point/station elevation =   702.930(Ft.)
Downstream point/station elevation =   702.190(Ft.)
Pipe length  =   135.00(Ft.)   Manning's N = 0.012
No. of pipes = 1  Required pipe flow  =     8.534(CFS)
Nearest computed pipe diameter  =     21.00(In.)
Calculated individual pipe flow  =     8.534(CFS)
Normal flow depth in pipe =   12.60(In.)
Flow top width inside pipe =   20.58(In.)
Critical Depth =   13.01(In.)
Pipe flow velocity =      5.67(Ft/s)
Travel time through pipe =    0.40 min.
Time of concentration (TC) =     8.83 min.


++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station       24.000 to Point/Station       24.000
**** SUBAREA FLOW ADDITION **** A-21
----------------------------------------------------------------------
RESIDENTIAL(11+ dwl/acre)
Decimal fraction soil group A = 0.000
Decimal fraction soil group B = 1.000
Decimal fraction soil group C = 0.000
Decimal fraction soil group D = 0.000
SCS curve number for soil(AMC 2)  = 56.00
Adjusted SCS curve number for AMC 3 = 75.80
Pervious ratio(Ap) = 0.2000     Max loss rate(Fm)=     0.088(In/Hr)
Time of concentration =     8.83 min.
Rainfall intensity =      3.790(In/Hr) for a   100.0 year storm
Effective runoff coefficient used for area,(total area with modified
rational method)(Q=KCIA) is C = 0.879
Subarea runoff =      0.462(CFS) for    0.210(Ac.)
Total runoff =      8.995(CFS)
Effective area this stream =        2.70(Ac.)
Total Study Area (Main Stream No. 2) =        6.93(Ac.)
Area averaged Fm value =    0.088(In/Hr)


++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station       24.000 to Point/Station       25.000
**** PIPEFLOW TRAVEL TIME (Program estimated size) ****
----------------------------------------------------------------------
Upstream point/station elevation =   702.190(Ft.)
Downstream point/station elevation =   702.090(Ft.)
Pipe length  =    18.00(Ft.)   Manning's N = 0.012
No. of pipes = 1  Required pipe flow  =     8.995(CFS)
Nearest computed pipe diameter  =     21.00(In.)
Calculated individual pipe flow  =     8.995(CFS)
Normal flow depth in pipe =   12.98(In.)
Flow top width inside pipe =   20.40(In.)
Critical Depth =   13.37(In.)
Pipe flow velocity =      5.76(Ft/s)
Travel time through pipe =    0.05 min.
Time of concentration (TC) =     8.88 min.
```

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++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station       25.000 to Point/Station       25.000
**** SUBAREA FLOW ADDITION **** A-22
----------------------------------------------------------------------
RESIDENTIAL(11+ dwl/acre)
Decimal fraction soil group A = 0.000
Decimal fraction soil group B = 1.000
Decimal fraction soil group C = 0.000
Decimal fraction soil group D = 0.000
SCS curve number for soil(AMC 2)  = 56.00
Adjusted SCS curve number for AMC 3 = 75.80
Pervious ratio(Ap) = 0.2000     Max loss rate(Fm)=     0.088(In/Hr)
Time of concentration =     8.88 min.
Rainfall intensity =      3.776(In/Hr) for a   100.0 year storm
Effective runoff coefficient used for area,(total area with modified
rational method)(Q=KCIA) is C = 0.879
Subarea runoff =      1.461(CFS) for    0.450(Ac.)
Total runoff =     10.457(CFS)
Effective area this stream =        3.15(Ac.)
Total Study Area (Main Stream No. 2) =        7.38(Ac.)
Area averaged Fm value =    0.088(In/Hr)


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Process from Point/Station       25.000 to Point/Station       26.000
**** PIPEFLOW TRAVEL TIME (Program estimated size) ****
----------------------------------------------------------------------
Upstream point/station elevation =   702.090(Ft.)
Downstream point/station elevation =   701.870(Ft.)
Pipe length  =    40.00(Ft.)   Manning's N = 0.012
No. of pipes = 1  Required pipe flow  =    10.457(CFS)
Nearest computed pipe diameter  =     21.00(In.)
Calculated individual pipe flow  =    10.457(CFS)
Normal flow depth in pipe =   14.48(In.)
Flow top width inside pipe =   19.43(In.)
Critical Depth =   14.45(In.)
Pipe flow velocity =      5.91(Ft/s)
Travel time through pipe =    0.11 min.
Time of concentration (TC) =     8.99 min.


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Process from Point/Station       26.000 to Point/Station       26.000
**** CONFLUENCE OF MAIN STREAMS ****
----------------------------------------------------------------------
The following data inside Main Stream is listed:
In Main Stream number: 2
Stream flow area =      3.150(Ac.)
Runoff from this stream =     10.457(CFS)
Time of concentration =    8.99 min.
Rainfall intensity =     3.748(In/Hr)
Area averaged loss rate (Fm) =    0.0880(In/Hr)
Area averaged Pervious ratio (Ap) = 0.2000
Summary of stream data:

Stream Flow rate    Area    TC     Fm       Rainfall Intensity
 No.    (CFS)   (Ac.)       (min) (In/Hr)     (In/Hr)


1     15.12     4.110      7.58    0.088      4.151
2     10.46     3.150      8.99    0.088      3.748
Qmax(1) =
```

```
         1.000 *    1.000 *    15.115) +
         1.110 *    0.843 *    10.457) + =      24.906
Qmax(2) =
         0.901 *    1.000 *    15.115) +
         1.000 *    1.000 *    10.457) + =      24.072

Total of 2 main streams to confluence:
Flow rates before confluence point:
      16.115      11.457
Maximum flow rates at confluence using above data:
       24.906       24.072
Area of streams before confluence:
        4.110        3.150
Effective area values after confluence:
        6.767        7.260


Results of confluence:
Total flow rate =     24.906(CFS)
Time of concentration =     7.583 min.
Effective stream area after confluence  =      6.767(Ac.)
Study area average Pervious fraction(Ap) =  0.200
Study area average soil loss rate(Fm) =    0.088(In/Hr)
Study area total =       7.26(Ac.)


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Process from Point/Station       26.000 to Point/Station       27.000
**** PIPEFLOW TRAVEL TIME (Program estimated size) ****
------------------------------------------------------------------------
Upstream point/station elevation =   701.870(Ft.)
Downstream point/station elevation =   701.720(Ft.)
Pipe length  =    80.00(Ft.)   Manning's N = 0.012
No. of pipes = 1  Required pipe flow  =    24.906(CFS)
Nearest computed pipe diameter  =     36.00(In.)
Calculated individual pipe flow  =    24.906(CFS)
Normal flow depth in pipe =   24.28(In.)
Flow top width inside pipe =   33.74(In.)
Critical Depth =   19.32(In.)
Pipe flow velocity =      4.91(Ft/s)
Travel time through pipe =    0.27 min.
Time of concentration (TC) =     7.85 min.


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Process from Point/Station       27.000 to Point/Station       27.000
**** SUBAREA FLOW ADDITION ****
```

A-23

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------------------------------------------------------------------------
RESIDENTIAL(11+ dwl/acre)
Decimal fraction soil group A = 0.000
Decimal fraction soil group B = 1.000
Decimal fraction soil group C = 0.000
Decimal fraction soil group D = 0.000
SCS curve number for soil(AMC 2)  = 56.00
Adjusted SCS curve number for AMC 3 = 75.80
Pervious ratio(Ap) = 0.2000     Max loss rate(Fm)=     0.088(In/Hr)
Time of concentration =     7.85 min.
Rainfall intensity =      4.065(In/Hr) for a   100.0 year storm
Effective runoff coefficient used for area,(total area with modified
rational method)(Q=KCIA) is C = 0.881
Subarea runoff =      0.278(CFS) for    0.270(Ac.)
Total runoff =     25.184(CFS)
Effective area this stream =        7.04(Ac.)
```

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Total Study Area (Main Stream No. 1) =        7.65(Ac.)
Area averaged Fm value =    0.088(In/Hr)


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Process from Point/Station       27.000 to Point/Station       28.000
**** PIPEFLOW TRAVEL TIME (Program estimated size) ****
----------------------------------------------------------------------
Upstream point/station elevation =   701.720(Ft.)
Downstream point/station elevation =   701.380(Ft.)
Pipe length  =    68.00(Ft.)   Manning's N = 0.012
No. of pipes = 1  Required pipe flow  =    25.184(CFS)
Nearest computed pipe diameter  =     30.00(In.)
Calculated individual pipe flow  =    25.184(CFS)
Normal flow depth in pipe =   20.32(In.)
Flow top width inside pipe =   28.05(In.)
Critical Depth =   20.51(In.)
Pipe flow velocity =      7.11(Ft/s)
Travel time through pipe =    0.16 min.
Time of concentration (TC) =     8.01 min.


++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station       28.000 to Point/Station       28.000
**** SUBAREA FLOW ADDITION ****
----------------------------------------------------------------------
RESIDENTIAL(11+ dwl/acre)
Decimal fraction soil group A = 0.000
Decimal fraction soil group B = 1.000
Decimal fraction soil group C = 0.000
Decimal fraction soil group D = 0.000
SCS curve number for soil(AMC 2)  = 56.00
Adjusted SCS curve number for AMC 3 = 75.80
Pervious ratio(Ap) = 0.2000     Max loss rate(Fm)=     0.088(In/Hr)
Time of concentration =     8.01 min.
Rainfall intensity =      4.016(In/Hr) for a   100.0 year storm
Effective runoff coefficient used for area,(total area with modified
rational method)(Q=KCIA) is C = 0.880
Subarea runoff =      2.414(CFS) for    0.770(Ac.)
Total runoff =     27.597(CFS)
Effective area this stream =        7.81(Ac.)
Total Study Area (Main Stream No. 1) =        8.42(Ac.)
Area averaged Fm value =    0.088(In/Hr)


++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station       28.000 to Point/Station       29.000
**** PIPEFLOW TRAVEL TIME (Program estimated size) ****
----------------------------------------------------------------------
Upstream point/station elevation =   701.380(Ft.)
Downstream point/station elevation =   701.080(Ft.)
Pipe length  =    56.00(Ft.)   Manning's N = 0.012
No. of pipes = 1  Required pipe flow  =    27.597(CFS)
Nearest computed pipe diameter  =     30.00(In.)
Calculated individual pipe flow  =    27.597(CFS)
Normal flow depth in pipe =   21.23(In.)
Flow top width inside pipe =   27.29(In.)
Critical Depth =   21.49(In.)
Pipe flow velocity =      7.44(Ft/s)
Travel time through pipe =    0.13 min.
Time of concentration (TC) =     8.14 min.
End of computations, Total Study Area =           8.42 (Ac.)
The following figures may
```

A-24

be used for a unit hydrograph study of the same area.
Note: These figures do not consider reduced effective area
effects caused by confluences in the rational equation.

Area averaged pervious area fraction(Ap) = 0.200
Area averaged SCS curve number = 56.0

San Bernardino County Rational Hydrology Program

(Hydrology Manual Date - August 1986)

CIVILCADD/CIVILDESIGN Engineering Software, (c) 1989-2012 Version 7.2
Rational Hydrology Study Date: 07/18/24

ESPERANZA - PA II
EUCALYPTUS AVENUE & AMHERST AVENUE, ONTARIO, CALIFORNIA
PROPOSED Q 100
2175-906-001

Program License Serial Number 6293

********* Hydrology Study Control Information **********

Rational hydrology study storm event year is 100.0
Computed rainfall intensity:
Storm year = 100.00 1 hour rainfall = 1.200 (In.)
Slope used for rainfall intensity curve b = 0.6000
Soil antecedent moisture condition (AMC) = 3

++

Process from Point/Station 20.000 to Point/Station 21.000
**** INITIAL AREA EVALUATION ****B-1

RESIDENTIAL(11+ dwl/acre)
Decimal fraction soil group A = 0.000
Decimal fraction soil group B = 1.000
Decimal fraction soil group C = 0.000
Decimal fraction soil group D = 0.000
SCS curve number for soil(AMC 2) = 56.00
Adjusted SCS curve number for AMC 3 = 75.80
Pervious ratio(Ap) = 0.2000 Max loss rate(Fm)= 0.088(In/Hr)
Initial subarea data:
Initial area flow distance = 140.000(Ft.)
Top (of initial area) elevation = 708.080(Ft.)
Bottom (of initial area) elevation = 706.540(Ft.)
Difference in elevation = 1.540(Ft.)
Slope = 0.01100 s(%)= 1.10
TC = k(0.324)*[(length^3)/(elevation change)]^0.2
Initial area time of concentration = 5.764 min.
Rainfall intensity = 4.894(In/Hr) for a 100.0 year storm
Effective runoff coefficient used for area (Q=KCIA) is C = 0.884
Subarea runoff = 6.920(CFS)
Total initial stream area = 1.600(Ac.)
Pervious area fraction = 0.200
Initial area Fm value = 0.088(In/Hr)
End of computations, Total Study Area = 1.60 (Ac.)
The following figures may
be used for a unit hydrograph study of the same area.
Note: These figures do not consider reduced effective area
effects caused by confluences in the rational equation.

Area averaged pervious area fraction(Ap) = 0.200
Area averaged SCS curve number = 56.0

SECTION 6

CATCH BASIN SIZING
(100-YEAR)

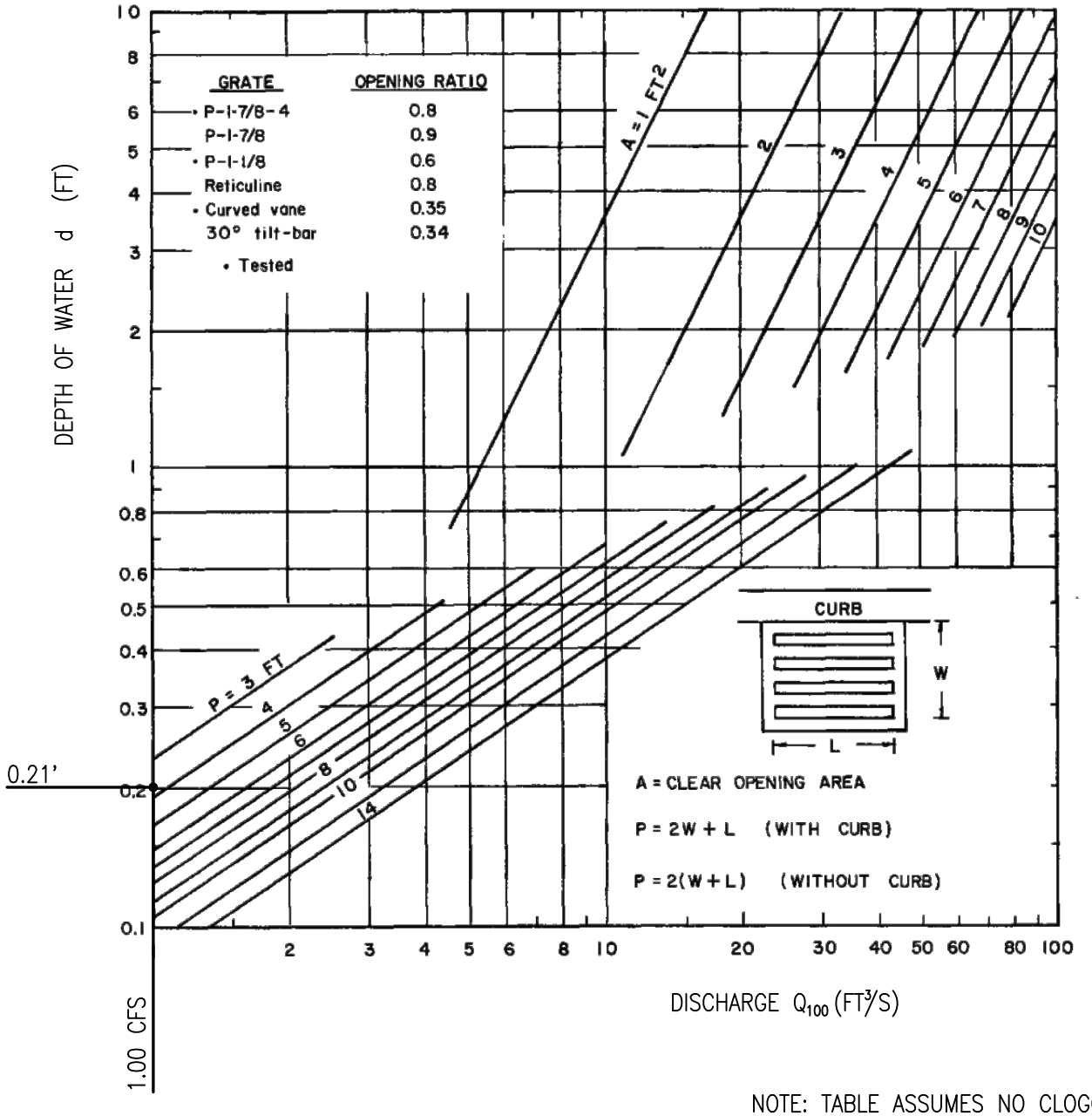
12"X12" GRATED INLET IN ALLEYS AND OPEN AREAS

Q_{100} = 0.50 CFS (LARGEST Q)

P = 2(W+L) = 4'

Q X 2 = 0.50 CFS X 2 = 1.00 CFS (CLOGGING ASSUMPTION)

RESULT: 0.21' WHICH IS LESS THAN THEN SPILL OVER DEPTH, THEREFORE OK



NOTE: TABLE ASSUMES NO CLOGGING

WALDEN & ASSOCIATES

2552 WHITE RD., SUITE B, IRVINE, CA 92614

(949) 660-0110 FAX: 660-0418

GRATE INLET CAPACITY IN SUMP CONDITION

SOURCE: U.S. DEPARTMENT OF TRANSPORTATION, HEC-22, CHART 9B

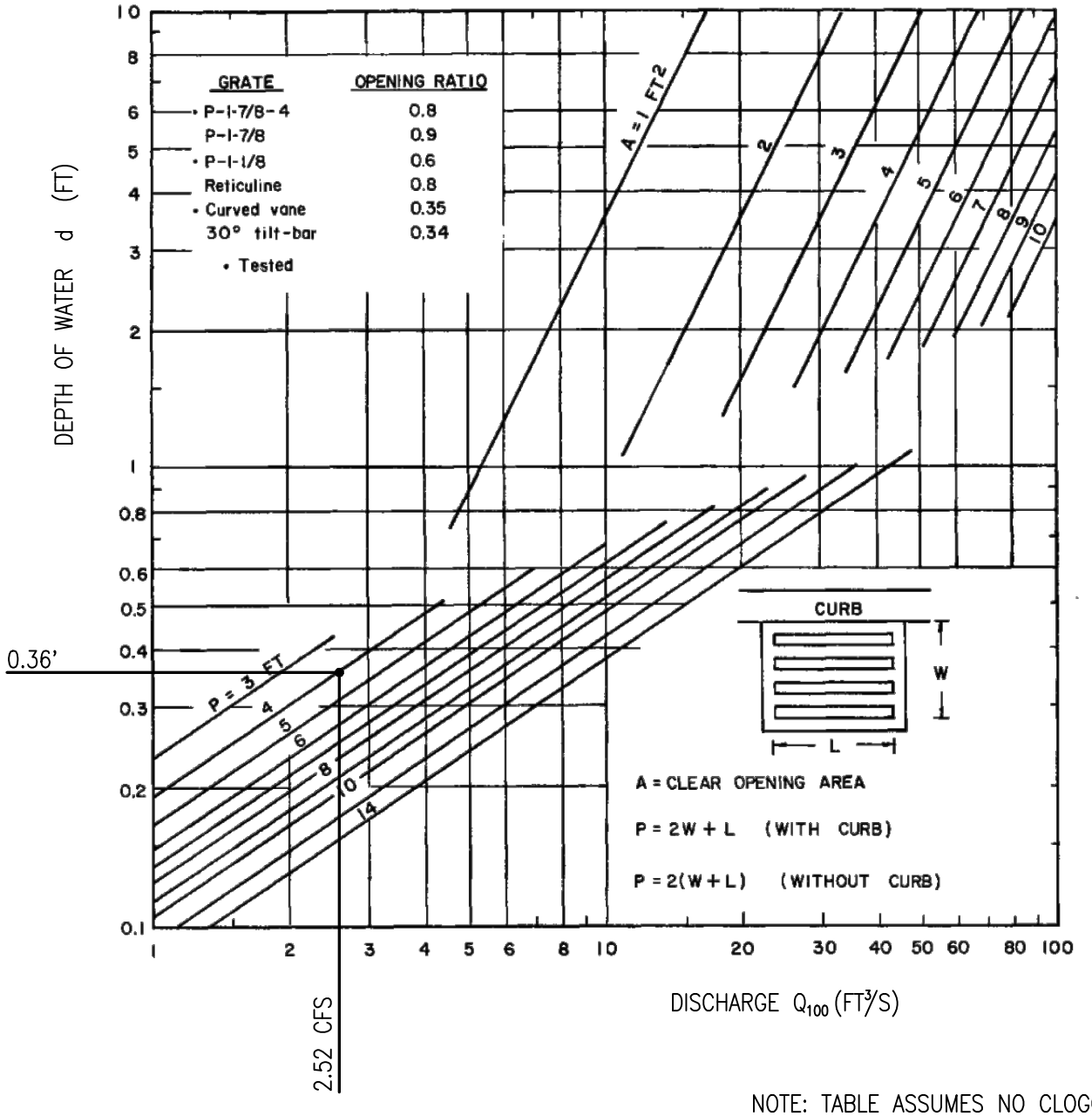
24"X24" GRATED INLET FOR AREAS A-15

Q_{100} = 1.26 CFS

P = 4'

Q X 2 = 1.26 CFS X 2 = 2.52 CFS (CLOGGING ASSUMPTION)

RESULT: 0.36' WHICH IS LESS THAN TOP OF CURB, THEREFORE OK



NOTE: TABLE ASSUMES NO CLOGGING

WALDEN & ASSOCIATES

2552 WHITE RD., SUITE B, IRVINE, CA 92614

(949) 660-0110 FAX: 660-0418

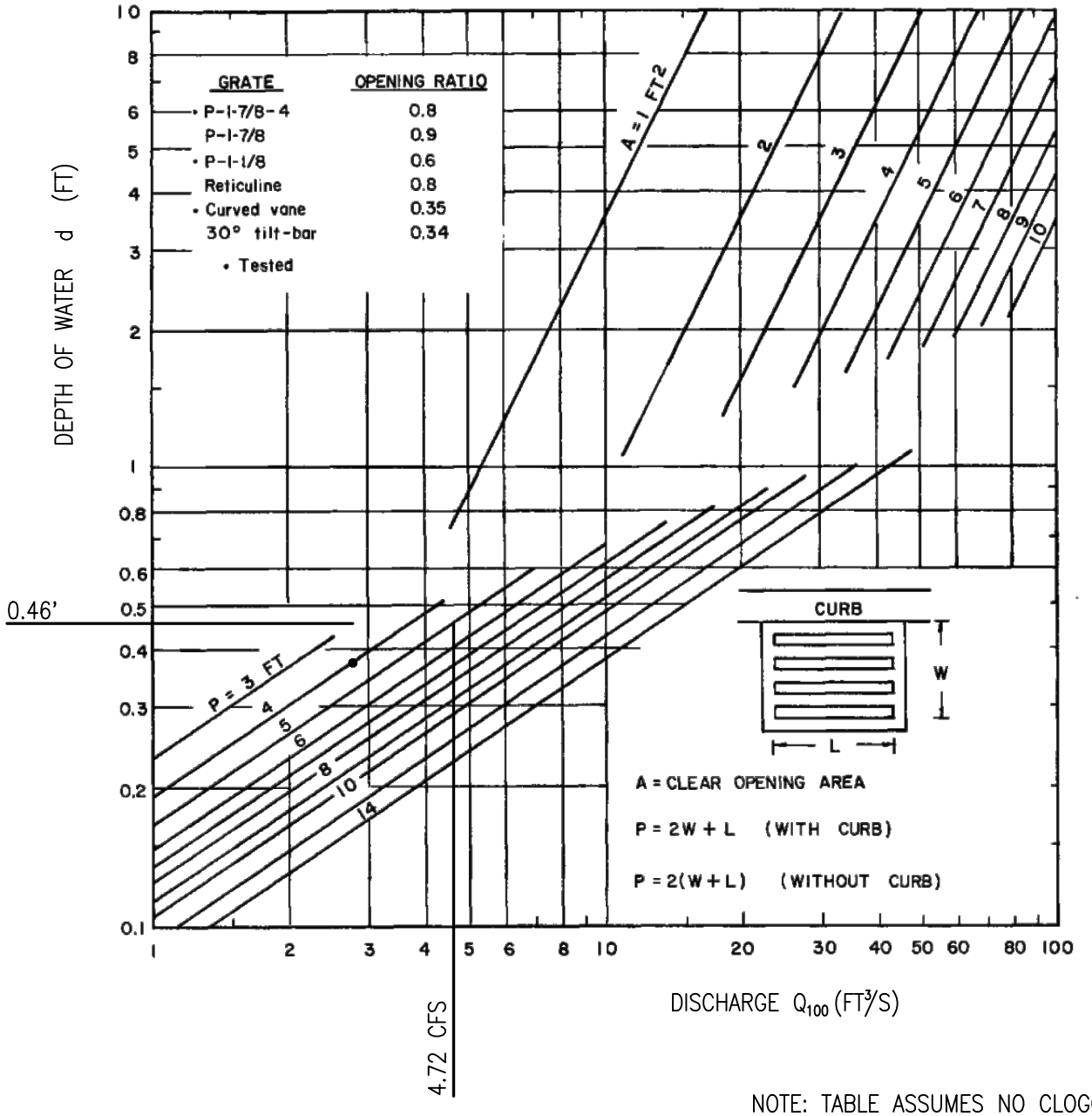
GRATE INLET CAPACITY IN SUMP CONDITION

SOURCE: U.S. DEPARTMENT OF TRANSPORTATION, HEC-22, CHART 9B

24"X24" GRATED INLET

Q_{100} = 2.36 CFS
P = 2W+L = 3'
Q X 2 = 2.36 CFS X 2 = 4.72 CFS (CLOGGING ASSUMPTION)

RESULT: 0.39' WHICH IS LESS THAN THE TOP OF CURB, THEREFORE OK



NOTE: TABLE ASSUMES NO CLOGGING

WALDEN & ASSOCIATES
2552 WHITE RD., SUITE B, IRVINE, CA 92614
(949) 660-0110 FAX: 660-0418

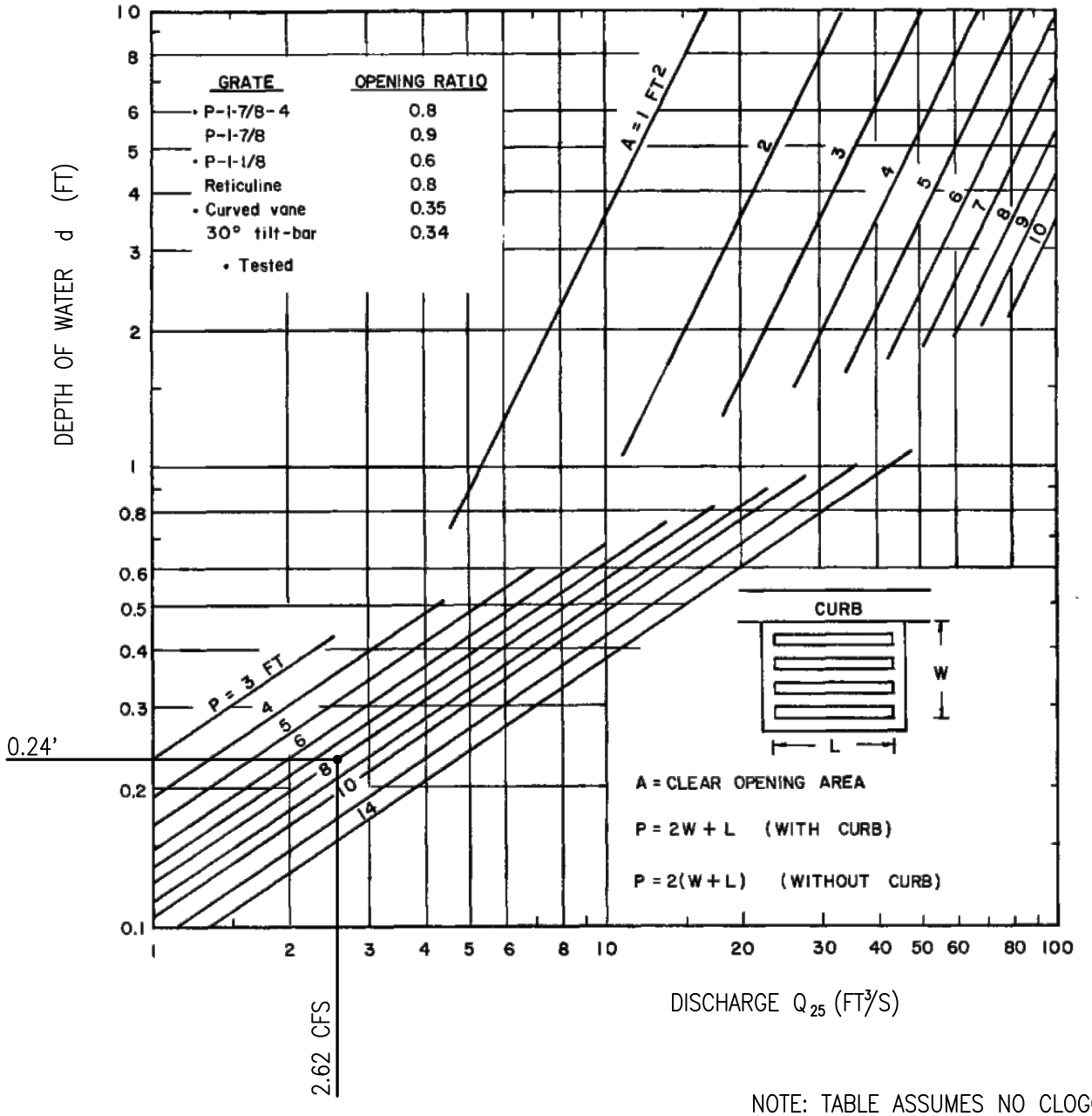
GRATE INLET CAPACITY IN SUMP CONDITION

SOURCE: U.S. DEPARTMENT OF TRANSPORTATION, HEC-22, CHART 9B

24"X24" GRATED INLET FOR AREA A-12

Q_{25} = 1.31 CFS
P = 2(W+L) = 8'
Q X 2 = 1.31 CFS X 2 = 2.62 CFS (CLOGGING ASSUMPTION)

RESULT: 0.24' WHICH IS BEFORE SPILL-OVER DEPTH TO ADJACENT DRAINAGE AREA, THEREFORE OK



NOTE: TABLE ASSUMES NO CLOGGING

WALDEN & ASSOCIATES
2552 WHITE RD., SUITE B, IRVINE, CA 92614
(949) 660-0110 FAX: 660-0418

GRATE INLET CAPACITY IN SUMP CONDITION

SOURCE: U.S. DEPARTMENT OF TRANSPORTATION, HEC-22, CHART 9B

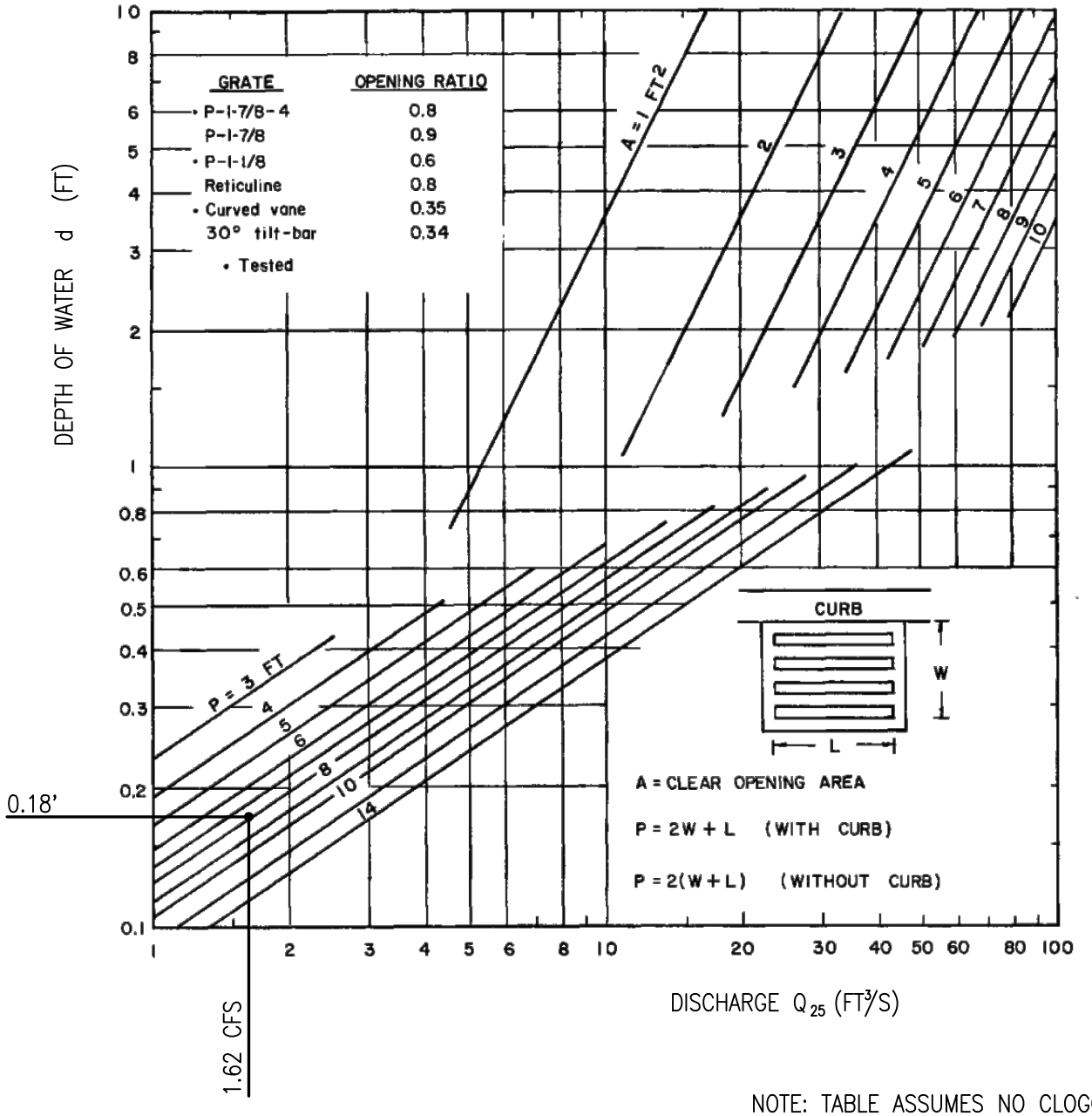
24"X24" GRATED INLET FOR AREA A-14

Q_{25} = 0.81 CFS

P = 2(W+L) = 8'

Q X 2 = 0.81 CFS X 2 = 1.62 CFS (CLOGGING ASSUMPTION) WORSE CASE

RESULT: 0.18' WHICH IS BEFORE SPILL-OVER DEPTH TO ADJACENT DRAINAGE AREA, THEREFORE OK



NOTE: TABLE ASSUMES NO CLOGGING

WALDEN & ASSOCIATES

2552 WHITE RD., SUITE B, IRVINE, CA 92614

(949) 660-0110 FAX: 660-0418

GRATE INLET CAPACITY IN SUMP CONDITION

SOURCE: U.S. DEPARTMENT OF TRANSPORTATION, HEC-22, CHART 9B

```
**********************************************************************
                HYDRAULIC ELEMENTS - I  PROGRAM PACKAGE
        (C) Copyright 1982-2014 Advanced Engineering Software (aes)
            Ver. 21.0  Release Date: 06/01/2014  License ID 1272

                           Analysis prepared by:

                             WALDEN & ASSOCIATES
                           2552 WHITE ROAD, SUITE B
                              IRVINE, CA 92614
                       TEL: # 949.660.0110 FAX: # 949.660.0418

----------------------------------------------------------------------
  TIME/DATE OF STUDY: 14:55 07/18/2024
======================================================================
 Problem Descriptions:
  FOR AREA A-14


**********************************************************************
>>>>SUMP TYPE BASIN INPUT INFORMATION<<<< FOR AREA A-14
----------------------------------------------------------------------

    Curb Inlet Capacities are approximated based on the Bureau of
    Public Roads nomograph plots for flowby basins and sump basins.


    BASIN INFLOW(CFS) =    2.30
    BASIN OPENING(FEET) =  0.33
    DEPTH OF WATER(FEET) =  0.32

    >>>>CALCULATED ESTIMATED SUMP BASIN WIDTH(FEET) =       4.12 USE 4'

======================================================================

 Problem Descriptions:
  FOR AREA A-24


**********************************************************************
>>>>SUMP TYPE BASIN INPUT INFORMATION<<<< FOR AREA A-24
----------------------------------------------------------------------

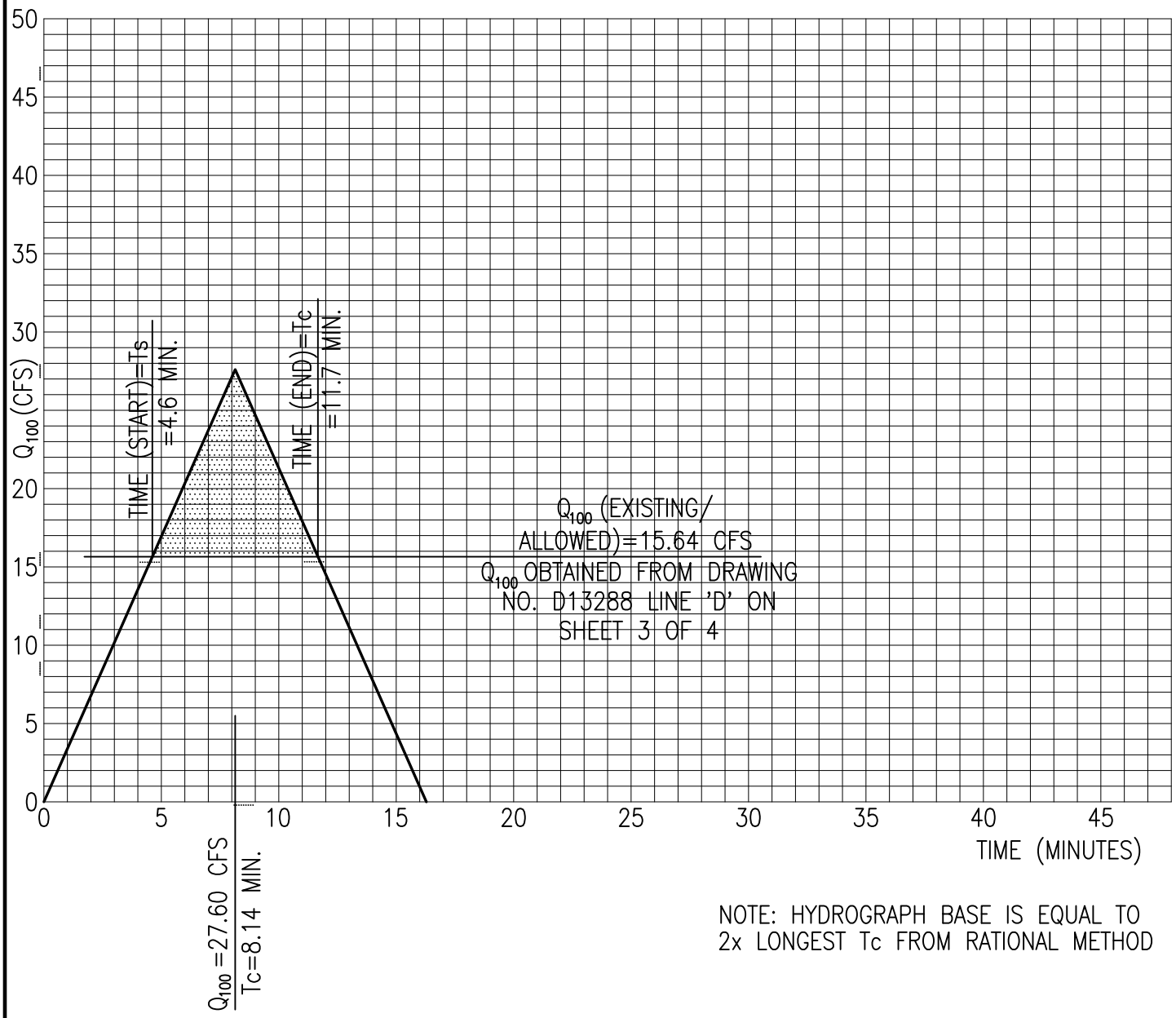
    Curb Inlet Capacities are approximated based on the Bureau of
    Public Roads nomograph plots for flowby basins and sump basins.


    BASIN INFLOW(CFS) =    2.41
    BASIN OPENING(FEET) =  0.50
    DEPTH OF WATER(FEET) =  0.45

    >>>>CALCULATED ESTIMATED SUMP BASIN WIDTH(FEET) =       2.59 USE 3'
```

SECTION 7

HYDROGRAPH



NOTE: HYDROGRAPH BASE IS EQUAL TO
2x LONGEST Tc FROM RATIONAL METHOD

REQUIRED STORAGE VOLUME

Q (ALLOWED) = Qa = EXISTING Q25 = 15.67 CFS

REQUIRED STORAGE VOLUME = (PROP Q100 – Qa) X (Tc – Ts) X 60 sec./min.
= (27.60 CFS – 15.64 CFS) X (11.7 MIN. – 4.6 MIN.) X 60 SEC./MIN.
= 5,095 CF

STORAGE VOLUME PROVIDED = 725 LF OF 36" (7.07 SQ FT) = 5,175 CF

WALDEN & ASSOCIATES
2552 WHITE RD., SUITE B, IRVINE, CA 92614
(949) 660-0110 FAX: 660-0418

HYDROGRAPH

PROPOSED DETENTION SYSTEM SIZING
(PROPOSED 100-YEAR – EXISTING 100-YEAR)

SECTION 8

ORIFICE CALCULATION

Cross Section for Rectangular Orifice

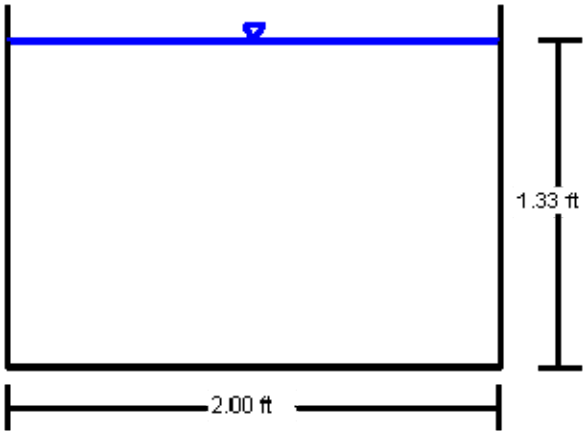
Project Description

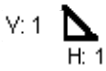
Solve For	Opening Height

Input Data

Discharge	15.64	ft³/s
Headwater Elevation	697.00	ft
Centroid Elevation	695.50	ft
Tailwater Elevation	692.64	ft
Discharge Coefficient	0.60	
Opening Width	2.00	ft
Opening Height	1.33	ft

Cross Section Image





Worksheet for Rectangular Orifice

Project Description

Solve For	Opening Height

Input Data

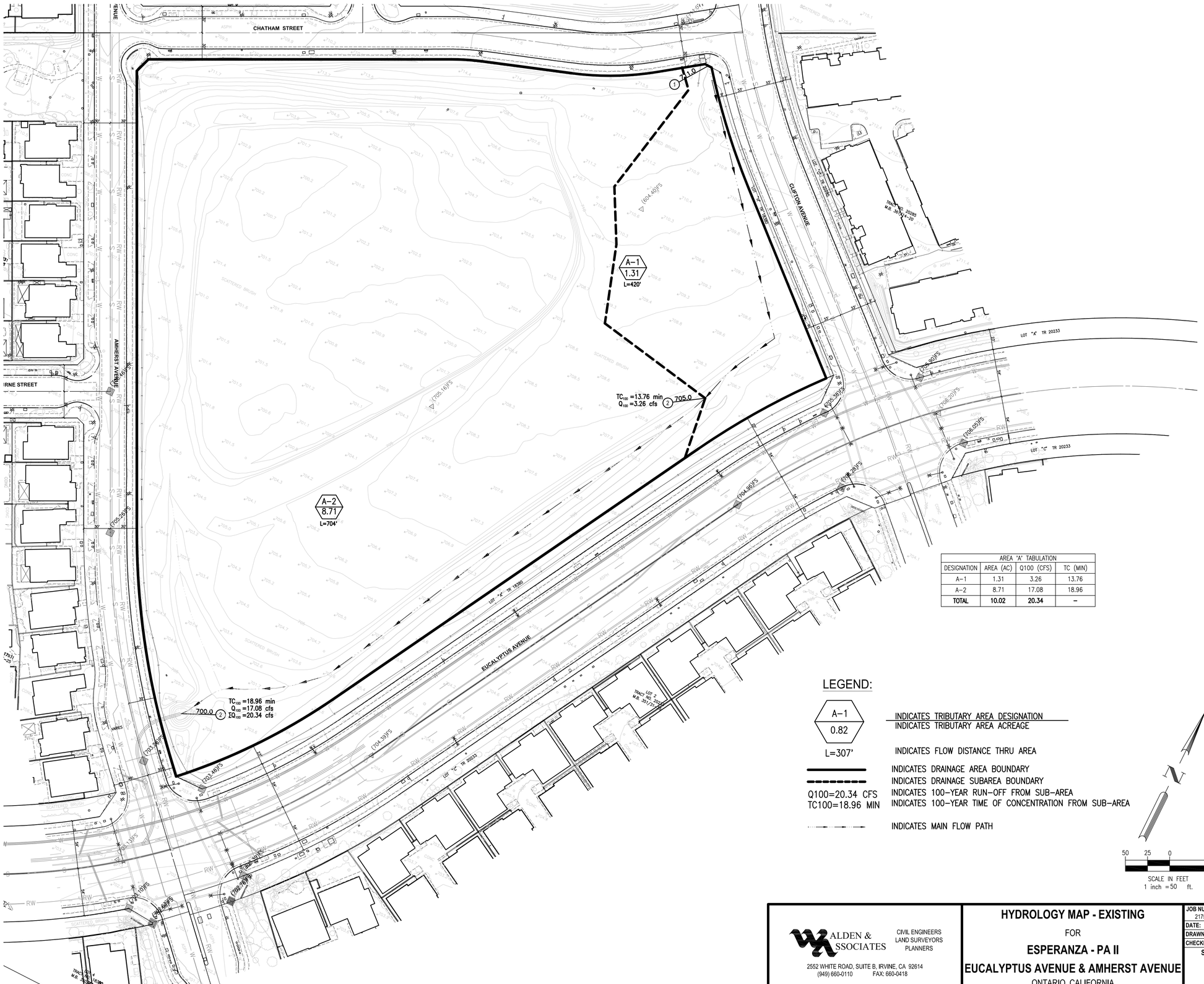
Discharge	15.64	ft³/s
Headwater Elevation	697.00	ft
Centroid Elevation	695.50	ft
Tailwater Elevation	692.64	ft
Discharge Coefficient	0.60	
Opening Width	2.00	ft

Results

Opening Height	1.33	ft
Headwater Height Above Centroid	1.50	ft
Tailwater Height Above Centroid	-2.86	ft
Flow Area	2.65	ft²
Velocity	5.89	ft/s

SECTION 10

APPENDIX



AREA 'A' TABULATION			
DESIGNATION	AREA (AC)	Q100 (CFS)	TC (MIN)
A-1	1.31	3.26	13.76
A-2	8.71	17.08	18.96
TOTAL	**10.02**	**20.34**	–

LEGEND:

A-1 / 0.82	INDICATES TRIBUTARY AREA DESIGNATION / INDICATES TRIBUTARY AREA ACREAGE
L=307'	INDICATES FLOW DISTANCE THRU AREA
———	INDICATES DRAINAGE AREA BOUNDARY
- - - - -	INDICATES DRAINAGE SUBAREA BOUNDARY
Q100=20.34 CFS	INDICATES 100-YEAR RUN-OFF FROM SUB-AREA
TC100=18.96 MIN	INDICATES 100-YEAR TIME OF CONCENTRATION FROM SUB-AREA
·—·—·	INDICATES MAIN FLOW PATH

N

50 25 0 50

SCALE IN FEET
1 inch = 50 ft.

ALDEN & ASSOCIATES
CIVIL ENGINEERS
LAND SURVEYORS
PLANNERS
2552 WHITE ROAD, SUITE B, IRVINE, CA 92614
(949) 660-0110 FAX: 660-0418

HYDROLOGY MAP - EXISTING

FOR

ESPERANZA - PA II

EUCALYPTUS AVENUE & AMHERST AVENUE

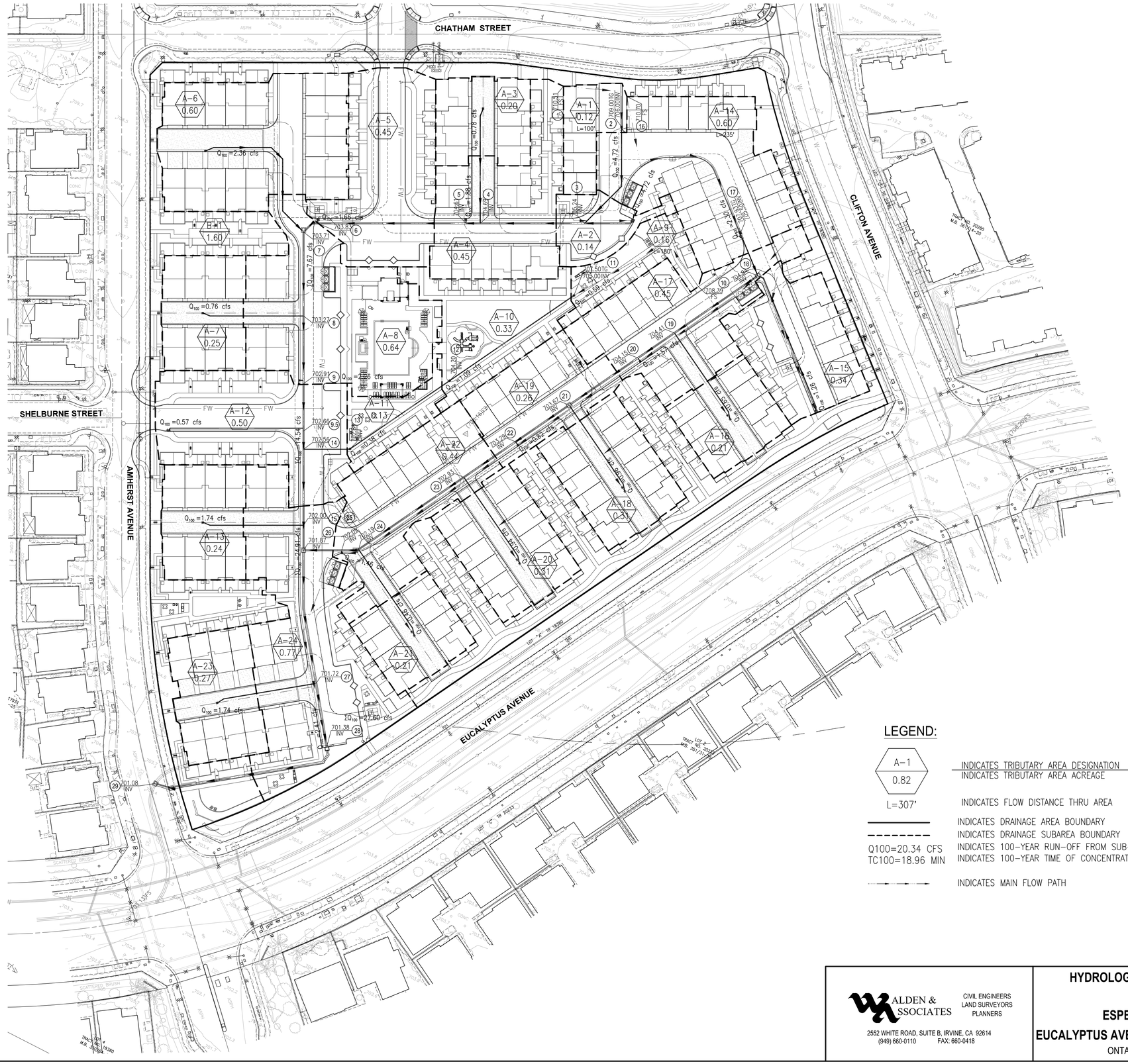
ONTARIO, CALIFORNIA

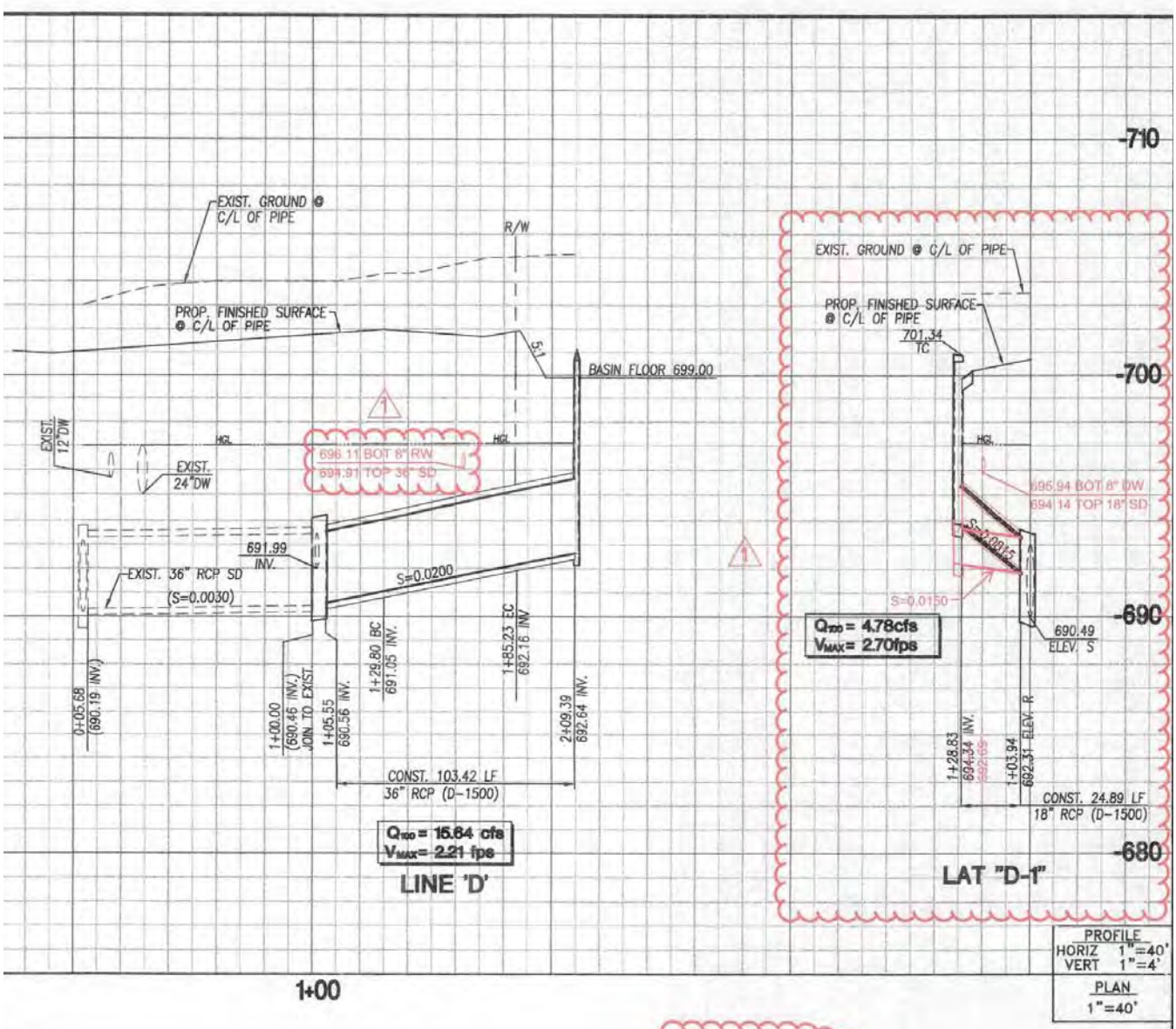
JOB NUMBER	2175-996-001
DATE:	07/2024
DRAWN:	SK
CHECKED:	MP
SHEET	1 OF 1

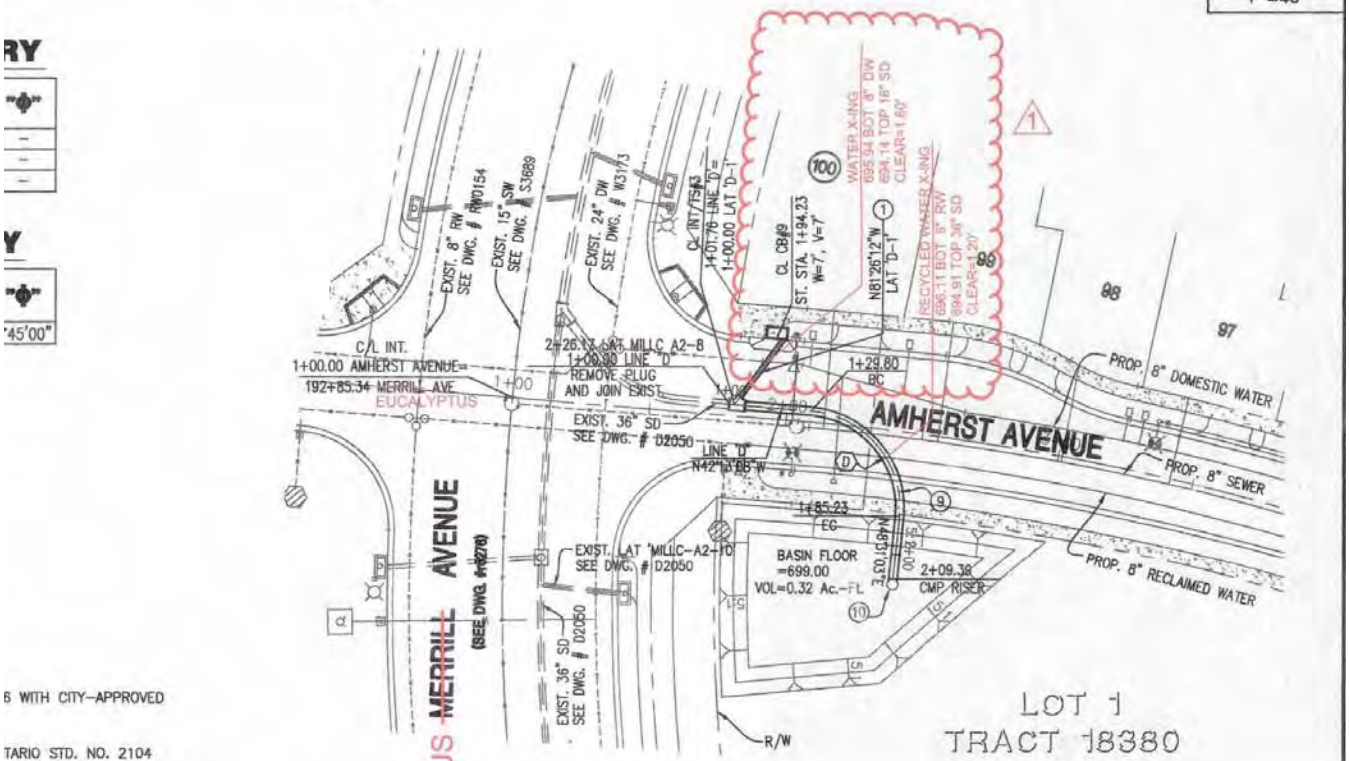
AREA 'A' TABULATION			
DESIGNATION	AREA (AC)	Q100 (CFS)	TC (MIN)
A-1	0.12	0.58	4.72
A-2	0.14	0.59	5.36
A-3	0.20	0.78	5.92
A-4	0.45	1.88	5.99
A-5	0.47	1.66	6.57
A-6	0.60	2.36	6.61
A-7	0.25	0.76	6.90
A-8	0.64	2.26	7.12
A-9	0.16	0.59	7.47
A-10	0.33	1.09	8.41
A-11	0.13	0.38	8.87
A-12	0.24	0.57	7.51
A-13	0.50	1.74	7.27
A-14	0.60	2.30	6.99
A-15	0.34	1.26	7.15
A-16	0.21	0.65	7.55
A-17	0.45	1.57	7.72
A-18	0.31	0.96	8.00
A-19	0.27	0.82	8.22
A-20	0.31	0.94	8.43
A-21	0.21	0.46	8.83
A-22	0.45	1.46	8.88
A-23	0.27	0.28	7.85
A-24	0.77	2.41	8.01
TOTAL	8.42	27.60	–

AREA 'B' TABULATION			
DESIGNATION	AREA (AC)	Q100 (CFS)	TC (MIN)
B-1	1.60	6.92	5.76

AREA TABULATION			
DESIGNATION	AREA (AC)	Q100 (CFS)	TC (MIN)
A	8.42	27.60	–
B	1.60	6.92	–
TOTAL	10.02	34.52	–


CHATHAM STREET
SHELBURNE STREET
AMHERST AVENUE
CLIFTON AVENUE
EUCALYPTUS AVENUE
A-1 0.12 L=100'
A-2 0.14
A-3 0.20
A-4 0.45
A-5 0.45
A-6 0.60
A-7 0.25
A-8 0.64
A-9 0.16
A-10 0.33
A-11 0.13
A-12 0.50
A-13 0.24
A-14 0.60 L=235'
A-15 0.34
A-16 0.21
A-17 0.45
A-18 0.31
A-19 0.26
A-20 0.31
A-21 0.21
A-22 0.44
A-23 0.27
A-24 0.77
B-1 1.60
Q100=2.36 cfs
Q100=1.66 cfs
Q100=0.76 cfs
Q100=0.57 cfs
Q100=1.74 cfs
Q100=7.60 cfs
Q100=20.34 cfs
Q100=4.72 cfs
Q100=4.78 cfs
Q100=1.88 cfs
Q100=7.67 cfs
Q100=2.26 cfs
Q100=1.09 cfs
Q100=0.59 cfs
Q100=1.57 cfs
Q100=0.38 cfs
Q100=1.46 cfs
Q100=0.96 cfs
Q100=0.65 cfs
Q100=0.46 cfs
Q100=0.28 cfs
Q100=2.41 cfs
Q100=1.26 cfs
Q100=0.82 cfs
Q100=0.94 cfs
Q100=1.46 cfs
Q100=0.58 cfs
Q100=0.59 cfs
Q100=0.78 cfs
Q100=1.88 cfs
Q100=1.66 cfs
Q100=2.36





6 WITH CITY-APPROVED

TARIO STD. NO. 2104

CURVE DATA

DELTA	RADIUS	LENGTH	TANGENT
05°14'14"	296.00'	27.06'	13.54'

Engineering Department

Preliminary Water Quality Management Plan (PWQMP)

For compliance with Santa Ana Regional Water Quality Control Board
Order Number R8-2010-0036 (NPDES Permit No. CAS618036)

Project Name:	Esperanza Townhomes
Ontario Project #:	2175-996-001 TM_20730 (PDEV24-017)
Applicant Name:	Genstar Development Company
Applicant Address:	12770 El Camino Real, Ste. 220 San Diego, CA 92130
Project Address:	Eucalyptus Avenue & Amherst Avenue Ontario, CA
Project Size (acres):	10.24-acres
Project Description:	Townhomes

Submittal Date: 3/12/2025

Preliminary Water Quality Management Plan (PWQMP)

1. Introduction

The Preliminary Water Quality Management Plan (PWQMP) is a planning tool to improve integration of required water quality elements, stormwater management, water conservation, rainwater harvesting and re-use, and flood management in land use planning and the City's development process. The Preliminary WQMP will assist project applicants and planners in properly designing and laying out project sites so that water quality may be incorporated in the most effective manner and at the lowest cost for the developer.

The San Bernardino County Municipal Separate Storm Sewer System Permit (MS4 Permit) requires project-specific Water Quality Management plans (WQMP) to be prepared for all priority new development and significant redevelopment projects listed in Section 2 of this document. The MS4 Permit stipulates that the City of Ontario require priority project applicants to submit a Preliminary project-specific WQMP, as early as possible, during the environmental review or planning phase of a development project and that the Preliminary WQMP be approved prior to the issuance of land use entitlement.

2. Priority Projects (requiring a Preliminary WQMP)

Land Use entitlement shall not be issued for any of the listed projects, below, until a Preliminary WQMP has been approved by the City's Engineering Department. For construction projects not going through entitlement, a Preliminary and Final project specific WQMP shall be approved, prior to the issuance of construction permits:

Check the appropriate project category below, for this project:

Check below	**Project Categories**
	1. All significant re-development projects. Significant re-development is defined as the addition or replacement of 5,000 or more square feet of impervious surface on an already developed site subject to discretionary approval of the Permittee. Redevelopment does not include routine maintenance activities that are conducted to maintain original line and grade, hydraulic capacity, original purpose of the facility, or emergency redevelopment activity required to protect public health and safety. Where redevelopment results in an increase of less than fifty percent of the impervious surfaces of a previously existing developed site, and the existing development was not subject to WQMP requirements, the numeric sizing criteria discussed below applies only to the addition or replacement, and not to the entire developed site. Where redevelopment results in an increase of fifty percent or more of the impervious surfaces of a previously existing developed site, the numeric sizing criteria applies to the entire development (new and existing).
✔	2. New development projects that create 10,000 square feet or more of impervious surface (collectively over the entire project site) including commercial, industrial, residential housing subdivisions (i.e., detached single family home subdivisions, multi-family attached subdivisions or townhomes, condominiums, apartments, etc.), mixed-use, and public projects. This category includes development projects on public and private land, which fall under the planning and building authority of the permitting agency.

Check below	Project Categories
	3. Automotive repair shops (with SIC codes 5013, 5014, 5541, 7532- 7534, 7536-7539).
	4. Restaurants and Food Service Establishments where the land area of development is 5,000 square feet or more.
	5. Developments of 2,500 square feet of impervious surface or more adjacent to (within 200 feet) or discharging directly into environmentally sensitive areas (ESA's) such as areas designated in the Ocean Plan as areas of special biological significance or waterbodies listed on the CWA Section 303(d) list of impaired waters.
	6. Parking lots of 5,000 square feet or more exposed to storm water. Parking lot is defined as land area or facility for the temporary storage of motor vehicles.
	7. Retail Gasoline Outlets (RGOs) that are either 5,000 sq ft or more or have a projected average daily traffic of 100 or more vehicles per day.
	8. *This project is not covered under any of the categories listed above.

* If the development is not covered under any of the project categories listed in Section 2, the project is not required to design and install Site Design/LID BMPs or Treatment Control BMPs to treat the design storm event (Design Capture Volume) described in Section 4.

3. Preliminary WQMP Objectives

Through a combination of Site Design/LID BMPs (where feasible), Source Control, and/or Treatment Control BMPs, project-specific WQMPs shall address all identified pollutants and hydrologic conditions of concern from new development and significant re-development projects for the categories of projects (priority projects) listed in Section 2. Under each type of BMP, listed below, please indicate which BMPs are planned to be implemented and included in the Final WQMP for the project:

A. Site Design/LID (Low Impact Design) for Reducing Stormwater Runoff:

The MS4 Permit requires each priority development project to infiltrate, harvest and use, evapotranspire, or bio-treat the runoff from a 2-yr, 24-hour storm event (Design Capture Volume). If site conditions do not permit infiltration, harvest and use, evapotranspiration, and/or bio-treatment of the entire Design Capture Volume, at the project site, Site Design/LID techniques are required to be implemented to the Maximum Extent Practicable, at the project site, and the remainder of the DCV shall be infiltrated, harvested, bio-treated or treated by alternative measures. Project applicants shall submit a Preliminary WQMP that documents the LID/Site Design BMPs, proposed for the project. Please indicate, in the table below, which Site Design/LID BMPs will be utilized on this project to accomplish this requirement:

Site Design/LID Practice	Planned	Not Planned
Provide at least the minimum effective area required for LID BMPs, to comply with the WQMP (see Table 3-1 below).		✔
Grade parking lot areas/drive aisles/roof drains to sheet flow runoff into landscaped swales, via curb cuts or zero-face curbs or otherwise disconnect direct drainage from MS4.		✔
Design landscaped areas as swales and grade to accept runoff from building roofs, parking lots and project roadways.		✔
Install surface retention basins or infiltration trenches to receive impervious area runoff.		✔
Install pervious pavement in parking stalls, alleys, driveways, gutters, walkways, trails or patios.		✔
Install underground stormwater retention chambers where downstream landscaped areas are limited.		✔
Install approved Stormwater Drywells in detention areas.		✔
Construct streets, sidewalks, and parking lot stalls to the minimum widths necessary.	✔	
Install on-site Biotreatment basins/trenches with underdrains, where soil type is poorly draining.		✔
Install “Engineered Soil” to increase uptake/soil storage capacity and/or evapotranspiration.		✔
Install Rainwater Harvesting/Use Equipment.		✔
Regional LID BMP facilities are installed, off-site, with the capacity and conveyances to accept post-development storm water runoff from this project and reserved capacity allocation credits have been assigned to the project, in a Certificate or other legally binding document, attached herein	✔	

Table 3-1 Minimum Effective Area[1] Required for LID BMPs (surface + subsurface facilities) for Project WQMP to Demonstrate Infeasibility[2] (% of site)

Project Type	New Development	Re-Development
SF/MF Residential < 7 du/ac	10%	5%
SF/MF Residential < 7 - 18 du/ac	7%	3.5%
SF/MF Residential > 18 du/ac	5%	2.5%
Mixed Use, Commercial/Industrial w/FAR< 1.0	10%	5%
Mixed Use, Commercial/Industrial w/FAR 1.0-2.0	7%	3.5%
Mixed Use, Commercial/Industrial w/FAR> 2.0	5%	2.5%
Podium (parking under > 75% of project)	3%	1.5%
Zoning allowing development to property lines	2%	1%
Transit Oriented Development[3]	5%	2.5%
Parking	5%	2.5%

[1] "Effective area" is defined as land area which 1) is suitable for a retention/infiltration BMP (based on infeasibility criteria) and 2) is located down-gradient from building roof or paved areas, so that it may receive gravity flow runoff.
[2] Criteria only required if the project WQMP seeks to demonstrate that the full DCV cannot be feasibly managed on-site.
[3] Transit oriented development is defined as a project with development center within one half mile of a mass transit center.
Key: du/ac = dwelling units/acre, FAR = Floor Area Ratio = ratio of gross floor area of building to gross lot area, MF = Multi Family, SF = Single Family

B. Source Control BMPs – The following BMPs are designed to control stormwater pollutants and runoff water at the location where it is generated. Please indicate which of the listed BMPs are planned to be implemented for the project:

Source Control BMPs	Planned	Not Planned
Minimize non-stormwater site runoff through efficient irrigation system design and controllers.	✔	
Minimize trash and debris in storm runoff through a regular parking lot, storage yard and roadway sweeping program.	✔	
Provide proper covers/roofs and secondary containment for outside material storage & work areas.		✔
Provide solid roofs over all trash enclosures.	✔	
Site Owner(s)/Property Manager/HOA or POA will be familiar with the project WQMP and stormwater BMPs.	✔	
Owner or HOA or POA to provide Education/Training of site occupants and employees on stormwater BMPs.	✔	
Install stormwater placards/stenciled messages with a "No Dumping" message on all on-site/off-site storm drain inlets.	✔	
Provide contained equipment/vehicle wash rack areas that discharge to sanitary sewer.		✔

C. Treatment Control BMPs – The following BMPs are designed to control stormwater pollutants where it is not feasible to install on-site or off-site Site Design/LID BMPs, with the requisite capacity to treat the Design Capture Volume for identified Pollutants of Concern or where pretreatment of stormwater runoff is required, ahead of infiltration BMPs. Please indicate which of the listed BMPs are planned to be implemented for the project:

Treatment Control BMP	Planned	Not Planned
Gravity Separator devices for pretreatment of sediment, trash/litter or Oil & Grease		✔
Proprietary Biofiltration vaults/devices		✔
Media Cartridge Filtration Vaults		✔
Proprietary Filter Inserts for on-site storm drain inlets or retention basin/trench overflow drains	✔	

4. Volume-based calculation (approximate) for sizing on-site or off-site Stormwater Retention/Infiltration, Harvest & Re-Use or Biotreatment facilities

1) After calculating the "Watershed Imperviousness Ratio", i, which is equal to the percent of impervious area in each Drainage Management Area, divided by 100, calculate the composite runoff coefficient C_{BMP} for the Drainage Area above using the following equation:

$$\mathbf{C_{BMP} = 0.858i^3 - 0.78i^2 + 0.774i + 0.04}$$

where: $\mathbf{C_{BMP}}$ = composite runoff coefficient; and,

i = watershed imperviousness ratio.

3) Determine the area-averaged "6-hour Mean Storm Rainfall", P_6, for the Drainage Area. This is calculated by multiplying the area averaged 2-year 1-hour value (0.5"-0.6") by the appropriate regression coefficient (1.4807). The 2-yr, 1-hr value for southern Ontario is approximately to 0.5" (P_6 = 0.5*1.4807 = 0.74 and northern Ontario is approximately 0.6" in/hr (P_6 = 0.6*1.4807 = 0.89).

4) Determine the appropriate drawdown time. Use the regression constant a = 1.582 for 24 hours and a = 1.963 for 48 hours. *Note: Regression constants are provided for both 24 hour and 48-hour drawdown times; however, 48-hour drawdown times should be used in most areas of California. Drawdown times in excess of 48 hours should be used with caution as vector breeding can be a problem after water has stood in excess of 72 hours. (Use of the 24-hour drawdown time should be limited to drainage areas with coarse soils (Class 'A' soils that readily drain.)*

5) Calculate the "Maximized Detention Volume", P_0, using the following equation:

$$\mathbf{P_0 = a \cdot C_{BMP} \cdot P_6}$$

where: $\mathbf{P_0}$ = Maximized Detention Volume, in inches

a = 1.582 for 24 hour and a = 1.963 for 48-hour drawdown,

$\mathbf{C_{BMP}}$ = composite runoff coefficient; and,

$\mathbf{P_6}$ = 6-hour Mean Storm Rainfall, in inches

6) Calculate the "Target Capture Volume", V_0, using the following equation:

$$\mathbf{V_0 = (P_0 \cdot A) / 12}$$

where: $\mathbf{V_0}$ = Target Capture Volume, in acre-feet

$\mathbf{P_0}$ = Maximized Detention Volume, in inches; and,

A = BMP Drainage Area, in acres

Project Volume-based calculation (approximate) for planned on-site or off-site Stormwater Retention/Infiltration, Harvest & Re-Use or Biotreatment facilities:

Variable	Factor/Formula	DA1, DMA A	DA1 DMA B	DA2 DMA A	DA2 DMA B
Impervious surface/total surface, ratio	(i)	0.79			
C_{BMP}= runoff coefficient	$0.858i^3 - 0.78i^2 + 0.774i + 0.04$	0.588			
P_6	**P_6 = 2-yr,1-hr depth*1.4807 =	0.797			
Detention Volume (acre inches)	$P_0 = a * C_{BMP} * P_6$ =	0.920			
Drawdown rate of basin/trench (a)	1.963 for 48-hr drawdown =	1.963			
Project Total Area (acre)	(A)	10.24			
Design Capture Volume in cu. ft.	$V_0 = [(P_0 * A)/12] *43560$ =	34,198			
Retention Volume provided in cubic feet.	Retention capacity of basins, trenches, underground storage or biotreatment basin				

**For P_6 value, use site coordinates and NOAA website to determine project's average 2-yr, 1-hr rainfall depth, at: http://hdsc.nws.noaa.gov/hdsc/pfds/sa/sca_pfds.html .

5. Flow-Based calculation (approximate) for sizing on-site or off-site Biotreatment facilities and proprietary treatment technology BMPs:

1) After calculating the "Watershed Imperviousness Ratio", i, which is equal to the percent of impervious area in each Drainage Management Area divided by 100, calculate the composite runoff coefficient C_{BMP} for the Drainage Area above using the following equation:

$$\mathbf{C_{BMP} = 0.858i^3 - 0.78i^2 + 0.774i + 0.04}$$

where: $\mathbf{C_{BMP}}$ = composite runoff coefficient; and,

i = watershed imperviousness ratio.

2) Determine BMP design rainfall intensity, **I_{BMP}**, using the project site geo-coordinates and the NOAA website to determine project's average 2-yr, 1-hr rainfall intensity, at: http://hdsc.nws.noaa.gov/hdsc/pfds/sa/sca_pfds.html .Multiply this value by 0.2787 (regression coefficient for Ontario) and a minimum safety factor of 2.

4) Calculate the target BMP flowrate, Q, using the following formula (for each DMA <50 acres*):

$$Q = C_{BMP} \cdot I_{BMP} \cdot A$$

Where: **Q** = flow in cfs (Cubic feet per second)
I_{BMP} = BMP design rainfall intensity, in/hr
A = Drainage Area in acres

*For DMAs >50 acres, with C_{BMP} <0.5, the project applicant shall use the unit hydrograph method specified in the San Bernardino County Hydrology Manual, using the design storm pattern with rainfall return frequency such that the peak 1-hr rainfall intensity equals the 85th percentile 1-hr rainfall, multiplied by 2.

Project Flow-based calculation (approximate) for planned on-site or off-site flow-based Biotreatment facilities or Stormwater Treatment BMPs:

Variable	Factor/Formula	DA1 DMA A	DA1 DMA B	DA2 DMA A	DA2 DMA B
Impervious surface/ total surface, ratio	(i)	0.79			
C_{BMP}= composite runoff coefficient	$0.858i^3 + 0.78i^2 + 0.774i + 0.04$	0.588			
I_{BMP}	I_{BMP} = 2-yr,1-hr storm intensity*0.2787*safety factor	0.300			
Drainage area (ac)	A = DMA sq ft/43,560	10.24			
Target BMP flowrate	Q = C_{BPM}* I_{BMP} * A	1.81			

6. Hydrologic Conditions of Concern (HCOC) and use of the on-line San Bernardino County HCOC Map for determining necessary mitigation steps necessary if there are HCOCs downstream of a project:

Project applicants may access the on-line HCOC Map at: http://permitrack.sbcounty.gov/WAP/. The map will indicate any hydrology concerns with downstream waterways that are hydraulically connected to the project and will indicate if there are any approved regional projects downstream that could be utilized for off-site mitigation of HCOCs. Please indicate here if the project will or will not be able to retain/infilter, harvest and use or biotreat and detain the DCV, on-site, as calculated in Section 4 and if there are HCOCs identified downstream of the project:

Retain or Harvest/Use the DCV on site?	Yes		No	✔
Biotreat the DCV but not infilter the runoff?	Yes		No	✔
HCOCs identified downstream of site?	Yes		No	✔

If the entire DCV will not be retained on site, the DCV is biotreated but not infiltered or additional detention capacity is needed to address identified HCOCs, downstream of the site, please list here, what additional mitigation measures will be utilized (on-site or off-site) to address HCOCs (see Section 4.2.1-4.2.3 of the SB County WQMP Technical Guidance):

_____

_____

7. Site Plan and Conceptual Grading/Drainage Plan requirements for submission with the Preliminary WQMP:

Provide a Site Plan and Conceptual Grading/Drainage Plan along with this Preliminary WQMP, which conceptually shows the proposed locations of buildings, homes, parking lots, parks, new paved roadways, landscaped areas, drainage patterns and drainage sub-areas, methods of conveyance, proposed retention/infiltration, harvest & use or biotreatment facilities that are planned for installation. Where it is determined to be infeasible to capture and detain design storm runoff volumes, on-site, please include other design features, as described in Section 3, above. Include numbered or lettered notes on the Site Plan with a legend detailing other BMPs, as described in Section 3.

8. BMP Maintenance and Funding Mechanism & Description:

_____

_____

9. Acknowledgment:

As the property owner or developer, I understand that this project is required to install and implement permanent LID Storm Water Best Management Practices pursuant to the requirements of the San Bernardino County MS4 Permit and to document those BMPs in the submittal of a Water Quality Management Plan, which is binding on any current or successive owners of this property.

Yes	✔	No	

10. Exemption Signature:

As the property owner or developer, I understand that this project is not required by the San Bernardino County MS4 Permit to install and implement permanent LID Storm Water Best Management Practices and will not be required to submit a Water Quality Management Plan.

_____ _____

Signature of Owner or Developer Date

CITY OF ONTARIO
MEMORANDUM

TO: Rudy Zeledon, PLANNING DEPARTMENT
Mike Eskander, ENGINEERING DEPARTMENT
FROM: Steve Wilson
DATE: November 16, 2006
SUBJECT: File No. PMTT06-056 (TT 18380) -Esperanza Specific Plan area "A" Map

---

[X] The "A" Maps for these tracts are approved. Prior to DAB approval of the "B" Maps for these tracts, the following items must be included in the Tentative Tract Maps and resubmitted to Engineering:

1. The Tract Map "B" Map submittals for these tracts must conceptually address the use of the regional wetlands in the ultimate condition as well as interim conditions to comply with the water quality requirements for all new development in the Regional Water Quality Management Plan (WQMP). All stormwater runoff pollutants not adequately addressed by on-site Source Control and Site design BMPs or off-site treatment controls must be addressed by on-site Treatment BMPs.

2. Interim on-site treatment control BMPs to address water quality, until such time that the regional wetlands are constructed and operational, are required to be to be shown on the Tract Map/Drainage Plan for this tract or on other tracts within this same project that would be slated for interim treatment BMPs and would receive drainage from this tract. Tentative Tract Map approval will not be granted until this is addressed.

Note: Each landowner/developer in the Esperanza project will be conditioned in the Engineering DAB Report, to prepare and submit one Water Quality Management Plan (WQMP), along with separate Grading Plans, for all of the tracts being developed by that owner. The model WQMP form is available at: www.swrcb.ca.gov/rwqcb8/html/sb_wqmp.html
The WQMP shall identify and detail all appropriate site design, source control and treatment control BMPs to be implemented or installed in this development project in order to reduce storm water pollutants and site runoff. You may also request a revised copy of the WQMP document, and the Standard Erosion & Sediment Control Notes for the Grading Plans from me by emailing a request to: swilson@ci.ontario.ca.us . Please direct all questions to Mr. Steve Wilson at (909)395-2389.

CITY OF ONTARIO
MEMORANDUM

Development Plan Review

Project: Esperanza Specific Plan PA-11 Date: March 7, 2024

Location: NEC of Clifton Ave and Eucalyptus Ave By: Diego Tapia

The following comments on the subject project are provided for the benefit of City Engineering and Planning staff and the Applicant. These are not the conditions of approval which will be submitted under separate cover.

Preliminary Comments:

1. A Traffic Impact Analysis must be submitted that supports the Applicant/Developer's proposed land use change and evaluates potential project traffic impacts. Additional comments may be provided once the Traffic Impact Analysis review is complete.

2. The previous site plan had the tract entrance being proposed on Amherst Avenue, currently it's now being proposed on Clifton Avenue. Please restore the tract entrance onto Amherst Avenue and align the centerline of the tract entry with Shelburne Street. Chokers shall also be installed on the east side of the intersection on Amherst Avenue at tract entrance per City of Ontario Standard Drawing No. 1110. Our intent is that by having the tract entrance on Amherst Avenue with chokers, speeding along the straightaway segment of Amherst Avenue will be reduced.

3. The Applicant/Developer shall align the proposed tract entry onto Chatham Street with Ventura Avenue (existing tract entrance).

4. Install choker, ramp and crosswalk on Chatham Street east of Ventura Avenue and appropriate parking restrictions for sight distance.

5. Remove on-street parking stall markings from site plans.

6. The Applicant/Developer shall install ADA ramps for pedestrian crossings at the following locations per City of Ontario Standard Drawing No. 1213.

    a. Southwest corner of Chatham Street and Clifton Avenue
    b. Southeast corner of Chatham Street and Amherst Avenue

7. The Applicant/Developer shall be responsible to design and construct street improvements along property frontages of Eucalyptus Avenue, Amherst Avenue, Chatham Street, and Clifton Avenue in accordance with conditions issued by City's Land Development Division.

These, and all other street improvements required herein, shall include, but not be limited to, concrete curb and gutter, sidewalk, LED streetlights, signing and striping, and parkway landscaping.

8. The Applicant/Developer shall be responsible to design and construct intersection choker on the southeast corner of Amherst Avenue and Chatham Street per City of Ontario Standard Drawing No. 1110.

9. Existing parking restrictions along Eucalyptus Avenue shall remain in place.

10. All landscaping, block walls, and other obstructions shall be compatible with the stopping sight distance requirements per City of Ontario Standard Drawing No. 1309.

dt;

3204

CHATHAM STREET

PROPOSED BUILDING 27
F.F.=709.50

PROPOSED BUILDING 26
F.F.=709.50

PROPOSED BUILDING 25
F.F.=708.00

PROPOSED BUILDING 24
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PROPOSED BUILDING 23
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PROPOSED BUILDING 22
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PROPOSED BUILDING 21
F.F.=706.00

PROPOSED BUILDING 20
F.F.=705.00

PROPOSED BUILDING 28
F.F.=710.00

PROPOSED BUILDING 1
F.F.=710.50

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PROPOSED BUILDING 17
F.F.=708.50

PROPOSED BUILDING 18
F.F.=708.00

PROPOSED BUILDING 19
F.F.=707.50

F.F.=709.25

SWQ AREA = 446,054
10.24 AC

AMHERST AVENUE

CLIFTON AVENUE

EUCALYPTUS AVENUE

EX. R/W

R/W

VICINITY MAP
NO SCALE

SCALE IN FEET
1 inch = 30 ft.

WALDEN & ASSOCIATES
CIVIL ENGINEERS
LAND SURVEYORS
PLANNERS

2552 WHITE ROAD, SUITE B, IRVINE, CA 92614
(949) 660-0110 FAX: 660-0418

STORMWATER QUALITY EXHIBIT
ESPERANZA TOWNHOMES
EUCALYPTUS AVE. & AMHERST AVE.
ONTARIO, CA

Esperanza Specific Plan Amendment

NOISE IMPACT ANALYSIS

CITY OF ONTARIO

PREPARED BY:

Bill Maddux, INCE
bmaddux@urbanxroads.com
(619) 778-1971

APRIL 24, 2025

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LIST OF ABBREVIATED TERMS

(1)	Reference
ADT	Average Daily Traffic
ANSI	American National Standards Institute
CEQA	California Environmental Quality Act
CNEL	Community Noise Equivalent Level
dBA	A-weighted decibels
EPA	Environmental Protection Agency
ESP	Esperanza Specific Plan
FHWA	Federal Highway Administration
FTA	Federal Transit Administration
Hz	Hertz
L_{eq}	Equivalent continuous (average) sound level
L_{max}	Maximum level measured over the time interval
L_{min}	Minimum level measured over the time interval
OPR	Office of Planning and Research
PPV	Peak particle velocity
Project	Esperanza Specific Plan Amendment
REMEL	Reference Energy Mean Emission Level
RMS	Root-mean-square
VdB	Vibration Decibels

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EXECUTIVE SUMMARY

Urban Crossroads, Inc. has prepared this noise study to determine the noise exposure and the necessary noise mitigation measures for the Esperanza Specific Plan Amendment ("Project"). The Project is located within the Esperanza Specific Plan. The original Specific Plan that was approved contemplated a 736-student elementary school within Planning Area 11. It is our understanding that the Project is to consist of 161 multifamily residential dwelling units (with a density of approximately 16.1 dwelling units per net acre). This noise study has been prepared to satisfy the applicable City of Ontario noise standards and significance criteria based on Appendix G of the California Environmental Quality Act (CEQA) Guidelines. (1)

The results of this Noise Impact Analysis are summarized below based on the significance criteria in Section 4 of this report, consistent with Appendix G of the California Environmental Quality Act (CEQA) Guidelines. (1) Table ES-1 shows the findings of significance for each potential noise and/or vibration impact under CEQA before and after any required mitigation measures.

TABLE ES-1: SUMMARY OF CEQA SIGNIFICANCE FINDINGS

Analysis	Report Section	Significance Findings	
		Unmitigated	Mitigated
Off-Site Traffic Noise	7	*Less Than Significant*	-
On-Site Traffic Noise	8	--[1]	--[1]
Operational Noise	10	*Less Than Significant*	-
Construction Noise	11	*Less Than Significant*	-
Construction Vibration		*Less Than Significant*	-

[1] Impacts to the Project from the environment are not considered a noise impact under CEQA.

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1 INTRODUCTION

This noise analysis has been completed to determine the noise impacts associated with the development of the Esperanza Specific Plan Amendment ("Project"). This noise study briefly describes the Project, provides information regarding noise fundamentals, sets out the local regulatory setting, presents the study methods and procedures for noise analysis, and evaluates the future exterior noise environment. In addition, this study includes an analysis of the potential Project-related long-term stationary-source operational noise and short-term construction noise and vibration impacts.

1.1 SITE LOCATION

The Subarea 29 Specific Plan area is located on the northeast corner of Eucalyptus Avenue and Amherst Avenue in the City of Ontario. The location of the Project is shown in Exhibit 1-A. The Ontario International Airport (ONT) is located approximately 4 miles north of the Project site, and Chino Airport is located approximately 3 miles east of the Project site.

1.2 PROJECT DESCRIPTION

The Project is located within the Esperanza Specific Plan (ESP). The approved original Specific Plan contemplated a 736-student elementary school within Planning Area 11. As part of the Project, the land use designation will be updated from "School" to "MDR Medium Density Residential" consistent with the adjacent land use to the northeast, as shown in Exhibit 1-B.

It is our understanding that the Project consists of an amendment to the ESP to replace the elementary school with 161 multifamily residential dwelling units (with a density of approximately 16.1 dwelling units per net acre). The Project also includes a 6-foot-high wall along Eucalyptus Avenue. The Project site plan is illustrated in Exhibit 1-C.

EXHIBIT 1-A: LOCATION MAP

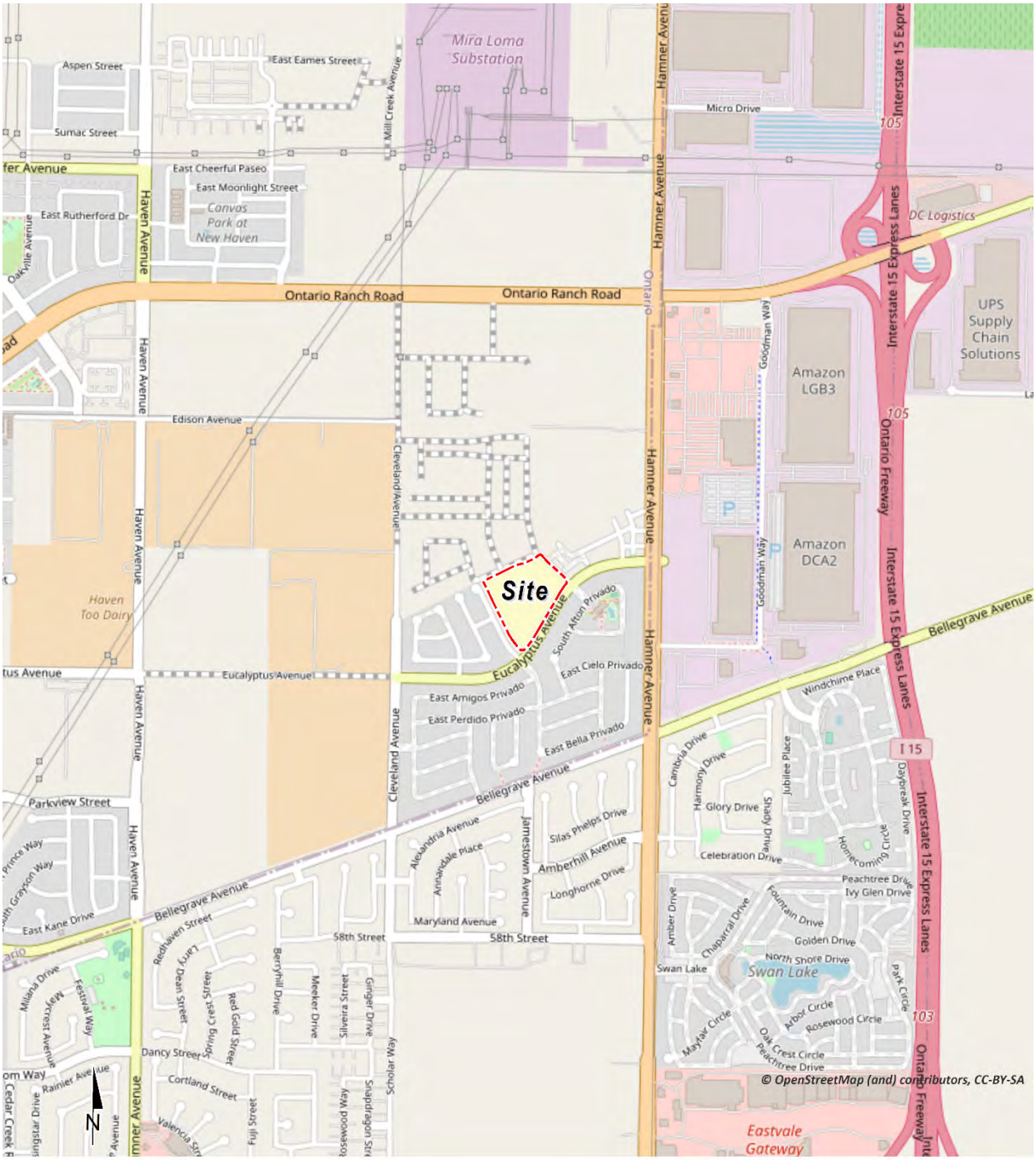


EXHIBIT 1-B: LAND USE PLAN

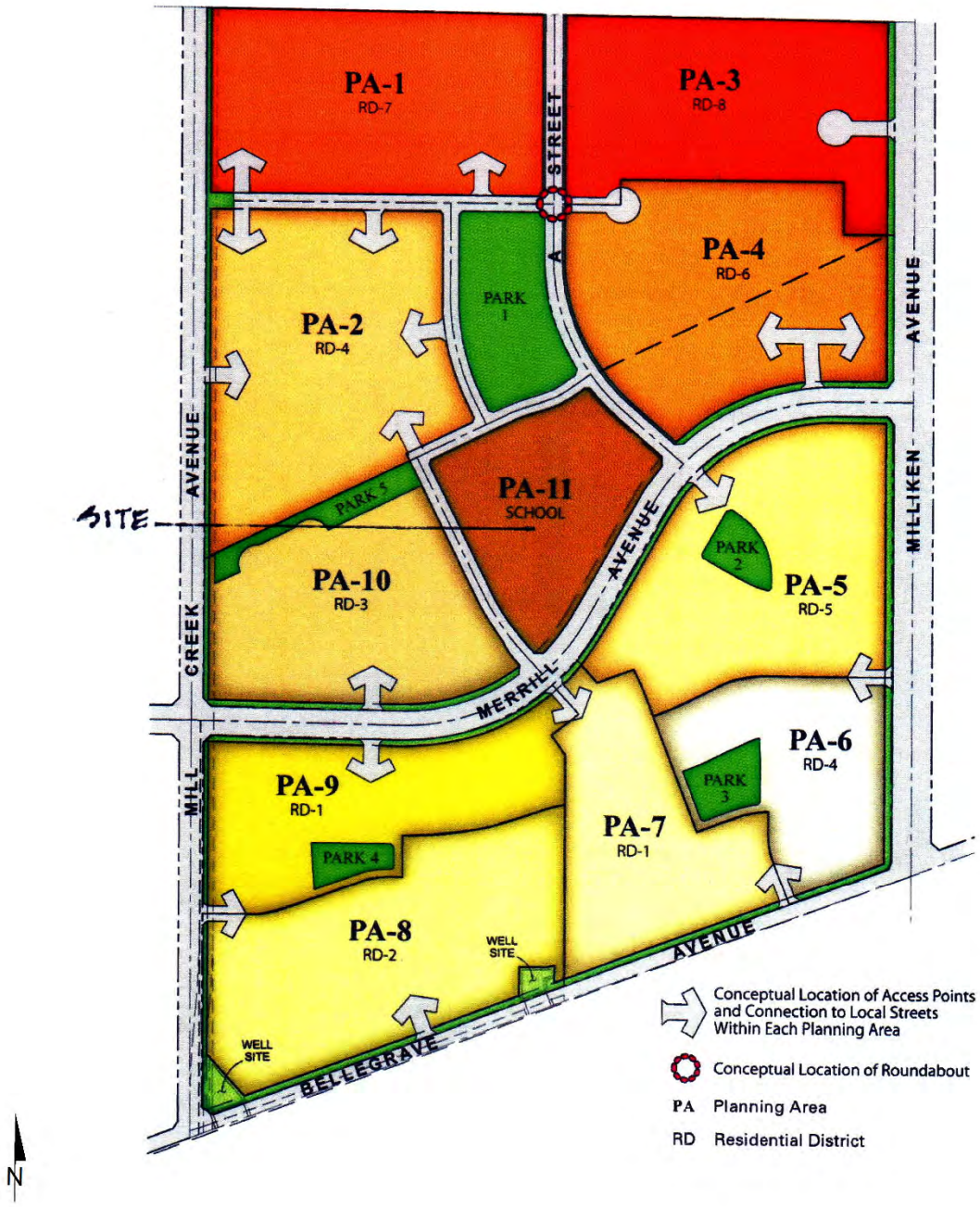


EXHIBIT 1-C: PROJECT SITE PLAN

2 FUNDAMENTALS

Noise is simply defined as "unwanted sound." Sound becomes unwanted when it interferes with normal activities, when it causes actual physical harm, or when it has adverse effects on health. Noise is measured on a logarithmic scale of sound pressure level known as a decibel (dB). A-weighted decibels (dBA) approximate the subjective response of the human ear to broad-frequency noise sources by discriminating against very low and very high frequencies of the audible spectrum. They are adjusted to reflect only those frequencies which are audible to the human ear. Exhibit 2-A presents a summary of the typical noise levels and their subjective loudness and effects, which are described in more detail below.

EXHIBIT 2-A: TYPICAL NOISE LEVELS

COMMON OUTDOOR ACTIVITIES	COMMON INDOOR ACTIVITIES	A - WEIGHTED SOUND LEVEL dBA	SUBJECTIVE LOUDNESS	EFFECTS OF NOISE
THRESHOLD OF PAIN		140	INTOLERABLE OR DEAFENING	HEARING LOSS
NEAR JET ENGINE		130		
		120		
JET FLY-OVER AT 300m (1000 ft)	ROCK BAND	110		
LOUD AUTO HORN		100	VERY NOISY	
GAS LAWN MOWER AT 1m (3 ft)		90		
DIESEL TRUCK AT 15m (50 ft), at 80 km/hr (50 mph)	FOOD BLENDER AT 1m (3 ft)	80		SPEECH INTERFERENCE
NOISY URBAN AREA, DAYTIME	VACUUM CLEANER AT 3m (10 ft)	70	LOUD	
HEAVY TRAFFIC AT 90m (300 ft)	NORMAL SPEECH AT 1m (3 ft)	60		
QUIET URBAN DAYTIME	LARGE BUSINESS OFFICE	50	MODERATE	SLEEP DISTURBANCE
QUIET URBAN NIGHTTIME	THEATER, LARGE CONFERENCE ROOM (BACKGROUND)	40		
QUIET SUBURBAN NIGHTTIME	LIBRARY	30	FAINT	NO EFFECT
QUIET RURAL NIGHTTIME	BEDROOM AT NIGHT, CONCERT HALL (BACKGROUND)	20		
	BROADCAST/RECORDING STUDIO	10	VERY FAINT	
LOWEST THRESHOLD OF HUMAN HEARING	LOWEST THRESHOLD OF HUMAN HEARING	0		

Source: Environmental Protection Agency Office of Noise Abatement and Control, Information on Levels of Environmental Noise Requisite to Protect Public Health and Welfare with an Adequate Margin of Safety (EPA/ONAC 550/9-74-004) March 1974.

2.1 RANGE OF NOISE

Since the range of intensities that the human ear can detect is so large, the scale frequently used to measure intensity is a scale based on multiples of 10, the logarithmic scale. The scale for measuring intensity is the decibel scale. Each interval of 10 decibels indicates a sound energy ten times greater than before, which is perceived by the human ear as being roughly twice as loud. (2) The most common sounds vary between 40 dBA (very quiet) to 100 dBA (very loud). Normal conversation at three feet is roughly at 60 dBA, while loud jet engine noises equate to 110 dBA at approximately 1,000 feet, which can cause serious discomfort. (3)

Another important aspect of noise is the duration of the sound and the way it is described and distributed in time.

2.2 NOISE DESCRIPTORS

Environmental noise descriptors are generally based on averages rather than instantaneous noise levels. The most used metric is the equivalent level (L_{eq}). Equivalent sound levels are not measured directly but are calculated from sound pressure levels typically measured in A-weighted decibels (dBA). The equivalent sound level (L_{eq}) represents a steady-state sound level containing the same total energy as a time-varying signal over a given sample period and is commonly used to describe the "average" noise levels within the environment.

Peak hour or average noise levels, while useful, do not completely describe a given noise environment. Noise levels lower than peak hour may be disturbing if they occur during times when quiet is most desirable, namely evening and nighttime (sleeping) hours. To account for this, the Community Noise Equivalent Level (CNEL), representing a composite 24-hour noise level is utilized. The CNEL is the weighted average of the intensity of a sound, with corrections for time of day, and averaged over 24 hours. The time-of-day corrections require the addition of 5 decibels to dBA L_{eq} sound levels in the evening from 7:00 p.m. to 10:00 p.m., and the addition of 10 decibels to dBA L_{eq} sound levels at night between 10:00 p.m. and 7:00 a.m. These additions are made to account for the noise-sensitive time periods during the evening and night hours when noise can become more intrusive. CNEL does not represent the actual sound level heard at any time but rather represents the total sound exposure. The City of Ontario relies on the 24-hour CNEL level to assess land use compatibility with transportation-related noise sources.

2.3 SOUND PROPAGATION

When sound propagates over a distance, it changes in level and frequency content. The way noise reduces with distance depends on the following factors.

2.3.1 GEOMETRIC SPREADING

Sound from a localized source (i.e., a stationary point source) propagates uniformly outward in a spherical pattern. The sound level attenuates (or decreases) at a rate of 6 dB for each doubling of distance from a point source. Highways consist of several localized noise sources on a defined path and hence can be treated as a line source, which approximates the effect of several point sources. Noise from a line source propagates outward in a cylindrical pattern, often referred to as cylindrical spreading. Sound levels attenuate at a rate of 3 dB for each doubling of distance from a line source. (2)

2.3.2 GROUND ABSORPTION

The propagation path of noise from a highway to a receiver is usually very close to the ground. Noise attenuation from ground absorption and reflective wave canceling adds to the attenuation associated with geometric spreading. Traditionally, the excess attenuation has also been expressed in terms of attenuation per doubling of distance. This approximation is usually sufficiently accurate for distances of less than 200 ft. For acoustically hard sites (i.e., sites with a

reflective surface between the source and the receiver, such as a parking lot or body of water), no excess ground attenuation is assumed. For acoustically absorptive or soft sites (i.e., those sites with an absorptive ground surface between the source and the receiver, such as soft dirt, grass, or scattered bushes and trees), an excess ground attenuation value of 1.5 dB per doubling of distance is normally assumed. When added to the cylindrical spreading, the excess ground attenuation results in an overall drop-off rate of 4.5 dB per doubling of distance from a line source. (4)

2.3.3 ATMOSPHERIC EFFECTS

Receivers located downwind from a source can be exposed to increased noise levels relative to calm conditions, whereas locations upwind can have lowered noise levels. Sound levels can be increased at large distances (e.g., more than 500 feet) due to atmospheric temperature inversion (i.e., increasing temperature with elevation). Other factors, such as air temperature, humidity, and turbulence, can also have significant effects. (2)

2.3.4 SHIELDING

A large object or barrier in the path between a noise source and a receiver can substantially attenuate noise levels at the receiver. The amount of attenuation provided by shielding depends on the size of the object and the frequency content of the noise source. Shielding by trees and other such vegetation typically only has an “out of sight, out of mind” effect. That is, the perception of noise impact tends to decrease when vegetation blocks the line of sight to nearby residents. However, for vegetation to provide a substantial, or even noticeable, noise reduction, the vegetation area must be at least 15 feet in height, 100 feet wide, and dense enough to completely obstruct the line of sight between the source and the receiver. This size of vegetation may provide up to 5 dBA of noise reduction. The Federal Highway Administration (FHWA) does not consider the planting of vegetation to be a noise abatement measure. (5)

2.4 NOISE CONTROL

Noise control is the process of obtaining an acceptable noise environment for an observation point or receiver by controlling the noise source, transmission path, receiver, or all three. This concept is known as the source-path-receiver concept. In general, noise control measures can be applied to these three elements.

2.5 NOISE BARRIER ATTENUATION

Effective noise barriers can reduce noise levels by 10 to 15 dBA, cutting the loudness of traffic noise in half. A noise barrier is most effective when placed close to the noise source or receiver. Noise barriers, however, do have limitations. For a noise barrier to work, it must block the line-of-sight path of sound from the noise source.

2.6 LAND USE COMPATIBILITY WITH NOISE

Some land uses are more tolerant of noise than others. For example, schools, hospitals, churches, and residences are more sensitive to noise intrusion than are commercial or industrial developments and related activities. As ambient noise levels affect the perceived amenity or livability of a development, so too can the mismanagement of noise impacts impair

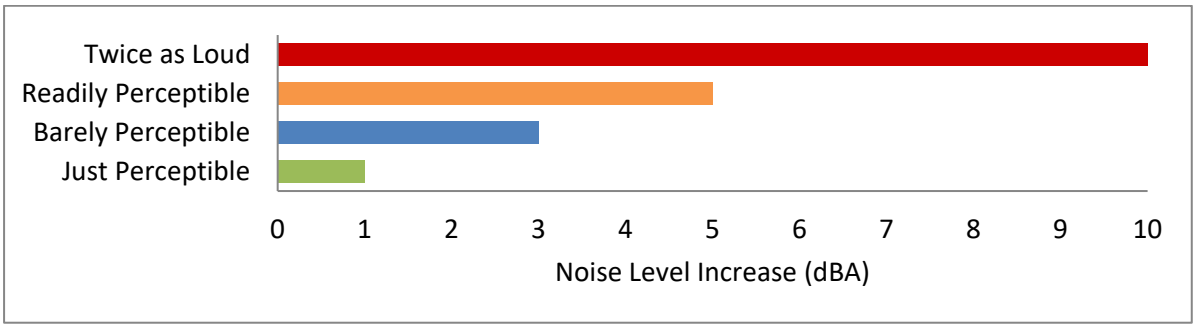
the economic health and growth potential of a community by reducing the area's desirability as a place to live, shop, and work. For this reason, land use compatibility with the noise environment is an important consideration in the planning and design process. The FHWA encourages State and Local government to regulate land development in such a way that noise-sensitive land uses are either prohibited from being located adjacent to a highway, or that the developments are planned, designed, and constructed in such a way that noise impacts are minimized. (6)

2.7 COMMUNITY RESPONSE TO NOISE

Approximately sixteen percent of the population has a very low tolerance for noise and will object to any noise not of their making. Consequently, even in the quietest environment, some complaints may occur. Twenty to thirty percent of the population will not complain even in very severe noise environments. (7 pp. 8-6) Thus, a variety of reactions can be expected from people exposed to any given noise environment.

Surveys have shown that community response to noise varies from no reaction to vigorous action for newly introduced noises averaging from 10 dB below existing to 25 dB above existing. (8) According to research originally published in the Noise Effects Handbook (7), the percentage of high annoyance ranges from approximately 0 percent at 45 dB or less, 10 percent are highly annoyed at around 60 dB, and increases rapidly to approximately 70 percent being highly annoyed at approximately 85 dB or greater. Despite this variability in behavior on an individual level, the population can be expected to exhibit the following responses to changes in noise levels, as shown in Exhibit 2-B. A change of 3 dBA is considered barely perceptible, and changes of 5 dBA are considered readily perceptible. (4)

EXHIBIT 2-B: NOISE LEVEL INCREASE PERCEPTION



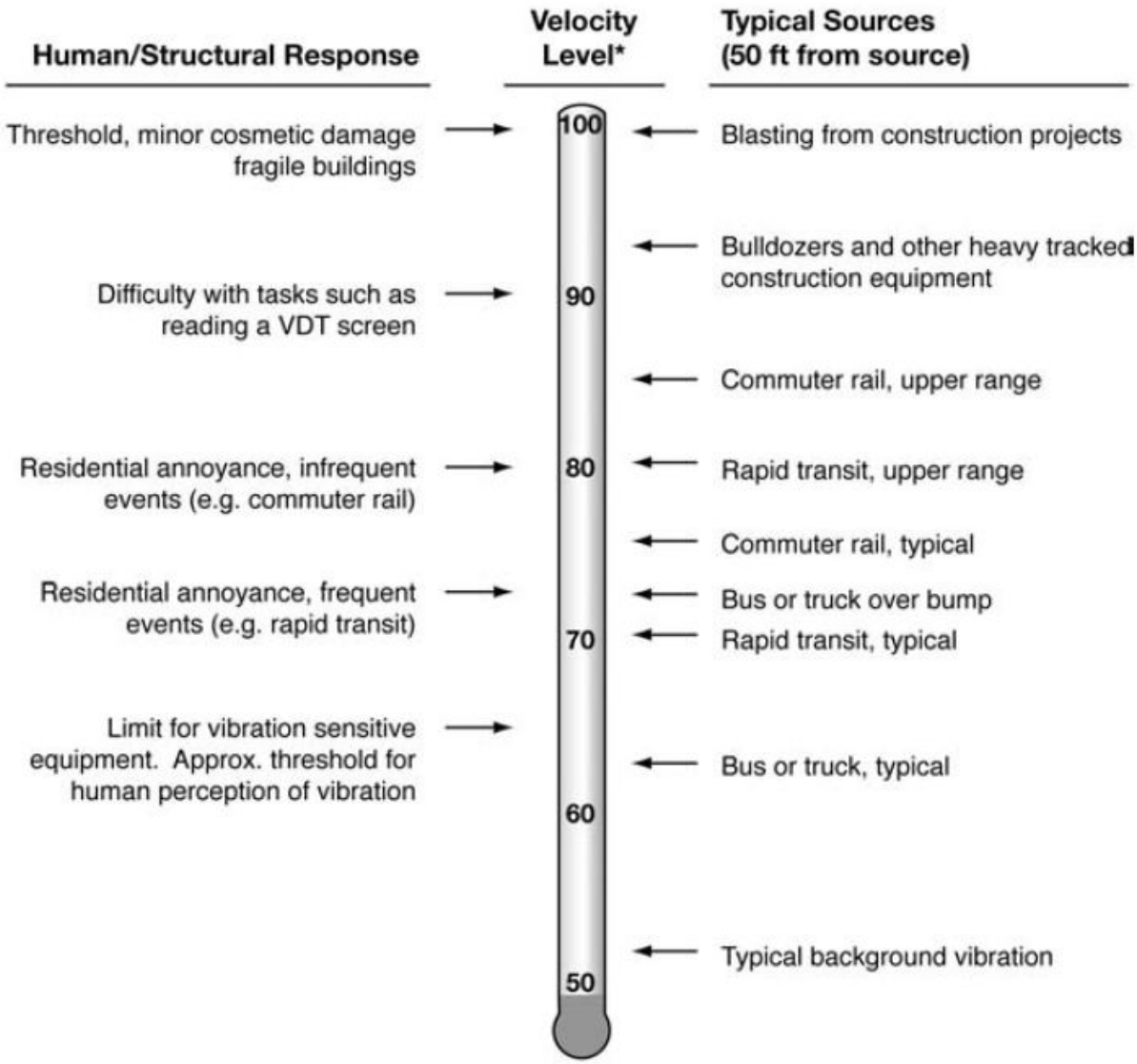
2.8 VIBRATION

Per the Federal Transit Administration (FTA) *Transit Noise Impact and Vibration Impact Assessment Manual* (8) , vibration is the periodic oscillation of a medium or object. The rumbling sound caused by the vibration of room surfaces is called structure-borne noise. Sources of ground-borne vibrations include natural phenomena (e.g., earthquakes, volcanic eruptions, sea waves, landslides) or human-made causes (e.g., explosions, machinery, traffic, trains, construction equipment). Vibration sources may be continuous, such as factory machinery, or transient, such as explosions. As is the case with airborne sound, ground-borne vibrations may be described by amplitude and frequency.

There are several different methods that are used to quantify vibration. The peak particle velocity (PPV) is defined as the maximum instantaneous peak of the vibration signal. The PPV is most frequently used to describe vibration impacts to buildings but is not always suitable for evaluating human response (annoyance) because it takes some time for the human body to respond to vibration signals. Instead, the human body responds to average vibration amplitude, often described as the root mean square (RMS). The RMS amplitude is defined as the average of the squared amplitude of the signal and is most frequently used to describe the effect of vibration on the human body. Decibel notation (VdB) is commonly used to measure RMS. Decibel notation (VdB) serves to reduce the range of numbers used to describe human response to vibration. Typically, ground-borne vibration generated by man-made activities attenuates rapidly with distance from the source of the vibration. Sensitive receivers for vibration include structures (especially older masonry structures), people (especially residents, the elderly, and the sick), and vibration-sensitive equipment and/or activities.

The background vibration-velocity level in residential areas is generally 50 VdB. Ground-borne vibration is normally perceptible to humans at approximately 65 VdB. For most people, a vibration-velocity level of 75 VdB is the approximate dividing line between barely perceptible and distinctly perceptible levels. Typical outdoor sources of perceptible ground-borne vibration are construction equipment, steel-wheeled trains, and traffic on rough roads. If a roadway is smooth, the ground-borne vibration is rarely perceptible. The range of interest is from approximately 50 VdB, which is the typical background vibration-velocity level, to 100 VdB, which is the general threshold where minor damage can occur in fragile buildings. Exhibit 2-C illustrates common vibration sources and the human and structural response to ground-borne vibration.

EXHIBIT 2-C: TYPICAL LEVELS OF GROUND-BORNE VIBRATION



Source: Federal Transit Administration (FTA) Transit Noise and Vibration Impact Assessment Manual.

3 REGULATORY SETTING

The federal government, the State of California, various county governments, and most municipalities in the state have established standards and ordinances to control noise. In most areas, automobile and truck traffic is the major source of environmental noise. Traffic activity generally produces an average sound level that remains constant with time. Air and rail traffic, and commercial and industrial activities are also major sources of noise in some areas. Federal, state, and local agencies regulate different aspects of environmental noise. Federal and state agencies generally set noise standards for mobile sources such as aircraft and motor vehicles, while regulation of stationary sources is left to local agencies.

3.1 STATE OF CALIFORNIA NOISE REQUIREMENTS

The State of California regulates freeway noise, sets standards for sound transmission, provides occupational noise control criteria, identifies noise standards, and provides guidance for local land use compatibility. State law requires that each county and city adopt a General Plan that includes a Noise Element, which is to be prepared per guidelines adopted by the Governor's Office of Planning and Research (OPR). (9) The purpose of the Noise Element is to *limit the exposure of the community to excessive noise levels*. In addition, the California Environmental Quality Act (CEQA) requires that all known environmental effects of a project be analyzed, including environmental noise impacts.

3.2 CITY OF ONTARIO GENERAL PLAN

The City of Ontario General Plan (Policy Plan) identifies several policies to minimize the impacts of excessive noise levels throughout the community. Policy Plan Section S4, Noise Hazards, establishes a goal of maintaining *an environment where noise does not adversely affect the public's health, safety, and welfare.* (10) To satisfy this goal, the Policy Plan identifies six policies related to: noise mitigation; coordination with transportation authorities; noise mitigation; truck traffic; roadway design; airport noise compatibility, and rail noise mitigation. Noise criteria identified in the General Plan Environmental Impact Report (EIR) in Table 5.13-3 are the guidelines used in the 2010 General Plan to evaluate land use compatibility within various noise environments. Table 5.13-3 is reproduced here in Exhibit 3-A *Noise Level Exposure and Land Use Compatibility Guidelines*. The Project residential land uses are considered *clearly acceptable* within exterior noise level environments approaching 60 dBA CNEL and *normally acceptable* within noise level environments up to 65 dBA CNEL. For noise level environments greater than 70 dBA CNEL, the Project land uses would be considered *clearly unacceptable* and no new construction should be permitted.

EXHIBIT 3-A: NOISE LEVEL EXPOSURE AND LAND USE COMPATIBILITY GUIDELINES

LAND USE CATEGORIES		COMMUNITY NOISE EQUIVALENT LEVEL (CNEL)						
Category	Land Use	55	60	65	70	75	80	
Residential/ Lodging	Single Family / Duplex							
	Multi-Family							
	Mobile Homes							
	Hotel/Motels							
Public/Institutional	Schools/Hospitals							
	Churches/ Libraries							
	Auditoriums/Concert Halls							
Commercial	Offices							
	Retail							
Industrial	Manufacturing							
	Warehousing							
Recreational/ Open Space	Parks/Playgrounds							
	Golf Courses/ Riding Stables							
	Outdoor Spectator Sports							
	Outdoor Music Shells/ Amphitheaters							
	Livestock/Wildlife Preserves							
	Crop Agriculture							

LEGEND

Clearly Acceptable:	No special noise insulation required, assuming buildings of normal conventional construction.
Normally Acceptable:	Acoustical reports will be required for major new residential construction. Conventional construction with closed windows and fresh air supply systems of air conditioning will normally suffice.
Normally Unacceptable:	New construction should be discouraged. Noise/aviation easements required for all new construction. If new construction does proceed, a detailed analysis of noise reduction requirements must be made and necessary noise insulation features included.
Clearly Unacceptable:	No new construction should be permitted.

Source: The Ontario Plan 2050 Environmental Impact Report (Table 5.13-3).

3.3 OPERATIONAL NOISE STANDARDS

To analyze noise impacts originating from a designated fixed location or private property such as the Project, stationary-source (operational) noise levels are evaluated against standards established under a City's Municipal Code, which is included in Appendix 3.1. The City of Ontario requires that noise from new stationary sources in the City comply with the City's Noise Ordinance, which limits the acceptable noise at the property line of the impacted property to reduce nuisances to sensitive land uses. Compliance with the City's Noise Ordinance would result in noise levels that are acceptable to the City and would result in less than significant noise impacts from stationary sources (11).

Section 5-29.04(a) identifies the allowable daytime and nighttime ambient exterior noise standards for each land use type. For residential land uses (Noise Zone I), ambient exterior noise levels may not exceed 65 dBA L_{eq} during the daytime hours (7:00 a.m. to 10:00 p.m.) and may not exceed 45 dBA L_{eq} during the nighttime hours (10:00 p.m. to 7:00 a.m.). (12) The lower noise level standard shall apply on the boundary between two (2) different noise zones. If the ambient noise level exceeds the resulting standard, the ambient noise level shall be the standard. The maximum acceptable Project-related operational noise levels received at off-site land uses in the City of Ontario are identified in Table 3-1.

TABLE 3-1: OPERATIONAL NOISE STANDARDS

Noise Zone	Land Use	Exterior Noise Levels (dBA Leq)[2]	
		Daytime (7 am-10 pm)	Nighttime (10 pm-7 am)
I	Single-Family Residential	65	45
II	Multi-Family Residential	65	50
III	Commercial	65	60
IV	Residential Mixed-Use	70	70
V	Manufacturing and Industrial	70	70

[1] Source: Section 5-29.04 of the City of Ontario Municipal Code (Appendix 3.1).
[2] L_{eq} represents a steady-state sound level containing the same total energy as a time-varying signal over a given period.

3.4 CONSTRUCTION NOISE STANDARDS

The City of Ontario has set restrictions to control noise impacts associated with construction. Section 5-29.09 of the Municipal Code states: No person, while engaged in construction, remodeling, digging, grading, demolition or any other related building activity, shall operate any tool, equipment or machine in a manner that produces loud noise that disturbs a person of normal sensitivity who works or resides in the vicinity, or a Police or Code Enforcement Officer, on any weekday except between the hours of 7:00 a.m. and 6:00 p.m. or on Saturday or Sunday between the hours of 9:00 a.m. and 6:00 p.m. (12) While the City establishes limits to the hours during which construction activity may take place, it does not identify specific noise level limits for construction noise levels at potentially affected receiver locations for CEQA analysis purposes. Therefore, a numerical construction threshold based on the Federal Transit

Administration (FTA) Transit Noise and Vibration Impact Assessment Manual is used for the analysis of daytime construction impacts, as discussed below.

According to the FTA, local noise ordinances are typically not very useful in evaluating construction noise. They usually relate to nuisance and hours of allowed activity and sometimes specify limits in terms of maximum levels but are generally not practical for assessing the impact of a construction project. Project construction noise criteria should account for the existing noise environment, the absolute noise levels during construction activities, the duration of the construction, and the adjacent land use. Due to the lack of standardized construction noise thresholds, the FTA provides guidelines that can be considered reasonable criteria for construction noise assessment. The FTA considers a daytime exterior construction noise level of 80 dBA L_{eq} as a reasonable threshold for noise-sensitive residential land use. (8 p. 179)

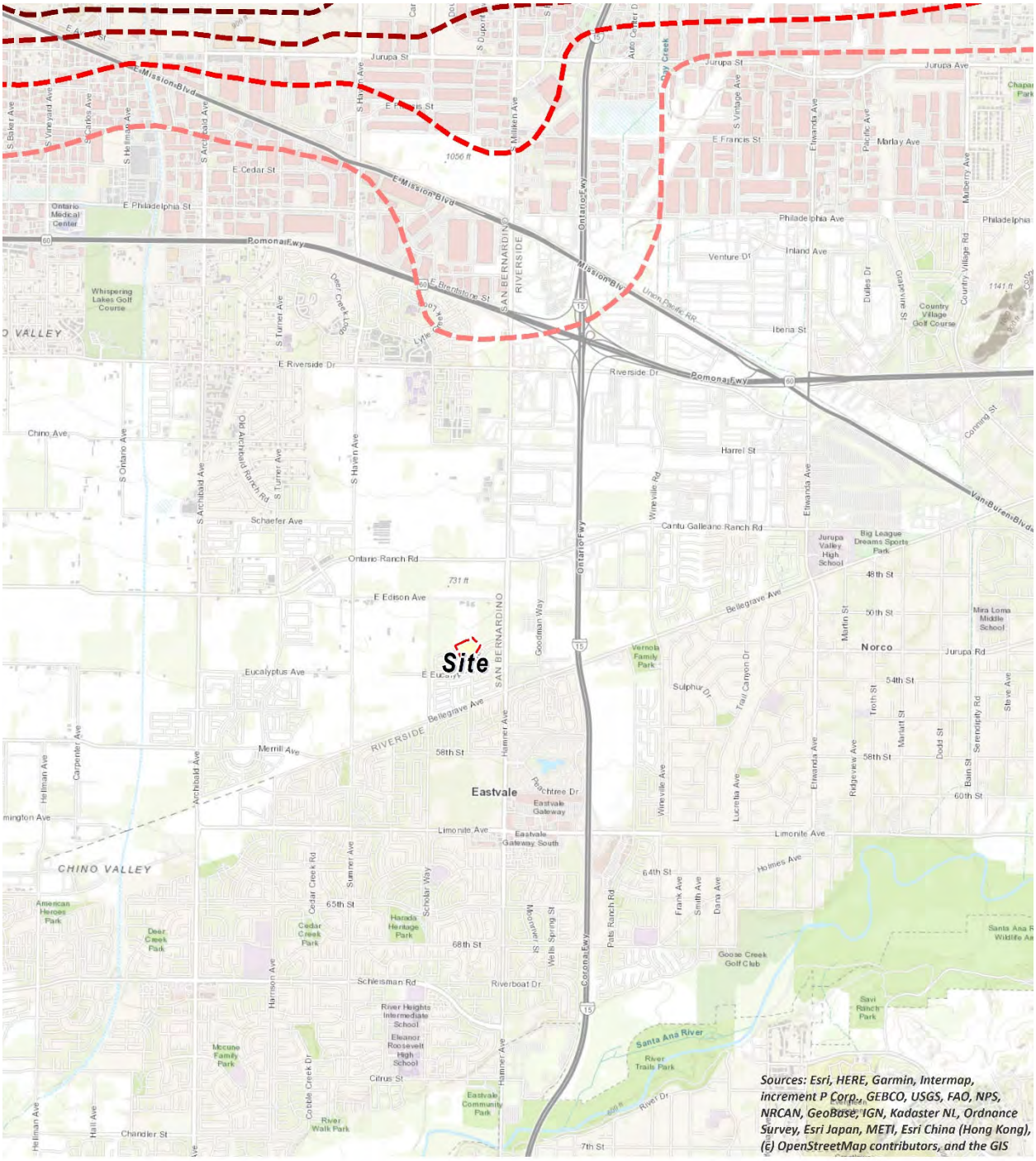
3.5 VIBRATION STANDARDS

Construction activity can result in varying degrees of ground-borne vibration, depending on the equipment and methods used, distance to the affected structures, and soil type. Construction vibration is generally associated with pile driving and rock blasting. Other construction equipment, such as air compressors, light trucks, hydraulic loaders, etc., generates little or no ground vibration. (8) To analyze vibration impacts originating from the operation and construction of a project, vibration-generating activities are appropriately evaluated against standards established under a City's Municipal Code, if such standards exist. However, the City of Ontario does not identify specific vibration level limits. Therefore, for analysis purposes, the Caltrans *Transportation and Construction Vibration Guidance Manual*, (13 p. 38) Table 19, vibration damage limit, is used in this noise study to assess potential temporary construction-related impacts at adjacent building locations. The nearest noise-sensitive buildings adjacent to the Project site can best be described as "older residential structures" with a maximum acceptable continuous vibration threshold of 0.3 PPV (in/sec).

3.6 AIRPORT LAND USE COMPATIBILITY

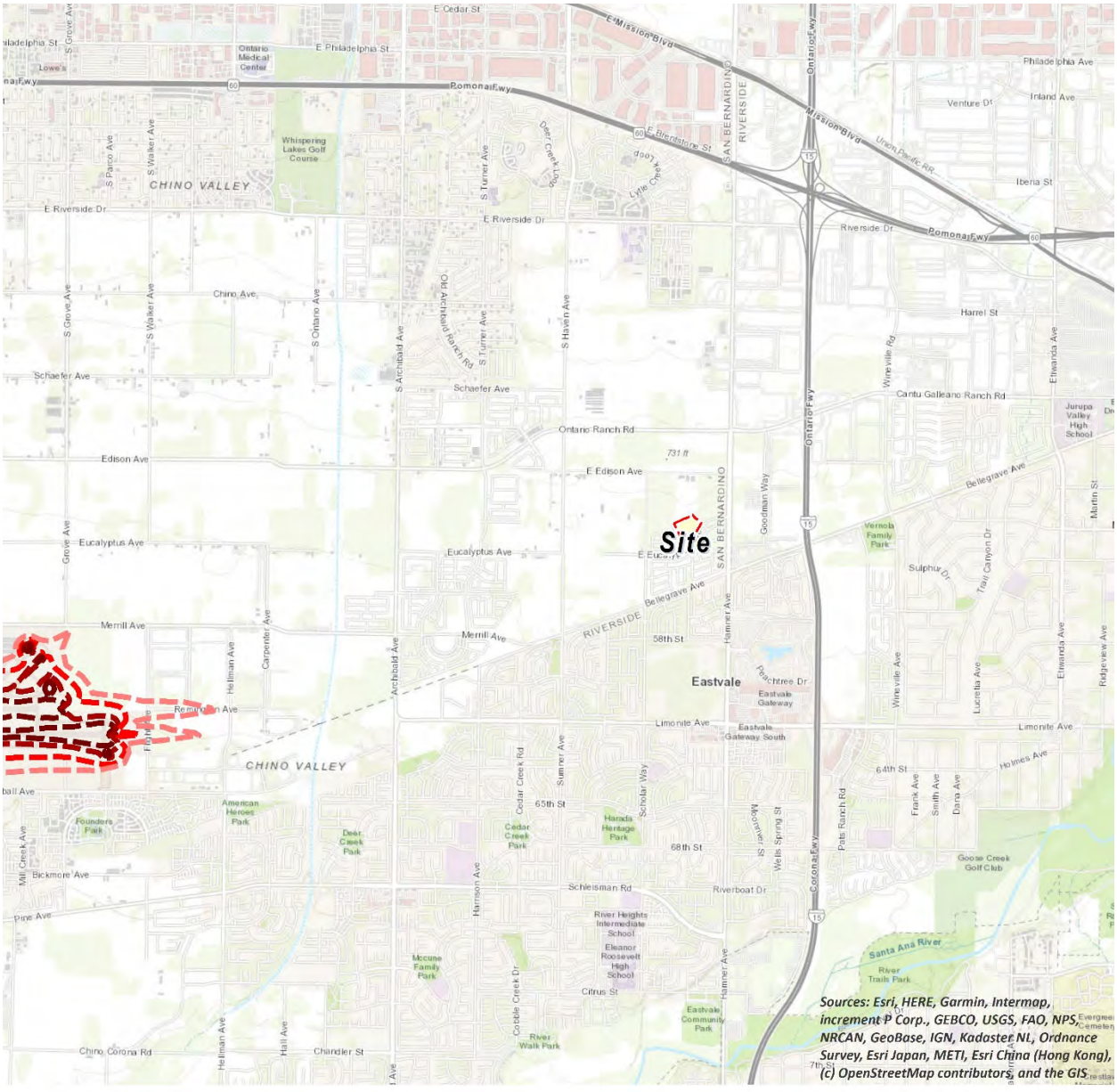
The Project site is located approximately 4 miles south of the Ontario International Airport (ONT). This places the Project site within the ONT Airport Influence Area according to Policy Map 2-1 of the *Ontario International Airport Land Use Compatibility Plan (ONT ALUCP).* The ONT ALUCP was amended in July 2018 to promote compatibility between the airport and the land uses that surround it (14). Since the Project site is located within the ONT Airport Influence Area, the Project is subject to the Noise Criteria established in Table 2-3 in the ONT ALUCP. As shown in Exhibit 3-B, the Project site is located within the ONT Airport Influence Area but outside the 60 dBA CNEL airport noise impact zone consistent with Policy Map 2-3. According to Table 2-3 of the ONT ALUCP, residential land uses and schools located outside the 60 dBA CNEL noise level contours of ONT, such as the Project, are considered *normally compatible land use.* For *normally compatible land use,* either the activities associated with the land use are inherently noisy or standard construction methods will sufficiently attenuate exterior noise to an acceptable indoor community noise equivalent level (CNEL).

EXHIBIT 3-B: ONT AIRPORT NOISE LEVEL CONTOURS



The Project site is located approximately 2.5 miles east of the Chino Airport (CNO). This places the Project site outside the Chino Airport Influence Area according to Figure 1-4 Airport Referral Areas of the *Comprehensive Land Use Plan for the Chino Airport.* As shown in Exhibit 3-C, the Project site is outside the 60 dBA CNEL airport noise level contour, and impacts would be *less than significant*.

EXHIBIT 3-C: CHINO AIRPORT NOISE LEVEL CONTOURS



4 SIGNIFICANCE CRITERIA

The following significance criteria are based on currently adopted guidance provided by Appendix G of the California Environmental Quality Act (CEQA) Guidelines. (15) For the purposes of this report, impacts would be potentially significant if the Project results in or causes:

A. Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?

B. Generation of excessive ground-borne vibration or ground-borne noise levels?

C. For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?

4.1 NOISE LEVEL INCREASES (THRESHOLD A)

Noise level increases resulting from the Project are evaluated based on the Appendix G CEQA Guidelines. Under CEQA, consideration must be given to the magnitude of the increase, the existing baseline ambient noise levels, and the location of receivers to determine if a noise increase represents a significant adverse environmental impact. This approach recognizes *that there is no single noise increase that renders the noise impact significant.* (16) This is primarily because of the wide variation in individual thresholds of annoyance and differing individual experiences with noise. Thus, an important way of determining a person's subjective reaction to a new noise is to compare it to the existing environment to which one has adapted—the so-called *ambient* environment. In general, the more a new noise exceeds the previously existing ambient noise level, the less acceptable the new noise will typically be judged.

The Federal Interagency Committee on Noise (FICON) (17) developed guidance to be used for the assessment of project-generated increases in noise levels that consider the ambient noise level. The FICON recommendations are based on studies that relate aircraft noise levels to the percentage of persons highly annoyed by aircraft noise. Although the FICON recommendations were specifically developed to assess aircraft noise impacts, these recommendations are often used in environmental noise impact assessments involving the use of cumulative noise exposure metrics, such as the average-daily noise level (CNEL) and equivalent continuous noise level (L_{eq}).

As previously stated, the approach used in this noise study recognizes *that there is no single noise increase that renders the noise impact significant*, based on a 2008 California Court of Appeal ruling on Gray v. County of Madera. (16) For example, if the ambient noise environment is quiet (<60 dBA) and the new noise source greatly increases the noise levels, an impact may occur if the noise criteria are exceeded. Therefore, for this analysis, a *readily perceptible* 5 dBA or greater project-related noise level increase is considered a significant impact when the without project noise levels are below 60 dBA. Per the FICON, in areas where the without project noise levels range from 60 to 64 dBA, a 3 dBA *barely perceptible* noise level increase

appears to be appropriate for most people. When the without project noise levels are 65 dBA and higher, any increase in community noise louder than 1.5 dBA or greater is considered a significant impact if the noise criteria for a given land use is exceeded since it likely contributes to an existing noise exposure exceedance. The FICON guidance provides an established source of criteria to assess the impacts of substantial temporary or permanent increases in baseline ambient noise levels. Based on the FICON criteria, the amount to which a given noise level increase is considered acceptable is reduced when the without Project (baseline) noise levels are already shown to exceed certain land-use specific exterior noise level criteria. The specific levels are based on typical responses to noise level increases of 5 dBA or *readily perceptible*, 3 dBA or *barely perceptible*, and 1.5 dBA depending on the underlying without Project noise levels for noise-sensitive uses. These levels of increase and their perceived acceptance are consistent with guidance provided by the Federal Aviation Administration, the Federal Highway Administration (4 p. 9), and Caltrans (18 p. 2_48).

4.2 VIBRATION (THRESHOLD B)

As described in Section 3.5, the vibration impacts originating from the construction of the Esperanza Specific Plan Amendment, vibration-generating activities are appropriately evaluated using the Caltrans vibration damage thresholds to assess potential temporary construction-related impacts at adjacent building locations. The nearest noise-sensitive buildings adjacent to the Project site can best be described as “older residential structures” with a maximum acceptable continuous vibration threshold of 0.3 PPV (in/sec).

4.3 CEQA GUIDELINES NOT FURTHER ANALYZED (THRESHOLD C)

CEQA Noise Threshold C applies when there are nearby public and private airports and/or airstrips and focuses on land use compatibility of the Project to nearby airports and airstrips. The closest airport that would require additional noise analysis under CEQA Guideline threshold C is the Ontario International Airport, which is located approximately 4 miles north of the Project site. As previously indicated in Section 3.6, the Project site is located within the ONT Airport Influence Area but is located outside the 60 dBA CNEL airport noise impact zone. Similarly, as indicated in Section 3.6, the Project site is not located within the CNO Airport Influence Area and is outside the 60 dBA CNEL airport noise impact zone. Therefore, airport noise impacts are considered *less than significant,* and no further noise analysis is provided under Guideline C.

4.4 SIGNIFICANCE CRITERIA SUMMARY

Noise impacts shall be considered significant if any of the following occur as a direct result of the Project. Table 4-1 shows the significance criteria summary matrix that includes the allowable criteria used to identify potentially significant incremental noise level increases.

TABLE 4-1: SIGNIFICANCE CRITERIA SUMMARY

Analysis	Receiving Land Use	Condition(s)	Significance Criteria	
			Daytime	Nighttime
Off-Site Traffic	All	If ambient is < 60 dBA CNEL[2]	≥ 5 dBA CNEL Project increase	
		If ambient is 60 - 64 dBA CNEL[2]	≥ 3 dBA CNEL Project increase	
		If ambient is >= 65 dBA CNEL[2]	≥ 1.5 dBA CNEL Project increase	
On-Site Traffic	All	See Exhibit 3-A		
Operational	Noise-Sensitive	Exterior Noise Level Standards[1]	65 dBA L_{eq}	45 dBA L_{eq}
		If ambient is < 60 dBA Leq[2]	≥ 5 dBA L_{eq} Project increase	
		If ambient is 60 - 65 dBA Leq[2]	≥ 3 dBA L_{eq} Project increase	
		If ambient is > 65 dBA Leq[2]	≥ 1.5 dBA L_{eq} Project increase	
Construction		Permitted hours of 7:00 a.m. and 6:00 p.m. on weekdays[3]		
		Noise Level Threshold[4]	80 dBA L_{eq}	
		Vibration Level Threshold[5]	0.3 PPV (in/sec)	

[1] City of Ontario Municipal Code, 5-29.04(a) exterior noise standards for residential land uses (Noise Zone I).
[2] FICON, 1992.
[3] City of Ontario Municipal Code Section 5-29.09(a).
[4] Federal Transit Administration, Transit Noise and Vibration Impact Assessment Manual.
[5] Caltrans Transportation and Construction Vibration Manual, April 2020 Table 19.
"Daytime" = 7:00 a.m. to 10:00 p.m.; "Nighttime" = 10:00 p.m. to 7:00 a.m.

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5 EXISTING NOISE LEVEL MEASUREMENTS

To assess the existing noise level environment, six 24-hour noise level measurements were taken at sensitive receiver locations in the Project study area. The receiver locations were selected to describe and document the existing noise environment within the Project study area. Exhibit 5-A provides the boundaries of the Project study area and the noise level measurement locations. To fully describe the existing noise conditions, noise level measurements were collected by Urban Crossroads, Inc. on Wednesday, October 4, 2023. Appendix 5.1 includes study area photos.

5.1 MEASUREMENT PROCEDURE AND CRITERIA

To describe the existing noise environment, the hourly noise levels were measured during typical weekday conditions over a 24-hour period. By collecting individual hourly noise level measurements, it is possible to describe the daytime and nighttime hourly noise levels and calculate the 24-hour CNEL. The long-term noise readings were recorded using Piccolo Type 2 integrating sound level meter and dataloggers. The Piccolo sound level meters were calibrated using a Larson-Davis calibrator, Model CAL 150. All noise meters were programmed in "slow" mode to record noise levels in "A" weighted form. The sound level meters and microphones were equipped with a windscreen during all measurements. All noise level measurement equipment satisfies the American National Standards Institute (ANSI) standard specifications for sound level meters ANSI S1.4-2014/IEC 61672-1:2013.

5.2 NOISE MEASUREMENT LOCATIONS

The long-term noise level measurements were positioned as close to the nearest sensitive receiver locations as possible to assess the existing ambient hourly noise levels surrounding the Project site. Actual measurement locations may be affected by location access, equipment security, and proximity to noise sources or solid objects that would affect the measurement and thus may be located at locations that have similar acoustic conditions as the desired locations. Both Caltrans and the FTA recognize that it is not reasonable to collect noise level measurements that can fully represent any part of a private yard, patio, deck, or balcony normally used for human activity when estimating impacts for new development projects. This is demonstrated in the Caltrans general site location guidelines, which indicate that *sites must be free of noise contamination by sources other than sources of interest. Avoid sites located near sources such as barking dogs, lawnmowers, pool pumps, and air conditioners unless it is the express intent of the analyst to measure these sources*. (2) Further, FTA guidance states, t*hat it is not necessary nor recommended that existing noise exposure be determined by measuring at every noise-sensitive location in the project area. Rather, the recommended approach is to characterize the noise environment for clusters of sites based on measurements or estimates at representative locations in the community*. (19)

EXHIBIT 5-A: AMBIENT NOISE MEASUREMENT LOCATIONS

Based on recommendations of Caltrans and the FTA, it is not necessary to collect measurements at each individual building or residence because each measurement represents a group of locations that share acoustical equivalence. (19) In other words, the area represented by the measurement location shares similar shielding, terrain, and geometric relationship to the reference noise source as the receiver location. Receivers represent a location of noise-sensitive areas and are used to estimate the future noise level impacts. Collecting reference ambient noise level measurements at the nearby sensitive receiver locations allows for a comparison of the before and after Project noise levels and is necessary to assess potential noise impacts due to the Project's contribution to the ambient noise levels.

5.3 NOISE MEASUREMENT RESULTS

The noise measurements presented below focus on the average or equivalent sound levels (L_{eq}). The equivalent sound level (L_{eq}) represents a steady-state sound level containing the same total energy as a time-varying signal over a given sample period. Table 5-1 identifies the hourly daytime (7:00 a.m. to 10:00 p.m.) and nighttime (10:00 p.m. to 7:00 a.m.) noise levels at each noise level measurement location. Appendix 5.2 provides a summary of the existing hourly ambient noise levels.

TABLE 5-1: NOISE LEVEL MEASUREMENT SUMMARY

Location[1]	Description	Energy Average Noise Level (dBA L_{eq})[2]	
		Daytime	Nighttime
L1	Located East of the site at future residential	67.9	55.3
L2	Located Northwest of the site at future residential	45.1	36.9
L3	Located North of the site	47.4	34.9
L4	Located West of the site near the residence at 4500 S. Amherst Ave.	53.2	53.3
L5	Located South of the site near the residence at 4576 S Afton Privado	60.3	53.4
L6	Located South of the site near the residence at 4554 S Afton Privado	66.0	45.2

[1] See Exhibit 5-A for the noise level measurement locations.
[2] Energy (logarithmic) average levels. The long-term 24-hour measurement worksheets are included in Appendix 5.2.
"Daytime" = 7:00 a.m. to 10:00 p.m.; "Nighttime" = 10:00 p.m. to 7:00 a.m.

Table 5-1 provides the (energy average) noise levels used to describe the daytime and nighttime ambient conditions. These daytime and nighttime energy average noise levels represent the average of all hourly noise levels observed during these time periods expressed as a single number. Appendix 5.2 provides summary worksheets of the noise levels for each

hour as well as the minimum, maximum, L_1, L_2, L_5, L_8, L_{25}, L_{50}, L_{90}, L_{95}, and L_{99} percentile noise levels observed during the daytime and nighttime periods.

6 METHODS AND PROCEDURES

The following section outlines the methods and procedures used to model and analyze the future traffic noise environment.

6.1 FHWA TRAFFIC NOISE PREDICTION MODEL

The estimated roadway noise impacts from vehicular traffic were calculated using a computer program that replicates the Federal Highway Administration (FHWA) Traffic Noise Prediction Model- FHWA-RD-77-108. (20) The FHWA Model arrives at a predicted noise level through a series of adjustments to the Reference Energy Mean Emission Level (REMEL). In California, the national REMELs are substituted with the California Vehicle Noise (Calveno) Emission Levels. (21) Adjustments are then made to the REMEL to account for: the roadway classification (e.g., collector, secondary, major, or arterial), the roadway active width (i.e., the distance between the center of the outermost travel lanes on each side of the roadway), the total average daily traffic (ADT), the travel speed, the percentages of automobiles, medium trucks, and heavy trucks in the traffic volume, the roadway grade, the angle of view (e.g., whether the roadway view is blocked), the site conditions ("hard" or "soft" relates to the absorption of the ground, pavement, or landscaping), and the percentage of total ADT which flows each hour throughout a 24-hour period.

6.2 ON-SITE TRAFFIC NOISE PREDICTION MODEL INPUTS

Table 6-1 presents the on-site roadway parameters, including the ADT volumes used for this study. The on-site roadway parameters are based on the City of Ontario General Plan Mobility Element roadway classifications. The maximum two-way traffic volumes are based on the roadway design capacity and reflect future long-range traffic conditions needed to assess the on-site traffic noise environment and to identify potential noise abatement measures (if any) that address the worst-case future noise conditions.

TABLE 6-1: ON-SITE ROADWAY PARAMETERS

Location	Classification[1]	Lanes	Average Daily Traffic Volume[2]	Speed Limit (mph)[2]	Site Conditions[2]
Eucalyptus Ave	Arterial	4	21,700	40	Soft
Amherst Ave	Local	2	9,500	25	Soft
Clifton Ave	Local	2	9,500	25	Soft
Chatham St	Local	2	9,500	25	Soft

[1] Road classifications based upon the Esperanza Specific Plan, Exhibit 10 Master Circulation Plan.
[2] Volumes based upon the roadway capacity defined City of Ontario General Plan (TOP2050) Draft EIR, Appendix K.

6.3 TRAFFIC NOISE PREDICTION MODEL INPUTS

The average daily traffic (ADT) volumes used for this study are presented in Table 6-1. The Existing Plus Project ADT was derived based on the differences in Opening Year ADT volumes

added to the Existing ADT volumes. Tables 6-2 and 6-3 provide the time of day (daytime, evening, and nighttime) vehicle splits used for calculating CNEL values.

TABLE 6-2: TIME OF DAY VEHICLE SPLITS

Time Period	Vehicle Type		
	Autos	Medium Trucks	Heavy Trucks
Daytime (7:00 a.m. - 7:00 p.m.)	77.50%	84.80%	86.50%
Evening (7:00 p.m. - 10:00 p.m.)	12.90%	4.90%	2.70%
Nighttime (10:00 p.m. - 7:00 a.m.)	9.60%	10.30%	10.80%
Total:	100.00%	100.00%	100.00%

Source: Typical Southern California vehicle mix.

TABLE 6-3: DISTRIBUTION OF TRAFFIC FLOW BY VEHICLE TYPE (VEHICLE MIX)

Roadway	Total % Traffic Flow			Total
	Autos	Medium Trucks	Heavy Trucks	
All Roadways	97.42%	1.84%	0.74%	100.00%

Source: Typical Southern California vehicle mix.

7 OFF-SITE TRAFFIC NOISE ANALYSIS

The Project would result in a small increase in regional and local traffic volumes. Because sources are calculated on a logarithmic scale, a doubling of the energy is required to generate a noise level increase of 3 dBA. In the case of traffic, a doubling of the traffic volume, without changing the vehicle speeds or mix ratio, results in a noise increase of 3 dBA.

Based on the Project trip generation analysis, the Project is anticipated to generate a net -5 new trips daily (22). Therefore, the Project's traffic volumes would not result in an increase on Eucalyptus Avenue or other area roadways greater than predicted in the original Esperanza Specific Plan or The Ontario Plan 2050 (TOP 2050). Off-site traffic noise impacts would continue to be *less than significant* under CEQA.

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8 ON-SITE TRAFFIC NOISE ANALYSIS

An on-site exterior noise impact analysis has been completed to determine the noise exposure levels resulting from adjacent transportation noise sources in the Project study area and identify potential noise attenuation measures that would achieve acceptable Project exterior and interior noise levels. The primary source of transportation noise affecting the Project site is anticipated to be from Eucalyptus Avenue, Clifton Avenue, Chatham Street, and Amherst Avenue. The Project would also be exposed to nominal traffic noise from the Project's internal roads. However, due to the low traffic volume/speed, traffic noise from these internal roads will not substantially contribute to ambient noise conditions.

8.1 EXTERIOR NOISE ANALYSIS

The expected exterior noise levels for the on-site Project land uses were estimated using the FHWA traffic noise prediction model and the parameters outlined in Tables 6-1 to 6-3. Table 8-1 presents a summary of future on-site exterior traffic noise levels at Project building facades, including the Project 6-foot-high wall along Eucalyptus Avenue. The on-site traffic noise analysis calculations are provided in Appendix 8.1.

TABLE 8-1: EXTERIOR NOISE LEVELS

Building	Roadway	Unmitigated Exterior Noise Level (dBA CNEL)[2]	Land Use Compatibility[3]
BLDG 20	Eucalyptus Ave	59.3	*Clearly Acceptable*
BLDG 7-14	Eucalyptus Ave	59.4	*Clearly Acceptable*
BLDG 6	Eucalyptus Ave	59.4	*Clearly Acceptable*
BLDG 5-6	Clifton Ave	62.7	*Normally Acceptable*
BLDG 4	Clifton Ave	61.0	*Normally Acceptable*
BLDG 4	Chatham St	64.4	*Normally Acceptable*
BLDG 1-3	Chatham St	63.9	*Normally Acceptable*
BLDG 27-28	Chatham St	62.3	*Normally Acceptable*
BLDG 27	Amherst Ave	62.9	*Normally Acceptable*
BLDG 26-22	Amherst Ave	62.9	*Normally Acceptable*
BLDG 20-21	Amherst Ave	62.9	*Normally Acceptable*

[1] Project buildings shown on Exhibit 1-B.
[2] Exterior on-site traffic noise level calculations are included in Appendix 8.1.
[3] Based on the General Plan land use compatibility guidelines as shown in Exhibit 3-A.

The on-site exterior traffic noise analysis indicates that all buildings will experience exterior noise levels ranging from 59.3 to 64.4 CNEL. Based on the City of Ontario Land Use Compatibility for Community Noise Exposure shown in Exhibit 3-A, the Project land uses are considered clearly acceptable to normally acceptable with unmitigated exterior noise levels of less than 65 dBA CNEL. For *normally acceptable* exterior noise levels, a*coustical reports will be*

required for major new residential construction. Conventional construction with closed windows and fresh air supply systems of air conditioning will normally suffice.

In addition, the Project will satisfy the City of Ontario 65 dBA CNEL exterior noise level standards for residential land uses. This noise analysis shows that the Project will satisfy the City of Ontario 65 dBA CNEL exterior noise level standards for residential use without additional noise abatement measures.

8.1.4 EXTERIOR TRAFFIC NOISE LEVEL COMPLIANCE

Table 8-1 shows that on-site traffic noise levels do not exceed the City of Ontario 65 dBA CNEL exterior noise level standards for noise-sensitive residential land uses.

8.2 INTERIOR NOISE ANALYSIS

To ensure that the interior noise levels comply with the interior noise level standards, future exterior noise levels were calculated at the first-, second-, and third-floor building façade/balcony locations.

8.2.1 NOISE REDUCTION METHODOLOGY

The interior noise level is the difference between the predicted exterior noise level at the building facade and the noise reduction of the structure. Typical building construction will provide a Noise Reduction (NR) of approximately 12 dBA with "windows open" and a minimum 25 dBA noise reduction with "windows closed." (4) (23)

8.2.2 INTERIOR NOISE LEVEL ASSESSMENT

To provide the necessary interior noise level reduction, Tables 8-2 through 8-4 indicate that Project land uses adjacent to Eucalyptus Avenue, Clifton Avenue, Chatham Street, and Amherst Avenue will require a windows-closed condition and mechanical ventilation (e.g., air conditioning). Table 8-2 shows that the future noise levels at the first-floor building façade are expected to range from 59.3 to 64.4 dBA CNEL, and with standard construction, interior noise levels will range from 33.9 to 39.4 dBA CNEL. Table 8-3 shows that the future noise levels at the second-floor building façade are expected to range from 60.8 to 65.5 dBA CNEL, and with standard construction, interior noise levels will range from 38.5 to 40.5 dBA CNEL. Table 8-4 shows that the future noise levels at the third-floor building façade are expected to range from 60.4 to 65.3 dBA CNEL, and with standard construction, interior noise levels will range from 35.4 to 40.3 dBA CNEL.

8.2.3 INTERIOR TRAFFIC NOISE LEVEL COMPLIANCE

Tables 8-2 through 8-4 show that on-site interior traffic noise levels will not exceed the City of Ontario 45 dBA CNEL interior noise level standard for residential development and additional noise abatement measures are unnecessary.

TABLE 8-2: FIRST-FLOOR INTERIOR NOISE LEVELS (CNEL)

Building	Roadway	Noise Level at Façade[2]	Required Interior Noise Reduction[3]	Estimated Interior Noise Reduction[4]	Upgraded Windows[5]	Interior Noise Level[6]	Threshold[7]	Threshold Exceeded?
BLDG 20	Keller Rd.	59.3	14.3	25.0	No	34.3	45	No
BLDG 7-14	Keller Rd.	59.4	14.4	25.0	No	34.4	45	No
BLDG 6	Keller Rd.	59.4	14.4	25.0	No	34.4	45	No
BLDG 5-6	Keller Rd.	62.7	17.7	25.0	No	37.7	45	No
BLDG 4	Keller Rd.	61.0	16.0	25.0	No	36.0	45	No
BLDG 4	Keller Rd.	64.4	19.4	25.0	No	39.4	45	No
BLDG 1-3	Keller Rd.	63.9	18.9	25.0	No	38.9	45	No
BLDG 27-28	Keller Rd.	62.3	17.3	25.0	No	37.3	45	No
BLDG 27	Keller Rd.	62.9	17.9	25.0	No	37.9	45	No
BLDG 26-22	Keller Rd.	62.9	17.9	25.0	No	37.9	45	No
BLDG 20-21	Keller Rd.	62.9	17.9	25.0	No	37.9	45	No

[1] Project site plan shown on Exhibit 1-B.
[2] Exterior noise level at the facade with a windows-closed condition and a means of mechanical ventilation (e.g., air conditioning). See Appendix 8.1.
[3] Noise reduction to satisfy the interior noise level threshold.
[4] A minimum of 25 dBA noise reduction is assumed with standard building construction and approximately 2 dBA less than the STC rating for upgraded windows.
[5] Does the required interior noise reduction trigger upgraded windows with a minimum STC rating of greater than 27?
[6] Estimated interior noise level with minimum STC rating for all windows.
[7] Interior noise level threshold: 45 dBA CNEL for residential use (California Code of Regulations, Title 24, Building Standards Administrative Code).

TABLE 8-3: SECOND-FLOOR INTERIOR NOISE LEVELS (CNEL)

Building	Roadway	Noise Level at Façade[2]	Required Interior Noise Reduction[3]	Estimated Interior Noise Reduction[4]	Upgraded Windows[5]	Interior Noise Level[6]	Threshold[7]	Threshold Exceeded?
BLDG 20	Keller Rd.	65.3	20.3	25.0	No	40.3	45	No
BLDG 7-14	Keller Rd.	65.5	20.5	25.0	No	40.5	45	No
BLDG 6	Keller Rd.	65.4	20.4	25.0	No	40.4	45	No
BLDG 5-6	Keller Rd.	62.4	17.4	25.0	No	37.4	45	No
BLDG 4	Keller Rd.	60.8	15.8	25.0	No	35.8	45	No
BLDG 4	Keller Rd.	63.9	18.9	25.0	No	38.9	45	No
BLDG 1-3	Keller Rd.	63.5	18.5	25.0	No	38.5	45	No
BLDG 27-28	Keller Rd.	62.0	17.0	25.0	No	37.0	45	No
BLDG 27	Keller Rd.	62.5	17.5	25.0	No	37.5	45	No
BLDG 26-22	Keller Rd.	62.5	17.5	25.0	No	37.5	45	No
BLDG 20-21	Keller Rd.	62.5	17.5	25.0	No	37.5	45	No

[1] Project site plan shown on Exhibit 1-B.
[2] Exterior noise level at the facade with a windows-closed condition and a means of mechanical ventilation (e.g., air conditioning). See Appendix 8.1.
[3] Noise reduction to satisfy the interior noise level threshold.
[4] A minimum of 25 dBA noise reduction is assumed with standard building construction and approximately 2 dBA less than the STC rating for upgraded windows.
[5] Does the required interior noise reduction trigger upgraded windows with a minimum STC rating of greater than 27?
[6] Estimated interior noise level with minimum STC rating for all windows.
[7] Interior noise level threshold: 45 dBA CNEL for residential use (California Code of Regulations, Title 24, Building Standards Administrative Code).

TABLE 8-4: THIRD-FLOOR INTERIOR NOISE LEVELS (CNEL)

Building	Roadway	Noise Level at Façade[2]	Required Interior Noise Reduction[3]	Estimated Interior Noise Reduction[4]	Upgraded Windows[5]	Interior Noise Level[6]	Threshold[7]	Threshold Exceeded?
BLDG 20	Keller Rd.	NA	NA	25.0	NA	NA	45	NA
BLDG 7-14	Keller Rd.	65.3	20.3	25.0	No	40.3	45	No
BLDG 6	Keller Rd.	65.3	20.3	25.0	No	40.3	45	No
BLDG 5-6	Keller Rd.	61.7	16.7	25.0	No	36.7	45	No
BLDG 4	Keller Rd.	60.4	15.4	25.0	No	35.4	45	No
BLDG 4	Keller Rd.	62.9	17.9	25.0	No	37.9	45	No
BLDG 1-3	Keller Rd.	62.6	17.6	25.0	No	37.6	45	No
BLDG 27-28	Keller Rd.	NA	NA	25.0	NA	NA	45	NA
BLDG 27	Keller Rd.	NA	NA	25.0	NA	NA	45	NA
BLDG 26-22	Keller Rd.	NA	NA	25.0	NA	NA	45	NA
BLDG 20-21	Keller Rd.	NA	NA	25.0	NA	NA	45	NA

[1] Project site plan shown on Exhibit 1-B.
[2] Exterior noise level at the facade with a windows-closed condition and a means of mechanical ventilation (e.g., air conditioning). See Appendix 8.1.
[3] Noise reduction to satisfy the interior noise level threshold.
[4] A minimum of 25 dBA noise reduction is assumed with standard building construction and approximately 2 dBA less than the STC rating for upgraded windows.
[5] Does the required interior noise reduction trigger upgraded windows with a minimum STC rating of greater than 27?
[6] Estimated interior noise level with minimum STC rating for all windows.
[7] Interior noise level threshold: 45 dBA CNEL for residential use (California Code of Regulations, Title 24, Building Standards Administrative Code).

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9 RECEIVER LOCATIONS

To assess the potential for long-term operational and short-term construction noise impacts, the following sensitive receiver locations, as shown in Exhibit 9-A, were identified as representative locations for analysis. Sensitive receivers are generally defined as locations where people reside or where the presence of unwanted sound could otherwise adversely affect the use of the land. Noise-sensitive land uses are generally considered to include schools, hospitals, single-family dwellings, mobile home parks, churches, libraries, and recreation areas. Moderately noise-sensitive land uses typically include multi-family dwellings, hotels, motels, dormitories, outpatient clinics, cemeteries, golf courses, country clubs, athletic/tennis clubs, and equestrian clubs. Land uses considered relatively insensitive to noise include business, commercial, and professional developments. Land uses typically unaffected by noise include industrial, manufacturing, utilities, agriculture, undeveloped land, parking lots, warehousing, liquid and solid waste facilities, salvage yards, and transit terminals.

To describe the potential off-site Project noise levels, six receiver locations in the vicinity of the Project site were identified. The selection of receiver locations is based on FHWA guidelines and is consistent with additional guidance provided by Caltrans and the FTA. Other sensitive land uses in the Project study area located at greater distances than those identified in this noise study will experience lower noise levels than those presented in this report due to the additional attenuation from distance and the shielding of intervening structures. Distance is measured in a straight line from the project boundary to each receiver location.

R1: Location R1 represents the future residential area east of Clifton Avenue, approximately 83 feet east of the Project site. Receptor R1 is placed at the nearest potential location for future housing facing the Project site.

R2: Location R2 represents the future residential area northeast of the intersection of Clifton Avenue and Chatham Street, approximately 92 feet northeast of the Project site. Receptor R2 is placed at the nearest potential location for future housing facing the Project site.

R3: Location R3 represents the future park north of Chatham Street, approximately 75 feet north of the Project site. Receptor R3 is placed at the nearest potential location within the park use facing the Project site.

R4: Location R4 represents an existing residence at 4508 S. Amherst Avenue, approximately 130 feet west of the Project site. Receptor R4 is placed at the private outdoor living areas (backyards) facing the Project site.

R5: Location R5 represents the existing residence at 4095 E. Amigos Privado, approximately 202 feet south of the Project site. Receptor R5 is placed at the private outdoor living areas (backyards) facing the Project site.

R6: Location R6 represents the existing residence at 4556 S. Afton Privado, approximately 142 feet southeast of the Project site. Receptor R6 is placed at the private outdoor living areas (backyards) facing the Project site.

EXHIBIT 9-A: RECEIVER LOCATIONS

10 OPERATIONAL NOISE ANALYSIS

The Project is considered a noise-sensitive receiving land use and is not expected to include any specific type of operational noise levels beyond those typically associated with residential land uses in the Project study area. Additionally, Section 21085 of the California Public Resources Code states in part, "…for residential projects, the effects of noise generated by project occupants and their guests on human beings is not a significant effect on the environment." (29) A review of the legislative record indicates the author's intent for Section 21085 was to "remove the potential for litigants to challenge residential development based on the speculation that the new residents will create unwanted noises. It would also reestablish existing precedent that minor and intermittent noise nuisances, such as from unamplified human voices, be addressed through local nuisance ordinances and not via CEQA. Consequently, activities solely associated with occupants and quests, such as the swimming pool/spa activities, dog park activities, and outdoor activities in common spaces, are not considered part of this operational noise analysis for CEQA." Based on the intent of the author of Section 21085, the operational noise sources are limited to the mechanical and non-verbal noise sources that occur onsite, including air conditioning units, trash enclosure activity, and parking lot movements.

Therefore, this section analyzes the potential operational noise impacts at the nearby receiver locations, identified in Section 9, resulting from the operation of air conditioning units, trash enclosure activity, and parking lot movements. Exhibit 10-A identifies the noise source locations used to assess the equivalent Leq operational noise levels.

10.1 OPERATIONAL NOISE SOURCES

The proposed development is considered a noise-sensitive receiving land use and is not expected to include any operational noise source activities that would impact existing residential land uses. Operational noise sources associated with residential development are generally limited to Project construction and maintenance. However, to assess the potential operational noise source activities from the Project, this section analyzes the noise impacts resulting from the operation associated with the proposed air conditioning units, trash enclosure activity, and parking lot movements.

AIR CONDITIONING UNITS

To assess the noise levels generated by the air conditioning units, reference noise levels were taken from equipment specifications for a 3- to 5-ton residential packaged air conditioning unit (Carrier 24ABC6); see Appendix 10.1. The air conditioning units were modeled as operating 45 minutes per hour during the daytime and 30 minutes at night, representing the typical maximum operating time for properly sized AC systems. The air conditioning units are anticipated to be located 3 feet above ground level. At a uniform reference distance of 50 feet, the units would generate a reference noise level of 44.4 dBA L_{eq}.

EXHIBIT 10-A: OPERATIONAL NOISE SOURCE LOCATIONS

TRASH ENCLOSURE ACTIVITY

To describe the noise levels associated with trash enclosure activity, Urban Crossroads collected a reference noise level measurement at an existing trash enclosure containing two dumpster bins at the Old Town West Parking structure in the City of Orange. The trash enclosure noise levels describe metal gates opening and closing, metal scraping against concrete floor sounds, dumpster movement on metal wheels, and trash dropping into the metal dumpster. The reference noise levels describe trash enclosure noise activities when trash is dropped into an empty metal dumpster, as would occur at the Project site. The measured reference noise level at the uniform 50-foot reference distance is 72.7 dBA L_{max} and 57.4 dBA L_{eq} for the trash enclosure activity. The reference noise level describes the expected noise source activities associated with the Project trash enclosures. Typical trash enclosure activities are estimated to occur for 10 minutes per hour.

PARKING LOT ACTIVITIES

Parking activities are based on the area of the parking spaces. The Project includes approximately 56 new uncovered surface parking spaces on-site. The surface parking spaces are assumed to have up to 2 movements per hour for 112 events per hour. Based on studies conducted in Europe and Australia, the average parking procedure, which included movement associated with either entering or exiting the parking area, parking the vehicles, and opening and closing doors, resulted in a sound power level of approximately 63 dBA L_w/square meter per event (24) (25).

10.2 REFERENCE NOISE LEVELS

To estimate the operational noise impacts, reference noise level measurements were collected from similar types of activities to represent the noise levels expected with the development of the Project. While sound pressure levels (e.g., L_{eq}) quantify in decibels the intensity of given sound sources at a reference distance, sound power levels (L_w) are connected to the sound source and are independent of distance. Sound pressure levels vary substantially with distance from the source and diminish because of intervening obstacles (e.g., walls, buildings, etc.), air absorption, wind, and other factors. Sound power is the acoustic energy emitted by the sound source and is an absolute value not affected by the environment. The reference project operational noise levels are based on the Project related noise sources shown in Exhibit 10-A. The reference Project's operational sound power levels are summarized in Table 10-1.

TABLE 10-1: REFERENCE NOISE LEVELS

Noise Source	Noise Source Height (Feet)	Min./Hour[4]			Sound Power Level (dBA)[6]
		Day	Night	@ 50 Feet	
Air Conditioning Units[1]	3'	45	30	44.4	76.0
Trash Enclosure Activity[2]	8'	10	10	57.4	89.0
Parking Lot Movements[3]	5'	60	60	31.4	63.0

[1] Carrier 25HBC5 air conditioning unit, see Appendix 10.1.
[2] As measured by Urban Crossroads, Inc.
[3] Parking Area Noise, 2007.
[4] Anticipated duration (minutes within the hour) of noise activity during typical hourly conditions expected at the Project site.
"Daytime" = 7:00 a.m. to 10:00 p.m.; "Nighttime" = 10:00 p.m. to 7:00 a.m.

10.3 CADNAA NOISE PREDICTION MODEL

To fully describe the exterior operational noise levels from the Project, Urban Crossroads, Inc. developed a noise prediction model using the CadnaA (Computer Aided Noise Abatement) computer program. CadnaA can analyze multiple types of noise sources using the spatially accurate Project site plan, georeferenced Nearmap aerial imagery, topography, buildings, and barriers in its calculations to predict outdoor noise levels.

Using the ISO 9613 protocol, CadnaA will calculate the distance from each noise source to the noise receiver locations, using the ground absorption, distance, and barrier/building attenuation inputs to provide a summary of the noise level at each receiver and the partial noise level contributions by noise source. Consistent with the ISO 9613 protocol, the CadnaA noise prediction model relies on the reference sound power level (L_w) to describe individual noise sources. While sound pressure levels (e.g., L_{eq}) quantify in decibels the intensity of given sound sources at a reference distance, sound power levels (L_w) are connected to the sound source and are independent of distance. Sound pressure levels vary substantially with distance from the source and diminish because of intervening obstacles (e.g., walls, buildings, terrain, etc.), air absorption, wind, and other factors. Sound power is the acoustic energy emitted by the sound source and is an absolute value not affected by the environment.

The operational noise level calculations in this noise study account for the distance attenuation provided due to geometric spreading, when sound from a localized stationary source (i.e., a point source) propagates uniformly outward in a spherical pattern. A default ground attenuation factor of 0.5 was used in the noise analysis to account for mixed ground representing a combination of hard and soft surfaces. Appendix 10.2 includes the detailed noise model inputs used to estimate the Project operational noise levels presented in this section.

10.4 PROJECT OPERATIONAL NOISE LEVELS

Using the reference noise levels to represent the Project operations that include air conditioning units, trash enclosure activity, and parking lot movements, Urban Crossroads, Inc. calculated the unmitigated operational source noise levels expected to be generated at the Project site and the Project-related noise level increases that would be experienced at each of

the sensitive receiver locations. Table 10-2 shows the Project's operational daytime noise levels. The hourly noise levels at the off-site receiver locations are expected to range from 38.3 to 46.4 dBA L_{eq}. Appendix 10.2 includes the detailed noise model inputs used to estimate the Project operational noise levels presented in this section.

TABLE 10-2: PROJECT DAYTIME OPERATIONAL NOISE LEVELS

Noise Source[1]	Operational Noise Levels by Receiver Location (dBA L_{eq})					
	R1	R2	R3	R4	R5	R6
Air Conditioning Units	45.7	37.4	39.8	43.3	38.8	37.9
Trash Enclosure Activity	37.9	30.5	30.3	34.1	29.6	27.9
Parking Lot Movements	27.5	18.6	20.5	24.9	20.8	19.2
Total (All Noise Sources)	**46.4**	**38.3**	**40.3**	**43.8**	**39.4**	**38.4**

[1] See Exhibit 10-A for the noise source locations. CadnaA noise model calculations are included in Appendix 10.2.

Table 10-3 shows the Project operational noise levels during the nighttime hours of 10:00 p.m. to 7:00 a.m. The nighttime hourly noise levels at the off-site receiver locations are expected to range from 35.8 to 44.1 dBA L_{eq}. Appendix 10.2 includes the detailed noise model inputs.

TABLE 10-3: PROJECT NIGHTTIME OPERATIONAL NOISE LEVELS

Noise Source[1]	Operational Noise Levels by Receiver Location (dBA L_{eq})					
	R1	R2	R3	R4	R5	R6
Air Conditioning Units	43.0	34.7	37.0	40.5	36.0	35.1
Trash Enclosure Activity	36.9	29.6	29.3	33.1	28.6	26.9
Parking Lot Movements	27.5	18.6	20.5	24.9	20.8	19.2
Total (All Noise Sources)	**44.1**	**36.0**	**37.8**	**41.3**	**36.8**	**35.8**

[1] See Exhibit 10-A for the noise source locations. CadnaA noise model calculations are included in Appendix 10.2.

10.5 PROJECT OPERATIONAL NOISE LEVEL COMPLIANCE

To demonstrate compliance with local noise regulations, the Project-only operational noise levels are evaluated against exterior noise level thresholds based on the City of Ontario exterior noise level standards at the nearest noise-sensitive receiver locations. Table 10-4 shows the operational noise levels associated with the Project will satisfy the City of Ontario 65 dBA L_{eq} daytime and 45 dBA L_{eq} nighttime exterior noise level standards at all the nearest receiver locations. Therefore, the operational noise impacts are considered *less than significant* at the nearest noise-sensitive receiver locations.

TABLE 10-4: OPERATIONAL NOISE LEVEL COMPLIANCE

Receiver Location[1]	Project Operational Noise Levels (dBA Leq)[2]		Noise Level Standards (dBA Leq)[3]		Noise Level Standards Exceeded?[4]	
	Daytime	Nighttime	Daytime	Nighttime	Daytime	Nighttime
R1	46.4	44.1	65	45	No	No
R2	38.3	36.0	65	45	No	No
R3	40.3	37.8	65	45	No	No
R4	43.8	41.3	65	45	No	No
R5	39.4	36.8	65	45	No	No
R6	38.4	35.8	65	45	No	No

[1] See Exhibit 9-A for the receiver locations.
[2] Project operational noise levels as shown in Tables 10-2 and 10-3.
[3] City of Ontario Municipal Code, Section 5-29.04 (Appendix 3.1)
[4] Do the estimated Project operational noise source activities exceed the noise level standards?
"Daytime" = 7:00 a.m. to 10:00 p.m.; "Nighttime" = 10:00 p.m. to 7:00 a.m.

10.6 PROJECT OPERATIONAL NOISE LEVEL INCREASES

To describe the Project operational noise level increases, the Project operational noise levels are combined with the existing ambient noise level measurements for the nearest receiver locations potentially impacted by Project operational noise sources. Since the units used to measure noise, decibels (dB), are logarithmic units, the Project-operational and existing ambient noise levels cannot be combined using standard arithmetic equations. (2) Instead, they must be logarithmically added using the following base equation:

$$SPL_{Total} = 10\log_{10}[10^{SPL1/10} + 10^{SPL2/10} + \ldots 10^{SPLn/10}]$$

Where “SPL1,” “SPL2,” etc. are equal to the sound pressure levels being combined, or in this case, the Project-operational and existing ambient noise levels. The difference between the combined Project and ambient noise levels describes the Project noise level increases to the existing ambient noise environment. Noise levels that would be experienced at receiver locations when Project-source noise is added to the daytime and nighttime ambient conditions are presented in Tables 10-2 and 10-3, respectively.

As indicated in Table 10-5, the Project will generate daytime operational noise level increases ranging from less than 0.1 to 0.8 dBA L_{eq} at the nearest receiver locations. According to Table 10-6, the Project will generate nighttime operational noise level increases ranging from approximately 0.1 to 4.7 dBA L_{eq} at the nearest receiver locations. In effect, the amount to which a given noise level increase is considered acceptable is reduced based on existing ambient noise conditions. Based on the result shown in Tables 10-5 and 10-6, the Project-related operational noise level increases will satisfy the operational noise level increase criteria at the nearest sensitive receiver locations, and noise level increases will be *less than significant.*

TABLE 10-5: DAYTIME PROJECT OPERATIONAL NOISE LEVEL INCREASES

Receiver Location[1]	Total Project Operational Noise Level[2]	Measurement Location[3]	Reference Ambient Noise Levels[4]	Combined Project and Ambient[5]	Project Increase[6]	Existing Noise Sensitive Land Use?	Increase Criteria[7]	Increase Criteria Exceeded?[7]
R1	46.4	L1	67.9	67.9	0.0	Yes	1.5	No
R2	38.3	L2	45.1	45.9	0.8	Yes	5.0	No
R3	40.3	L3	47.4	48.2	0.8	Yes	5.0	No
R4	43.8	L4	53.2	53.7	0.5	Yes	5.0	No
R5	39.4	L5	60.3	60.3	0.0	Yes	3.0	No
R6	38.4	L6	66.0	66.0	0.0	Yes	1.5	No

[1] See Exhibit 9-A for the receiver locations.
[2] Total Project daytime operational noise levels as shown in Table 10-3.
[3] Reference noise level measurement locations as shown in Exhibit 5-A.
[4] Observed daytime ambient noise levels as shown in Table 5-1.
[5] Represents the combined ambient conditions plus the Project activities.
[6] The noise level increase expected with the addition of the proposed Project activities.
[7] Significance increase criteria as shown in Table 4-1.

TABLE 10-6: NIGHTTIME OPERATIONAL NOISE LEVEL INCREASES

Receiver Location[1]	Total Project Operational Noise Level[2]	Measurement Location[3]	Reference Ambient Noise Levels[4]	Combined Project and Ambient[5]	Project Increase[6]	Noise Sensitive Land Use?	Increase Criteria[7]	Increase Criteria Exceeded?[7]
R1	44.1	L1	55.3	55.6	0.3	Yes	5.0	No
R2	36.0	L2	36.9	39.5	2.6	Yes	5.0	No
R3	37.8	L3	34.9	39.6	4.7	Yes	5.0	No
R4	41.3	L4	53.3	53.6	0.3	Yes	5.0	No
R5	36.8	L5	53.4	53.5	0.1	Yes	5.0	No
R6	35.8	L6	45.2	45.7	0.5	Yes	5.0	No

[1] See Exhibit 9-A for the receiver locations.
[2] Total Project nighttime operational noise levels as shown in Table 10-3.
[3] Reference noise level measurement locations as shown in Exhibit 5-A.
[4] Observed nighttime ambient noise levels as shown in Table 5-1.
[5] Represents the combined ambient conditions plus the Project activities.
[6] The noise level increase expected with the addition of the proposed Project activities.
[7] Significance increase criteria as shown in Table 4-1.

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11 CONSTRUCTION ANALYSIS

This section analyzes potential impacts resulting from the short-term construction activities associated with the development of the Project. Exhibit 11-A shows the construction activity boundaries in relation to the nearest sensitive receiver locations previously described in Section 9.

To prevent high levels of construction noise from impacting noise-sensitive land uses, section 5-29.09 of the Ontario Municipal Code states: *No person, while engaged in construction, remodeling, digging, grading, demolition or any other related building activity, shall operate any tool, equipment or machine in a manner that produces loud noise that disturbs a person of normal sensitivity who works or resides in the vicinity, or a Police or Code Enforcement Officer, on any weekday except between the hours of 7:00 a.m. and 6:00 p.m. or on Saturday or Sunday between the hours of 9:00 a.m. and 6:00 p.m.* (12)

While the City establishes limits to the hours during which construction activity may take place, it does not identify specific noise level limits for construction noise levels at potentially affected receiver locations for CEQA analysis purposes. Therefore, a numerical construction threshold based on the Federal Transit Administration (FTA) Transit Noise and Vibration Impact Assessment Manual is used for the analysis of daytime construction impacts. The FTA considers a daytime exterior construction noise level of 80 dBA L_{eq} as a reasonable threshold for noise-sensitive residential land use. (8 p. 179).

11.1 CONSTRUCTION NOISE LEVELS

The FTA *Transit Noise and Vibration Impact Assessment Manual* recognizes that construction projects are accomplished in several different stages and outlines the procedures for assessing noise impacts during construction. Each stage has a specific equipment mix, depending on the work to be completed during that stage. As a result of the equipment mix, each stage has its own noise characteristics; some stages have higher continuous noise levels than others, and some have higher impact noise levels than others. The Project construction activities are expected to occur in the following stages:

- Site Preparation
- Grading
- Building Construction
- Paving
- Architectural Coating

11.2 CONSTRUCTION REFERENCE NOISE LEVELS

To describe construction noise activities, this construction noise analysis was prepared using reference construction equipment noise levels from the Federal Highway Administration (FHWA) published the Roadway Construction Noise Model (RCNM), which includes a national database of construction equipment reference noise emission levels. (26) The RCNM equipment database provides a comprehensive list of the noise-generating characteristics for specific types of construction equipment. In addition, the database provides an acoustical usage

factor to estimate the fraction of time each piece of construction equipment is operating at full power (i.e., its loudest condition) during a construction operation.

EXHIBIT 11-A: CONSTRUCTION NOISE SOURCE LOCATIONS

TABLE 11-1: CONSTRUCTION REFERENCE NOISE LEVELS

Construction Stage	Reference Construction Equipmnet[1]	Reference Noise Level @ 50 Feet (dBA L_{eq})	Composite Reference Noise Level (dBA L_{eq})	Reference Power Level (dBA L_w)
Site Preparation	Tractor	80.0	82.9	114.5
	Front End Loader	75.0		
	Dozer	78.0		
Grading	Tractor	80.0	84.2	115.9
	Grader	81.0		
	Compactor (ground)	76.0		
Building Construction	Crane	73.0	82.1	113.7
	Generator	78.0		
	Gradall	79.0		
Paving	Paver	74.0	77.8	109.5
	Dump Truck	72.0		
	Roller	73.0		
Architectural Coating	Man Lift	68.0	76.2	107.8
	Compressor (air)	74.0		
	Generator (<25kVA)	70.0		

[1] FHWA Road Construction Noise Model.

11.3 CONSTRUCTION NOISE ANALYSIS

Using the reference construction equipment noise levels and the CadnaA noise prediction model, calculations of the Project construction noise level impacts at the nearby sensitive receiver locations were completed. Consistent with FTA guidance for general construction noise assessment, Table 11-1 presents the combined noise levels for the loudest construction equipment, assuming they operate at the same time. As shown in Table 11-2, the construction noise levels are expected to range from 59.5 to 67.6 dBA L_{eq} at the nearby receiver locations. Appendix 11.1 includes the detailed CadnaA construction noise model inputs.

TABLE 11-2: CONSTRUCTION EQUIPMENT NOISE LEVEL SUMMARY

Receiver Location[1]	Construction Noise Levels (dBA L_{eq})					
	Site Preparation	Grading	Building Construction	Paving	Architectural Coating	Highest Levels[2]
R1	64.0	65.3	63.2	58.9	57.2	67.6
R2	62.5	63.8	61.7	57.4	55.7	66.1
R3	63.0	64.3	62.2	57.9	56.2	66.6
R4	59.7	61.0	58.9	54.6	52.9	63.3
R5	55.9	57.2	55.1	50.8	49.1	59.5
R6	60.7	62.0	59.9	55.6	53.9	64.3

[1] Noise receiver locations are shown in Exhibit 9-A.
[2] Construction noise level calculations are based on distance from the construction activity, measured from the Project site boundary to the nearest receiver locations. CadnaA construction noise model inputs are included in Appendix 11.1.

11.4 CONSTRUCTION NOISE LEVEL COMPLIANCE

To evaluate whether the Project will generate potentially significant short-term noise levels at the nearest receiver locations, a construction-related daytime noise level threshold of 80 dBA L_{eq} is used as a reasonable threshold to assess the daytime construction noise level impacts. The construction noise analysis shows that the nearest receiver locations will satisfy the reasonable daytime 80 dBA L_{eq} significance threshold during Project construction activities, as shown in Table 11-3. Therefore, the noise impacts due to Project construction noise are considered *less than significant* at all receiver locations.

TABLE 11-3: CONSTRUCTION NOISE LEVEL COMPLIANCE

Receiver Location[1]	Construction Noise Levels (dBA L_{eq})		
	Highest Construction Noise Levels[2]	Threshold[3]	Threshold Exceeded?[4]
R1	67.6	80	No
R2	66.1	80	No
R3	66.6	80	No
R4	63.3	80	No
R5	59.5	80	No
R6	64.3	80	No

[1] Noise receiver locations are shown in Exhibit 9-A.
[2] Highest construction noise level calculations based on distance from the construction noise source activity to the nearest receiver locations, as shown in Table 11-2.
[3] Construction noise level thresholds as shown in Table 4-1.
[4] Do the estimated Project construction noise levels exceed the construction noise level threshold?

11.5 CONSTRUCTION VIBRATION ANALYSIS

Construction activity can result in varying degrees of ground vibration, depending on the equipment and methods employed. Operation of construction equipment causes ground vibrations that spread through the ground and diminish in strength with distance. Ground vibration levels associated with various types of construction equipment are summarized in Table 11-4. Based on the representative vibration levels presented for various construction equipment types, it is possible to estimate the potential for human response (annoyance) and building damage using the following vibration assessment methods defined by the FTA. To describe the vibration impacts, the FTA provides the following equation: $PPV_{equip} = PPV_{ref} \times (25/D)^{1.5}$

TABLE 11-4: VIBRATION SOURCE LEVELS FOR CONSTRUCTION EQUIPMENT

Equipment	PPV (in/sec) at 25 feet
Small bulldozer	0.003
Jackhammer	0.035
Loaded Trucks	0.076
Large bulldozer	0.089

Federal Transit Administration, Transit Noise and Vibration Impact Assessment Manual

Table 11-5 presents the expected Project related vibration levels at the nearby receiver locations. At distances ranging from 75 to 202 feet from Project construction activities, construction vibration velocity levels are estimated to range from less than 0.01 to 0.02 in/sec PPV. Based on the maximum acceptable continuous vibration threshold of 0.30 PPV (in/sec), the typical Project construction vibration levels will fall below the building damage thresholds at all the receiver locations. Therefore, the Project-related vibration impacts are considered *less than significant* during typical construction activities at the Project site. Moreover, the vibration levels reported at the sensitive receiver locations are unlikely to be sustained during the entire construction period but will occur rather only during the times that heavy construction equipment is operating adjacent to the Project site perimeter.

Moreover, the impacts at the site of the nearest sensitive receiver locations are unlikely to be sustained during the entire construction period but will occur rather only during the times that heavy construction equipment is operating adjacent to the Project site perimeter.

TABLE 11-5: PROJECT CONSTRUCTION VIBRATION LEVELS

Receiver[1]	Distance to Const. Activity (Feet)[2]	Typical Construction Vibration Levels PPV (in/sec)[3]					Thresholds PPV (in/sec)[4]	Thresholds Exceeded?[5]
		Small bulldozer	Jackhammer	Loaded Trucks	Large bulldozer	Highest Vibration Level		
R1	82'	0.00	0.01	0.01	0.01	0.01	0.3	No
R2	92'	0.00	0.00	0.01	0.01	0.01	0.3	No
R3	75'	0.00	0.01	0.01	0.02	0.02	0.3	No
R4	130'	0.00	0.00	0.01	0.01	0.01	0.3	No
R5	202'	0.00	0.00	0.00	0.00	0.00	0.3	No
R6	142'	0.00	0.00	0.01	0.01	0.01	0.3	No

[1] Receiver locations are shown in Exhibit 9-A.
[2] Distance from receiver location to Project construction boundary.
[3] Based on the Vibration Source Levels of Construction Equipment (Table 10-4).
[4] Caltrans Transportation and Construction Vibration Guidance Manual, April 2020, Table 19, p. 38.
[5] Does the peak vibration exceed the acceptable vibration thresholds?
"PPV" = Peak Particle Velocity

12 REFERENCES

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21. **California Department of Transportation Environmental Program, Office of Environmental Engineering.** *Use of California Vehicle Noise Reference Energy Mean Emission Levels (Calveno REMELs) in FHWA Highway Traffic Noise Prediction.* September 1995. TAN 95-03.

22. **Urban Crossroads, Inc.** *Esperanza Specific Plan Trip Generation Assessment.* 2024.
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25. *Prediction of parking area noise in Australian conditions.* **Johnson, Laurence Nicol and Paul.** Paper Number 39, s.l. : Gold Coast, Australia, 2-4 November 2011, Vol. Proceedings of ACOUSTICS 2011.
26. **U.S. Department of Transportation, Federal Highway Administration, Office of Environment and Planning.** *FHWA Roadway Construction Noise Model.* January, 2006.

13 CERTIFICATIONS

The contents of this noise study report represent an accurate depiction of the noise environment and impacts associated with the Esperanza Specific Plan Amendment Project. The information contained in this noise study report is based on the best available data at the time of preparation. If you have any questions, please contact me directly at (619) 788-1971.

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EDUCATION

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California Polytechnic State University, Pomona • June 2000

PROFESSIONAL AFFILIATIONS

INCE – Institute of Noise Control Engineers, Member
ASA – Acoustical Society of America
AEP – Association of Environmental Planners
AWMA – Air and Waste Management Association

PROFESSIONAL CERTIFICATIONS

Approved Acoustical Consultant • County of San Diego
FHWA Traffic Noise Model of Training • November 2004
CadnaA Basic and Advanced Training Certificate • October 2008.

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APPENDIX 3.1:

CITY OF ONTARIO MUNICIPAL CODE

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CHAPTER 29: NOISE

5-29.01 Declaration of findings and policy

5-29.02 Definitions

5-29.03 Designated noise zones

5-29.04 Exterior noise standards

5-29.05 Interior noise standards

5-29.06 Exemptions

5-29.07 Loud and disturbing noise

5-29.08 Real property maintenance noise regulations

5-29.09 Construction activity noise regulations

5-29.10 Other public agency exceptions

5-29.11 Schools, day care centers, churches, libraries, museums, health care institutions; Special provisions

5-29.12 Sound amplifying equipment

5-29.13 Amplified sound

5-29.14 Motor vehicles

5-29.15 Noise level measurement

5-29.16 Prima facie violation

5-29.17 Penalty

5-29.18 Enforcement and administration

5-29.19 City Manager waiver

5-29.20 Noise abatement program

Sec. 5-29.01. Declaration of findings and policy.

It is hereby found and declared that:

(a) The making and creation of excessive, unnecessary or unusually loud noises within the limits of the City is a condition that has existed for some time, however, the extent and volume of such noises is increasing;

(b) The making, creation or maintenance of such excessive, unnecessary, unnatural or unusually loud noises that are prolonged, unusual and unnatural in their time, place and use affect and are a detriment to public health, comfort, convenience, safety, welfare and prosperity of the residents of the City; and

(c) The necessity in the public interest for the provisions and prohibitions hereinafter contained and enacted, is declared as a matter of legislative determination and public policy, and it is further declared that the provisions and prohibitions hereinafter contained and enacted are in pursuance of and for the purpose of securing and promoting the public health, comfort, convenience, safety, welfare and prosperity and the peace and quiet of the residents of the City.

(§ 2, Ord. 2888, eff. March 6, 2008)

Sec. 5-29.02. Definitions.

As used in this chapter, specific words and phrases are defined as follows:

(a) "Ambient noise level" shall mean the all-encompassing noise level associated with a given environment and is a composite of sounds from all sources, excluding the alleged offensive noise or excessive sound, at the location and approximate time at which a comparison with the alleged offensive noise is to be made.

(b) "Applicable (noise) zone" shall mean the noise zone category based on the actual use of the property, provided that the actual use is a legal use in the City.

(c) "A-weighted sound level" shall mean the sound pressure level in decibels (dBAs) as measured with a sound level meter using the A-weighted filter network (scale) at slow response and at a pressure of twenty (20) micropascals. The A-weighted filter de-emphasizes the very low and a very high frequency component of sound in a manner similar to the response of the human ear, and is a numerical method of rating human judgment of loudness.

(d) "Decibel (dBA)" shall mean a unit for measuring the amplitude of a sound, equal to twenty (20) times the logarithm to the base ten (10) of the ratio of pressure of the sound measured to the reference pressure of twenty (20) micropascals.

(e) "Equivalent sound or noise level (Leq)" shall mean the International Electrotechnical Commission (IEC) 60804 Standard for measurement, or the most recent revision thereof, for the sound level corresponding to a steady state noise level over a given sample period with the same amount of acoustic energy as the actual time varying noise level or the energy average noise level during the sample period. The measurement period for the purposes of this chapter is fifteen (15) minutes.

(f) "Impulsive noise" shall mean a noise of short duration usually less than one (1) second and of high intensity, with an abrupt onset and rapid decay. Such objectionable noises may also be repetitive.

(g) "Intrusive noise" shall mean that noise that intrudes over and above the ambient noise at a given location. The relative intrusiveness of a sound depends upon its amplitude, duration, frequency, time of occurrence and tonal information content, as well as the prevailing ambient noise level.

(h) "Maintenance" shall mean the upkeep, repair or preservation of existing property or structures.

(i) "Noise" shall mean any unwanted sound or sound that is undesirable because it interferes with speech and hearing, or is intense enough to damage hearing or is otherwise annoying.

(j) "Noise level (sound level)" shall mean the weighted sound pressure level obtained by use of a sound level meter having a standard frequency filter for attenuating part of the sound spectrum. For purposes of this chapter, all noise levels (sound levels) shall be A-weighted sound pressure level.

(k) "Noise (sound) level meter" shall mean an instrument, including a microphone, an amplifier, an output meter and frequency weighting networks for the measurement and determination of noise and sound levels. For the purposes of this chapter, the sound level meter must meet the International Electrotechnical Commission (IEC) 60651 and 60804 Standards, or the most recent revisions thereof, for Type 1 sound level meters or an instrument and the associated recording and analyzing equipment that will provide equivalent data.

(§ 2, Ord. 2888, eff. March 6, 2008)

Sec. 5-29.03. Designated noise zones.

The properties hereinafter described shall be assigned to the following noise zones:

Noise Zone I:	All single-family residential properties;
Noise Zone II:	All multi-family residential properties and mobile home parks;
Noise Zone III:	All commercial property;
Noise Zone IV:	The residential portion of mixed use properties;
Noise Zone V:	All manufacturing or industrial properties and all other uses.

The actual use of the property, and not necessarily its zoning designation, shall be the determining factor in establishing whether a property is in Noise Zone I, II, III, IV or V, provided that the actual use is a legal use within the applicable zone.

(§ 2, Ord. 2888, eff. March 6, 2008)

Sec. 5-29.04. Exterior noise standards.

(a) The following exterior noise standards, unless otherwise specifically indicated, shall apply to all properties within a designated noise zone.

Allowable Exterior Noise Level (1)		***Allowed Equivalent Noise Level, Leq. (2)***	
Noise Zone	***Type of Land Use***	***7 a.m. to 10 p.m.***	***10 p.m. to 7 a.m.***
I	Single-Family Residential	65 dBA	45 dBA
II	Multi-Family Residential, Mobile Home Parks	65 dBA	50 dBA
III	Commercial Property	65 dBA	60 dBA
IV	Residential Portion of Mixed Use	70 dBA	70 dBA
V	Manufacturing and Industrial, Other Uses	70 dBA	70 dBA

(1) If the ambient noise level exceeds the resulting standard, the ambient noise level shall be the standard.

(2) Measurements for compliance are made on the affected property pursuant to § 5-29.15.

(b) It is unlawful for any person at any location within the incorporated area of the City to create noise, or to allow the creation of any noise on property owned, leased, occupied or otherwise controlled by such person, which noise causes the noise level, when measured at any location on any other property, to exceed either of the following:

(1) The noise standard for the applicable zone for any fifteen-minute (15) period; and

(2) A maximum instantaneous (single instance) noise level equal to the value of the noise standard plus twenty (20) dBA for any period of time (measured using A-weighted slow response).

(c) In the event the ambient noise level exceeds the noise standard, the maximum allowable noise level under such category shall be increased to reflect the maximum ambient noise level.

(d) The Noise Zone IV standard shall apply to that portion of residential property falling within one hundred (100) feet of a commercial property or use, if the noise originates from that commercial property or use.

(e) If the measurement location is on a boundary between two (2) different noise zones, the lower noise level standard applicable to the noise zone shall apply.

(§ 2, Ord. 2888, eff. March 6, 2008)

Sec. 5-29.05. Interior noise standards.

(a) The following interior noise standards, unless otherwise specifically indicated, shall apply to all properties within a designated noise zone.

Allowable Interior Noise Level (1)		**Allowed Equivalent Noise Level, Leq.** (2)	
Noise Zone	***Type of Land Use***	***7 a.m. to 10 p.m.***	***10 p.m. to 7 a.m.***
I	Single-Family Residential	45 dBA	40 dBA
II	Multi-Family Residential, Mobile Home Parks	45 dBA	40 dBA
IV	Residential Portion of Mixed Use	45 dBA	40 dBA

(1) If the ambient noise level exceeds the resulting standard, the ambient noise level shall be the standard.

(2) Measurements for compliance are made on the affected property pursuant to § 5-29.15.

(b) It is unlawful for any person at any location within the incorporated area of the City to create noise, or to allow the creation of any noise on property owned, leased, occupied or otherwise controlled by such person, which noise causes the noise level, when measured at any location on any other property, to exceed either of the following:

(1) The noise standard for the applicable zone for any fifteen-minute (15) period;

(2) A maximum instantaneous (single instance) noise level equal to the value of the noise standard plus twenty (20) dBA for any period of time (measured using A-weighted slow response).

(c) In the event the ambient noise level exceeds the noise standard, the maximum allowable noise level under such category shall be increased to reflect the maximum ambient noise level.

(d) The Noise Zone IV standard shall apply to that portion of residential property falling within one hundred (100) feet of a commercial property or use, if the noise originates from that commercial property or use.

(e) If the measurement location is on a boundary between two (2) different noise zones, the lower noise level standard applicable to the noise zone shall apply.

(§ 2, Ord. 2888, eff. March 6, 2008)

Sec. 5-29.06. Exemptions.

The following activities shall be exempted from the provisions of this chapter:

(a) Any activity conducted on public property, or on private property with the consent of the owner, by any public entity or its officers, employees, representatives, agents, subcontractors, permittees, licensees or lessees that the public entity has authorized are exempt from the provisions of this chapter. This includes, without limitation, sporting and recreational activities that are sponsored, co-sponsored, permitted or allowed by the City or any school district within the City's jurisdictional boundaries. This also includes, without limitation, occasional outdoor gatherings, public dances, shows or sporting and entertainment events, provided such events are conducted pursuant to an approval, authorization, contract, lease, permit or sublease by the appropriate public entity, specifically the planning commission or City Council;

(b) Occasional outdoor gatherings, public dances, show, sporting and entertainment events, provided said events are conducted pursuant to a permit or license issued by the appropriate jurisdiction relative to the staging of said events;

(c) Any mechanical device, apparatus or equipment used, related to or connected with emergency machinery, vehicle, work or warning alarm or bell, provided the sounding of any bell or alarm on any building or motor vehicle shall terminate its operation within forty-five (45) minutes in any hour of its being activated;

(d) Noise sources associated with construction, repair, remodeling, demolition or grading of any real property. Such activities shall instead be subject to the provisions of § 5-29.09;

(e) Noise sources associated with construction, repair, remodeling, demolition or grading of public rights-of-way or during authorized seismic surveys;

(f) All mechanical devices, apparatus or equipment associated with agriculture operations provided that:

(1) Operations do not take place between 8:00 p.m. and 7:00 a.m.;

(2) Such operations and equipment are utilized for the protection or salvage of agricultural crops during periods of potential or actual frost damage or other adverse weather conditions; or

(3) Such operations and equipment are associated with agricultural pest control through pesticide application, provided the application is made in accordance with permits issued by or regulations enforced by the California Department of Agriculture;

(g) Noise sources associated with the maintenance of real property. Such activities shall instead be subject to the provisions of § 5-29.08;

(h) Any activity to the extent regulation thereof has been preempted by state or federal law;

(i) Any noise sources associated with people and/or music associated with a party at a residential property. Such noise shall be subject to the provisions of OMC § 5-29.07;

(j) Any noise source emanating from an ice cream truck within the City. Such noise shall be subject to the provisions of OMC § 4-18.04;

(k) Any noise sources associated with barking dogs or other intermittent noises made by animals on any properly within the City. Such noise shall be subject to the provisions of OMC Chapter 1, Title 6;

(l) Noise sources related to uses approved by a permit or development agreement adopted prior to the date of adoption of this chapter and that contains acoustic or noise standard conditions of approval. This exemption shall only be applicable during the effective period of the City-approved permit or development agreement.

(§ 2, Ord. 2888, eff. March 6, 2008)

Sec. 5-29.07. Loud and disturbing noise.

(a) It is unlawful for any person or property owner within the City to make, cause or allow to be made any loud, excessive, impulsive or intrusive noise, disturbance or commotion that disturbs the peace or quiet of any area or that causes discomfort or annoyance to any reasonable person of normal sensitivities in the area, after a Police or Code Enforcement Officer has first requested that the person or property owner cease and desist from making such noise. The types of loud, disturbing, excessive, impulsive or intrusive noise may include, but shall not be limited to, yelling, shouting, hooting, whistling, singing, playing a musical instrument, or emitting or transmitting any loud music or noise from any mechanical or electrical sound making or sound-amplifying device.

(b) The factors, standards, and conditions that may be considered in determining whether a violation of the provisions of this section has been committed, included, but not limited to, the following:

(1) The level of the noise;

(2) The level and intensity of the background (ambient) noise, if any;

(3) The proximity of the noise to residential or commercial sleeping areas;

(4) The nature and zoning of the area within which the noise emanates;

(5) The density of inhabitation of the area within which the noise emanates;

(6) The time of day and night the noise occurs;

(7) The duration of the noise;

(8) Whether the noise is constant, recurrent or intermittent;

(9) Whether the noise is produced by a commercial or noncommercial activity; and

(10) Whether the use is lawful under the provisions of Title 5 of this Code and whether the noise is one that could reasonably be expected from the activity or allowed use.

(§ 2, Ord. 2888, eff. March 6, 2008)

Sec. 5-29.08. Real property maintenance noise regulations.

(a) No person, while engaged in maintenance of real property, shall operate any tool, equipment or machine in a manner that produces loud noise that disturbs a person of normal sensitivity who works or resides in the vicinity, or a Police or Code Enforcement Officer, except between the hours of 8:00 a.m. and 6:00 p.m.

(b) Trimming or pruning that requires the use of chainsaws or mulching machines shall only be allowed between the hours of 8:00 a.m. and 6:00 p.m. on a weekday and between the hours of 9:00 a.m. and 5:00 p.m. on Saturday or Sunday.

(c) The use of electrical or gasoline powered blowers, such as commonly used by gardeners or other persons for cleaning lawns, yards, driveways, gutters and other property shall only be allowed between the hours of 8:00 a.m. and 6:00 p.m. on a weekday and between the hours of 9:00 a.m. and 5:00 p.m. on Saturday or Sunday.

(d) No landowner, gardener, property maintenance service, contractor, subcontractor or employer shall permit or allow any person or persons working under his or her direction or control to operate any tool, equipment or machine in violation of the provisions of this section.

(e) Exceptions. The provisions of this section shall not apply to the following:

(1) Emergency property maintenance required by the building official;

(2) The maintenance, repair or improvement of any public work or facility by public employees, by any person or persons acting pursuant to a public works contract, or by any person or persons performing such work or pursuant to the direction of, or on behalf of, any public agency; provided, however, this exception shall not apply to the City, or its employees, contractors or agents, unless:

(i) The City Manager or department head determines that the maintenance, repair or improvement is immediately necessary to maintain public service,

(ii) The maintenance, repair or improvement is of a nature that cannot feasibly be conducted during normal business hours, or

(iii) The City Council has approved project specifications, contract provisions, or an environmental document that specifically authorizes maintenance during hours of the day that would otherwise be prohibited pursuant to this section; and

(3) Any maintenance that complies with the noise limits specified in § 5-29.04.

(§ 2, Ord. 2888, eff. March 6, 2008)

Sec. 5-29.09. Construction activity noise regulations.

(a) No person, while engaged in construction, remodeling, digging, grading, demolition or any other related building activity, shall operate any tool, equipment or machine in a manner that produces loud noise that disturbs a person of normal sensitivity who works or resides in the vicinity, or a Police or Code Enforcement Officer, on any weekday except between the hours of 7:00 a.m. and 6:00 p.m. or on Saturday or Sunday between the hours of 9:00 a.m. and 6:00 p.m.

(b) No landowner, construction company owner, contractor, subcontractor, or employer shall permit or allow any person or persons working under their direction and control to operate any tool, equipment or machine in violation of the provisions of this section.

(c) Exceptions.

(1) The provisions of this section shall not apply to emergency construction work performed by a private party when authorized by the City Manager or his or her designee;

(2) The maintenance, repair or improvement of any public work or facility by public employees, by any person or persons acting pursuant to a public works contract, or by any person or persons performing such

work or pursuant to the direction of, or on behalf of, any public agency; provided, however, this exception shall not apply to the City, or its employees, contractors or agents, unless:

(i) The City Manager or a department head determines that the maintenance, repair or improvement is immediately necessary to maintain public services,

(ii) The maintenance, repair or improvement is of a nature that cannot feasibly be conducted during normal business hours, or

(iii) The City Council has approved project specifications, contract provisions, or an environmental document that specifically authorizes construction during hours of the day that would otherwise be prohibited pursuant to this section; and

(3) Any construction that complies with the noise limits specified in §§ 5-29.04 or 5-29.05.

(§ 2, Ord. 2888, eff. March 6, 2008)

Sec. 5-29.10. Other public agency exceptions.

The provisions of this chapter shall not be construed to prohibit any work at different hours by or under the direction of any other public agency or public or private utility companies in cases of necessity or emergency.

(§ 2, Ord. 2888, eff. March 6, 2008)

Sec. 5-29.11. Schools, day care centers, churches, libraries, museums, health care institutions; Special provisions.

It is unlawful for any person to create any noise that causes the outdoor noise level at any school, day care center, hospital or similar health care institution, church, library or museum while the same is in use, to exceed the noise standards specified in § 5-29.04 prescribed for the assigned Noise Zone I.

(§ 2, Ord. 2888, eff. March 6, 2008)

Sec. 5-29.12. Sound amplifying equipment.

Loudspeakers, sound amplifiers, public address systems or similar devices used to amplify sounds shall be subject to the provisions of § 5-29.13. Such sound amplifying equipment shall not be construed to include electronic devices, including but not limited to, radios, tape players, tape recorders, compact disc players, MP3 players, electric keyboards, music synthesizers, record players or televisions, which are designed and operated for personal use, or used entirely within a building and are not designed or used to convey the human voice, music or any other sound to an audience outside such building, or which are used in vehicles and heard only by occupants of the vehicle in which installed.

(§ 2, Ord. 2888, eff. March 6, 2008)

Sec. 5-29.13. Amplified sound.

(a) The City Council enacts the following legislation for the sole purpose of securing and promoting the public health, comfort, safety and welfare for its citizenry. While recognizing that the use of sound amplifying equipment may be entitled to certain protection by the constitutional rights of freedom of speech and assembly, the City Council finds that in order to protect the public safety and the correlative rights of the citizens of this community to privacy and freedom from public nuisance of loud and unnecessary noise, reasonable regulation of the time, place and manner of the use of amplifying equipment is necessary. In no event shall approval or authorization required herein be withheld by reason of the constitutionally protected content of any material proposed to be broadcast through amplifying equipment.

(b) It is unlawful for any person, other than personnel of law enforcement or governmental agencies, to install, use or operate a loudspeaker or sound amplifying device in a fixed or movable position or mounted upon any vehicle within the City for the purpose of giving instructions, directions, talks, addresses or lectures to any persons or assemblages of persons in or upon any street, alley, sidewalk, park, place or public property without a permit to do so from the Police Chief or his or her designee. Notwithstanding any other provision of this chapter, the provisions of this section shall also apply to the use of sound amplifying equipment upon public or private property when used in connection with outdoor or indoor public or private events, whether or

not admission is charged or food or beverages are sold, when such activity is to be attended by more than one hundred (100) persons and the noise emanating from the event will be audible at the property plane, or in the case of a street dance or concert on the nearest residential property. Those activities listed in § 5-29.06(a) are exempt from the requirements of this section.

(c) The Police Chief or his or her designee is authorized to approve and issue permits under this section.

(d) An application for a permit required by this section shall be filed with the Police Chief at least sixteen (16) days and no more than one hundred twenty (120) days prior to the date on which the sound amplifying equipment is intended to be used. Applications for events covered by the First Amendment of the United States Constitution are exempt from the time requirements of this section if it is shown that circumstances require a shorter filing period and the event will not constitute an unsafe condition. The application shall contain the following information:

(1) The name, address and telephone number of both the owner and the user of the sound amplifying equipment;

(2) The license number, if a sound truck is to be used;

(3) A general description of the sound amplifying equipment which is to be used;

(4) Whether sound amplifying equipment will be used for commercial or noncommercial purpose;

(5) The dates and times upon and within which, and the streets or property over or upon which, the equipment is proposed to be operated;

(6) The name or names of one (1) or more persons who will be present during the conduct of any activities for which registration is sought and who will have authority to reduce the volume of any sound amplifying equipment during the course of the activities if required pursuant to this chapter and, otherwise, to insure compliance with the provisions of this chapter;

(7) A statement by the applicant that he or she is willing and able to comply with the provisions of this chapter and the conditions of the permit; and

(8) A sketch of the area or facilities within which the activities are to be conducted, with approximate dimensions and illustration of the location and orientation of all sound-amplifying equipment.

(e) The Police Chief shall deny the permit application or revoke any permit if the chief finds any of the following:

(1) The application contains materially false or intentionally misleading information;

(2) The use of sound amplifying equipment at an event or activity proposed will be located in or upon a premises, building or structure that is hazardous to the health or safety of the employees or patrons of the premises, business, activity, or event, or the general public, under the standards established by the Uniform Building or Fire Codes, or other applicable codes, as set forth in OMC Titles 4 and 8;

(3) The use of sound amplifying equipment at an event or activity proposed in or upon a premises, building or structure that lacks adequate on-site parking for participants attending the proposed event or activity under the applicable standards set forth in OMC Title 9;

(4) The conditions of any motor vehicle movement are such that, in his or her opinion, the use of the equipment would constitute an unreasonable interference with traffic safety;

(5) The conditions of pedestrian movement are such that the use of the equipment would constitute a detriment to traffic safety;

(6) The application submitted by the applicant reveals that the applicant would violate the provisions of this section or any other provision of federal, state and/or local law;

(7) The applicant is unwilling or unable to comply with the provisions of this chapter or any conditions imposed upon any permit issued;

(8) There had already been a permitted event at the intended location, or within a two hundred (200) yard radius of the intended location and the prior permitted event was located on residentially zoned property or on

a street, alley, public parking lot or neighborhood park within three (3) months prior to the intended event. Community parks are exempt from this subsection (8); or

(9) The applicant or location has had previous violations within the past calendar year, and in the judgment of the Police Chief, issuance would be contrary to the intent of this section.

(f) In determining whether the use of the equipment would constitute an unreasonable interference with or detriment to traffic safety, the Police Chief shall consider, but shall not necessarily be limited to:

(1) The volumes, patterns and speed of vehicular and pedestrian traffic in the proposed area of use;

(2) The relationship of the proposed use of equipment and potential impacts upon traffic patterns;

(3) Availability of sufficient room for the operation of the equipment without significantly interfering with the traffic patterns;

(4) Proximity to schools, playgrounds and similar facilities where use of such equipment might attract children into traffic patterns; or

(5) Proximity to busy intersections or other potentially hazardous conditions where use of such equipment might constitute a hazard by reason of its tendency to distract drivers of vehicles or pedestrians.

(g) Issuance or denial.

(1) If the application is approved, the Police Chief shall return an approved copy of the application to the applicant and shall issue a permit. The permit shall constitute permission for the use of the sound amplifying equipment as requested.

(2) Any application filed shall be either approved or disapproved within five (5) days of the filing thereof.

(3) If the application is disapproved, the Police Chief shall return a disapproved copy forthwith to the applicant with a written statement on the reason for disapproval.

(i) Any person aggrieved by a decision of the Police Chief or his or her designee may file an appeal to the City Manager. A complete and proper appeal shall be filed with the City Clerk within ten (10) calendar days of the action that is the subject of the appeal. If the applicant fails to file an appeal within the ten (10) day filing period provided herein, denial shall take effect immediately upon expiration of such filing period. All appeals shall be in writing and shall contain the following information: (a) name(s) of the person filing the appeal, (b) a brief statement in ordinary and concise language of the relief sought, and (c) the signatures of all parties named as appellants and their mailing addresses. After receiving the appeal, the City Clerk shall immediately forward the matter to the City Manager for handling.

(ii) The City Manager shall, upon receipt of the appeal, set the matter for hearing before the City Manager or a hearing officer. Any hearing officer shall be a licensed attorney or recognized mediator designated by the City Manager. The hearing shall be set for not more than ten (10) calendar days after the receipt of the appeal unless a longer time is requested or consented to by the appellant. Notice of such hearing shall be given in writing and mailed at least five (5) calendar days prior to the date of the hearing, by U.S. mail, with a proof of service attached, addressed to the address listed on the permit application, or the written appeal if different from the permit application. The notice shall state the grounds of the complaint or reason for the denial and shall state the time and place where such hearing will be held.

(iii) The City Manager or hearing officer shall, within ten (10) calendar days following the conclusion of the hearing, make a written finding and decision, which shall be delivered to the City and the appellant by first class mail. Notwithstanding any provision in this Code, the decision of the City Manager or hearing officer shall be the final administrative decision of the City. Any party dissatisfied with the decision of the City Manager or hearing officer may seek review of such decision under the provisions of Code Civil Procedure, §§ 1094.5 and 1094.8, as amended from time to time.

(h) In addition to any other provisions of this Code, the use of sound-amplifying equipment and sound trucks in the City shall be subject to the following regulations:

(1) The only sounds permitted are music and human speech;

(2) Sound shall not be emitted within one hundred (100) yards of hospitals, churches, schools and City Hall;

(3) The volume of sound shall be controlled so that it will not be audible for a distance in excess of one hundred (100) feet from the sound amplifying equipment or sound truck, and so that the volume is not unreasonably loud, raucous, jarring, disturbing or a nuisance to persons within the range of allowed audibility; or

(4) The sound amplifying equipment or sound truck shall not be used between the hours of 8:00 p.m. and 8:00 a.m.

(§ 2, Ord. 2888, eff. March 6, 2008)

Sec. 5-29.14. Motor vehicles.

The use of any motor vehicle in such a condition as to create excessive, impulsive or intrusive noises is prohibited. The discharge into the open air of the exhaust of any internal combustion engine, stationary or mounted on wheels, motorboat or motor vehicle, including motor cycle, whether or not discharged through a muffler or other similar device, which discharge creates excessive, unusual, impulsive or intrusive noise is prohibited. Motor vehicles shall comply with the noise regulations of the California Vehicle Code.

(§ 2, Ord. 2888, eff. March 6, 2008)

Sec. 5-29.15. Noise level measurement.

(a) The location selected for measuring exterior noise levels in a residential area shall be at any part of a private yard, patio, deck or balcony normally used for human activity and identified by the owner or, if occupied by someone other than the owner, the occupant of the affected property as suspected of exceeding the noise level standard. This location may be the closest point in the private yard or patio, or on the deck or balcony, to the noise source, but should not be located in nonhuman activity areas such as trash container storage areas, planter beds, above or contacting a property line fence, or other areas not normally used as part of the yard, patio, deck or balcony. The location selected for measuring exterior noise levels in a nonresidential area shall be at the closest point to the noise source. The measurement microphone height shall be five (5) feet above finish elevation or, in the case of a deck or balcony, the measurement microphone height shall be five (5) feet above the finished floor level.

(b) The location selected for measuring interior noise levels shall be made within the affected residential unit. The measurements shall be made at a point at least four (4) feet from the wall, ceiling or floor, or within the frame of a window opening, nearest the noise source. The measurements shall be made with windows in an open position.

(c) Any decibel measurement made pursuant to the provisions of this chapter shall be measured in decibels (dBAs) as measured with a sound level meter using the A-weighted sound pressure level.

(§ 2, Ord. 2888, eff. March 6, 2008)

Sec. 5-29.16. Prima facie violation.

Any noise exceeding the noise level standard as specified in §§ 5-29.04 and 5-29.05, shall be deemed to be prima facie evidence of a violation of the provisions of this chapter.

(§ 2, Ord. 2888, eff. March 6, 2008)

Sec. 5-29.17. Penalty.

(a) Any person who negligently or knowingly violates any provision of this chapter shall be guilty of an infraction and upon conviction shall be punishable by a fine specified in OMC § 1-2.01. Each day a violation occurs shall constitute a separate offense and shall be punishable as such.

(b) Any person who negligently or knowingly violates any provision of this chapter may also be subject to fine(s) specified in the administrative citation schedule of fines set forth in OMC § 1-5.04. The manner of issuing administrative citations shall comply with all the procedures specified in OMC Chapter 5, Title 1.

(c) As an additional remedy, the operation or maintenance of any device, instrument, vehicle or machinery in violation of any provisions of this chapter, which operation or maintenance causes or creates sound levels exceeding the allowable standards as specified in this chapter, shall be deemed and is declared to be a public nuisance and may be subject to abatement by a restraining order or injunction issued by a court of competent jurisdiction.

(d) Any violation of this chapter is declared to be a public nuisance and may be abated in accordance with law. The expense of enforcing this chapter is declared to be public nuisance and may be by resolution of the City Council declared to be a lien and special assessment against the property on which such nuisance is maintained, and any such charge shall also be a personal obligation of the property owner.

(§ 2, Ord. 2888, eff. March 6, 2008)

Sec. 5-29.18. Enforcement and administration.

(a) It shall be the responsibility of Police or Code Enforcement Officers to enforce the provisions of this chapter and to perform all other functions required by this chapter. Such duties shall include, but not be limited to investigating potential violations, issuing warning notices and citations, and providing evidence to the City prosecutor for legal action.

(b) For violations of § 5-29.07, Police or Code Enforcement Officers shall obtain a declaration under penalty of perjury from two (2) declarants living in separate households within a sixty (60) day period stating in detail all of the following:

(1) That the declarant is a resident of a residential neighborhood located within two hundred (200) yards of the noise source; and

(2) Within the past month declarant has heard noise for substantially long periods to the extreme annoyance of the declarant.

(3) Declarations from two (2) declarants are required to prove a violation of § 5-29.07, but are not required to prove that a person has violated any other provision of this chapter.

(§ 2, Ord. 2888, eff. March 6, 2008)

Sec. 5-29.19. City Manager waiver.

The City Manager is authorized to grant a temporary waiver to the provisions of this chapter for a period of time necessary to correct the violations of this chapter, if such temporary waiver would be in the public interest and there is no feasible and prudent alternative to the activity, or the method of conducting the activity, for which the temporary waiver is sought. This time period may include a commitment to a program that includes placing necessary orders and entering into necessary contracts within thirty (30) days for repair or installation.

(§ 2, Ord. 2888, eff. March 6, 2008)

Sec. 5-29.20. Noise abatement program.

(a) In circumstances where adopted community-wide noise standards and policies prove impractical in controlling noise generated from a specific source, the City Council may establish a noise abatement program that recognizes the characteristics of the noise source and affected property and that incorporates specialized mitigation measures.

(b) Noise abatement programs shall set forth in detail the approved terms, conditions and requirements for achieving maximum compliance with noise standards and policies. Said terms, conditions and requirements may include, but shall not be limited to, limitations, restrictions, or prohibitions on operating hours, location of operations, and the types of equipment.

(§ 2, Ord. 2888, eff. March 6, 2008)

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APPENDIX 5.1:

STUDY AREA PHOTOS

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15662 - Esperanza Specific Plan

15662_L1_C 1.North
33, 59' 35.790000"117, 33' 43.600000"

15662_L1_C 2.South
33, 59' 35.780000"117, 33' 43.600000"

15662_L1_C 3.East
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15662_L1_C 4.West
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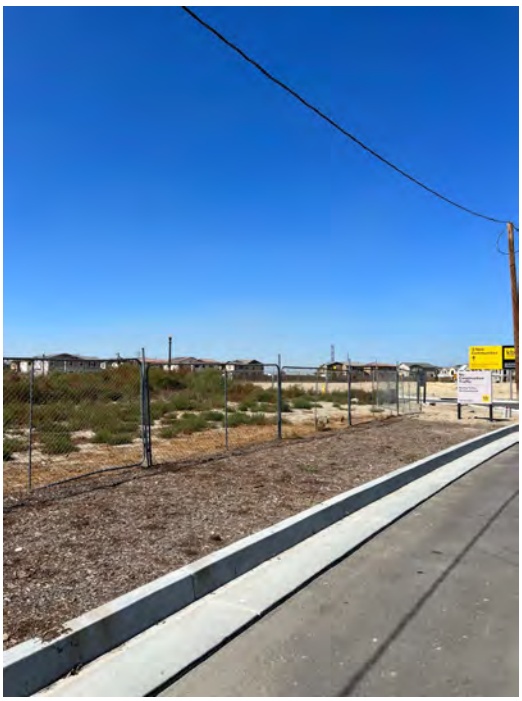

15662 - Esperanza Specific Plan

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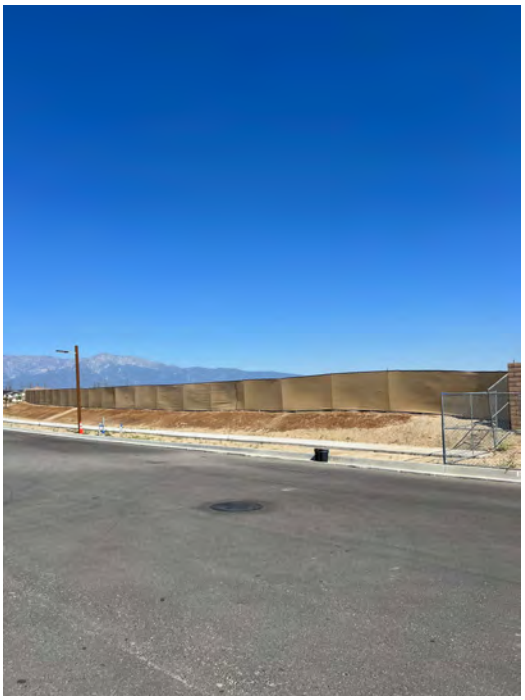

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15662_L2_E 4.West
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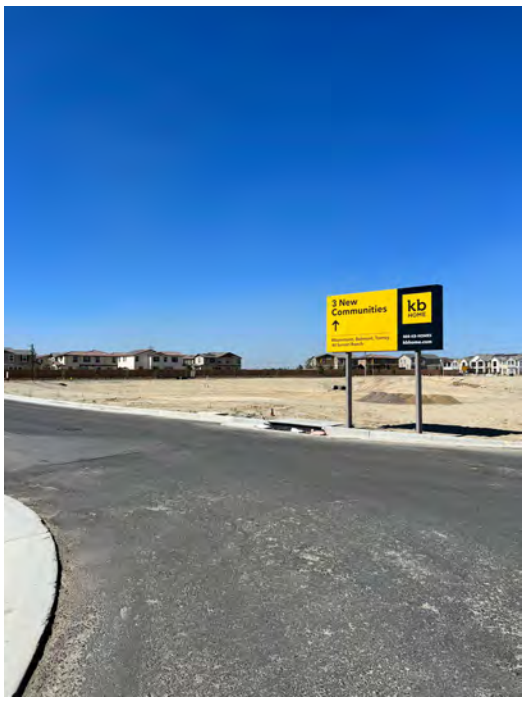

15662 - Esperanza Specific Plan

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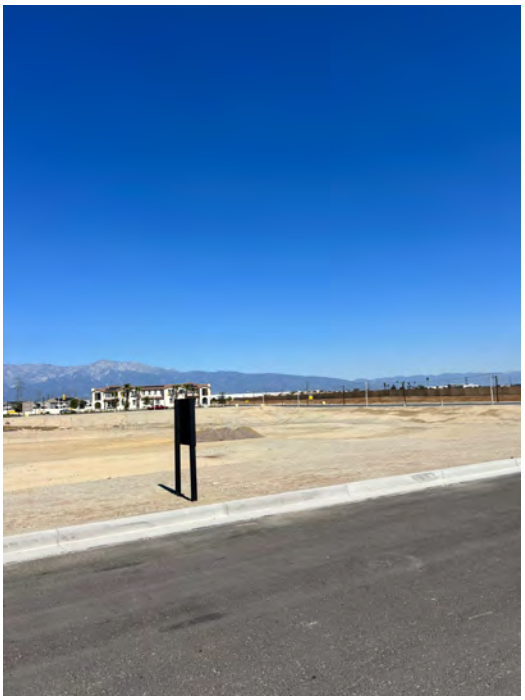

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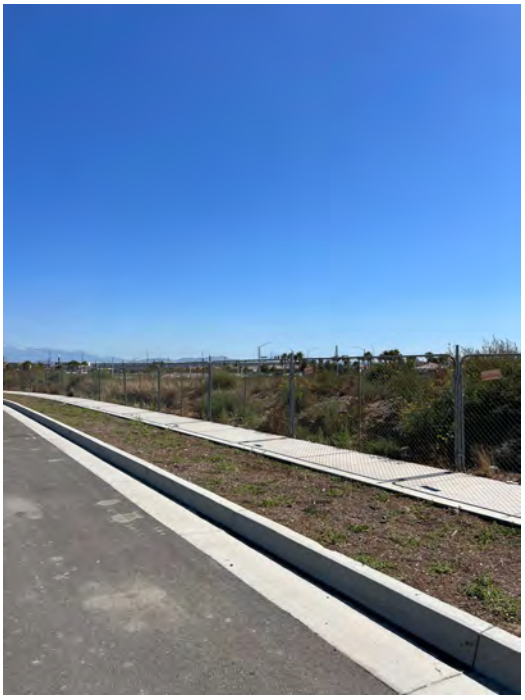
15662_L3_J 3.East
33, 59' 35.450000"117, 33' 47.310000"



15662_L3_J 4.West
33, 59' 35.420000"117, 33' 47.360000"

15662 - Esperanza Specific Plan

15662_L4_L 1.North
33, 59' 31.850000"117, 33' 50.490000"

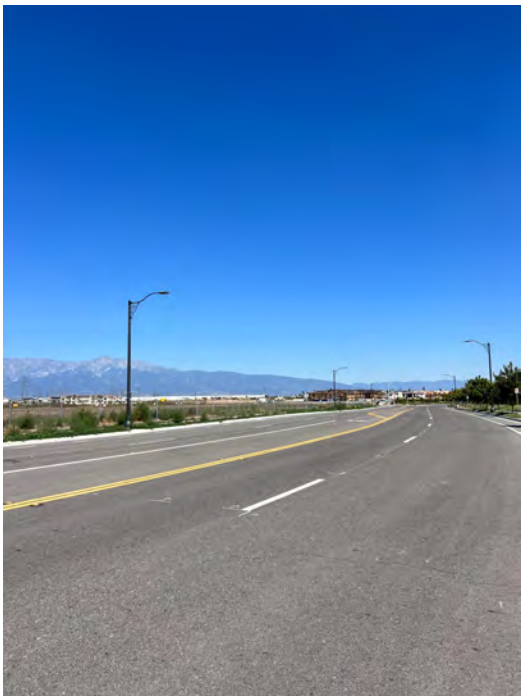
15662_L4_L 2.South
33, 59' 31.610000"117, 33' 50.690000"

15662_L4_L 3.East
33, 59' 31.590000"117, 33' 50.630000"

15662_L4_L 4.West
33, 59' 31.640000"117, 33' 50.660000"

15662 - Esperanza Specific Plan

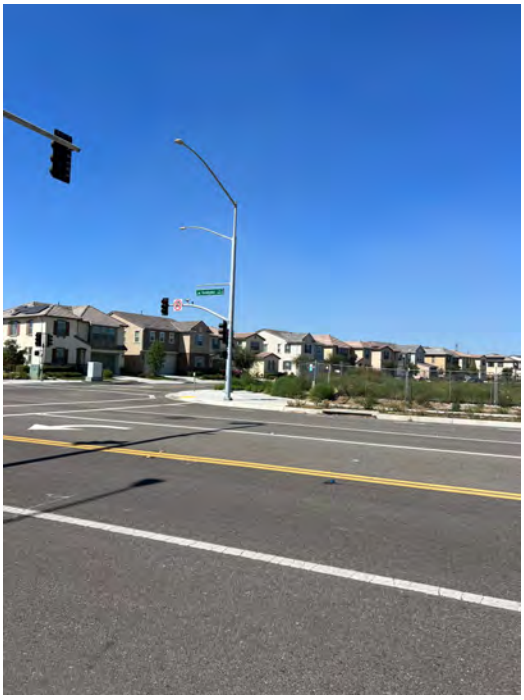
15662_L5_O 1.North
33, 59' 26.240000"117, 33' 45.190000"



15662_L5_O 2.South
33, 59' 26.200000"117, 33' 45.190000"

15662_L5_O 3.East
33, 59' 26.160000"117, 33' 45.220000"

15662_L5_O 4.West
33, 59' 26.160000"117, 33' 45.250000"



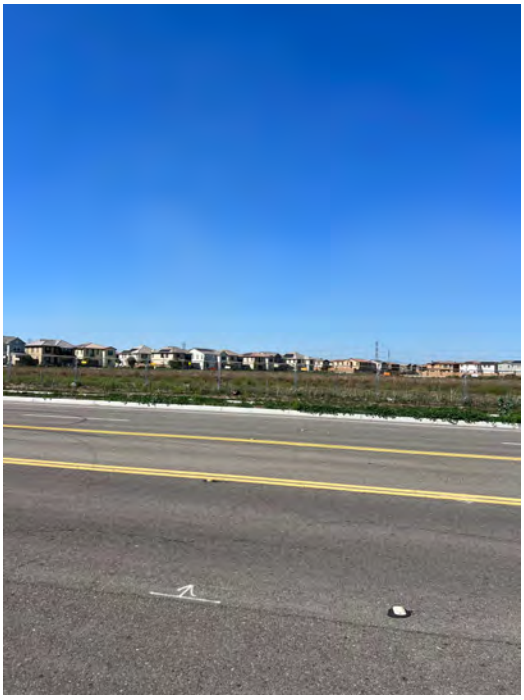
15662 - Esperanza Specific Plan

15662_L6_S 1.North
33, 59' 29.250000"117, 33' 42.970000"

15662_L6_S 2.South
33, 59' 29.130000"117, 33' 43.020000"

15662_L6_S 3.East
33, 59' 29.130000"117, 33' 42.990000"

15662_L6_S 4.West
33, 59' 29.110000"117, 33' 43.020000"



APPENDIX 5.2:

NOISE LEVEL MEASUREMENTS

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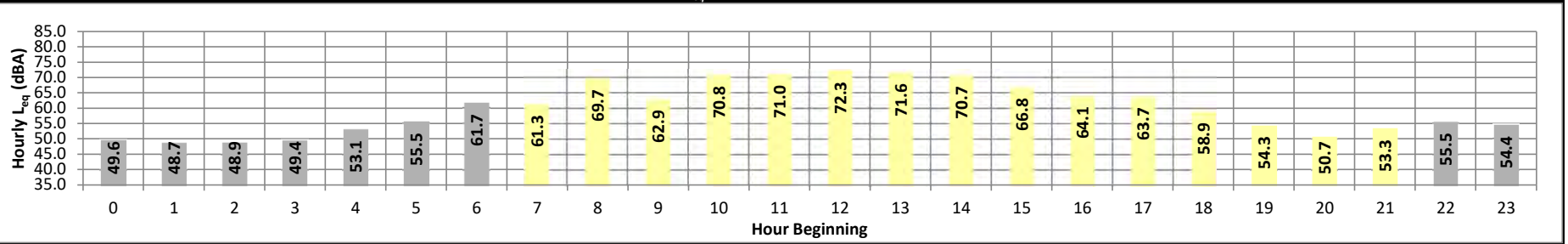
24-Hour Noise Level Measurement Summary

Date: Wednesday, October 4, 2023 | *Location:* L1 - Located East of the site at future residential | *Meter:* Piccolo II | *JN:* 15662

Project: Ontario Esperanza PA-11 | *Source:* | *Analyst:* Z. Ibrahim

Hourly L_{eq} dBA Readings (unadjusted)



Timeframe	Hour	L_{eq}	L_{max}	L_{min}	L1%	L2%	L5%	L8%	L25%	L50%	L90%	L95%	L99%	L_{eq}	Adj.	Adj. L_{eq}
Night	0	49.6	53.5	47.4	53.1	52.8	52.1	51.6	50.0	49.1	48.0	47.8	47.5	49.6	10.0	59.6
	1	48.7	52.5	46.7	52.3	51.9	51.1	50.4	49.1	48.3	47.3	47.1	46.8	48.7	10.0	58.7
	2	48.9	53.0	46.6	52.8	52.5	51.6	50.8	49.3	48.4	47.2	46.9	46.7	48.9	10.0	58.9
	3	49.4	52.8	47.5	52.6	52.3	51.6	51.2	49.9	49.1	48.0	47.8	47.5	49.4	10.0	59.4
	4	53.1	57.3	51.4	57.0	56.5	55.4	54.7	53.3	52.7	51.8	51.7	51.5	53.1	10.0	63.1
	5	55.5	62.5	53.0	61.9	61.2	59.4	58.0	55.4	54.4	53.5	53.3	53.1	55.5	10.0	65.5
	6	61.7	70.1	55.6	69.9	69.5	67.9	66.3	61.6	58.6	56.3	56.0	55.7	61.7	10.0	71.7
Day	7	61.3	69.3	57.3	69.0	68.5	66.9	65.5	60.9	59.1	57.7	57.6	57.4	61.3	0.0	61.3
	8	69.7	77.8	60.2	77.5	76.8	75.4	74.5	70.7	66.2	62.0	61.4	60.6	69.7	0.0	69.7
	9	62.9	71.7	57.3	71.3	70.7	68.8	67.5	62.4	60.1	58.0	57.7	57.4	62.9	0.0	62.9
	10	70.8	79.7	57.8	79.0	78.3	76.7	75.6	71.4	67.6	61.1	59.6	58.2	70.8	0.0	70.8
	11	71.0	80.3	57.6	79.5	78.7	76.6	75.4	71.7	68.1	61.5	60.2	58.3	71.0	0.0	71.0
	12	72.3	81.8	57.0	81.2	80.5	78.7	77.3	72.7	68.6	61.5	59.8	57.6	72.3	0.0	72.3
	13	71.6	80.2	57.3	79.6	78.9	77.4	76.4	72.4	68.6	62.0	60.3	58.0	71.6	0.0	71.6
	14	70.7	79.4	56.4	78.7	78.1	76.6	75.5	71.6	67.7	60.7	59.1	57.2	70.7	0.0	70.7
	15	66.8	74.9	54.0	74.3	73.6	72.2	71.4	67.9	64.3	57.9	56.4	54.6	66.8	0.0	66.8
	16	64.1	73.1	51.5	72.3	71.6	70.1	68.8	64.9	60.8	54.5	53.3	52.0	64.1	0.0	64.1
	17	63.7	72.5	51.8	72.0	71.2	69.3	68.2	64.6	60.9	54.6	53.6	52.2	63.7	0.0	63.7
	18	58.9	67.8	50.3	67.2	66.5	64.5	63.1	59.3	56.2	52.1	51.3	50.6	58.9	0.0	58.9
	19	54.3	60.8	51.0	60.3	59.7	58.4	57.5	54.6	52.9	51.5	51.3	51.1	54.3	5.0	59.3
	20	50.7	54.0	49.2	53.6	53.2	52.5	52.2	51.1	50.4	49.6	49.4	49.3	50.7	5.0	55.7
	21	53.3	56.7	51.8	56.5	56.2	55.3	54.8	53.6	53.0	52.2	52.0	51.9	53.3	5.0	58.3
Night	22	55.5	61.0	53.2	60.7	60.3	59.2	58.1	55.4	54.5	53.7	53.5	53.3	55.5	10.0	65.5
	23	54.4	57.0	52.7	56.7	56.5	56.0	55.8	54.9	54.2	53.3	53.1	52.8	54.4	10.0	64.4

Timeframe	Hour	L_{eq}	L_{max}	L_{min}	L1%	L2%	L5%	L8%	L25%	L50%	L90%	L95%	L99%
Day	Min	50.7	54.0	49.2	53.6	53.2	52.5	52.2	51.1	50.4	49.6	49.4	49.3
	Max	72.3	81.8	60.2	81.2	80.5	78.7	77.3	72.7	68.6	62.0	61.4	60.6
Energy Average		67.9	Average:		71.5	70.8	69.3	68.2	64.7	61.6	57.1	56.2	55.1
Night	Min	48.7	52.5	46.6	52.3	51.9	51.1	50.4	49.1	48.3	47.2	46.9	46.7
	Max	61.7	70.1	55.6	69.9	69.5	67.9	66.3	61.6	58.6	56.3	56.0	55.7
Energy Average		55.3	Average:		57.4	57.1	56.0	55.2	53.2	52.1	51.0	50.8	50.6

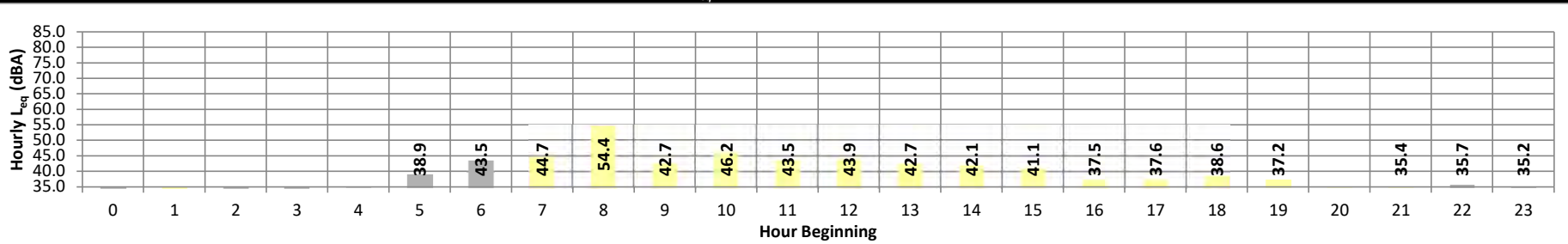
24-Hour CNEL	Leq (dBA) Daytime (7am-10pm)	Leq (dBA) Nighttime (10pm-7am)
67.1	67.9	55.3

24-Hour Noise Level Measurement Summary

Date: Wednesday, October 4, 2023 | *Location:* L2 - Located Northwest of the site at future residential | *Meter:* Piccolo II | *JN:* 15662

Project: Ontario Esperanza PA-11 | *Source:* | *Analyst:* Z. Ibrahim

Hourly L_{eq} dBA Readings (unadjusted)



Timeframe	Hour	L_{eq}	L_{max}	L_{min}	L1%	L2%	L5%	L8%	L25%	L50%	L90%	L95%	L99%	L_{eq}	Adj.	Adj. L_{eq}
Night	0	29.7	32.7	28.0	32.4	32.1	31.5	31.1	30.1	29.4	28.4	28.2	28.0	29.7	10.0	39.7
	1	30.7	33.8	28.9	33.6	33.3	32.6	32.2	31.1	30.5	29.4	29.2	29.0	30.7	10.0	40.7
	2	30.1	33.4	28.0	33.2	33.0	32.2	31.7	30.6	29.7	28.6	28.4	28.1	30.1	10.0	40.1
	3	30.1	32.9	28.6	32.7	32.5	32.0	31.6	30.4	29.9	29.0	28.9	28.7	30.1	10.0	40.1
	4	34.9	38.1	33.3	37.8	37.4	36.8	36.2	35.1	34.6	33.8	33.6	33.4	34.9	10.0	44.9
	5	38.9	49.8	34.5	48.9	47.7	45.1	42.5	36.7	35.7	34.9	34.8	34.6	38.9	10.0	48.9
	6	43.5	52.6	36.6	52.3	51.9	50.0	48.1	43.4	40.3	37.1	36.9	36.7	43.5	10.0	53.5
Day	7	44.7	55.1	38.4	54.5	53.7	51.5	49.5	43.7	40.2	38.8	38.7	38.5	44.7	0.0	44.7
	8	54.4	60.7	43.0	60.3	60.0	59.1	58.5	56.0	52.6	45.8	44.5	43.3	54.4	0.0	54.4
	9	42.7	53.5	34.7	53.1	52.5	50.6	48.4	39.6	36.7	35.1	35.0	34.8	42.7	0.0	42.7
	10	46.2	54.8	38.4	54.2	53.8	52.2	50.3	46.1	43.8	40.6	39.6	38.6	46.2	0.0	46.2
	11	43.5	52.8	32.1	52.2	51.5	49.6	48.3	44.1	40.2	34.5	33.6	32.5	43.5	0.0	43.5
	12	43.9	52.5	33.1	51.7	50.8	49.4	48.4	44.8	41.4	36.1	34.9	33.5	43.9	0.0	43.9
	13	42.7	51.5	32.3	50.7	49.9	48.0	46.9	43.5	40.3	34.9	33.8	32.7	42.7	0.0	42.7
	14	42.1	50.2	32.7	49.3	48.6	47.2	46.2	42.9	40.1	35.6	34.6	33.2	42.1	0.0	42.1
	15	41.1	49.3	31.5	48.7	48.0	46.4	45.2	41.8	38.9	34.0	33.1	32.0	41.1	0.0	41.1
	16	37.5	46.3	29.0	45.8	45.2	43.4	42.1	37.8	34.4	30.6	30.0	29.3	37.5	0.0	37.5
	17	37.6	46.6	29.5	46.1	45.5	43.3	41.9	37.9	34.7	31.1	30.5	29.7	37.6	0.0	37.6
	18	38.6	46.5	32.0	45.9	45.4	44.1	43.0	39.3	36.0	33.0	32.6	32.1	38.6	0.0	38.6
	19	37.2	40.3	35.9	40.1	39.8	38.8	38.3	37.4	37.0	36.3	36.2	36.0	37.2	5.0	42.2
	20	34.8	36.3	33.8	36.2	36.0	35.7	35.6	35.0	34.8	34.1	34.0	33.8	34.8	5.0	39.8
	21	35.4	38.5	34.1	38.2	37.9	37.1	36.5	35.5	35.1	34.4	34.3	34.1	35.4	5.0	40.4
Night	22	35.7	39.4	34.1	39.1	38.9	38.3	37.8	35.8	35.2	34.5	34.4	34.2	35.7	10.0	45.7
	23	35.2	37.2	33.8	37.0	36.8	36.5	36.2	35.5	35.0	34.3	34.1	33.8	35.2	10.0	45.2

Timeframe	Hour	L_{eq}	L_{max}	L_{min}	L1%	L2%	L5%	L8%	L25%	L50%	L90%	L95%	L99%
Day	Min	34.8	36.3	29.0	36.2	36.0	35.7	35.6	35.0	34.4	30.6	30.0	29.3
	Max	54.4	60.7	43.0	60.3	60.0	59.1	58.5	56.0	52.6	45.8	44.5	43.3
Energy Average		45.1	Average:		48.5	47.9	46.4	45.3	41.7	39.1	35.7	35.0	34.3
Night	Min	29.7	32.7	28.0	32.4	32.1	31.5	31.1	30.1	29.4	28.4	28.2	28.0
	Max	43.5	52.6	36.6	52.3	51.9	50.0	48.1	43.4	40.3	37.1	36.9	36.7
Energy Average		36.9	Average:		38.6	38.2	37.2	36.4	34.3	33.4	32.2	32.1	31.8

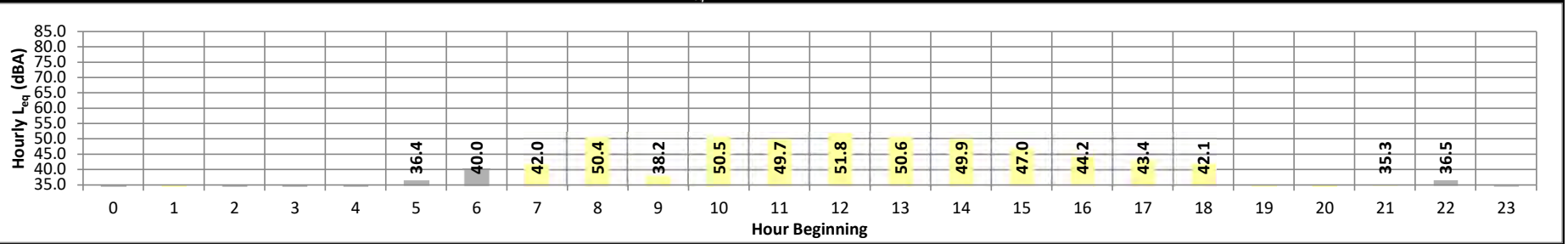
24-Hour CNEL	*Leq (dBA) Daytime (7am-10pm)*	*Leq (dBA) Nighttime (10pm-7am)*
46.0	**45.1**	**36.9**

24-Hour Noise Level Measurement Summary

Date: Wednesday, October 4, 2023 | *Location:* L3 - Located North of the site at future park site | *Meter:* Piccolo II | *JN:* 15662

Project: Ontario Esperanza PA-11 | *Source:* | *Analyst:* Z. Ibrahim

Hourly L_{eq} dBA Readings (unadjusted)



Timeframe	Hour	L_{eq}	L_{max}	L_{min}	L1%	L2%	L5%	L8%	L25%	L50%	L90%	L95%	L99%	L_{eq}	Adj.	Adj. L_{eq}
Night	0	29.5	32.6	27.8	32.4	32.0	31.5	31.2	29.9	29.2	28.3	28.1	27.8	29.5	10.0	39.5
	1	29.6	33.4	27.8	33.2	32.9	32.2	31.5	29.8	29.2	28.2	28.1	27.8	29.6	10.0	39.6
	2	29.9	32.7	28.1	32.5	32.2	31.7	31.4	30.4	29.6	28.6	28.4	28.2	29.9	10.0	39.9
	3	30.3	33.3	28.8	33.0	32.7	32.1	31.5	30.6	30.1	29.3	29.1	28.9	30.3	10.0	40.3
	4	34.1	38.1	32.3	37.7	37.4	36.6	35.9	34.3	33.5	32.8	32.6	32.4	34.1	10.0	44.1
	5	36.4	41.4	34.4	41.0	40.5	39.5	38.5	36.6	35.7	34.8	34.7	34.5	36.4	10.0	46.4
	6	40.0	47.3	36.2	47.1	46.9	45.4	44.0	39.6	37.8	36.7	36.5	36.3	40.0	10.0	50.0
Day	7	42.0	50.0	38.1	49.8	49.6	48.4	46.7	40.6	39.2	38.4	38.3	38.2	42.0	0.0	42.0
	8	50.4	57.0	40.1	56.7	56.3	55.4	54.6	51.6	48.3	43.0	41.7	40.3	50.4	0.0	50.4
	9	38.2	47.5	33.9	47.2	46.8	44.8	42.3	36.9	35.2	34.3	34.2	34.0	38.2	0.0	38.2
	10	50.5	57.2	42.4	56.7	56.2	55.0	54.2	51.6	49.2	45.0	44.1	42.8	50.5	0.0	50.5
	11	49.7	56.8	40.4	56.4	55.9	54.7	53.9	50.9	47.9	43.0	41.9	40.9	49.7	0.0	49.7
	12	51.8	58.6	43.0	58.1	57.3	56.2	55.4	52.8	50.4	46.0	45.1	43.6	51.8	0.0	51.8
	13	50.6	56.8	42.0	56.3	55.8	54.8	54.1	51.8	49.4	45.0	43.9	42.4	50.6	0.0	50.6
	14	49.9	56.1	41.6	55.6	55.3	54.3	53.5	51.1	48.7	44.5	43.4	42.1	49.9	0.0	49.9
	15	47.0	54.0	37.8	53.4	52.8	51.7	50.8	48.1	45.7	40.8	39.6	38.2	47.0	0.0	47.0
	16	44.2	50.9	35.6	50.4	49.9	48.7	48.0	45.4	42.9	38.3	37.3	36.0	44.2	0.0	44.2
	17	43.4	49.0	35.9	48.6	48.3	47.4	46.8	44.6	42.3	38.3	37.3	36.3	43.4	0.0	43.4
	18	42.1	53.8	32.4	52.6	51.6	47.1	45.0	42.3	38.5	33.9	33.4	32.7	42.1	0.0	42.1
	19	34.7	39.2	31.8	38.8	38.5	37.8	37.2	35.5	34.0	32.4	32.2	31.9	34.7	5.0	39.7
	20	31.5	35.0	30.2	34.8	34.5	33.6	33.0	31.8	31.1	30.5	30.4	30.2	31.5	5.0	36.5
	21	35.3	39.0	33.9	38.8	38.5	37.6	36.9	35.4	34.9	34.3	34.2	34.0	35.3	5.0	40.3
Night	22	36.5	42.3	34.2	41.9	41.5	40.3	39.4	36.2	35.4	34.6	34.5	34.3	36.5	10.0	46.5
	23	34.7	37.1	33.2	36.8	36.6	36.2	35.9	35.1	34.5	33.7	33.5	33.3	34.7	10.0	44.7

Timeframe	Hour	L_{eq}	L_{max}	L_{min}	L1%	L2%	L5%	L8%	L25%	L50%	L90%	L95%	L99%
Day	Min	31.5	35.0	30.2	34.8	34.5	33.6	33.0	31.8	31.1	30.5	30.4	30.2
	Max	51.8	58.6	43.0	58.1	57.3	56.2	55.4	52.8	50.4	46.0	45.1	43.6
Energy Average		47.4	Average:		50.3	49.8	48.5	47.5	44.7	42.5	39.2	38.5	37.6
Night	Min	29.5	32.6	27.8	32.4	32.0	31.5	31.2	29.8	29.2	28.2	28.1	27.8
	Max	40.0	47.3	36.2	47.1	46.9	45.4	44.0	39.6	37.8	36.7	36.5	36.3
Energy Average		34.9	Average:		37.3	37.0	36.2	35.5	33.6	32.8	31.9	31.7	31.5

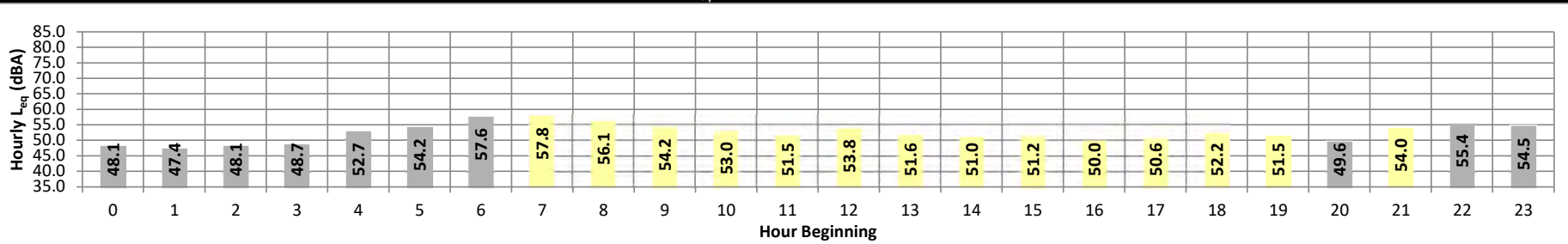
24-Hour CNEL	*Leq (dBA) Daytime (7am-10pm)*	*Leq (dBA) Nighttime (10pm-7am)*
46.7	**47.4**	**34.9**

24-Hour Noise Level Measurement Summary

Date: Wednesday, October 4, 2023 *Location:* L4 - Located West of the site near the residence at 4500 S. *Meter:* Piccolo II *JN:* 15662

Project: Ontario Esperanza PA-11 *Source:* Amherst Ave. *Analyst:* Z. Ibrahim

Hourly L_{eq} dBA Readings (unadjusted)



Timeframe	Hour	L_{eq}	L_{max}	L_{min}	L1%	L2%	L5%	L8%	L25%	L50%	L90%	L95%	L99%	L_{eq}	Adj.	Adj. L_{eq}
Night	0	48.1	52.1	46.1	51.8	51.4	50.4	50.0	48.5	47.7	46.6	46.4	46.2	48.1	10.0	58.1
	1	47.4	50.5	45.7	50.3	50.0	49.4	49.1	47.8	47.1	46.2	45.9	45.7	47.4	10.0	57.4
	2	48.1	51.4	46.1	51.1	50.9	50.3	49.8	48.6	47.6	46.5	46.4	46.1	48.1	10.0	58.1
	3	48.7	51.4	47.2	51.2	50.9	50.4	50.0	49.1	48.5	47.6	47.4	47.3	48.7	10.0	58.7
	4	52.7	57.3	50.8	56.8	56.5	55.6	54.7	53.0	52.0	51.2	51.1	50.9	52.7	10.0	62.7
	5	54.2	57.6	52.6	57.3	56.9	56.2	55.6	54.5	53.8	53.0	52.8	52.6	54.2	10.0	64.2
	6	57.6	63.7	54.8	63.4	63.1	62.2	61.3	57.3	56.1	55.3	55.1	54.9	57.6	10.0	67.6
Day	7	57.8	61.1	56.3	60.9	60.6	59.9	59.3	58.0	57.4	56.7	56.5	56.4	57.8	0.0	57.8
	8	56.1	58.3	54.5	58.1	57.8	57.4	57.2	56.5	55.9	55.0	54.8	54.6	56.1	0.0	56.1
	9	54.2	57.1	52.7	56.8	56.5	56.0	55.5	54.6	53.9	53.1	53.0	52.8	54.2	0.0	54.2
	10	53.0	58.5	50.5	57.9	57.4	56.1	55.4	53.3	52.1	51.0	50.8	50.6	53.0	0.0	53.0
	11	51.5	56.1	48.8	55.7	55.3	54.4	53.8	52.2	50.9	49.4	49.1	48.9	51.5	0.0	51.5
	12	53.8	60.9	48.8	60.4	59.7	58.6	57.7	54.7	51.6	49.5	49.2	48.9	53.8	0.0	53.8
	13	51.6	57.6	48.4	57.1	56.6	55.5	54.8	52.0	50.4	49.0	48.8	48.5	51.6	0.0	51.6
	14	51.0	56.5	48.2	56.1	55.7	54.4	53.6	51.3	50.2	48.9	48.6	48.3	51.0	0.0	51.0
	15	51.2	57.2	47.5	56.7	56.0	54.9	54.4	52.2	49.8	48.1	47.8	47.5	51.2	0.0	51.2
	16	50.0	56.1	46.9	55.4	54.9	53.5	52.5	50.6	49.0	47.5	47.2	47.0	50.0	0.0	50.0
	17	50.6	57.4	47.0	56.8	56.2	55.1	54.0	51.1	48.8	47.6	47.4	47.1	50.6	0.0	50.6
	18	52.2	59.9	48.3	59.5	59.2	57.7	56.6	51.6	50.1	48.8	48.6	48.4	52.2	0.0	52.2
	19	51.5	57.3	49.0	56.7	56.2	54.9	54.3	51.8	50.5	49.4	49.3	49.1	51.5	5.0	56.5
	20	49.6	54.4	47.4	53.8	53.3	52.4	51.9	50.2	48.7	47.8	47.7	47.5	49.6	5.0	54.6
	21	54.0	57.9	52.2	57.5	57.1	56.3	55.8	54.3	53.6	52.7	52.5	52.3	54.0	5.0	59.0
Night	22	55.4	60.3	53.2	60.0	59.6	58.5	57.7	55.5	54.7	53.7	53.6	53.3	55.4	10.0	65.4
	23	54.5	57.6	52.7	57.3	57.0	56.4	56.0	54.9	54.1	53.2	53.0	52.8	54.5	10.0	64.5

Timeframe	Hour	L_{eq}	L_{max}	L_{min}	L1%	L2%	L5%	L8%	L25%	L50%	L90%	L95%	L99%
Day	Min	49.6	54.4	46.9	53.8	53.3	52.4	51.9	50.2	48.7	47.5	47.2	47.0
	Max	57.8	61.1	56.3	60.9	60.6	59.9	59.3	58.0	57.4	56.7	56.5	56.4
Energy Average		53.2	Average:		57.3	56.8	55.8	55.1	53.0	51.5	50.3	50.1	49.9
Night	Min	47.4	50.5	45.7	50.3	50.0	49.4	49.1	47.8	47.1	46.2	45.9	45.7
	Max	57.6	63.7	54.8	63.4	63.1	62.2	61.3	57.3	56.1	55.3	55.1	54.9
Energy Average		53.3	Average:		55.5	55.1	54.4	53.8	52.1	51.3	50.4	50.2	50.0

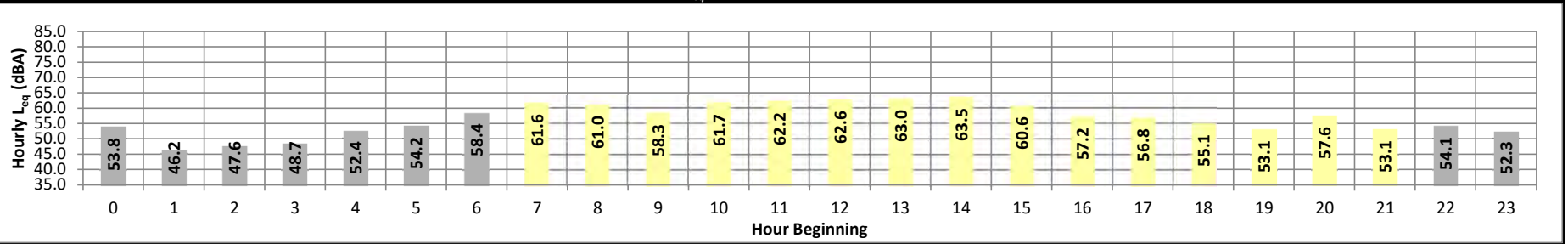
24-Hour CNEL	Leq (dBA) Daytime (7am-10pm)	Leq (dBA) Nighttime (10pm-7am)
59.9	**53.2**	**53.3**

24-Hour Noise Level Measurement Summary

Date: Wednesday, October 4, 2023 | *Location:* L5 - Located South of the site near the residence at 4576 S | *Meter:* Piccolo II | *JN:* 15662

Project: Ontario Esperanza PA-11 | *Source:* Afton Privado | *Analyst:* Z. Ibrahim

Hourly L_{eq} dBA Readings (unadjusted)



Timeframe	Hour	L_{eq}	L_{max}	L_{min}	L1%	L2%	L5%	L8%	L25%	L50%	L90%	L95%	L99%	L_{eq}	Adj.	Adj. L_{eq}
Night	0	53.8	57.1	51.9	56.9	56.7	55.8	55.3	54.4	53.4	52.5	52.3	52.1	53.8	10.0	63.8
	1	46.2	50.5	44.2	50.3	50.1	49.4	48.5	46.4	45.6	44.6	44.5	44.3	46.2	10.0	56.2
	2	47.6	51.1	45.7	50.9	50.6	49.9	49.3	48.0	47.1	46.1	45.9	45.8	47.6	10.0	57.6
	3	48.7	55.1	45.8	54.8	54.4	53.5	52.4	48.6	47.0	46.2	46.1	45.9	48.7	10.0	58.7
	4	52.4	59.4	49.7	59.0	58.6	56.8	55.3	52.1	51.0	50.1	49.9	49.7	52.4	10.0	62.4
	5	54.2	60.1	51.9	59.8	59.5	58.0	56.7	54.1	53.2	52.3	52.1	51.9	54.2	10.0	64.2
	6	58.4	66.9	53.6	66.6	66.3	64.3	62.6	57.9	55.5	54.1	53.9	53.7	58.4	10.0	68.4
Day	7	61.6	70.7	55.0	70.4	69.8	67.9	66.1	61.7	58.5	55.4	55.2	55.0	61.6	0.0	61.6
	8	61.0	72.7	53.7	72.1	71.2	67.9	65.3	58.8	55.8	54.2	54.0	53.8	61.0	0.0	61.0
	9	58.3	68.0	52.4	67.6	67.1	65.4	63.7	56.5	54.1	52.8	52.6	52.4	58.3	0.0	58.3
	10	61.7	70.2	54.1	69.5	68.8	67.2	66.2	62.1	59.2	55.8	55.2	54.4	61.7	0.0	61.7
	11	62.2	70.2	54.7	69.5	68.8	67.0	66.0	62.8	60.3	56.7	55.9	55.0	62.2	0.0	62.2
	12	62.6	70.4	54.2	69.9	69.4	67.8	66.6	63.3	60.7	56.3	55.4	54.5	62.6	0.0	62.6
	13	63.0	71.2	54.4	70.5	70.0	68.4	67.3	63.6	60.9	56.5	55.7	54.6	63.0	0.0	63.0
	14	63.5	71.6	54.7	71.1	70.6	68.9	67.8	64.3	61.3	56.9	56.0	54.9	63.5	0.0	63.5
	15	60.6	68.8	52.2	68.4	67.7	65.8	64.7	61.3	58.5	54.4	53.6	52.6	60.6	0.0	60.6
	16	57.2	65.5	49.9	65.1	64.6	62.6	61.2	57.5	54.9	51.4	50.7	50.0	57.2	0.0	57.2
	17	56.8	64.5	50.0	64.0	63.6	61.9	60.6	57.4	54.9	51.5	50.9	50.2	56.8	0.0	56.8
	18	55.1	63.0	49.6	62.6	62.1	60.4	59.2	55.3	52.8	50.5	50.2	49.7	55.1	0.0	55.1
	19	53.1	61.2	48.9	60.9	60.4	58.5	57.2	52.7	50.7	49.3	49.1	49.0	53.1	5.0	58.1
	20	57.6	68.8	52.3	68.1	67.1	64.6	61.4	55.2	54.1	52.8	52.7	52.5	57.6	5.0	62.6
	21	53.1	60.3	50.6	59.8	59.3	57.2	55.9	52.9	51.9	51.0	50.9	50.7	53.1	5.0	58.1
Night	22	54.1	62.5	50.9	62.2	61.6	59.0	57.1	53.5	52.2	51.3	51.2	51.0	54.1	10.0	64.1
	23	52.3	56.4	50.4	56.2	55.8	55.0	54.4	52.6	51.7	50.8	50.7	50.5	52.3	10.0	62.3

Timeframe	Hour	L_{eq}	L_{max}	L_{min}	L1%	L2%	L5%	L8%	L25%	L50%	L90%	L95%	L99%
Day	Min	53.1	60.3	48.9	59.8	59.3	57.2	55.9	52.7	50.7	49.3	49.1	49.0
	Max	63.5	72.7	55.0	72.1	71.2	68.9	67.8	64.3	61.3	56.9	56.0	55.0
Energy Average		60.3	Average:		67.3	66.7	64.8	63.3	59.0	56.6	53.7	53.2	52.6
Night	Min	46.2	50.5	44.2	50.3	50.1	49.4	48.5	46.4	45.6	44.6	44.5	44.3
	Max	58.4	66.9	53.6	66.6	66.3	64.3	62.6	57.9	55.5	54.1	53.9	53.7
Energy Average		53.4	Average:		57.4	57.1	55.8	54.6	52.0	50.7	49.8	49.6	49.4

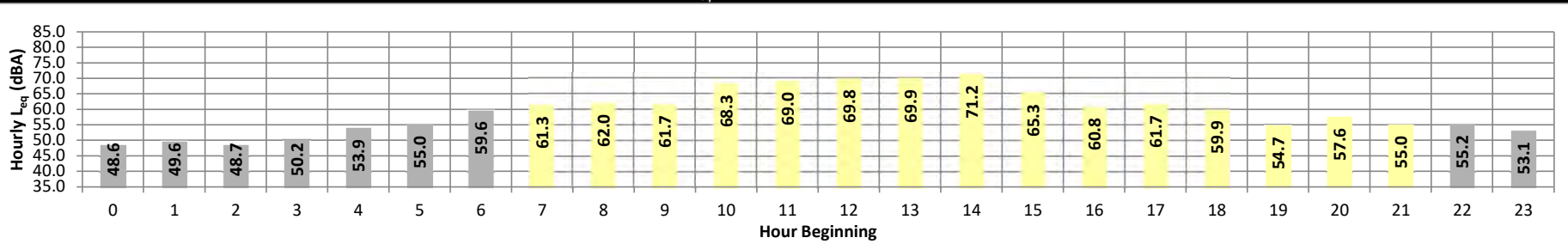
24-Hour CNEL	Leq (dBA) Daytime (7am-10pm)	Leq (dBA) Nighttime (10pm-7am)
62.0	60.3	53.4

24-Hour Noise Level Measurement Summary

Date: Wednesday, October 4, 2023 | *Location:* L6 - Located South of the site near the residence at 4554 S | *Meter:* Piccolo II | *JN:* 15662

Project: Ontario Esperanza PA-11 | *Source:* Afton Privado | *Analyst:* Z. Ibrahim

Hourly L_{eq} dBA Readings (unadjusted)



Timeframe	Hour	L_{eq}	L_{max}	L_{min}	L1%	L2%	L5%	L8%	L25%	L50%	L90%	L95%	L99%	L_{eq}	Adj.	Adj. L_{eq}
Night	0	48.6	56.5	45.2	56.2	55.6	53.0	51.3	48.4	47.2	45.8	45.6	45.3	48.6	10.0	58.6
	1	49.6	53.5	47.7	53.3	53.0	52.3	51.6	49.9	49.2	48.3	48.0	47.7	49.6	10.0	59.6
	2	48.7	53.5	46.1	53.3	53.0	52.0	51.2	49.1	47.8	46.6	46.4	46.1	48.7	10.0	58.7
	3	50.2	57.0	46.9	56.8	56.5	55.5	54.2	49.8	48.2	47.3	47.1	46.9	50.2	10.0	60.2
	4	53.9	61.8	50.8	61.6	61.1	58.9	56.9	53.3	52.2	51.3	51.1	50.9	53.9	10.0	63.9
	5	55.0	61.5	52.4	61.3	60.9	59.2	57.7	54.9	53.8	52.9	52.7	52.5	55.0	10.0	65.0
	6	59.6	68.9	53.9	68.7	68.3	66.2	64.1	58.5	55.9	54.4	54.1	53.9	59.6	10.0	69.6
Day	7	61.3	71.8	55.2	71.4	70.7	67.9	65.7	60.0	57.1	55.7	55.5	55.3	61.3	0.0	61.3
	8	62.0	73.6	54.1	73.3	72.4	69.1	66.2	59.7	56.3	54.5	54.4	54.2	62.0	0.0	62.0
	9	61.7	72.6	53.3	72.4	71.9	69.3	66.9	59.3	55.2	53.8	53.6	53.4	61.7	0.0	61.7
	10	68.3	77.4	54.8	76.9	76.3	75.1	73.5	68.5	64.0	57.5	56.4	55.1	68.3	0.0	68.3
	11	69.0	78.7	53.8	78.1	77.5	75.9	74.5	69.3	63.7	56.5	55.3	54.1	69.0	0.0	69.0
	12	69.8	78.7	54.4	78.2	77.6	76.2	75.1	70.7	66.0	57.2	56.1	54.8	69.8	0.0	69.8
	13	69.9	78.1	55.4	77.7	77.3	76.0	75.0	70.9	66.0	59.1	57.8	55.8	69.9	0.0	69.9
	14	71.2	79.7	56.7	79.3	78.9	77.3	76.1	72.2	67.7	60.9	59.5	57.4	71.2	0.0	71.2
	15	65.3	73.9	52.4	73.5	72.9	71.3	70.1	66.1	62.4	55.0	53.9	52.8	65.3	0.0	65.3
	16	60.8	70.4	49.6	69.9	69.1	67.0	65.5	61.0	57.4	51.9	51.0	50.0	60.8	0.0	60.8
	17	61.7	70.7	49.8	70.1	69.4	67.8	66.5	62.1	58.6	52.2	51.2	50.1	61.7	0.0	61.7
	18	59.9	70.3	50.2	69.4	68.6	65.9	64.3	59.6	56.5	52.0	51.2	50.4	59.9	0.0	59.9
	19	54.7	64.5	48.3	64.1	63.5	60.9	59.2	53.9	50.9	48.9	48.6	48.4	54.7	5.0	59.7
	20	57.6	70.3	48.0	69.9	69.0	65.0	61.4	53.7	50.4	48.5	48.3	48.1	57.6	5.0	62.6
	21	55.0	64.5	50.7	64.1	63.4	60.7	58.7	54.2	52.3	51.2	51.0	50.8	55.0	5.0	60.0
Night	22	55.2	64.4	51.0	63.9	63.1	60.5	58.6	54.6	52.6	51.5	51.3	51.1	55.2	10.0	65.2
	23	53.1	58.2	50.6	57.9	57.6	56.6	55.7	53.3	52.3	51.2	50.9	50.7	53.1	10.0	63.1

Timeframe	Hour	L_{eq}	L_{max}	L_{min}	L1%	L2%	L5%	L8%	L25%	L50%	L90%	L95%	L99%
Day	Min	54.7	64.5	48.0	64.1	63.4	60.7	58.7	53.7	50.4	48.5	48.3	48.1
	Max	71.2	79.7	56.7	79.3	78.9	77.3	76.1	72.2	67.7	60.9	59.5	57.4
Energy Average		66.0	Average:		72.6	71.9	69.7	67.9	62.8	59.0	54.3	53.6	52.7
Night	Min	48.6	53.5	45.2	53.3	53.0	52.0	51.2	48.4	47.2	45.8	45.6	45.3
	Max	59.6	68.9	53.9	68.7	68.3	66.2	64.1	58.5	55.9	54.4	54.1	53.9
Energy Average		54.2	Average:		59.2	58.8	57.1	55.7	52.4	51.0	49.9	49.7	49.5

24-Hour CNEL	Leq (dBA) Daytime (7am-10pm)	Leq (dBA) Nighttime (10pm-7am)
65.5	**66.0**	**54.2**

APPENDIX 8.1:

ON-SITE MODEL INPUTS

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FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL (CALVENO) - v10/31/19

Scenario: Backyard No Wall
Road Name: Eucalyptus Ave
Lot No: BLDG 20

Project Name: Esperanza Specific Plan
Job Number: 15662
Analyst: B. Maddux

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	21,700 vehicles
Peak Hour Percentage:	10%
Peak Hour Volume:	2,170 vehicles
Vehicle Speed:	40 mph
Near/Far Lane Distance:	40 feet

Site Data

Barrier Height:	**0.0 feet**
Barrier Type (0-Wall, 1-Berm):	0.0
Centerline Dist. to Barrier:	83.0 feet
Centerline Dist. to Observer:	105.0 feet
Barrier Distance to Observer:	22.0 feet
Observer Height (Above Pad):	5.0 feet
Pad Elevation:	0.0 feet
Road Elevation:	0.0 feet
Barrier Elevation:	0.0 feet
Road Grade:	1.0%

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	15
Medium Trucks (2 Axles):	15
Heavy Trucks (3+ Axles):	15

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	77.5%	12.9%	9.6%	97.42%
Medium Trucks:	84.8%	4.9%	10.3%	1.84%
Heavy Trucks:	86.5%	2.7%	10.8%	0.74%

Noise Source Elevations (in feet)

Autos:	0.00		
Medium Trucks:	2.30		
Heavy Trucks:	8.01	*Grade Adjustment:*	0.0

Lane Equivalent Distance (in feet)

Autos:	82.765
Medium Trucks:	82.658
Heavy Trucks:	82.668

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	67.36	1.93	-3.39	-1.20	*-0.41*	0.000	0.000
Medium Trucks:	76.31	-15.31	-3.38	-1.20	*-0.55*	0.000	0.000
Heavy Trucks:	81.16	-19.27	-3.38	-1.20	*-0.99*	0.000	0.000

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	64.7	62.8	61.0	55.0	63.6	64.2
Medium Trucks:	56.4	54.9	48.6	47.0	55.5	55.7
Heavy Trucks:	57.3	55.9	46.9	48.1	56.5	56.6
Vehicle Noise:	65.9	64.2	61.4	56.3	64.9	65.4

Mitigated Noise Levels (with Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	64.7	62.8	61.0	55.0	63.6	64.2
Medium Trucks:	56.4	54.9	48.6	47.0	55.5	55.7
Heavy Trucks:	57.3	55.9	46.9	48.1	56.5	56.6
Vehicle Noise:	65.9	64.2	61.4	56.3	64.9	65.4

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL (CALVENO) - v10/31/19

Scenario: Backyard No Wall
Road Name: Eucalyptus Ave
Lot No: BLDG 7-14

Project Name: Esperanza Specific Plan
Job Number: 15662
Analyst: B. Maddux

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	21,700 vehicles
Peak Hour Percentage:	10%
Peak Hour Volume:	2,170 vehicles
Vehicle Speed:	40 mph
Near/Far Lane Distance:	40 feet

Site Data

Barrier Height:	**0.0 feet**
Barrier Type (0-Wall, 1-Berm):	0.0
Centerline Dist. to Barrier:	83.0 feet
Centerline Dist. to Observer:	103.0 feet
Barrier Distance to Observer:	20.0 feet
Observer Height (Above Pad):	5.0 feet
Pad Elevation:	0.0 feet
Road Elevation:	0.0 feet
Barrier Elevation:	0.0 feet
Road Grade:	1.0%

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	15
Medium Trucks (2 Axles):	15
Heavy Trucks (3+ Axles):	15

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	77.5%	12.9%	9.6%	97.42%
Medium Trucks:	84.8%	4.9%	10.3%	1.84%
Heavy Trucks:	86.5%	2.7%	10.8%	0.74%

Noise Source Elevations (in feet)

Autos:	0.00		
Medium Trucks:	2.30		
Heavy Trucks:	8.01	*Grade Adjustment:*	0.0

Lane Equivalent Distance (in feet)

Autos:	80.709
Medium Trucks:	80.600
Heavy Trucks:	80.610

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	67.36	1.93	-3.22	-1.20	*-0.46*	0.000	0.000
Medium Trucks:	76.31	-15.31	-3.21	-1.20	*-0.60*	0.000	0.000
Heavy Trucks:	81.16	-19.27	-3.21	-1.20	*-1.04*	0.000	0.000

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	64.9	63.0	61.2	55.1	63.8	64.4
Medium Trucks:	56.6	55.1	48.7	47.2	55.6	55.9
Heavy Trucks:	57.5	56.1	47.0	48.3	56.6	56.7
Vehicle Noise:	66.1	64.3	61.6	56.5	65.1	65.6

Mitigated Noise Levels (with Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	64.9	63.0	61.2	55.1	63.8	64.4
Medium Trucks:	56.6	55.1	48.7	47.2	55.6	55.9
Heavy Trucks:	57.5	56.1	47.0	48.3	56.6	56.7
Vehicle Noise:	66.1	64.3	61.6	56.5	65.1	65.6

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL (CALVENO) - v10/31/19

Scenario: Backyard No Wall
Road Name: Eucalyptus Ave
Lot No: BLDG 6

Project Name: Esperanza Specific Plan
Job Number: 15662
Analyst: B. Maddux

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	21,700 vehicles
Peak Hour Percentage:	10%
Peak Hour Volume:	2,170 vehicles
Vehicle Speed:	40 mph
Near/Far Lane Distance:	40 feet

Site Data

Barrier Height:	**0.0 feet**
Barrier Type (0-Wall, 1-Berm):	0.0
Centerline Dist. to Barrier:	84.0 feet
Centerline Dist. to Observer:	104.0 feet
Barrier Distance to Observer:	20.0 feet
Observer Height (Above Pad):	5.0 feet
Pad Elevation:	0.0 feet
Road Elevation:	0.0 feet
Barrier Elevation:	0.0 feet
Road Grade:	1.0%

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	15
Medium Trucks (2 Axles):	15
Heavy Trucks (3+ Axles):	15

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	77.5%	12.9%	9.6%	97.42%
Medium Trucks:	84.8%	4.9%	10.3%	1.84%
Heavy Trucks:	86.5%	2.7%	10.8%	0.74%

Noise Source Elevations (in feet)

Autos:	0.00		
Medium Trucks:	2.30		
Heavy Trucks:	8.01	*Grade Adjustment:*	0.0

Lane Equivalent Distance (in feet)

Autos:	81.737
Medium Trucks:	81.629
Heavy Trucks:	81.640

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	67.36	1.93	-3.31	-1.20	*-0.46*	0.000	0.000
Medium Trucks:	76.31	-15.31	-3.30	-1.20	*-0.60*	0.000	0.000
Heavy Trucks:	81.16	-19.27	-3.30	-1.20	*-1.04*	0.000	0.000

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	64.8	62.9	61.1	55.1	63.7	64.3
Medium Trucks:	56.5	55.0	48.6	47.1	55.5	55.8
Heavy Trucks:	57.4	56.0	46.9	48.2	56.5	56.7
Vehicle Noise:	66.0	64.2	61.5	56.4	65.0	65.5

Mitigated Noise Levels (with Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	64.8	62.9	61.1	55.1	63.7	64.3
Medium Trucks:	56.5	55.0	48.6	47.1	55.5	55.8
Heavy Trucks:	57.4	56.0	46.9	48.2	56.5	56.7
Vehicle Noise:	66.0	64.2	61.5	56.4	65.0	65.5

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL (CALVENO) - v10/31/19

Scenario: Backyard No Wall
Road Name: Clifton Ave
Lot No: BLDG 5-6

Project Name: Esperanza Specific Plan
Job Number: 15662
Analyst: B. Maddux

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	9,500 vehicles
Peak Hour Percentage:	10%
Peak Hour Volume:	950 vehicles
Vehicle Speed:	25 mph
Near/Far Lane Distance:	12 feet

Site Data

Barrier Height:	**0.0 feet**
Barrier Type (0-Wall, 1-Berm):	0.0
Centerline Dist. to Barrier:	31.0 feet
Centerline Dist. to Observer:	41.0 feet
Barrier Distance to Observer:	10.0 feet
Observer Height (Above Pad):	5.0 feet
Pad Elevation:	0.0 feet
Road Elevation:	0.0 feet
Barrier Elevation:	0.0 feet
Road Grade:	1.0%

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	15
Medium Trucks (2 Axles):	15
Heavy Trucks (3+ Axles):	15

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	77.5%	12.9%	9.6%	97.42%
Medium Trucks:	84.8%	4.9%	10.3%	1.84%
Heavy Trucks:	86.5%	2.7%	10.8%	0.74%

Noise Source Elevations (in feet)

Autos:	0.00		
Medium Trucks:	2.30		
Heavy Trucks:	8.01	*Grade Adjustment:*	0.0

Lane Equivalent Distance (in feet)

Autos:	34.843
Medium Trucks:	34.588
Heavy Trucks:	34.613

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	59.44	0.38	2.25	-1.20	*-0.81*	0.000	0.000
Medium Trucks:	71.09	-16.86	2.30	-1.20	*-1.16*	0.000	0.000
Heavy Trucks:	77.24	-20.82	2.29	-1.20	*-2.25*	0.000	0.000

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	60.9	59.0	57.2	51.1	59.8	60.4
Medium Trucks:	55.3	53.8	47.5	45.9	54.4	54.6
Heavy Trucks:	57.5	56.1	47.1	48.3	56.7	56.8
Vehicle Noise:	63.3	61.6	58.0	53.7	62.3	62.7

Mitigated Noise Levels (with Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	60.9	59.0	57.2	51.1	59.8	60.4
Medium Trucks:	55.3	53.8	47.5	45.9	54.4	54.6
Heavy Trucks:	57.5	56.1	47.1	48.3	56.7	56.8
Vehicle Noise:	63.3	61.6	58.0	53.7	62.3	62.7

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL (CALVENO) - v10/31/19

Scenario: Backyard No Wall
Road Name: Clifton Ave
Lot No: BLDG 4

Project Name: Esperanza Specific Plan
Job Number: 15662
Analyst: B. Maddux

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	9,500 vehicles
Peak Hour Percentage:	10%
Peak Hour Volume:	950 vehicles
Vehicle Speed:	25 mph
Near/Far Lane Distance:	12 feet

Site Data

Barrier Height:	**0.0 feet**
Barrier Type (0-Wall, 1-Berm):	0.0
Centerline Dist. to Barrier:	32.0 feet
Centerline Dist. to Observer:	51.0 feet
Barrier Distance to Observer:	19.0 feet
Observer Height (Above Pad):	5.0 feet
Pad Elevation:	0.0 feet
Road Elevation:	0.0 feet
Barrier Elevation:	0.0 feet
Road Grade:	1.0%

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	15
Medium Trucks (2 Axles):	15
Heavy Trucks (3+ Axles):	15

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	77.5%	12.9%	9.6%	97.42%
Medium Trucks:	84.8%	4.9%	10.3%	1.84%
Heavy Trucks:	86.5%	2.7%	10.8%	0.74%

Noise Source Elevations (in feet)

Autos:	0.00		
Medium Trucks:	2.30		
Heavy Trucks:	8.01	*Grade Adjustment:*	0.0

Lane Equivalent Distance (in feet)

Autos:	44.878
Medium Trucks:	44.680
Heavy Trucks:	44.699

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	59.44	0.38	0.60	-1.20	*-0.36*	0.000	0.000
Medium Trucks:	71.09	-16.86	0.63	-1.20	*-0.65*	0.000	0.000
Heavy Trucks:	77.24	-20.82	0.63	-1.20	*-1.71*	0.000	0.000

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	59.2	57.3	55.6	49.5	58.1	58.7
Medium Trucks:	53.7	52.1	45.8	44.2	52.7	52.9
Heavy Trucks:	55.9	54.4	45.4	46.6	55.0	55.1
Vehicle Noise:	61.6	59.9	56.4	52.1	60.6	61.0

Mitigated Noise Levels (with Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	59.2	57.3	55.6	49.5	58.1	58.7
Medium Trucks:	53.7	52.1	45.8	44.2	52.7	52.9
Heavy Trucks:	55.9	54.4	45.4	46.6	55.0	55.1
Vehicle Noise:	61.6	59.9	56.4	52.1	60.6	61.0

Wednesday, May 29, 2024

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL (CALVENO) - v10/31/19

Scenario: Backyard No Wall
Road Name: Chatham St
Lot No: BLDG 4

Project Name: Esperanza Specific Plan
Job Number: 15662
Analyst: B. Maddux

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	9,500 vehicles
Peak Hour Percentage:	10%
Peak Hour Volume:	950 vehicles
Vehicle Speed:	25 mph
Near/Far Lane Distance:	12 feet

Site Data

Barrier Height:	**0.0 feet**
Barrier Type (0-Wall, 1-Berm):	0.0
Centerline Dist. to Barrier:	25.0 feet
Centerline Dist. to Observer:	33.0 feet
Barrier Distance to Observer:	8.0 feet
Observer Height (Above Pad):	5.0 feet
Pad Elevation:	0.0 feet
Road Elevation:	0.0 feet
Barrier Elevation:	0.0 feet
Road Grade:	1.0%

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	15
Medium Trucks (2 Axles):	15
Heavy Trucks (3+ Axles):	15

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	77.5%	12.9%	9.6%	97.42%
Medium Trucks:	84.8%	4.9%	10.3%	1.84%
Heavy Trucks:	86.5%	2.7%	10.8%	0.74%

Noise Source Elevations (in feet)

Autos:	0.00		
Medium Trucks:	2.30		
Heavy Trucks:	8.01	*Grade Adjustment:*	0.0

Lane Equivalent Distance (in feet)

Autos:	26.796
Medium Trucks:	26.463
Heavy Trucks:	26.496

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	59.44	0.38	3.96	-1.20	*-0.95*	0.000	0.000
Medium Trucks:	71.09	-16.86	4.04	-1.20	*-1.41*	0.000	0.000
Heavy Trucks:	77.24	-20.82	4.03	-1.20	*-2.82*	0.000	0.000

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	62.6	60.7	58.9	52.9	61.5	62.1
Medium Trucks:	57.1	55.6	49.2	47.7	56.1	56.3
Heavy Trucks:	59.3	57.8	48.8	50.1	58.4	58.5
Vehicle Noise:	65.0	63.3	59.7	55.5	64.0	64.4

Mitigated Noise Levels (with Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	62.6	60.7	58.9	52.9	61.5	62.1
Medium Trucks:	57.1	55.6	49.2	47.7	56.1	56.3
Heavy Trucks:	59.3	57.8	48.8	50.1	58.4	58.5
Vehicle Noise:	65.0	63.3	59.7	55.5	64.0	64.4

Wednesday, May 29, 2024

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL (CALVENO) - v10/31/19

Scenario: Backyard No Wall
Road Name: Chatham St
Lot No: BLDG 1-3

Project Name: Esperanza Specific Plan
Job Number: 15662
Analyst: B. Maddux

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	9,500 vehicles
Peak Hour Percentage:	10%
Peak Hour Volume:	950 vehicles
Vehicle Speed:	25 mph
Near/Far Lane Distance:	12 feet

Site Data

Barrier Height:	**0.0 feet**
Barrier Type (0-Wall, 1-Berm):	0.0
Centerline Dist. to Barrier:	25.0 feet
Centerline Dist. to Observer:	35.0 feet
Barrier Distance to Observer:	10.0 feet
Observer Height (Above Pad):	5.0 feet
Pad Elevation:	0.0 feet
Road Elevation:	0.0 feet
Barrier Elevation:	0.0 feet
Road Grade:	1.0%

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	15
Medium Trucks (2 Axles):	15
Heavy Trucks (3+ Axles):	15

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	77.5%	12.9%	9.6%	97.42%
Medium Trucks:	84.8%	4.9%	10.3%	1.84%
Heavy Trucks:	86.5%	2.7%	10.8%	0.74%

Noise Source Elevations (in feet)

Autos:	0.00		
Medium Trucks:	2.30		
Heavy Trucks:	8.01	*Grade Adjustment:*	0.0

Lane Equivalent Distance (in feet)

Autos:	28.810
Medium Trucks:	28.501
Heavy Trucks:	28.531

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	59.44	0.38	3.49	-1.20	*-0.74*	0.000	0.000
Medium Trucks:	71.09	-16.86	3.56	-1.20	*-1.17*	0.000	0.000
Heavy Trucks:	77.24	-20.82	3.55	-1.20	*-2.59*	0.000	0.000

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	62.1	60.2	58.4	52.4	61.0	61.6
Medium Trucks:	56.6	55.1	48.7	47.2	55.6	55.9
Heavy Trucks:	58.8	57.4	48.3	49.6	57.9	58.1
Vehicle Noise:	64.5	62.8	59.2	55.0	63.5	63.9

Mitigated Noise Levels (with Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	62.1	60.2	58.4	52.4	61.0	61.6
Medium Trucks:	56.6	55.1	48.7	47.2	55.6	55.9
Heavy Trucks:	58.8	57.4	48.3	49.6	57.9	58.1
Vehicle Noise:	64.5	62.8	59.2	55.0	63.5	63.9

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL (CALVENO) - v10/31/19

Scenario: Backyard No Wall
Road Name: Chatham St
Lot No: BLDG 27-28

Project Name: Esperanza Specific Plan
Job Number: 15662
Analyst: B. Maddux

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	9,500 vehicles
Peak Hour Percentage:	10%
Peak Hour Volume:	950 vehicles
Vehicle Speed:	25 mph
Near/Far Lane Distance:	12 feet

Site Data

Barrier Height:	**0.0 feet**
Barrier Type (0-Wall, 1-Berm):	0.0
Centerline Dist. to Barrier:	25.0 feet
Centerline Dist. to Observer:	43.0 feet
Barrier Distance to Observer:	18.0 feet
Observer Height (Above Pad):	5.0 feet
Pad Elevation:	0.0 feet
Road Elevation:	0.0 feet
Barrier Elevation:	0.0 feet
Road Grade:	1.0%

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	15
Medium Trucks (2 Axles):	15
Heavy Trucks (3+ Axles):	15

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	77.5%	12.9%	9.6%	97.42%
Medium Trucks:	84.8%	4.9%	10.3%	1.84%
Heavy Trucks:	86.5%	2.7%	10.8%	0.74%

Noise Source Elevations (in feet)

Autos:	0.00		
Medium Trucks:	2.30		
Heavy Trucks:	8.01	*Grade Adjustment:*	0.0

Lane Equivalent Distance (in feet)

Autos:	36.851
Medium Trucks:	36.610
Heavy Trucks:	36.634

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	59.44	0.38	1.88	-1.20	*-0.34*	0.000	0.000
Medium Trucks:	71.09	-16.86	1.93	-1.20	*-0.71*	0.000	0.000
Heavy Trucks:	77.24	-20.82	1.92	-1.20	*-2.13*	0.000	0.000

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	60.5	58.6	56.8	50.8	59.4	60.0
Medium Trucks:	55.0	53.4	47.1	45.5	54.0	54.2
Heavy Trucks:	57.1	55.7	46.7	47.9	56.3	56.4
Vehicle Noise:	62.9	61.2	57.6	53.4	61.9	62.3

Mitigated Noise Levels (with Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	60.5	58.6	56.8	50.8	59.4	60.0
Medium Trucks:	55.0	53.4	47.1	45.5	54.0	54.2
Heavy Trucks:	57.1	55.7	46.7	47.9	56.3	56.4
Vehicle Noise:	62.9	61.2	57.6	53.4	61.9	62.3

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL (CALVENO) - v10/31/19

Scenario: Backyard No Wall
Road Name: Amherst Ave
Lot No: BLDG 27

Project Name: Esperanza Specific Plan
Job Number: 15662
Analyst: B. Maddux

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	9,500 vehicles
Peak Hour Percentage:	10%
Peak Hour Volume:	950 vehicles
Vehicle Speed:	25 mph
Near/Far Lane Distance:	12 feet

Site Data

Barrier Height:	**0.0 feet**
Barrier Type (0-Wall, 1-Berm):	0.0
Centerline Dist. to Barrier:	30.0 feet
Centerline Dist. to Observer:	40.0 feet
Barrier Distance to Observer:	10.0 feet
Observer Height (Above Pad):	5.0 feet
Pad Elevation:	0.0 feet
Road Elevation:	0.0 feet
Barrier Elevation:	0.0 feet
Road Grade:	1.0%

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	15
Medium Trucks (2 Axles):	15
Heavy Trucks (3+ Axles):	15

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	77.5%	12.9%	9.6%	97.42%
Medium Trucks:	84.8%	4.9%	10.3%	1.84%
Heavy Trucks:	86.5%	2.7%	10.8%	0.74%

Noise Source Elevations (in feet)

Autos:	0.00		
Medium Trucks:	2.30		
Heavy Trucks:	8.01	*Grade Adjustment:*	0.0

Lane Equivalent Distance (in feet)

Autos:	33.838
Medium Trucks:	33.575
Heavy Trucks:	33.601

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	59.44	0.38	2.44	-1.20	*-0.80*	0.000	0.000
Medium Trucks:	71.09	-16.86	2.49	-1.20	*-1.16*	0.000	0.000
Heavy Trucks:	77.24	-20.82	2.49	-1.20	*-2.30*	0.000	0.000

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	61.1	59.2	57.4	51.3	60.0	60.6
Medium Trucks:	55.5	54.0	47.6	46.1	54.6	54.8
Heavy Trucks:	57.7	56.3	47.3	48.5	56.9	57.0
Vehicle Noise:	63.5	61.8	58.2	53.9	62.5	62.9

Mitigated Noise Levels (with Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	61.1	59.2	57.4	51.3	60.0	60.6
Medium Trucks:	55.5	54.0	47.6	46.1	54.6	54.8
Heavy Trucks:	57.7	56.3	47.3	48.5	56.9	57.0
Vehicle Noise:	63.5	61.8	58.2	53.9	62.5	62.9

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL (CALVENO) - v10/31/19

Scenario: Backyard No Wall
Road Name: Amherst Ave
Lot No: BLDG 26-22

Project Name: Esperanza Specific Plan
Job Number: 15662
Analyst: B. Maddux

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	9,500 vehicles
Peak Hour Percentage:	10%
Peak Hour Volume:	950 vehicles
Vehicle Speed:	25 mph
Near/Far Lane Distance:	12 feet

Site Data

Barrier Height:	**0.0 feet**
Barrier Type (0-Wall, 1-Berm):	0.0
Centerline Dist. to Barrier:	30.0 feet
Centerline Dist. to Observer:	40.0 feet
Barrier Distance to Observer:	10.0 feet
Observer Height (Above Pad):	5.0 feet
Pad Elevation:	0.0 feet
Road Elevation:	0.0 feet
Barrier Elevation:	0.0 feet
Road Grade:	0.0%

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	15
Medium Trucks (2 Axles):	15
Heavy Trucks (3+ Axles):	15

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	77.5%	12.9%	9.6%	97.42%
Medium Trucks:	84.8%	4.9%	10.3%	1.84%
Heavy Trucks:	86.5%	2.7%	10.8%	0.74%

Noise Source Elevations (in feet)

Autos:	0.00		
Medium Trucks:	2.30		
Heavy Trucks:	8.01	*Grade Adjustment:*	0.0

Lane Equivalent Distance (in feet)

Autos:	33.838
Medium Trucks:	33.575
Heavy Trucks:	33.601

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	59.44	0.38	2.44	-1.20	*-0.80*	0.000	0.000
Medium Trucks:	71.09	-16.86	2.49	-1.20	*-1.16*	0.000	0.000
Heavy Trucks:	77.24	-20.82	2.49	-1.20	*-2.30*	0.000	0.000

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	61.1	59.2	57.4	51.3	60.0	60.6
Medium Trucks:	55.5	54.0	47.6	46.1	54.6	54.8
Heavy Trucks:	57.7	56.3	47.3	48.5	56.9	57.0
Vehicle Noise:	63.5	61.8	58.2	53.9	62.5	62.9

Mitigated Noise Levels (with Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	61.1	59.2	57.4	51.3	60.0	60.6
Medium Trucks:	55.5	54.0	47.6	46.1	54.6	54.8
Heavy Trucks:	57.7	56.3	47.3	48.5	56.9	57.0
Vehicle Noise:	63.5	61.8	58.2	53.9	62.5	62.9

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL (CALVENO) - v10/31/19

Scenario: Backyard No Wall
Road Name: Amherst Ave
Lot No: BLDG 20-21

Project Name: Esperanza Specific Plan
Job Number: 15662
Analyst: B. Maddux

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	9,500 vehicles
Peak Hour Percentage:	10%
Peak Hour Volume:	950 vehicles
Vehicle Speed:	25 mph
Near/Far Lane Distance:	12 feet

Site Data

Barrier Height:	**0.0 feet**
Barrier Type (0-Wall, 1-Berm):	0.0
Centerline Dist. to Barrier:	30.0 feet
Centerline Dist. to Observer:	40.0 feet
Barrier Distance to Observer:	10.0 feet
Observer Height (Above Pad):	5.0 feet
Pad Elevation:	0.0 feet
Road Elevation:	0.0 feet
Barrier Elevation:	0.0 feet
Road Grade:	0.0%

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	15
Medium Trucks (2 Axles):	15
Heavy Trucks (3+ Axles):	15

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	77.5%	12.9%	9.6%	97.42%
Medium Trucks:	84.8%	4.9%	10.3%	1.84%
Heavy Trucks:	86.5%	2.7%	10.8%	0.74%

Noise Source Elevations (in feet)

Autos:	0.00		
Medium Trucks:	2.30		
Heavy Trucks:	8.01	*Grade Adjustment:*	0.0

Lane Equivalent Distance (in feet)

Autos:	33.838
Medium Trucks:	33.575
Heavy Trucks:	33.601

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	59.44	0.38	2.44	-1.20	*-0.80*	0.000	0.000
Medium Trucks:	71.09	-16.86	2.49	-1.20	*-1.16*	0.000	0.000
Heavy Trucks:	77.24	-20.82	2.49	-1.20	*-2.30*	0.000	0.000

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	61.1	59.2	57.4	51.3	60.0	60.6
Medium Trucks:	55.5	54.0	47.6	46.1	54.6	54.8
Heavy Trucks:	57.7	56.3	47.3	48.5	56.9	57.0
Vehicle Noise:	63.5	61.8	58.2	53.9	62.5	62.9

Mitigated Noise Levels (with Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	61.1	59.2	57.4	51.3	60.0	60.6
Medium Trucks:	55.5	54.0	47.6	46.1	54.6	54.8
Heavy Trucks:	57.7	56.3	47.3	48.5	56.9	57.0
Vehicle Noise:	63.5	61.8	58.2	53.9	62.5	62.9

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL (CALVENO) - v10/31/19

Scenario: Backyard With Wall
Road Name: Eucalyptus Ave
Lot No: BLDG 20

Project Name: Esperanza Specific Plan
Job Number: 15662
Analyst: B. Maddux

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	21,700 vehicles
Peak Hour Percentage:	10%
Peak Hour Volume:	2,170 vehicles
Vehicle Speed:	40 mph
Near/Far Lane Distance:	40 feet

Site Data

Barrier Height:	**6.0 feet**
Barrier Type (0-Wall, 1-Berm):	0.0
Centerline Dist. to Barrier:	83.0 feet
Centerline Dist. to Observer:	105.0 feet
Barrier Distance to Observer:	22.0 feet
Observer Height (Above Pad):	5.0 feet
Pad Elevation:	0.0 feet
Road Elevation:	0.0 feet
Barrier Elevation:	0.0 feet
Road Grade:	1.0%

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	15
Medium Trucks (2 Axles):	15
Heavy Trucks (3+ Axles):	15

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	77.5%	12.9%	9.6%	97.42%
Medium Trucks:	84.8%	4.9%	10.3%	1.84%
Heavy Trucks:	86.5%	2.7%	10.8%	0.74%

Noise Source Elevations (in feet)

Autos:	0.00		
Medium Trucks:	2.30		
Heavy Trucks:	8.01	*Grade Adjustment:*	0.0

Lane Equivalent Distance (in feet)

Autos:	82.064
Medium Trucks:	81.878
Heavy Trucks:	81.797

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	67.36	1.93	-3.33	-1.20	*0.16*	-6.480	-9.480
Medium Trucks:	76.31	-15.31	-3.32	-1.20	*0.09*	-5.900	-8.900
Heavy Trucks:	81.16	-19.27	-3.31	-1.20	*0.00*	-4.900	-7.900

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	64.8	62.9	61.1	55.0	63.7	64.3
Medium Trucks:	56.5	55.0	48.6	47.1	55.5	55.8
Heavy Trucks:	57.4	56.0	46.9	48.2	56.5	56.7
Vehicle Noise:	66.0	64.2	61.5	56.4	65.0	65.5

Mitigated Noise Levels (with Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	58.3	56.4	54.6	48.6	57.2	57.8
Medium Trucks:	50.6	49.1	42.7	41.2	49.6	49.9
Heavy Trucks:	52.5	51.1	42.0	43.3	51.6	51.8
Vehicle Noise:	59.8	58.1	55.1	50.3	58.8	59.3

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL (CALVENO) - v10/31/19

Scenario: Backyard With Wall
Road Name: Eucalyptus Ave
Lot No: BLDG 7-14

Project Name: Esperanza Specific Plan
Job Number: 15662
Analyst: B. Maddux

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	21,700 vehicles
Peak Hour Percentage:	10%
Peak Hour Volume:	2,170 vehicles
Vehicle Speed:	40 mph
Near/Far Lane Distance:	40 feet

Site Data

Barrier Height:	**6.0 feet**
Barrier Type (0-Wall, 1-Berm):	0.0
Centerline Dist. to Barrier:	83.0 feet
Centerline Dist. to Observer:	103.0 feet
Barrier Distance to Observer:	20.0 feet
Observer Height (Above Pad):	5.0 feet
Pad Elevation:	0.0 feet
Road Elevation:	0.0 feet
Barrier Elevation:	0.0 feet
Road Grade:	1.0%

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	15
Medium Trucks (2 Axles):	15
Heavy Trucks (3+ Axles):	15

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	77.5%	12.9%	9.6%	97.42%
Medium Trucks:	84.8%	4.9%	10.3%	1.84%
Heavy Trucks:	86.5%	2.7%	10.8%	0.74%

Noise Source Elevations (in feet)

Autos:	0.00		
Medium Trucks:	2.30		
Heavy Trucks:	8.01	*Grade Adjustment:*	0.0

Lane Equivalent Distance (in feet)

Autos:	80.067
Medium Trucks:	79.881
Heavy Trucks:	79.800

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	67.36	1.93	-3.17	-1.20	*0.16*	-6.480	-9.480
Medium Trucks:	76.31	-15.31	-3.16	-1.20	*0.09*	-5.900	-8.900
Heavy Trucks:	81.16	-19.27	-3.15	-1.20	*0.00*	-4.900	-7.900

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	64.9	63.0	61.2	55.2	63.8	64.4
Medium Trucks:	56.6	55.1	48.8	47.2	55.7	55.9
Heavy Trucks:	57.5	56.1	47.1	48.3	56.7	56.8
Vehicle Noise:	66.2	64.4	61.6	56.5	65.1	65.6

Mitigated Noise Levels (with Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	58.4	56.5	54.8	48.7	57.3	57.9
Medium Trucks:	50.7	49.2	42.9	41.3	49.8	50.0
Heavy Trucks:	52.6	51.2	42.2	43.4	51.8	51.9
Vehicle Noise:	60.0	58.2	55.3	50.4	59.0	59.4

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL (CALVENO) - v10/31/19

Scenario: Backyard With Wall
Road Name: Eucalyptus Ave
Lot No: BLDG 6

Project Name: Esperanza Specific Plan
Job Number: 15662
Analyst: B. Maddux

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	21,700 vehicles
Peak Hour Percentage:	10%
Peak Hour Volume:	2,170 vehicles
Vehicle Speed:	40 mph
Near/Far Lane Distance:	40 feet

Site Data

Barrier Height:	**6.0 feet**
Barrier Type (0-Wall, 1-Berm):	0.0
Centerline Dist. to Barrier:	84.0 feet
Centerline Dist. to Observer:	104.0 feet
Barrier Distance to Observer:	20.0 feet
Observer Height (Above Pad):	5.0 feet
Pad Elevation:	0.0 feet
Road Elevation:	0.0 feet
Barrier Elevation:	0.0 feet
Road Grade:	1.0%

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	15
Medium Trucks (2 Axles):	15
Heavy Trucks (3+ Axles):	15

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	77.5%	12.9%	9.6%	97.42%
Medium Trucks:	84.8%	4.9%	10.3%	1.84%
Heavy Trucks:	86.5%	2.7%	10.8%	0.74%

Noise Source Elevations (in feet)

Autos:	0.00		
Medium Trucks:	2.30		
Heavy Trucks:	8.01	*Grade Adjustment:*	0.0

Lane Equivalent Distance (in feet)

Autos:	81.115
Medium Trucks:	80.932
Heavy Trucks:	80.853

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	67.36	1.93	-3.26	-1.20	*0.15*	-6.400	-9.400
Medium Trucks:	76.31	-15.31	-3.24	-1.20	*0.09*	-5.900	-8.900
Heavy Trucks:	81.16	-19.27	-3.23	-1.20	*0.00*	-4.900	-7.900

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	64.8	62.9	61.2	55.1	63.7	64.3
Medium Trucks:	56.6	55.1	48.7	47.1	55.6	55.8
Heavy Trucks:	57.5	56.0	47.0	48.2	56.6	56.7
Vehicle Noise:	66.1	64.3	61.6	56.5	65.0	65.5

Mitigated Noise Levels (with Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	58.4	56.5	54.8	48.7	57.3	57.9
Medium Trucks:	50.7	49.2	42.8	41.2	49.7	49.9
Heavy Trucks:	52.6	51.1	42.1	43.3	51.7	51.8
Vehicle Noise:	60.0	58.2	55.2	50.4	58.9	59.4

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL (CALVENO) - v10/31/19

Scenario: Backyard With Wall
Road Name: Clifton Ave
Lot No: BLDG 5-6

Project Name: Esperanza Specific Plan
Job Number: 15662
Analyst: B. Maddux

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	9,500 vehicles
Peak Hour Percentage:	10%
Peak Hour Volume:	950 vehicles
Vehicle Speed:	25 mph
Near/Far Lane Distance:	12 feet

Site Data

Barrier Height:	**0.0 feet**
Barrier Type (0-Wall, 1-Berm):	0.0
Centerline Dist. to Barrier:	31.0 feet
Centerline Dist. to Observer:	41.0 feet
Barrier Distance to Observer:	10.0 feet
Observer Height (Above Pad):	5.0 feet
Pad Elevation:	0.0 feet
Road Elevation:	0.0 feet
Barrier Elevation:	0.0 feet
Road Grade:	1.0%

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	15
Medium Trucks (2 Axles):	15
Heavy Trucks (3+ Axles):	15

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	77.5%	12.9%	9.6%	97.42%
Medium Trucks:	84.8%	4.9%	10.3%	1.84%
Heavy Trucks:	86.5%	2.7%	10.8%	0.74%

Noise Source Elevations (in feet)

Autos:	0.00		
Medium Trucks:	2.30		
Heavy Trucks:	8.01	*Grade Adjustment:*	0.0

Lane Equivalent Distance (in feet)

Autos:	34.843
Medium Trucks:	34.588
Heavy Trucks:	34.613

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	59.44	0.38	2.25	-1.20	*-0.81*	0.000	0.000
Medium Trucks:	71.09	-16.86	2.30	-1.20	*-1.16*	0.000	0.000
Heavy Trucks:	77.24	-20.82	2.29	-1.20	*-2.25*	0.000	0.000

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	60.9	59.0	57.2	51.1	59.8	60.4
Medium Trucks:	55.3	53.8	47.5	45.9	54.4	54.6
Heavy Trucks:	57.5	56.1	47.1	48.3	56.7	56.8
Vehicle Noise:	63.3	61.6	58.0	53.7	62.3	62.7

Mitigated Noise Levels (with Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	60.9	59.0	57.2	51.1	59.8	60.4
Medium Trucks:	55.3	53.8	47.5	45.9	54.4	54.6
Heavy Trucks:	57.5	56.1	47.1	48.3	56.7	56.8
Vehicle Noise:	63.3	61.6	58.0	53.7	62.3	62.7

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL (CALVENO) - v10/31/19

Scenario: Backyard With Wall
Road Name: Clifton Ave
Lot No: BLDG 4

Project Name: Esperanza Specific Plan
Job Number: 15662
Analyst: B. Maddux

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	9,500 vehicles
Peak Hour Percentage:	10%
Peak Hour Volume:	950 vehicles
Vehicle Speed:	25 mph
Near/Far Lane Distance:	12 feet

Site Data

Barrier Height:	**0.0 feet**
Barrier Type (0-Wall, 1-Berm):	0.0
Centerline Dist. to Barrier:	32.0 feet
Centerline Dist. to Observer:	51.0 feet
Barrier Distance to Observer:	19.0 feet
Observer Height (Above Pad):	5.0 feet
Pad Elevation:	0.0 feet
Road Elevation:	0.0 feet
Barrier Elevation:	0.0 feet
Road Grade:	1.0%

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	15
Medium Trucks (2 Axles):	15
Heavy Trucks (3+ Axles):	15

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	77.5%	12.9%	9.6%	97.42%
Medium Trucks:	84.8%	4.9%	10.3%	1.84%
Heavy Trucks:	86.5%	2.7%	10.8%	0.74%

Noise Source Elevations (in feet)

Autos:	0.00		
Medium Trucks:	2.30		
Heavy Trucks:	8.01	*Grade Adjustment:*	0.0

Lane Equivalent Distance (in feet)

Autos:	44.878
Medium Trucks:	44.680
Heavy Trucks:	44.699

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	59.44	0.38	0.60	-1.20	*-0.36*	0.000	0.000
Medium Trucks:	71.09	-16.86	0.63	-1.20	*-0.65*	0.000	0.000
Heavy Trucks:	77.24	-20.82	0.63	-1.20	*-1.71*	0.000	0.000

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	59.2	57.3	55.6	49.5	58.1	58.7
Medium Trucks:	53.7	52.1	45.8	44.2	52.7	52.9
Heavy Trucks:	55.9	54.4	45.4	46.6	55.0	55.1
Vehicle Noise:	61.6	59.9	56.4	52.1	60.6	61.0

Mitigated Noise Levels (with Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	59.2	57.3	55.6	49.5	58.1	58.7
Medium Trucks:	53.7	52.1	45.8	44.2	52.7	52.9
Heavy Trucks:	55.9	54.4	45.4	46.6	55.0	55.1
Vehicle Noise:	61.6	59.9	56.4	52.1	60.6	61.0

Wednesday, May 29, 2024

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL (CALVENO) - v10/31/19

Scenario: Backyard With Wall
Road Name: Chatham St
Lot No: BLDG 4

Project Name: Esperanza Specific Plan
Job Number: 15662
Analyst: B. Maddux

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	9,500 vehicles
Peak Hour Percentage:	10%
Peak Hour Volume:	950 vehicles
Vehicle Speed:	25 mph
Near/Far Lane Distance:	12 feet

Site Data

Barrier Height:	**0.0 feet**
Barrier Type (0-Wall, 1-Berm):	0.0
Centerline Dist. to Barrier:	25.0 feet
Centerline Dist. to Observer:	33.0 feet
Barrier Distance to Observer:	8.0 feet
Observer Height (Above Pad):	5.0 feet
Pad Elevation:	0.0 feet
Road Elevation:	0.0 feet
Barrier Elevation:	0.0 feet
Road Grade:	1.0%

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	15
Medium Trucks (2 Axles):	15
Heavy Trucks (3+ Axles):	15

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	77.5%	12.9%	9.6%	97.42%
Medium Trucks:	84.8%	4.9%	10.3%	1.84%
Heavy Trucks:	86.5%	2.7%	10.8%	0.74%

Noise Source Elevations (in feet)

Autos:	0.00		
Medium Trucks:	2.30		
Heavy Trucks:	8.01	*Grade Adjustment:*	0.0

Lane Equivalent Distance (in feet)

Autos:	26.796
Medium Trucks:	26.463
Heavy Trucks:	26.496

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	59.44	0.38	3.96	-1.20	*-0.95*	0.000	0.000
Medium Trucks:	71.09	-16.86	4.04	-1.20	*-1.41*	0.000	0.000
Heavy Trucks:	77.24	-20.82	4.03	-1.20	*-2.82*	0.000	0.000

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	62.6	60.7	58.9	52.9	61.5	62.1
Medium Trucks:	57.1	55.6	49.2	47.7	56.1	56.3
Heavy Trucks:	59.3	57.8	48.8	50.1	58.4	58.5
Vehicle Noise:	65.0	63.3	59.7	55.5	64.0	64.4

Mitigated Noise Levels (with Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	62.6	60.7	58.9	52.9	61.5	62.1
Medium Trucks:	57.1	55.6	49.2	47.7	56.1	56.3
Heavy Trucks:	59.3	57.8	48.8	50.1	58.4	58.5
Vehicle Noise:	65.0	63.3	59.7	55.5	64.0	64.4

Wednesday, May 29, 2024

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL (CALVENO) - v10/31/19

Scenario: Backyard With Wall
Road Name: Chatham St
Lot No: BLDG 1-3

Project Name: Esperanza Specific Plan
Job Number: 15662
Analyst: B. Maddux

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	9,500 vehicles
Peak Hour Percentage:	10%
Peak Hour Volume:	950 vehicles
Vehicle Speed:	25 mph
Near/Far Lane Distance:	12 feet

Site Data

Barrier Height:	**0.0 feet**
Barrier Type (0-Wall, 1-Berm):	0.0
Centerline Dist. to Barrier:	25.0 feet
Centerline Dist. to Observer:	35.0 feet
Barrier Distance to Observer:	10.0 feet
Observer Height (Above Pad):	5.0 feet
Pad Elevation:	0.0 feet
Road Elevation:	0.0 feet
Barrier Elevation:	0.0 feet
Road Grade:	1.0%

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	15
Medium Trucks (2 Axles):	15
Heavy Trucks (3+ Axles):	15

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	77.5%	12.9%	9.6%	97.42%
Medium Trucks:	84.8%	4.9%	10.3%	1.84%
Heavy Trucks:	86.5%	2.7%	10.8%	0.74%

Noise Source Elevations (in feet)

Autos:	0.00		
Medium Trucks:	2.30		
Heavy Trucks:	8.01	*Grade Adjustment:*	0.0

Lane Equivalent Distance (in feet)

Autos:	28.810
Medium Trucks:	28.501
Heavy Trucks:	28.531

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	59.44	0.38	3.49	-1.20	*-0.74*	0.000	0.000
Medium Trucks:	71.09	-16.86	3.56	-1.20	*-1.17*	0.000	0.000
Heavy Trucks:	77.24	-20.82	3.55	-1.20	*-2.59*	0.000	0.000

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	62.1	60.2	58.4	52.4	61.0	61.6
Medium Trucks:	56.6	55.1	48.7	47.2	55.6	55.9
Heavy Trucks:	58.8	57.4	48.3	49.6	57.9	58.1
Vehicle Noise:	64.5	62.8	59.2	55.0	63.5	63.9

Mitigated Noise Levels (with Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	62.1	60.2	58.4	52.4	61.0	61.6
Medium Trucks:	56.6	55.1	48.7	47.2	55.6	55.9
Heavy Trucks:	58.8	57.4	48.3	49.6	57.9	58.1
Vehicle Noise:	64.5	62.8	59.2	55.0	63.5	63.9

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL (CALVENO) - v10/31/19

Scenario: Backyard With Wall
Road Name: Chatham St
Lot No: BLDG 27-28

Project Name: Esperanza Specific Plan
Job Number: 15662
Analyst: B. Maddux

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	9,500 vehicles
Peak Hour Percentage:	10%
Peak Hour Volume:	950 vehicles
Vehicle Speed:	25 mph
Near/Far Lane Distance:	12 feet

Site Data

Barrier Height:	**0.0 feet**
Barrier Type (0-Wall, 1-Berm):	0.0
Centerline Dist. to Barrier:	25.0 feet
Centerline Dist. to Observer:	43.0 feet
Barrier Distance to Observer:	18.0 feet
Observer Height (Above Pad):	5.0 feet
Pad Elevation:	0.0 feet
Road Elevation:	0.0 feet
Barrier Elevation:	0.0 feet
Road Grade:	1.0%

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	15
Medium Trucks (2 Axles):	15
Heavy Trucks (3+ Axles):	15

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	77.5%	12.9%	9.6%	97.42%
Medium Trucks:	84.8%	4.9%	10.3%	1.84%
Heavy Trucks:	86.5%	2.7%	10.8%	0.74%

Noise Source Elevations (in feet)

Autos:	0.00		
Medium Trucks:	2.30		
Heavy Trucks:	8.01	*Grade Adjustment:*	0.0

Lane Equivalent Distance (in feet)

Autos:	36.851
Medium Trucks:	36.610
Heavy Trucks:	36.634

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	59.44	0.38	1.88	-1.20	*-0.34*	0.000	0.000
Medium Trucks:	71.09	-16.86	1.93	-1.20	*-0.71*	0.000	0.000
Heavy Trucks:	77.24	-20.82	1.92	-1.20	*-2.13*	0.000	0.000

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	60.5	58.6	56.8	50.8	59.4	60.0
Medium Trucks:	55.0	53.4	47.1	45.5	54.0	54.2
Heavy Trucks:	57.1	55.7	46.7	47.9	56.3	56.4
Vehicle Noise:	62.9	61.2	57.6	53.4	61.9	62.3

Mitigated Noise Levels (with Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	60.5	58.6	56.8	50.8	59.4	60.0
Medium Trucks:	55.0	53.4	47.1	45.5	54.0	54.2
Heavy Trucks:	57.1	55.7	46.7	47.9	56.3	56.4
Vehicle Noise:	62.9	61.2	57.6	53.4	61.9	62.3

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL (CALVENO) - v10/31/19

Scenario: Backyard With Wall
Road Name: Amherst Ave
Lot No: BLDG 27

Project Name: Esperanza Specific Plan
Job Number: 15662
Analyst: B. Maddux

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	9,500 vehicles
Peak Hour Percentage:	10%
Peak Hour Volume:	950 vehicles
Vehicle Speed:	25 mph
Near/Far Lane Distance:	12 feet

Site Data

Barrier Height:	**0.0 feet**
Barrier Type (0-Wall, 1-Berm):	0.0
Centerline Dist. to Barrier:	30.0 feet
Centerline Dist. to Observer:	40.0 feet
Barrier Distance to Observer:	10.0 feet
Observer Height (Above Pad):	5.0 feet
Pad Elevation:	0.0 feet
Road Elevation:	0.0 feet
Barrier Elevation:	0.0 feet
Road Grade:	1.0%

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	15
Medium Trucks (2 Axles):	15
Heavy Trucks (3+ Axles):	15

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	77.5%	12.9%	9.6%	97.42%
Medium Trucks:	84.8%	4.9%	10.3%	1.84%
Heavy Trucks:	86.5%	2.7%	10.8%	0.74%

Noise Source Elevations (in feet)

Autos:	0.00		
Medium Trucks:	2.30		
Heavy Trucks:	8.01	*Grade Adjustment:*	0.0

Lane Equivalent Distance (in feet)

Autos:	33.838
Medium Trucks:	33.575
Heavy Trucks:	33.601

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	59.44	0.38	2.44	-1.20	*-0.80*	0.000	0.000
Medium Trucks:	71.09	-16.86	2.49	-1.20	*-1.16*	0.000	0.000
Heavy Trucks:	77.24	-20.82	2.49	-1.20	*-2.30*	0.000	0.000

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	61.1	59.2	57.4	51.3	60.0	60.6
Medium Trucks:	55.5	54.0	47.6	46.1	54.6	54.8
Heavy Trucks:	57.7	56.3	47.3	48.5	56.9	57.0
Vehicle Noise:	63.5	61.8	58.2	53.9	62.5	62.9

Mitigated Noise Levels (with Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	61.1	59.2	57.4	51.3	60.0	60.6
Medium Trucks:	55.5	54.0	47.6	46.1	54.6	54.8
Heavy Trucks:	57.7	56.3	47.3	48.5	56.9	57.0
Vehicle Noise:	63.5	61.8	58.2	53.9	62.5	62.9

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL (CALVENO) - v10/31/19

Scenario: Backyard With Wall
Road Name: Amherst Ave
Lot No: BLDG 26-22

Project Name: Esperanza Specific Plan
Job Number: 15662
Analyst: B. Maddux

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	9,500 vehicles
Peak Hour Percentage:	10%
Peak Hour Volume:	950 vehicles
Vehicle Speed:	25 mph
Near/Far Lane Distance:	12 feet

Site Data

Barrier Height:	**0.0 feet**
Barrier Type (0-Wall, 1-Berm):	0.0
Centerline Dist. to Barrier:	30.0 feet
Centerline Dist. to Observer:	40.0 feet
Barrier Distance to Observer:	10.0 feet
Observer Height (Above Pad):	5.0 feet
Pad Elevation:	0.0 feet
Road Elevation:	0.0 feet
Barrier Elevation:	0.0 feet
Road Grade:	0.0%

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	15
Medium Trucks (2 Axles):	15
Heavy Trucks (3+ Axles):	15

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	77.5%	12.9%	9.6%	97.42%
Medium Trucks:	84.8%	4.9%	10.3%	1.84%
Heavy Trucks:	86.5%	2.7%	10.8%	0.74%

Noise Source Elevations (in feet)

Autos:	0.00		
Medium Trucks:	2.30		
Heavy Trucks:	8.01	*Grade Adjustment:*	0.0

Lane Equivalent Distance (in feet)

Autos:	33.838
Medium Trucks:	33.575
Heavy Trucks:	33.601

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	59.44	0.38	2.44	-1.20	*-0.80*	0.000	0.000
Medium Trucks:	71.09	-16.86	2.49	-1.20	*-1.16*	0.000	0.000
Heavy Trucks:	77.24	-20.82	2.49	-1.20	*-2.30*	0.000	0.000

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	61.1	59.2	57.4	51.3	60.0	60.6
Medium Trucks:	55.5	54.0	47.6	46.1	54.6	54.8
Heavy Trucks:	57.7	56.3	47.3	48.5	56.9	57.0
Vehicle Noise:	63.5	61.8	58.2	53.9	62.5	62.9

Mitigated Noise Levels (with Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	61.1	59.2	57.4	51.3	60.0	60.6
Medium Trucks:	55.5	54.0	47.6	46.1	54.6	54.8
Heavy Trucks:	57.7	56.3	47.3	48.5	56.9	57.0
Vehicle Noise:	63.5	61.8	58.2	53.9	62.5	62.9

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL (CALVENO) - v10/31/19

Scenario: Backyard With Wall
Road Name: Amherst Ave
Lot No: BLDG 20-21

Project Name: Esperanza Specific Plan
Job Number: 15662
Analyst: B. Maddux

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	9,500 vehicles
Peak Hour Percentage:	10%
Peak Hour Volume:	950 vehicles
Vehicle Speed:	25 mph
Near/Far Lane Distance:	12 feet

Site Data

Barrier Height:	**0.0 feet**
Barrier Type (0-Wall, 1-Berm):	0.0
Centerline Dist. to Barrier:	30.0 feet
Centerline Dist. to Observer:	40.0 feet
Barrier Distance to Observer:	10.0 feet
Observer Height (Above Pad):	5.0 feet
Pad Elevation:	0.0 feet
Road Elevation:	0.0 feet
Barrier Elevation:	0.0 feet
Road Grade:	0.0%

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	15
Medium Trucks (2 Axles):	15
Heavy Trucks (3+ Axles):	15

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	77.5%	12.9%	9.6%	97.42%
Medium Trucks:	84.8%	4.9%	10.3%	1.84%
Heavy Trucks:	86.5%	2.7%	10.8%	0.74%

Noise Source Elevations (in feet)

Autos:	0.00		
Medium Trucks:	2.30		
Heavy Trucks:	8.01	*Grade Adjustment:*	0.0

Lane Equivalent Distance (in feet)

Autos:	33.838
Medium Trucks:	33.575
Heavy Trucks:	33.601

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	59.44	0.38	2.44	-1.20	*-0.80*	0.000	0.000
Medium Trucks:	71.09	-16.86	2.49	-1.20	*-1.16*	0.000	0.000
Heavy Trucks:	77.24	-20.82	2.49	-1.20	*-2.30*	0.000	0.000

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	61.1	59.2	57.4	51.3	60.0	60.6
Medium Trucks:	55.5	54.0	47.6	46.1	54.6	54.8
Heavy Trucks:	57.7	56.3	47.3	48.5	56.9	57.0
Vehicle Noise:	63.5	61.8	58.2	53.9	62.5	62.9

Mitigated Noise Levels (with Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	61.1	59.2	57.4	51.3	60.0	60.6
Medium Trucks:	55.5	54.0	47.6	46.1	54.6	54.8
Heavy Trucks:	57.7	56.3	47.3	48.5	56.9	57.0
Vehicle Noise:	63.5	61.8	58.2	53.9	62.5	62.9

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL (CALVENO) - v10/31/19

Scenario:	First Floor With Wall	*Project Name:*	Esperanza Specific Plan
Road Name:	Eucalyptus Ave	*Job Number:*	15662
Lot No:	BLDG 20	*Analyst:*	B. Maddux

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	21,700	vehicles
Peak Hour Percentage:	10%	
Peak Hour Volume:	2,170	vehicles
Vehicle Speed:	40	mph
Near/Far Lane Distance:	40	feet

Site Data

Barrier Height:	**6.0**	**feet**
Barrier Type (0-Wall, 1-Berm):	0.0	
Centerline Dist. to Barrier:	83.0	feet
Centerline Dist. to Observer:	105.0	feet
Barrier Distance to Observer:	22.0	feet
Observer Height (Above Pad):	5.0	feet
Pad Elevation:	0.0	feet
Road Elevation:	0.0	feet
Barrier Elevation:	0.0	feet
Road Grade:	1.0%	

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	15
Medium Trucks (2 Axles):	15
Heavy Trucks (3+ Axles):	15

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	77.5%	12.9%	9.6%	97.42%
Medium Trucks:	84.8%	4.9%	10.3%	1.84%
Heavy Trucks:	86.5%	2.7%	10.8%	0.74%

Noise Source Elevations (in feet)

Autos:	0.00		
Medium Trucks:	2.30		
Heavy Trucks:	8.01	*Grade Adjustment:*	0.0

Lane Equivalent Distance (in feet)

Autos:	82.064
Medium Trucks:	81.878
Heavy Trucks:	81.797

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	67.36	1.93	-3.33	-1.20	*0.16*	-6.480	-9.480
Medium Trucks:	76.31	-15.31	-3.32	-1.20	*0.09*	-5.900	-8.900
Heavy Trucks:	81.16	-19.27	-3.31	-1.20	*0.00*	-4.900	-7.900

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	64.8	62.9	61.1	55.0	63.7	64.3
Medium Trucks:	56.5	55.0	48.6	47.1	55.5	55.8
Heavy Trucks:	57.4	56.0	46.9	48.2	56.5	56.7
Vehicle Noise:	66.0	64.2	61.5	56.4	65.0	65.5

Mitigated Noise Levels (with Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	58.3	56.4	54.6	48.6	57.2	57.8
Medium Trucks:	50.6	49.1	42.7	41.2	49.6	49.9
Heavy Trucks:	52.5	51.1	42.0	43.3	51.6	51.8
Vehicle Noise:	59.8	58.1	55.1	50.3	58.8	59.3

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL (CALVENO) - v10/31/19

Scenario: First Floor With Wall
Road Name: Eucalyptus Ave
Lot No: BLDG 7-14

Project Name: Esperanza Specific Plan
Job Number: 15662
Analyst: B. Maddux

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	21,700 vehicles
Peak Hour Percentage:	10%
Peak Hour Volume:	2,170 vehicles
Vehicle Speed:	40 mph
Near/Far Lane Distance:	40 feet

Site Data

Barrier Height:	**6.0 feet**
Barrier Type (0-Wall, 1-Berm):	0.0
Centerline Dist. to Barrier:	83.0 feet
Centerline Dist. to Observer:	103.0 feet
Barrier Distance to Observer:	20.0 feet
Observer Height (Above Pad):	5.0 feet
Pad Elevation:	0.0 feet
Road Elevation:	0.0 feet
Barrier Elevation:	0.0 feet
Road Grade:	1.0%

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	15
Medium Trucks (2 Axles):	15
Heavy Trucks (3+ Axles):	15

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	77.5%	12.9%	9.6%	97.42%
Medium Trucks:	84.8%	4.9%	10.3%	1.84%
Heavy Trucks:	86.5%	2.7%	10.8%	0.74%

Noise Source Elevations (in feet)

Autos:	0.00		
Medium Trucks:	2.30		
Heavy Trucks:	8.01	*Grade Adjustment:*	0.0

Lane Equivalent Distance (in feet)

Autos:	80.067
Medium Trucks:	79.881
Heavy Trucks:	79.800

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	67.36	1.93	-3.17	-1.20	*0.16*	-6.480	-9.480
Medium Trucks:	76.31	-15.31	-3.16	-1.20	*0.09*	-5.900	-8.900
Heavy Trucks:	81.16	-19.27	-3.15	-1.20	*0.00*	-4.900	-7.900

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	64.9	63.0	61.2	55.2	63.8	64.4
Medium Trucks:	56.6	55.1	48.8	47.2	55.7	55.9
Heavy Trucks:	57.5	56.1	47.1	48.3	56.7	56.8
Vehicle Noise:	66.2	64.4	61.6	56.5	65.1	65.6

Mitigated Noise Levels (with Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	58.4	56.5	54.8	48.7	57.3	57.9
Medium Trucks:	50.7	49.2	42.9	41.3	49.8	50.0
Heavy Trucks:	52.6	51.2	42.2	43.4	51.8	51.9
Vehicle Noise:	60.0	58.2	55.3	50.4	59.0	59.4

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL (CALVENO) - v10/31/19

Scenario: First Floor With Wall
Road Name: Eucalyptus Ave
Lot No: BLDG 6

Project Name: Esperanza Specific Plan
Job Number: 15662
Analyst: B. Maddux

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	21,700 vehicles
Peak Hour Percentage:	10%
Peak Hour Volume:	2,170 vehicles
Vehicle Speed:	40 mph
Near/Far Lane Distance:	40 feet

Site Data

Barrier Height:	**6.0 feet**
Barrier Type (0-Wall, 1-Berm):	0.0
Centerline Dist. to Barrier:	84.0 feet
Centerline Dist. to Observer:	104.0 feet
Barrier Distance to Observer:	20.0 feet
Observer Height (Above Pad):	5.0 feet
Pad Elevation:	0.0 feet
Road Elevation:	0.0 feet
Barrier Elevation:	0.0 feet
Road Grade:	1.0%

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	15
Medium Trucks (2 Axles):	15
Heavy Trucks (3+ Axles):	15

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	77.5%	12.9%	9.6%	97.42%
Medium Trucks:	84.8%	4.9%	10.3%	1.84%
Heavy Trucks:	86.5%	2.7%	10.8%	0.74%

Noise Source Elevations (in feet)

Autos:	0.00		
Medium Trucks:	2.30		
Heavy Trucks:	8.01	*Grade Adjustment:*	0.0

Lane Equivalent Distance (in feet)

Autos:	81.115
Medium Trucks:	80.932
Heavy Trucks:	80.853

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	67.36	1.93	-3.26	-1.20	*0.15*	-6.400	-9.400
Medium Trucks:	76.31	-15.31	-3.24	-1.20	*0.09*	-5.900	-8.900
Heavy Trucks:	81.16	-19.27	-3.23	-1.20	*0.00*	-4.900	-7.900

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	64.8	62.9	61.2	55.1	63.7	64.3
Medium Trucks:	56.6	55.1	48.7	47.1	55.6	55.8
Heavy Trucks:	57.5	56.0	47.0	48.2	56.6	56.7
Vehicle Noise:	66.1	64.3	61.6	56.5	65.0	65.5

Mitigated Noise Levels (with Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	58.4	56.5	54.8	48.7	57.3	57.9
Medium Trucks:	50.7	49.2	42.8	41.2	49.7	49.9
Heavy Trucks:	52.6	51.1	42.1	43.3	51.7	51.8
Vehicle Noise:	60.0	58.2	55.2	50.4	58.9	59.4

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL (CALVENO) - v10/31/19

Scenario: First Floor With Wall
Road Name: Clifton Ave
Lot No: BLDG 5-6

Project Name: Esperanza Specific Plan
Job Number: 15662
Analyst: B. Maddux

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	9,500 vehicles
Peak Hour Percentage:	10%
Peak Hour Volume:	950 vehicles
Vehicle Speed:	25 mph
Near/Far Lane Distance:	12 feet

Site Data

Barrier Height:	**0.0 feet**
Barrier Type (0-Wall, 1-Berm):	0.0
Centerline Dist. to Barrier:	31.0 feet
Centerline Dist. to Observer:	41.0 feet
Barrier Distance to Observer:	10.0 feet
Observer Height (Above Pad):	5.0 feet
Pad Elevation:	0.0 feet
Road Elevation:	0.0 feet
Barrier Elevation:	0.0 feet
Road Grade:	1.0%

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	15
Medium Trucks (2 Axles):	15
Heavy Trucks (3+ Axles):	15

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	77.5%	12.9%	9.6%	97.42%
Medium Trucks:	84.8%	4.9%	10.3%	1.84%
Heavy Trucks:	86.5%	2.7%	10.8%	0.74%

Noise Source Elevations (in feet)

Autos:	0.00		
Medium Trucks:	2.30		
Heavy Trucks:	8.01	*Grade Adjustment:*	0.0

Lane Equivalent Distance (in feet)

Autos:	34.843
Medium Trucks:	34.588
Heavy Trucks:	34.613

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	59.44	0.38	2.25	-1.20	*-0.81*	0.000	0.000
Medium Trucks:	71.09	-16.86	2.30	-1.20	*-1.16*	0.000	0.000
Heavy Trucks:	77.24	-20.82	2.29	-1.20	*-2.25*	0.000	0.000

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	60.9	59.0	57.2	51.1	59.8	60.4
Medium Trucks:	55.3	53.8	47.5	45.9	54.4	54.6
Heavy Trucks:	57.5	56.1	47.1	48.3	56.7	56.8
Vehicle Noise:	63.3	61.6	58.0	53.7	62.3	62.7

Mitigated Noise Levels (with Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	60.9	59.0	57.2	51.1	59.8	60.4
Medium Trucks:	55.3	53.8	47.5	45.9	54.4	54.6
Heavy Trucks:	57.5	56.1	47.1	48.3	56.7	56.8
Vehicle Noise:	63.3	61.6	58.0	53.7	62.3	62.7

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL (CALVENO) - v10/31/19

Scenario: First Floor With Wall
Road Name: Clifton Ave
Lot No: BLDG 4

Project Name: Esperanza Specific Plan
Job Number: 15662
Analyst: B. Maddux

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	9,500 vehicles
Peak Hour Percentage:	10%
Peak Hour Volume:	950 vehicles
Vehicle Speed:	25 mph
Near/Far Lane Distance:	12 feet

Site Data

Barrier Height:	**0.0 feet**
Barrier Type (0-Wall, 1-Berm):	0.0
Centerline Dist. to Barrier:	32.0 feet
Centerline Dist. to Observer:	51.0 feet
Barrier Distance to Observer:	19.0 feet
Observer Height (Above Pad):	5.0 feet
Pad Elevation:	0.0 feet
Road Elevation:	0.0 feet
Barrier Elevation:	0.0 feet
Road Grade:	1.0%

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	15
Medium Trucks (2 Axles):	15
Heavy Trucks (3+ Axles):	15

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	77.5%	12.9%	9.6%	97.42%
Medium Trucks:	84.8%	4.9%	10.3%	1.84%
Heavy Trucks:	86.5%	2.7%	10.8%	0.74%

Noise Source Elevations (in feet)

Autos:	0.00		
Medium Trucks:	2.30		
Heavy Trucks:	8.01	*Grade Adjustment:*	0.0

Lane Equivalent Distance (in feet)

Autos:	44.878
Medium Trucks:	44.680
Heavy Trucks:	44.699

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	59.44	0.38	0.60	-1.20	*-0.36*	0.000	0.000
Medium Trucks:	71.09	-16.86	0.63	-1.20	*-0.65*	0.000	0.000
Heavy Trucks:	77.24	-20.82	0.63	-1.20	*-1.71*	0.000	0.000

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	59.2	57.3	55.6	49.5	58.1	58.7
Medium Trucks:	53.7	52.1	45.8	44.2	52.7	52.9
Heavy Trucks:	55.9	54.4	45.4	46.6	55.0	55.1
Vehicle Noise:	61.6	59.9	56.4	52.1	60.6	61.0

Mitigated Noise Levels (with Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	59.2	57.3	55.6	49.5	58.1	58.7
Medium Trucks:	53.7	52.1	45.8	44.2	52.7	52.9
Heavy Trucks:	55.9	54.4	45.4	46.6	55.0	55.1
Vehicle Noise:	61.6	59.9	56.4	52.1	60.6	61.0

Wednesday, May 29, 2024

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL (CALVENO) - v10/31/19

Scenario: First Floor With Wall
Road Name: Chatham St
Lot No: BLDG 4

Project Name: Esperanza Specific Plan
Job Number: 15662
Analyst: B. Maddux

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	9,500 vehicles
Peak Hour Percentage:	10%
Peak Hour Volume:	950 vehicles
Vehicle Speed:	25 mph
Near/Far Lane Distance:	12 feet

Site Data

Barrier Height:	**0.0 feet**
Barrier Type (0-Wall, 1-Berm):	0.0
Centerline Dist. to Barrier:	25.0 feet
Centerline Dist. to Observer:	33.0 feet
Barrier Distance to Observer:	8.0 feet
Observer Height (Above Pad):	5.0 feet
Pad Elevation:	0.0 feet
Road Elevation:	0.0 feet
Barrier Elevation:	0.0 feet
Road Grade:	1.0%

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	15
Medium Trucks (2 Axles):	15
Heavy Trucks (3+ Axles):	15

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	77.5%	12.9%	9.6%	97.42%
Medium Trucks:	84.8%	4.9%	10.3%	1.84%
Heavy Trucks:	86.5%	2.7%	10.8%	0.74%

Noise Source Elevations (in feet)

Autos:	0.00		
Medium Trucks:	2.30		
Heavy Trucks:	8.01	*Grade Adjustment:*	0.0

Lane Equivalent Distance (in feet)

Autos:	26.796
Medium Trucks:	26.463
Heavy Trucks:	26.496

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	59.44	0.38	3.96	-1.20	*-0.95*	0.000	0.000
Medium Trucks:	71.09	-16.86	4.04	-1.20	*-1.41*	0.000	0.000
Heavy Trucks:	77.24	-20.82	4.03	-1.20	*-2.82*	0.000	0.000

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	62.6	60.7	58.9	52.9	61.5	62.1
Medium Trucks:	57.1	55.6	49.2	47.7	56.1	56.3
Heavy Trucks:	59.3	57.8	48.8	50.1	58.4	58.5
Vehicle Noise:	65.0	63.3	59.7	55.5	64.0	64.4

Mitigated Noise Levels (with Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	62.6	60.7	58.9	52.9	61.5	62.1
Medium Trucks:	57.1	55.6	49.2	47.7	56.1	56.3
Heavy Trucks:	59.3	57.8	48.8	50.1	58.4	58.5
Vehicle Noise:	65.0	63.3	59.7	55.5	64.0	64.4

Wednesday, May 29, 2024

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL (CALVENO) - v10/31/19

Scenario: First Floor With Wall
Road Name: Chatham St
Lot No: BLDG 1-3

Project Name: Esperanza Specific Plan
Job Number: 15662
Analyst: B. Maddux

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	9,500 vehicles
Peak Hour Percentage:	10%
Peak Hour Volume:	950 vehicles
Vehicle Speed:	25 mph
Near/Far Lane Distance:	12 feet

Site Data

Barrier Height:	**0.0 feet**
Barrier Type (0-Wall, 1-Berm):	0.0
Centerline Dist. to Barrier:	25.0 feet
Centerline Dist. to Observer:	35.0 feet
Barrier Distance to Observer:	10.0 feet
Observer Height (Above Pad):	5.0 feet
Pad Elevation:	0.0 feet
Road Elevation:	0.0 feet
Barrier Elevation:	0.0 feet
Road Grade:	1.0%

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	15
Medium Trucks (2 Axles):	15
Heavy Trucks (3+ Axles):	15

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	77.5%	12.9%	9.6%	97.42%
Medium Trucks:	84.8%	4.9%	10.3%	1.84%
Heavy Trucks:	86.5%	2.7%	10.8%	0.74%

Noise Source Elevations (in feet)

Autos:	0.00		
Medium Trucks:	2.30		
Heavy Trucks:	8.01	*Grade Adjustment:*	0.0

Lane Equivalent Distance (in feet)

Autos:	28.810
Medium Trucks:	28.501
Heavy Trucks:	28.531

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	59.44	0.38	3.49	-1.20	*-0.74*	0.000	0.000
Medium Trucks:	71.09	-16.86	3.56	-1.20	*-1.17*	0.000	0.000
Heavy Trucks:	77.24	-20.82	3.55	-1.20	*-2.59*	0.000	0.000

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	62.1	60.2	58.4	52.4	61.0	61.6
Medium Trucks:	56.6	55.1	48.7	47.2	55.6	55.9
Heavy Trucks:	58.8	57.4	48.3	49.6	57.9	58.1
Vehicle Noise:	64.5	62.8	59.2	55.0	63.5	63.9

Mitigated Noise Levels (with Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	62.1	60.2	58.4	52.4	61.0	61.6
Medium Trucks:	56.6	55.1	48.7	47.2	55.6	55.9
Heavy Trucks:	58.8	57.4	48.3	49.6	57.9	58.1
Vehicle Noise:	64.5	62.8	59.2	55.0	63.5	63.9

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL (CALVENO) - v10/31/19

Scenario: First Floor With Wall
Road Name: Chatham St
Lot No: BLDG 27-28

Project Name: Esperanza Specific Plan
Job Number: 15662
Analyst: B. Maddux

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	9,500 vehicles
Peak Hour Percentage:	10%
Peak Hour Volume:	950 vehicles
Vehicle Speed:	25 mph
Near/Far Lane Distance:	12 feet

Site Data

Barrier Height:	**0.0 feet**
Barrier Type (0-Wall, 1-Berm):	0.0
Centerline Dist. to Barrier:	25.0 feet
Centerline Dist. to Observer:	43.0 feet
Barrier Distance to Observer:	18.0 feet
Observer Height (Above Pad):	5.0 feet
Pad Elevation:	0.0 feet
Road Elevation:	0.0 feet
Barrier Elevation:	0.0 feet
Road Grade:	1.0%

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	15
Medium Trucks (2 Axles):	15
Heavy Trucks (3+ Axles):	15

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	77.5%	12.9%	9.6%	97.42%
Medium Trucks:	84.8%	4.9%	10.3%	1.84%
Heavy Trucks:	86.5%	2.7%	10.8%	0.74%

Noise Source Elevations (in feet)

Autos:	0.00		
Medium Trucks:	2.30		
Heavy Trucks:	8.01	*Grade Adjustment:*	0.0

Lane Equivalent Distance (in feet)

Autos:	36.851
Medium Trucks:	36.610
Heavy Trucks:	36.634

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	59.44	0.38	1.88	-1.20	*-0.34*	0.000	0.000
Medium Trucks:	71.09	-16.86	1.93	-1.20	*-0.71*	0.000	0.000
Heavy Trucks:	77.24	-20.82	1.92	-1.20	*-2.13*	0.000	0.000

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	60.5	58.6	56.8	50.8	59.4	60.0
Medium Trucks:	55.0	53.4	47.1	45.5	54.0	54.2
Heavy Trucks:	57.1	55.7	46.7	47.9	56.3	56.4
Vehicle Noise:	62.9	61.2	57.6	53.4	61.9	62.3

Mitigated Noise Levels (with Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	60.5	58.6	56.8	50.8	59.4	60.0
Medium Trucks:	55.0	53.4	47.1	45.5	54.0	54.2
Heavy Trucks:	57.1	55.7	46.7	47.9	56.3	56.4
Vehicle Noise:	62.9	61.2	57.6	53.4	61.9	62.3

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL (CALVENO) - v10/31/19

Scenario: First Floor With Wall
Road Name: Amherst Ave
Lot No: BLDG 27

Project Name: Esperanza Specific Plan
Job Number: 15662
Analyst: B. Maddux

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	9,500 vehicles
Peak Hour Percentage:	10%
Peak Hour Volume:	950 vehicles
Vehicle Speed:	25 mph
Near/Far Lane Distance:	12 feet

Site Data

Barrier Height:	**0.0 feet**
Barrier Type (0-Wall, 1-Berm):	0.0
Centerline Dist. to Barrier:	30.0 feet
Centerline Dist. to Observer:	40.0 feet
Barrier Distance to Observer:	10.0 feet
Observer Height (Above Pad):	5.0 feet
Pad Elevation:	0.0 feet
Road Elevation:	0.0 feet
Barrier Elevation:	0.0 feet
Road Grade:	1.0%

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	15
Medium Trucks (2 Axles):	15
Heavy Trucks (3+ Axles):	15

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	77.5%	12.9%	9.6%	97.42%
Medium Trucks:	84.8%	4.9%	10.3%	1.84%
Heavy Trucks:	86.5%	2.7%	10.8%	0.74%

Noise Source Elevations (in feet)

Autos:	0.00		
Medium Trucks:	2.30		
Heavy Trucks:	8.01	*Grade Adjustment:*	0.0

Lane Equivalent Distance (in feet)

Autos:	33.838
Medium Trucks:	33.575
Heavy Trucks:	33.601

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	59.44	0.38	2.44	-1.20	*-0.80*	0.000	0.000
Medium Trucks:	71.09	-16.86	2.49	-1.20	*-1.16*	0.000	0.000
Heavy Trucks:	77.24	-20.82	2.49	-1.20	*-2.30*	0.000	0.000

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	61.1	59.2	57.4	51.3	60.0	60.6
Medium Trucks:	55.5	54.0	47.6	46.1	54.6	54.8
Heavy Trucks:	57.7	56.3	47.3	48.5	56.9	57.0
Vehicle Noise:	63.5	61.8	58.2	53.9	62.5	62.9

Mitigated Noise Levels (with Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	61.1	59.2	57.4	51.3	60.0	60.6
Medium Trucks:	55.5	54.0	47.6	46.1	54.6	54.8
Heavy Trucks:	57.7	56.3	47.3	48.5	56.9	57.0
Vehicle Noise:	63.5	61.8	58.2	53.9	62.5	62.9

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL (CALVENO) - v10/31/19

Scenario: First Floor With Wall
Road Name: Amherst Ave
Lot No: BLDG 26-22

Project Name: Esperanza Specific Plan
Job Number: 15662
Analyst: B. Maddux

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	9,500 vehicles
Peak Hour Percentage:	10%
Peak Hour Volume:	950 vehicles
Vehicle Speed:	25 mph
Near/Far Lane Distance:	12 feet

Site Data

Barrier Height:	**0.0 feet**
Barrier Type (0-Wall, 1-Berm):	0.0
Centerline Dist. to Barrier:	30.0 feet
Centerline Dist. to Observer:	40.0 feet
Barrier Distance to Observer:	10.0 feet
Observer Height (Above Pad):	5.0 feet
Pad Elevation:	0.0 feet
Road Elevation:	0.0 feet
Barrier Elevation:	0.0 feet
Road Grade:	0.0%

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	15
Medium Trucks (2 Axles):	15
Heavy Trucks (3+ Axles):	15

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	77.5%	12.9%	9.6%	97.42%
Medium Trucks:	84.8%	4.9%	10.3%	1.84%
Heavy Trucks:	86.5%	2.7%	10.8%	0.74%

Noise Source Elevations (in feet)

Autos:	0.00		
Medium Trucks:	2.30		
Heavy Trucks:	8.01	*Grade Adjustment:*	0.0

Lane Equivalent Distance (in feet)

Autos:	33.838
Medium Trucks:	33.575
Heavy Trucks:	33.601

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	59.44	0.38	2.44	-1.20	*-0.80*	0.000	0.000
Medium Trucks:	71.09	-16.86	2.49	-1.20	*-1.16*	0.000	0.000
Heavy Trucks:	77.24	-20.82	2.49	-1.20	*-2.30*	0.000	0.000

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	61.1	59.2	57.4	51.3	60.0	60.6
Medium Trucks:	55.5	54.0	47.6	46.1	54.6	54.8
Heavy Trucks:	57.7	56.3	47.3	48.5	56.9	57.0
Vehicle Noise:	63.5	61.8	58.2	53.9	62.5	62.9

Mitigated Noise Levels (with Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	61.1	59.2	57.4	51.3	60.0	60.6
Medium Trucks:	55.5	54.0	47.6	46.1	54.6	54.8
Heavy Trucks:	57.7	56.3	47.3	48.5	56.9	57.0
Vehicle Noise:	63.5	61.8	58.2	53.9	62.5	62.9

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL (CALVENO) - v10/31/19

Scenario: First Floor With Wall
Road Name: Amherst Ave
Lot No: BLDG 20-21

Project Name: Esperanza Specific Plan
Job Number: 15662
Analyst: B. Maddux

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	9,500 vehicles
Peak Hour Percentage:	10%
Peak Hour Volume:	950 vehicles
Vehicle Speed:	25 mph
Near/Far Lane Distance:	12 feet

Site Data

Barrier Height:	**0.0 feet**
Barrier Type (0-Wall, 1-Berm):	0.0
Centerline Dist. to Barrier:	30.0 feet
Centerline Dist. to Observer:	40.0 feet
Barrier Distance to Observer:	10.0 feet
Observer Height (Above Pad):	5.0 feet
Pad Elevation:	0.0 feet
Road Elevation:	0.0 feet
Barrier Elevation:	0.0 feet
Road Grade:	0.0%

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	15
Medium Trucks (2 Axles):	15
Heavy Trucks (3+ Axles):	15

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	77.5%	12.9%	9.6%	97.42%
Medium Trucks:	84.8%	4.9%	10.3%	1.84%
Heavy Trucks:	86.5%	2.7%	10.8%	0.74%

Noise Source Elevations (in feet)

Autos:	0.00		
Medium Trucks:	2.30		
Heavy Trucks:	8.01	*Grade Adjustment:*	0.0

Lane Equivalent Distance (in feet)

Autos:	33.838
Medium Trucks:	33.575
Heavy Trucks:	33.601

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	59.44	0.38	2.44	-1.20	*-0.80*	0.000	0.000
Medium Trucks:	71.09	-16.86	2.49	-1.20	*-1.16*	0.000	0.000
Heavy Trucks:	77.24	-20.82	2.49	-1.20	*-2.30*	0.000	0.000

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	61.1	59.2	57.4	51.3	60.0	60.6
Medium Trucks:	55.5	54.0	47.6	46.1	54.6	54.8
Heavy Trucks:	57.7	56.3	47.3	48.5	56.9	57.0
Vehicle Noise:	63.5	61.8	58.2	53.9	62.5	62.9

Mitigated Noise Levels (with Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	61.1	59.2	57.4	51.3	60.0	60.6
Medium Trucks:	55.5	54.0	47.6	46.1	54.6	54.8
Heavy Trucks:	57.7	56.3	47.3	48.5	56.9	57.0
Vehicle Noise:	63.5	61.8	58.2	53.9	62.5	62.9

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL (CALVENO) - v10/31/19

Scenario: Second Floor With Wall
Road Name: Eucalyptus Ave
Lot No: BLDG 20

Project Name: Esperanza Specific Plan
Job Number: 15662
Analyst: B. Maddux

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	21,700 vehicles
Peak Hour Percentage:	10%
Peak Hour Volume:	2,170 vehicles
Vehicle Speed:	40 mph
Near/Far Lane Distance:	40 feet

Site Data

Barrier Height:	**6.0 feet**
Barrier Type (0-Wall, 1-Berm):	0.0
Centerline Dist. to Barrier:	83.0 feet
Centerline Dist. to Observer:	105.0 feet
Barrier Distance to Observer:	22.0 feet
Observer Height (Above Pad):	14.0 feet
Pad Elevation:	0.0 feet
Road Elevation:	0.0 feet
Barrier Elevation:	0.0 feet
Road Grade:	1.0%

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	15
Medium Trucks (2 Axles):	15
Heavy Trucks (3+ Axles):	15

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	77.5%	12.9%	9.6%	97.42%
Medium Trucks:	84.8%	4.9%	10.3%	1.84%
Heavy Trucks:	86.5%	2.7%	10.8%	0.74%

Noise Source Elevations (in feet)

Autos:	0.00		
Medium Trucks:	2.30		
Heavy Trucks:	8.01	*Grade Adjustment:*	0.0

Lane Equivalent Distance (in feet)

Autos:	83.791
Medium Trucks:	83.438
Heavy Trucks:	82.831

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	67.36	1.93	-3.47	-1.20	*-0.54*	0.000	0.000
Medium Trucks:	76.31	-15.31	-3.44	-1.20	*-0.70*	0.000	0.000
Heavy Trucks:	81.16	-19.27	-3.39	-1.20	*-1.20*	0.000	0.000

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	64.6	62.7	61.0	54.9	63.5	64.1
Medium Trucks:	56.4	54.9	48.5	46.9	55.4	55.6
Heavy Trucks:	57.3	55.9	46.8	48.1	56.4	56.6
Vehicle Noise:	65.9	64.1	61.3	56.3	64.8	65.3

Mitigated Noise Levels (with Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	64.6	62.7	61.0	54.9	63.5	64.1
Medium Trucks:	56.4	54.9	48.5	46.9	55.4	55.6
Heavy Trucks:	57.3	55.9	46.8	48.1	56.4	56.6
Vehicle Noise:	65.9	64.1	61.3	56.3	64.8	65.3

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL (CALVENO) - v10/31/19

Scenario: Second Floor With Wall
Road Name: Eucalyptus Ave
Lot No: BLDG 7-14

Project Name: Esperanza Specific Plan
Job Number: 15662
Analyst: B. Maddux

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	21,700 vehicles
Peak Hour Percentage:	10%
Peak Hour Volume:	2,170 vehicles
Vehicle Speed:	40 mph
Near/Far Lane Distance:	40 feet

Site Data

Barrier Height:	**6.0 feet**
Barrier Type (0-Wall, 1-Berm):	0.0
Centerline Dist. to Barrier:	83.0 feet
Centerline Dist. to Observer:	103.0 feet
Barrier Distance to Observer:	20.0 feet
Observer Height (Above Pad):	14.0 feet
Pad Elevation:	0.0 feet
Road Elevation:	0.0 feet
Barrier Elevation:	0.0 feet
Road Grade:	1.0%

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	15
Medium Trucks (2 Axles):	15
Heavy Trucks (3+ Axles):	15

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	77.5%	12.9%	9.6%	97.42%
Medium Trucks:	84.8%	4.9%	10.3%	1.84%
Heavy Trucks:	86.5%	2.7%	10.8%	0.74%

Noise Source Elevations (in feet)

Autos:	0.00		
Medium Trucks:	2.30		
Heavy Trucks:	8.01	*Grade Adjustment:*	0.0

Lane Equivalent Distance (in feet)

Autos:	81.762
Medium Trucks:	81.400
Heavy Trucks:	80.777

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	67.36	1.93	-3.31	-1.20	*-0.64*	0.000	0.000
Medium Trucks:	76.31	-15.31	-3.28	-1.20	*-0.81*	0.000	0.000
Heavy Trucks:	81.16	-19.27	-3.23	-1.20	*-1.33*	0.000	0.000

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	64.8	62.9	61.1	55.1	63.7	64.3
Medium Trucks:	56.5	55.0	48.7	47.1	55.6	55.8
Heavy Trucks:	57.5	56.0	47.0	48.3	56.6	56.7
Vehicle Noise:	66.0	64.2	61.5	56.4	65.0	65.5

Mitigated Noise Levels (with Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	64.8	62.9	61.1	55.1	63.7	64.3
Medium Trucks:	56.5	55.0	48.7	47.1	55.6	55.8
Heavy Trucks:	57.5	56.0	47.0	48.3	56.6	56.7
Vehicle Noise:	66.0	64.2	61.5	56.4	65.0	65.5

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL (CALVENO) - v10/31/19

Scenario: Second Floor With Wall
Road Name: Eucalyptus Ave
Lot No: BLDG 6

Project Name: Esperanza Specific Plan
Job Number: 15662
Analyst: B. Maddux

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	21,700 vehicles
Peak Hour Percentage:	10%
Peak Hour Volume:	2,170 vehicles
Vehicle Speed:	40 mph
Near/Far Lane Distance:	40 feet

Site Data

Barrier Height:	**6.0 feet**
Barrier Type (0-Wall, 1-Berm):	0.0
Centerline Dist. to Barrier:	84.0 feet
Centerline Dist. to Observer:	104.0 feet
Barrier Distance to Observer:	20.0 feet
Observer Height (Above Pad):	14.0 feet
Pad Elevation:	0.0 feet
Road Elevation:	0.0 feet
Barrier Elevation:	0.0 feet
Road Grade:	1.0%

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	15
Medium Trucks (2 Axles):	15
Heavy Trucks (3+ Axles):	15

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	77.5%	12.9%	9.6%	97.42%
Medium Trucks:	84.8%	4.9%	10.3%	1.84%
Heavy Trucks:	86.5%	2.7%	10.8%	0.74%

Noise Source Elevations (in feet)

Autos:	0.00		
Medium Trucks:	2.30		
Heavy Trucks:	8.01	*Grade Adjustment:*	0.0

Lane Equivalent Distance (in feet)

Autos:	82.777
Medium Trucks:	82.419
Heavy Trucks:	81.804

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	67.36	1.93	-3.39	-1.20	*-0.65*	0.000	0.000
Medium Trucks:	76.31	-15.31	-3.36	-1.20	*-0.82*	0.000	0.000
Heavy Trucks:	81.16	-19.27	-3.31	-1.20	*-1.33*	0.000	0.000

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	64.7	62.8	61.0	55.0	63.6	64.2
Medium Trucks:	56.4	54.9	48.6	47.0	55.5	55.7
Heavy Trucks:	57.4	56.0	46.9	48.2	56.5	56.7
Vehicle Noise:	66.0	64.2	61.4	56.3	64.9	65.4

Mitigated Noise Levels (with Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	64.7	62.8	61.0	55.0	63.6	64.2
Medium Trucks:	56.4	54.9	48.6	47.0	55.5	55.7
Heavy Trucks:	57.4	56.0	46.9	48.2	56.5	56.7
Vehicle Noise:	66.0	64.2	61.4	56.3	64.9	65.4

Wednesday, May 29, 2024

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL (CALVENO) - v10/31/19

Scenario: Second Floor With Wall
Road Name: Clifton Ave
Lot No: BLDG 5-6

Project Name: Esperanza Specific Plan
Job Number: 15662
Analyst: B. Maddux

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	9,500 vehicles
Peak Hour Percentage:	10%
Peak Hour Volume:	950 vehicles
Vehicle Speed:	25 mph
Near/Far Lane Distance:	12 feet

Site Data

Barrier Height:	**0.0 feet**
Barrier Type (0-Wall, 1-Berm):	0.0
Centerline Dist. to Barrier:	31.0 feet
Centerline Dist. to Observer:	41.0 feet
Barrier Distance to Observer:	10.0 feet
Observer Height (Above Pad):	14.0 feet
Pad Elevation:	0.0 feet
Road Elevation:	0.0 feet
Barrier Elevation:	0.0 feet
Road Grade:	1.0%

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	15
Medium Trucks (2 Axles):	15
Heavy Trucks (3+ Axles):	15

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	77.5%	12.9%	9.6%	97.42%
Medium Trucks:	84.8%	4.9%	10.3%	1.84%
Heavy Trucks:	86.5%	2.7%	10.8%	0.74%

Noise Source Elevations (in feet)

Autos:	0.00		
Medium Trucks:	2.30		
Heavy Trucks:	8.01	*Grade Adjustment:*	0.0

Lane Equivalent Distance (in feet)

Autos:	37.216
Medium Trucks:	36.414
Heavy Trucks:	34.999

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	59.44	0.38	1.82	-1.20	*-4.41*	0.000	0.000
Medium Trucks:	71.09	-16.86	1.96	-1.20	*-5.29*	0.000	0.000
Heavy Trucks:	77.24	-20.82	2.22	-1.20	*-7.77*	0.000	0.000

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	60.4	58.5	56.8	50.7	59.3	59.9
Medium Trucks:	55.0	53.5	47.1	45.6	54.0	54.3
Heavy Trucks:	57.4	56.0	47.0	48.2	56.6	56.7
Vehicle Noise:	63.0	61.3	57.6	53.4	62.0	62.4

Mitigated Noise Levels (with Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	60.4	58.5	56.8	50.7	59.3	59.9
Medium Trucks:	55.0	53.5	47.1	45.6	54.0	54.3
Heavy Trucks:	57.4	56.0	47.0	48.2	56.6	56.7
Vehicle Noise:	63.0	61.3	57.6	53.4	62.0	62.4

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL (CALVENO) - v10/31/19

Scenario: Second Floor With Wall
Road Name: Clifton Ave
Lot No: BLDG 4

Project Name: Esperanza Specific Plan
Job Number: 15662
Analyst: B. Maddux

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	9,500 vehicles
Peak Hour Percentage:	10%
Peak Hour Volume:	950 vehicles
Vehicle Speed:	25 mph
Near/Far Lane Distance:	12 feet

Site Data

Barrier Height:	**0.0 feet**
Barrier Type (0-Wall, 1-Berm):	0.0
Centerline Dist. to Barrier:	32.0 feet
Centerline Dist. to Observer:	51.0 feet
Barrier Distance to Observer:	19.0 feet
Observer Height (Above Pad):	14.0 feet
Pad Elevation:	0.0 feet
Road Elevation:	0.0 feet
Barrier Elevation:	0.0 feet
Road Grade:	1.0%

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	15
Medium Trucks (2 Axles):	15
Heavy Trucks (3+ Axles):	15

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	77.5%	12.9%	9.6%	97.42%
Medium Trucks:	84.8%	4.9%	10.3%	1.84%
Heavy Trucks:	86.5%	2.7%	10.8%	0.74%

Noise Source Elevations (in feet)

Autos:	0.00		
Medium Trucks:	2.30		
Heavy Trucks:	8.01	*Grade Adjustment:*	0.0

Lane Equivalent Distance (in feet)

Autos:	46.744
Medium Trucks:	46.108
Heavy Trucks:	44.999

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	59.44	0.38	0.34	-1.20	*-2.42*	0.000	0.000
Medium Trucks:	71.09	-16.86	0.42	-1.20	*-3.14*	0.000	0.000
Heavy Trucks:	77.24	-20.82	0.58	-1.20	*-5.29*	0.000	0.000

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	59.0	57.1	55.3	49.2	57.9	58.5
Medium Trucks:	53.5	51.9	45.6	44.0	52.5	52.7
Heavy Trucks:	55.8	54.4	45.4	46.6	55.0	55.1
Vehicle Noise:	61.4	59.7	56.1	51.9	60.4	60.8

Mitigated Noise Levels (with Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	59.0	57.1	55.3	49.2	57.9	58.5
Medium Trucks:	53.5	51.9	45.6	44.0	52.5	52.7
Heavy Trucks:	55.8	54.4	45.4	46.6	55.0	55.1
Vehicle Noise:	61.4	59.7	56.1	51.9	60.4	60.8

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL (CALVENO) - v10/31/19

Scenario: Second Floor With Wall
Road Name: Chatham St
Lot No: BLDG 4

Project Name: Esperanza Specific Plan
Job Number: 15662
Analyst: B. Maddux

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	9,500 vehicles
Peak Hour Percentage:	10%
Peak Hour Volume:	950 vehicles
Vehicle Speed:	25 mph
Near/Far Lane Distance:	12 feet

Site Data

Barrier Height:	**0.0 feet**
Barrier Type (0-Wall, 1-Berm):	0.0
Centerline Dist. to Barrier:	25.0 feet
Centerline Dist. to Observer:	33.0 feet
Barrier Distance to Observer:	8.0 feet
Observer Height (Above Pad):	14.0 feet
Pad Elevation:	0.0 feet
Road Elevation:	0.0 feet
Barrier Elevation:	0.0 feet
Road Grade:	1.0%

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	15
Medium Trucks (2 Axles):	15
Heavy Trucks (3+ Axles):	15

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	77.5%	12.9%	9.6%	97.42%
Medium Trucks:	84.8%	4.9%	10.3%	1.84%
Heavy Trucks:	86.5%	2.7%	10.8%	0.74%

Noise Source Elevations (in feet)

Autos:	0.00		
Medium Trucks:	2.30		
Heavy Trucks:	8.01	*Grade Adjustment:*	0.0

Lane Equivalent Distance (in feet)

Autos:	29.816
Medium Trucks:	28.809
Heavy Trucks:	26.999

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	59.44	0.38	3.26	-1.20	*-4.61*	0.000	0.000
Medium Trucks:	71.09	-16.86	3.49	-1.20	*-5.71*	0.000	0.000
Heavy Trucks:	77.24	-20.82	3.91	-1.20	*-8.89*	0.000	0.000

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	61.9	60.0	58.2	52.2	60.8	61.4
Medium Trucks:	56.5	55.0	48.6	47.1	55.6	55.8
Heavy Trucks:	59.1	57.7	48.7	49.9	58.3	58.4
Vehicle Noise:	64.5	62.8	59.1	55.0	63.5	63.9

Mitigated Noise Levels (with Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	61.9	60.0	58.2	52.2	60.8	61.4
Medium Trucks:	56.5	55.0	48.6	47.1	55.6	55.8
Heavy Trucks:	59.1	57.7	48.7	49.9	58.3	58.4
Vehicle Noise:	64.5	62.8	59.1	55.0	63.5	63.9

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL (CALVENO) - v10/31/19

Scenario: Second Floor With Wall
Road Name: Chatham St
Lot No: BLDG 1-3

Project Name: Esperanza Specific Plan
Job Number: 15662
Analyst: B. Maddux

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	9,500 vehicles
Peak Hour Percentage:	10%
Peak Hour Volume:	950 vehicles
Vehicle Speed:	25 mph
Near/Far Lane Distance:	12 feet

Site Data

Barrier Height:	**0.0 feet**
Barrier Type (0-Wall, 1-Berm):	0.0
Centerline Dist. to Barrier:	25.0 feet
Centerline Dist. to Observer:	35.0 feet
Barrier Distance to Observer:	10.0 feet
Observer Height (Above Pad):	14.0 feet
Pad Elevation:	0.0 feet
Road Elevation:	0.0 feet
Barrier Elevation:	0.0 feet
Road Grade:	1.0%

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	15
Medium Trucks (2 Axles):	15
Heavy Trucks (3+ Axles):	15

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	77.5%	12.9%	9.6%	97.42%
Medium Trucks:	84.8%	4.9%	10.3%	1.84%
Heavy Trucks:	86.5%	2.7%	10.8%	0.74%

Noise Source Elevations (in feet)

Autos:	0.00		
Medium Trucks:	2.30		
Heavy Trucks:	8.01	*Grade Adjustment:*	0.0

Lane Equivalent Distance (in feet)

Autos:	31.639
Medium Trucks:	30.691
Heavy Trucks:	28.999

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	59.44	0.38	2.88	-1.20	*-3.92*	0.000	0.000
Medium Trucks:	71.09	-16.86	3.08	-1.20	*-4.96*	0.000	0.000
Heavy Trucks:	77.24	-20.82	3.45	-1.20	*-8.03*	0.000	0.000

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	61.5	59.6	57.8	51.8	60.4	61.0
Medium Trucks:	56.1	54.6	48.2	46.7	55.2	55.4
Heavy Trucks:	58.7	57.2	48.2	49.5	57.8	57.9
Vehicle Noise:	64.1	62.4	58.7	54.6	63.1	63.5

Mitigated Noise Levels (with Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	61.5	59.6	57.8	51.8	60.4	61.0
Medium Trucks:	56.1	54.6	48.2	46.7	55.2	55.4
Heavy Trucks:	58.7	57.2	48.2	49.5	57.8	57.9
Vehicle Noise:	64.1	62.4	58.7	54.6	63.1	63.5

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL (CALVENO) - v10/31/19

Scenario: Second Floor With Wall
Road Name: Chatham St
Lot No: BLDG 27-28

Project Name: Esperanza Specific Plan
Job Number: 15662
Analyst: B. Maddux

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	9,500 vehicles
Peak Hour Percentage:	10%
Peak Hour Volume:	950 vehicles
Vehicle Speed:	25 mph
Near/Far Lane Distance:	12 feet

Site Data

Barrier Height:	**0.0 feet**
Barrier Type (0-Wall, 1-Berm):	0.0
Centerline Dist. to Barrier:	25.0 feet
Centerline Dist. to Observer:	43.0 feet
Barrier Distance to Observer:	18.0 feet
Observer Height (Above Pad):	14.0 feet
Pad Elevation:	0.0 feet
Road Elevation:	0.0 feet
Barrier Elevation:	0.0 feet
Road Grade:	1.0%

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	15
Medium Trucks (2 Axles):	15
Heavy Trucks (3+ Axles):	15

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	77.5%	12.9%	9.6%	97.42%
Medium Trucks:	84.8%	4.9%	10.3%	1.84%
Heavy Trucks:	86.5%	2.7%	10.8%	0.74%

Noise Source Elevations (in feet)

Autos:	0.00		
Medium Trucks:	2.30		
Heavy Trucks:	8.01	*Grade Adjustment:*	0.0

Lane Equivalent Distance (in feet)

Autos:	39.102
Medium Trucks:	38.340
Heavy Trucks:	36.999

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	59.44	0.38	1.50	-1.20	*-2.19*	0.000	0.000
Medium Trucks:	71.09	-16.86	1.63	-1.20	*-3.07*	0.000	0.000
Heavy Trucks:	77.24	-20.82	1.86	-1.20	*-5.81*	0.000	0.000

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	60.1	58.2	56.5	50.4	59.0	59.6
Medium Trucks:	54.7	53.1	46.8	45.2	53.7	53.9
Heavy Trucks:	57.1	55.7	46.6	47.9	56.2	56.4
Vehicle Noise:	62.6	60.9	57.3	53.1	61.6	62.0

Mitigated Noise Levels (with Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	60.1	58.2	56.5	50.4	59.0	59.6
Medium Trucks:	54.7	53.1	46.8	45.2	53.7	53.9
Heavy Trucks:	57.1	55.7	46.6	47.9	56.2	56.4
Vehicle Noise:	62.6	60.9	57.3	53.1	61.6	62.0

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL (CALVENO) - v10/31/19

Scenario: Second Floor With Wall
Road Name: Amherst Ave
Lot No: BLDG 27

Project Name: Esperanza Specific Plan
Job Number: 15662
Analyst: B. Maddux

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	9,500 vehicles
Peak Hour Percentage:	10%
Peak Hour Volume:	950 vehicles
Vehicle Speed:	25 mph
Near/Far Lane Distance:	12 feet

Site Data

Barrier Height:	**0.0 feet**
Barrier Type (0-Wall, 1-Berm):	0.0
Centerline Dist. to Barrier:	30.0 feet
Centerline Dist. to Observer:	40.0 feet
Barrier Distance to Observer:	10.0 feet
Observer Height (Above Pad):	14.0 feet
Pad Elevation:	0.0 feet
Road Elevation:	0.0 feet
Barrier Elevation:	0.0 feet
Road Grade:	1.0%

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	15
Medium Trucks (2 Axles):	15
Heavy Trucks (3+ Axles):	15

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	77.5%	12.9%	9.6%	97.42%
Medium Trucks:	84.8%	4.9%	10.3%	1.84%
Heavy Trucks:	86.5%	2.7%	10.8%	0.74%

Noise Source Elevations (in feet)

Autos:	0.00		
Medium Trucks:	2.30		
Heavy Trucks:	8.01	*Grade Adjustment:*	0.0

Lane Equivalent Distance (in feet)

Autos:	36.277
Medium Trucks:	35.454
Heavy Trucks:	33.999

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	59.44	0.38	1.99	-1.20	*-4.34*	0.000	0.000
Medium Trucks:	71.09	-16.86	2.14	-1.20	*-5.24*	0.000	0.000
Heavy Trucks:	77.24	-20.82	2.41	-1.20	*-7.81*	0.000	0.000

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	60.6	58.7	56.9	50.9	59.5	60.1
Medium Trucks:	55.2	53.7	47.3	45.8	54.2	54.4
Heavy Trucks:	57.6	56.2	47.2	48.4	56.8	56.9
Vehicle Noise:	63.1	61.4	57.8	53.6	62.1	62.5

Mitigated Noise Levels (with Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	60.6	58.7	56.9	50.9	59.5	60.1
Medium Trucks:	55.2	53.7	47.3	45.8	54.2	54.4
Heavy Trucks:	57.6	56.2	47.2	48.4	56.8	56.9
Vehicle Noise:	63.1	61.4	57.8	53.6	62.1	62.5

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL (CALVENO) - v10/31/19

Scenario: Second Floor With Wall
Road Name: Amherst Ave
Lot No: BLDG 26-22

Project Name: Esperanza Specific Plan
Job Number: 15662
Analyst: B. Maddux

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	9,500 vehicles
Peak Hour Percentage:	10%
Peak Hour Volume:	950 vehicles
Vehicle Speed:	25 mph
Near/Far Lane Distance:	12 feet

Site Data

Barrier Height:	**0.0 feet**
Barrier Type (0-Wall, 1-Berm):	0.0
Centerline Dist. to Barrier:	30.0 feet
Centerline Dist. to Observer:	40.0 feet
Barrier Distance to Observer:	10.0 feet
Observer Height (Above Pad):	14.0 feet
Pad Elevation:	0.0 feet
Road Elevation:	0.0 feet
Barrier Elevation:	0.0 feet
Road Grade:	0.0%

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	15
Medium Trucks (2 Axles):	15
Heavy Trucks (3+ Axles):	15

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	77.5%	12.9%	9.6%	97.42%
Medium Trucks:	84.8%	4.9%	10.3%	1.84%
Heavy Trucks:	86.5%	2.7%	10.8%	0.74%

Noise Source Elevations (in feet)

Autos:	0.00		
Medium Trucks:	2.30		
Heavy Trucks:	8.01	*Grade Adjustment:*	0.0

Lane Equivalent Distance (in feet)

Autos:	36.277
Medium Trucks:	35.454
Heavy Trucks:	33.999

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	59.44	0.38	1.99	-1.20	*-4.34*	0.000	0.000
Medium Trucks:	71.09	-16.86	2.14	-1.20	*-5.24*	0.000	0.000
Heavy Trucks:	77.24	-20.82	2.41	-1.20	*-7.81*	0.000	0.000

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	60.6	58.7	56.9	50.9	59.5	60.1
Medium Trucks:	55.2	53.7	47.3	45.8	54.2	54.4
Heavy Trucks:	57.6	56.2	47.2	48.4	56.8	56.9
Vehicle Noise:	63.1	61.4	57.8	53.6	62.1	62.5

Mitigated Noise Levels (with Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	60.6	58.7	56.9	50.9	59.5	60.1
Medium Trucks:	55.2	53.7	47.3	45.8	54.2	54.4
Heavy Trucks:	57.6	56.2	47.2	48.4	56.8	56.9
Vehicle Noise:	63.1	61.4	57.8	53.6	62.1	62.5

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL (CALVENO) - v10/31/19

Scenario: Second Floor With Wall
Road Name: Amherst Ave
Lot No: BLDG 20-21

Project Name: Esperanza Specific Plan
Job Number: 15662
Analyst: B. Maddux

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	9,500 vehicles
Peak Hour Percentage:	10%
Peak Hour Volume:	950 vehicles
Vehicle Speed:	25 mph
Near/Far Lane Distance:	12 feet

Site Data

Barrier Height:	**0.0 feet**
Barrier Type (0-Wall, 1-Berm):	0.0
Centerline Dist. to Barrier:	30.0 feet
Centerline Dist. to Observer:	40.0 feet
Barrier Distance to Observer:	10.0 feet
Observer Height (Above Pad):	14.0 feet
Pad Elevation:	0.0 feet
Road Elevation:	0.0 feet
Barrier Elevation:	0.0 feet
Road Grade:	0.0%

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	15
Medium Trucks (2 Axles):	15
Heavy Trucks (3+ Axles):	15

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	77.5%	12.9%	9.6%	97.42%
Medium Trucks:	84.8%	4.9%	10.3%	1.84%
Heavy Trucks:	86.5%	2.7%	10.8%	0.74%

Noise Source Elevations (in feet)

Autos:	0.00		
Medium Trucks:	2.30		
Heavy Trucks:	8.01	*Grade Adjustment:*	0.0

Lane Equivalent Distance (in feet)

Autos:	36.277
Medium Trucks:	35.454
Heavy Trucks:	33.999

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	59.44	0.38	1.99	-1.20	*-4.34*	0.000	0.000
Medium Trucks:	71.09	-16.86	2.14	-1.20	*-5.24*	0.000	0.000
Heavy Trucks:	77.24	-20.82	2.41	-1.20	*-7.81*	0.000	0.000

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	60.6	58.7	56.9	50.9	59.5	60.1
Medium Trucks:	55.2	53.7	47.3	45.8	54.2	54.4
Heavy Trucks:	57.6	56.2	47.2	48.4	56.8	56.9
Vehicle Noise:	63.1	61.4	57.8	53.6	62.1	62.5

Mitigated Noise Levels (with Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	60.6	58.7	56.9	50.9	59.5	60.1
Medium Trucks:	55.2	53.7	47.3	45.8	54.2	54.4
Heavy Trucks:	57.6	56.2	47.2	48.4	56.8	56.9
Vehicle Noise:	63.1	61.4	57.8	53.6	62.1	62.5

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL (CALVENO) - v10/31/19

Scenario: Third Floor With Wall
Road Name: Eucalyptus Ave
Lot No: BLDG 20

Project Name: Esperanza Specific Plan
Job Number: 15662
Analyst: B. Maddux

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	21,700 vehicles
Peak Hour Percentage:	10%
Peak Hour Volume:	2,170 vehicles
Vehicle Speed:	40 mph
Near/Far Lane Distance:	40 feet

Site Data

Barrier Height:	**6.0 feet**
Barrier Type (0-Wall, 1-Berm):	0.0
Centerline Dist. to Barrier:	83.0 feet
Centerline Dist. to Observer:	105.0 feet
Barrier Distance to Observer:	22.0 feet
Observer Height (Above Pad):	23.0 feet
Pad Elevation:	0.0 feet
Road Elevation:	0.0 feet
Barrier Elevation:	0.0 feet
Road Grade:	1.0%

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	15
Medium Trucks (2 Axles):	15
Heavy Trucks (3+ Axles):	15

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	77.5%	12.9%	9.6%	97.42%
Medium Trucks:	84.8%	4.9%	10.3%	1.84%
Heavy Trucks:	86.5%	2.7%	10.8%	0.74%

Noise Source Elevations (in feet)

Autos:	0.00		
Medium Trucks:	2.30		
Heavy Trucks:	8.01	*Grade Adjustment:*	0.0

Lane Equivalent Distance (in feet)

Autos:	85.755
Medium Trucks:	85.168
Heavy Trucks:	83.963

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	67.36	1.93	-3.62	-1.20	*-2.97*	0.000	0.000
Medium Trucks:	76.31	-15.31	-3.57	-1.20	*-3.35*	0.000	0.000
Heavy Trucks:	81.16	-19.27	-3.48	-1.20	*-4.42*	0.000	0.000

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	64.5	62.6	60.8	54.7	63.4	64.0
Medium Trucks:	56.2	54.7	48.4	46.8	55.3	55.5
Heavy Trucks:	57.2	55.8	46.8	48.0	56.4	56.5
Vehicle Noise:	65.7	63.9	61.2	56.1	64.7	65.2

Mitigated Noise Levels (with Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	64.5	62.6	60.8	54.7	63.4	64.0
Medium Trucks:	56.2	54.7	48.4	46.8	55.3	55.5
Heavy Trucks:	57.2	55.8	46.8	48.0	56.4	56.5
Vehicle Noise:	65.7	63.9	61.2	56.1	64.7	65.2

Wednesday, May 29, 2024

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL (CALVENO) - v10/31/19

Scenario: Third Floor With Wall
Road Name: Eucalyptus Ave
Lot No: BLDG 7-14

Project Name: Esperanza Specific Plan
Job Number: 15662
Analyst: B. Maddux

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	21,700 vehicles
Peak Hour Percentage:	10%
Peak Hour Volume:	2,170 vehicles
Vehicle Speed:	40 mph
Near/Far Lane Distance:	40 feet

Site Data

Barrier Height:	**6.0 feet**
Barrier Type (0-Wall, 1-Berm):	0.0
Centerline Dist. to Barrier:	83.0 feet
Centerline Dist. to Observer:	103.0 feet
Barrier Distance to Observer:	20.0 feet
Observer Height (Above Pad):	23.0 feet
Pad Elevation:	0.0 feet
Road Elevation:	0.0 feet
Barrier Elevation:	0.0 feet
Road Grade:	1.0%

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	15
Medium Trucks (2 Axles):	15
Heavy Trucks (3+ Axles):	15

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	77.5%	12.9%	9.6%	97.42%
Medium Trucks:	84.8%	4.9%	10.3%	1.84%
Heavy Trucks:	86.5%	2.7%	10.8%	0.74%

Noise Source Elevations (in feet)

Autos:	0.00		
Medium Trucks:	2.30		
Heavy Trucks:	8.01	*Grade Adjustment:*	0.0

Lane Equivalent Distance (in feet)

Autos:	83.774
Medium Trucks:	83.172
Heavy Trucks:	81.938

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	67.36	1.93	-3.47	-1.20	*-3.33*	0.000	0.000
Medium Trucks:	76.31	-15.31	-3.42	-1.20	*-3.73*	0.000	0.000
Heavy Trucks:	81.16	-19.27	-3.32	-1.20	*-4.83*	0.000	0.000

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	64.6	62.7	61.0	54.9	63.5	64.1
Medium Trucks:	56.4	54.9	48.5	47.0	55.4	55.7
Heavy Trucks:	57.4	55.9	46.9	48.2	56.5	56.6
Vehicle Noise:	65.9	64.1	61.4	56.3	64.8	65.3

Mitigated Noise Levels (with Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	64.6	62.7	61.0	54.9	63.5	64.1
Medium Trucks:	56.4	54.9	48.5	47.0	55.4	55.7
Heavy Trucks:	57.4	55.9	46.9	48.2	56.5	56.6
Vehicle Noise:	65.9	64.1	61.4	56.3	64.8	65.3

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL (CALVENO) - v10/31/19

Scenario: Third Floor With Wall
Road Name: Eucalyptus Ave
Lot No: BLDG 6

Project Name: Esperanza Specific Plan
Job Number: 15662
Analyst: B. Maddux

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	21,700 vehicles
Peak Hour Percentage:	10%
Peak Hour Volume:	2,170 vehicles
Vehicle Speed:	40 mph
Near/Far Lane Distance:	40 feet

Site Data

Barrier Height:	**6.0 feet**
Barrier Type (0-Wall, 1-Berm):	0.0
Centerline Dist. to Barrier:	84.0 feet
Centerline Dist. to Observer:	104.0 feet
Barrier Distance to Observer:	20.0 feet
Observer Height (Above Pad):	23.0 feet
Pad Elevation:	0.0 feet
Road Elevation:	0.0 feet
Barrier Elevation:	0.0 feet
Road Grade:	1.0%

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	15
Medium Trucks (2 Axles):	15
Heavy Trucks (3+ Axles):	15

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	77.5%	12.9%	9.6%	97.42%
Medium Trucks:	84.8%	4.9%	10.3%	1.84%
Heavy Trucks:	86.5%	2.7%	10.8%	0.74%

Noise Source Elevations (in feet)

Autos:	0.00		
Medium Trucks:	2.30		
Heavy Trucks:	8.01	*Grade Adjustment:*	0.0

Lane Equivalent Distance (in feet)

Autos:	84.764
Medium Trucks:	84.170
Heavy Trucks:	82.951

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	67.36	1.93	-3.54	-1.20	*-3.36*	0.000	0.000
Medium Trucks:	76.31	-15.31	-3.50	-1.20	*-3.76*	0.000	0.000
Heavy Trucks:	81.16	-19.27	-3.40	-1.20	*-4.85*	0.000	0.000

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	64.5	62.6	60.9	54.8	63.4	64.1
Medium Trucks:	56.3	54.8	48.4	46.9	55.4	55.6
Heavy Trucks:	57.3	55.9	46.8	48.1	56.4	56.6
Vehicle Noise:	65.8	64.0	61.3	56.2	64.8	65.3

Mitigated Noise Levels (with Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	64.5	62.6	60.9	54.8	63.4	64.1
Medium Trucks:	56.3	54.8	48.4	46.9	55.4	55.6
Heavy Trucks:	57.3	55.9	46.8	48.1	56.4	56.6
Vehicle Noise:	65.8	64.0	61.3	56.2	64.8	65.3

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL (CALVENO) - v10/31/19

Scenario: Third Floor With Wall
Road Name: Clifton Ave
Lot No: BLDG 5-6

Project Name: Esperanza Specific Plan
Job Number: 15662
Analyst: B. Maddux

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	9,500 vehicles
Peak Hour Percentage:	10%
Peak Hour Volume:	950 vehicles
Vehicle Speed:	25 mph
Near/Far Lane Distance:	12 feet

Site Data

Barrier Height:	**0.0 feet**
Barrier Type (0-Wall, 1-Berm):	0.0
Centerline Dist. to Barrier:	31.0 feet
Centerline Dist. to Observer:	41.0 feet
Barrier Distance to Observer:	10.0 feet
Observer Height (Above Pad):	23.0 feet
Pad Elevation:	0.0 feet
Road Elevation:	0.0 feet
Barrier Elevation:	0.0 feet
Road Grade:	1.0%

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	15
Medium Trucks (2 Axles):	15
Heavy Trucks (3+ Axles):	15

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	77.5%	12.9%	9.6%	97.42%
Medium Trucks:	84.8%	4.9%	10.3%	1.84%
Heavy Trucks:	86.5%	2.7%	10.8%	0.74%

Noise Source Elevations (in feet)

Autos:	0.00		
Medium Trucks:	2.30		
Heavy Trucks:	8.01	*Grade Adjustment:*	0.0

Lane Equivalent Distance (in feet)

Autos:	41.449
Medium Trucks:	40.220
Heavy Trucks:	37.601

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	59.44	0.38	1.12	-1.20	*-8.02*	0.000	0.000
Medium Trucks:	71.09	-16.86	1.31	-1.20	*-9.31*	0.000	0.000
Heavy Trucks:	77.24	-20.82	1.75	-1.20	*-12.97*	0.000	0.000

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	59.7	57.8	56.1	50.0	58.6	59.2
Medium Trucks:	54.3	52.8	46.5	44.9	53.4	53.6
Heavy Trucks:	57.0	55.6	46.5	47.8	56.1	56.3
Vehicle Noise:	62.3	60.6	56.9	52.8	61.3	61.7

Mitigated Noise Levels (with Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	59.7	57.8	56.1	50.0	58.6	59.2
Medium Trucks:	54.3	52.8	46.5	44.9	53.4	53.6
Heavy Trucks:	57.0	55.6	46.5	47.8	56.1	56.3
Vehicle Noise:	62.3	60.6	56.9	52.8	61.3	61.7

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL (CALVENO) - v10/31/19

Scenario: Third Floor With Wall
Road Name: Clifton Ave
Lot No: BLDG 4

Project Name: Esperanza Specific Plan
Job Number: 15662
Analyst: B. Maddux

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	9,500 vehicles
Peak Hour Percentage:	10%
Peak Hour Volume:	950 vehicles
Vehicle Speed:	25 mph
Near/Far Lane Distance:	12 feet

Site Data

Barrier Height:	**0.0 feet**
Barrier Type (0-Wall, 1-Berm):	0.0
Centerline Dist. to Barrier:	32.0 feet
Centerline Dist. to Observer:	51.0 feet
Barrier Distance to Observer:	19.0 feet
Observer Height (Above Pad):	23.0 feet
Pad Elevation:	0.0 feet
Road Elevation:	0.0 feet
Barrier Elevation:	0.0 feet
Road Grade:	1.0%

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	15
Medium Trucks (2 Axles):	15
Heavy Trucks (3+ Axles):	15

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	77.5%	12.9%	9.6%	97.42%
Medium Trucks:	84.8%	4.9%	10.3%	1.84%
Heavy Trucks:	86.5%	2.7%	10.8%	0.74%

Noise Source Elevations (in feet)

Autos:	0.00		
Medium Trucks:	2.30		
Heavy Trucks:	8.01	*Grade Adjustment:*	0.0

Lane Equivalent Distance (in feet)

Autos:	50.180
Medium Trucks:	49.169
Heavy Trucks:	47.051

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	59.44	0.38	-0.13	-1.20	*-5.18*	0.000	0.000
Medium Trucks:	71.09	-16.86	0.01	-1.20	*-6.26*	0.000	0.000
Heavy Trucks:	77.24	-20.82	0.29	-1.20	*-9.40*	0.000	0.000

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	58.5	56.6	54.8	48.8	57.4	58.0
Medium Trucks:	53.0	51.5	45.2	43.6	52.1	52.3
Heavy Trucks:	55.5	54.1	45.1	46.3	54.7	54.8
Vehicle Noise:	61.0	59.3	55.7	51.5	60.0	60.4

Mitigated Noise Levels (with Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	58.5	56.6	54.8	48.8	57.4	58.0
Medium Trucks:	53.0	51.5	45.2	43.6	52.1	52.3
Heavy Trucks:	55.5	54.1	45.1	46.3	54.7	54.8
Vehicle Noise:	61.0	59.3	55.7	51.5	60.0	60.4

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL (CALVENO) - v10/31/19

Scenario: Third Floor With Wall
Road Name: Chatham St
Lot No: BLDG 4

Project Name: Esperanza Specific Plan
Job Number: 15662
Analyst: B. Maddux

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	9,500 vehicles
Peak Hour Percentage:	10%
Peak Hour Volume:	950 vehicles
Vehicle Speed:	25 mph
Near/Far Lane Distance:	12 feet

Site Data

Barrier Height:	**0.0 feet**
Barrier Type (0-Wall, 1-Berm):	0.0
Centerline Dist. to Barrier:	25.0 feet
Centerline Dist. to Observer:	33.0 feet
Barrier Distance to Observer:	8.0 feet
Observer Height (Above Pad):	23.0 feet
Pad Elevation:	0.0 feet
Road Elevation:	0.0 feet
Barrier Elevation:	0.0 feet
Road Grade:	1.0%

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	15
Medium Trucks (2 Axles):	15
Heavy Trucks (3+ Axles):	15

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	77.5%	12.9%	9.6%	97.42%
Medium Trucks:	84.8%	4.9%	10.3%	1.84%
Heavy Trucks:	86.5%	2.7%	10.8%	0.74%

Noise Source Elevations (in feet)

Autos:	0.00		
Medium Trucks:	2.30		
Heavy Trucks:	8.01	*Grade Adjustment:*	0.0

Lane Equivalent Distance (in feet)

Autos:	34.957
Medium Trucks:	33.491
Heavy Trucks:	30.296

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	59.44	0.38	2.23	-1.20	*-7.71*	0.000	0.000
Medium Trucks:	71.09	-16.86	2.51	-1.20	*-9.26*	0.000	0.000
Heavy Trucks:	77.24	-20.82	3.16	-1.20	*-13.78*	0.000	0.000

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	60.8	58.9	57.2	51.1	59.7	60.4
Medium Trucks:	55.5	54.0	47.7	46.1	54.6	54.8
Heavy Trucks:	58.4	57.0	47.9	49.2	57.5	57.7
Vehicle Noise:	63.5	61.9	58.1	54.0	62.5	62.9

Mitigated Noise Levels (with Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	60.8	58.9	57.2	51.1	59.7	60.4
Medium Trucks:	55.5	54.0	47.7	46.1	54.6	54.8
Heavy Trucks:	58.4	57.0	47.9	49.2	57.5	57.7
Vehicle Noise:	63.5	61.9	58.1	54.0	62.5	62.9

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL (CALVENO) - v10/31/19

Scenario: Third Floor With Wall
Road Name: Chatham St
Lot No: BLDG 1-3

Project Name: Esperanza Specific Plan
Job Number: 15662
Analyst: B. Maddux

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	9,500 vehicles
Peak Hour Percentage:	10%
Peak Hour Volume:	950 vehicles
Vehicle Speed:	25 mph
Near/Far Lane Distance:	12 feet

Site Data

Barrier Height:	**0.0 feet**
Barrier Type (0-Wall, 1-Berm):	0.0
Centerline Dist. to Barrier:	25.0 feet
Centerline Dist. to Observer:	35.0 feet
Barrier Distance to Observer:	10.0 feet
Observer Height (Above Pad):	23.0 feet
Pad Elevation:	0.0 feet
Road Elevation:	0.0 feet
Barrier Elevation:	0.0 feet
Road Grade:	1.0%

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	15
Medium Trucks (2 Axles):	15
Heavy Trucks (3+ Axles):	15

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	77.5%	12.9%	9.6%	97.42%
Medium Trucks:	84.8%	4.9%	10.3%	1.84%
Heavy Trucks:	86.5%	2.7%	10.8%	0.74%

Noise Source Elevations (in feet)

Autos:	0.00		
Medium Trucks:	2.30		
Heavy Trucks:	8.01	*Grade Adjustment:*	0.0

Lane Equivalent Distance (in feet)

Autos:	36.524
Medium Trucks:	35.123
Heavy Trucks:	32.091

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	59.44	0.38	1.94	-1.20	*-6.91*	0.000	0.000
Medium Trucks:	71.09	-16.86	2.20	-1.20	*-8.40*	0.000	0.000
Heavy Trucks:	77.24	-20.82	2.79	-1.20	*-12.77*	0.000	0.000

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	60.6	58.7	56.9	50.8	59.5	60.1
Medium Trucks:	55.2	53.7	47.4	45.8	54.3	54.5
Heavy Trucks:	58.0	56.6	47.6	48.8	57.2	57.3
Vehicle Noise:	63.2	61.5	57.8	53.7	62.2	62.6

Mitigated Noise Levels (with Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	60.6	58.7	56.9	50.8	59.5	60.1
Medium Trucks:	55.2	53.7	47.4	45.8	54.3	54.5
Heavy Trucks:	58.0	56.6	47.6	48.8	57.2	57.3
Vehicle Noise:	63.2	61.5	57.8	53.7	62.2	62.6

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL (CALVENO) - v10/31/19

Scenario: Third Floor With Wall
Road Name: Chatham St
Lot No: BLDG 27-28

Project Name: Esperanza Specific Plan
Job Number: 15662
Analyst: B. Maddux

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	9,500 vehicles
Peak Hour Percentage:	10%
Peak Hour Volume:	950 vehicles
Vehicle Speed:	25 mph
Near/Far Lane Distance:	12 feet

Site Data

Barrier Height:	**0.0 feet**
Barrier Type (0-Wall, 1-Berm):	0.0
Centerline Dist. to Barrier:	25.0 feet
Centerline Dist. to Observer:	43.0 feet
Barrier Distance to Observer:	18.0 feet
Observer Height (Above Pad):	23.0 feet
Pad Elevation:	0.0 feet
Road Elevation:	0.0 feet
Barrier Elevation:	0.0 feet
Road Grade:	1.0%

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	15
Medium Trucks (2 Axles):	15
Heavy Trucks (3+ Axles):	15

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	77.5%	12.9%	9.6%	97.42%
Medium Trucks:	84.8%	4.9%	10.3%	1.84%
Heavy Trucks:	86.5%	2.7%	10.8%	0.74%

Noise Source Elevations (in feet)

Autos:	0.00		
Medium Trucks:	2.30		
Heavy Trucks:	8.01	*Grade Adjustment:*	0.0

Lane Equivalent Distance (in feet)

Autos:	43.151
Medium Trucks:	41.972
Heavy Trucks:	39.469

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	59.44	0.38	0.86	-1.20	*-4.54*	0.000	0.000
Medium Trucks:	71.09	-16.86	1.04	-1.20	*-5.82*	0.000	0.000
Heavy Trucks:	77.24	-20.82	1.44	-1.20	*-9.69*	0.000	0.000

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	59.5	57.6	55.8	49.8	58.4	59.0
Medium Trucks:	54.1	52.6	46.2	44.7	53.1	53.3
Heavy Trucks:	56.7	55.2	46.2	47.5	55.8	55.9
Vehicle Noise:	62.1	60.4	56.7	52.5	61.1	61.5

Mitigated Noise Levels (with Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	59.5	57.6	55.8	49.8	58.4	59.0
Medium Trucks:	54.1	52.6	46.2	44.7	53.1	53.3
Heavy Trucks:	56.7	55.2	46.2	47.5	55.8	55.9
Vehicle Noise:	62.1	60.4	56.7	52.5	61.1	61.5

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL (CALVENO) - v10/31/19

Scenario: Third Floor With Wall
Road Name: Amherst Ave
Lot No: BLDG 27

Project Name: Esperanza Specific Plan
Job Number: 15662
Analyst: B. Maddux

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	9,500 vehicles
Peak Hour Percentage:	10%
Peak Hour Volume:	950 vehicles
Vehicle Speed:	25 mph
Near/Far Lane Distance:	12 feet

Site Data

Barrier Height:	**0.0 feet**
Barrier Type (0-Wall, 1-Berm):	0.0
Centerline Dist. to Barrier:	30.0 feet
Centerline Dist. to Observer:	40.0 feet
Barrier Distance to Observer:	10.0 feet
Observer Height (Above Pad):	23.0 feet
Pad Elevation:	0.0 feet
Road Elevation:	0.0 feet
Barrier Elevation:	0.0 feet
Road Grade:	1.0%

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	15
Medium Trucks (2 Axles):	15
Heavy Trucks (3+ Axles):	15

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	77.5%	12.9%	9.6%	97.42%
Medium Trucks:	84.8%	4.9%	10.3%	1.84%
Heavy Trucks:	86.5%	2.7%	10.8%	0.74%

Noise Source Elevations (in feet)

Autos:	0.00		
Medium Trucks:	2.30		
Heavy Trucks:	8.01	*Grade Adjustment:*	0.0

Lane Equivalent Distance (in feet)

Autos:	40.608
Medium Trucks:	39.352
Heavy Trucks:	36.672

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	59.44	0.38	1.25	-1.20	*-7.86*	0.000	0.000
Medium Trucks:	71.09	-16.86	1.46	-1.20	*-9.18*	0.000	0.000
Heavy Trucks:	77.24	-20.82	1.92	-1.20	*-12.94*	0.000	0.000

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	59.9	58.0	56.2	50.2	58.8	59.4
Medium Trucks:	54.5	53.0	46.6	45.1	53.5	53.8
Heavy Trucks:	57.1	55.7	46.7	47.9	56.3	56.4
Vehicle Noise:	62.5	60.8	57.1	53.0	61.5	61.9

Mitigated Noise Levels (with Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	59.9	58.0	56.2	50.2	58.8	59.4
Medium Trucks:	54.5	53.0	46.6	45.1	53.5	53.8
Heavy Trucks:	57.1	55.7	46.7	47.9	56.3	56.4
Vehicle Noise:	62.5	60.8	57.1	53.0	61.5	61.9

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL (CALVENO) - v10/31/19

Scenario: Third Floor With Wall
Road Name: Amherst Ave
Lot No: BLDG 26-22

Project Name: Esperanza Specific Plan
Job Number: 15662
Analyst: B. Maddux

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	9,500 vehicles
Peak Hour Percentage:	10%
Peak Hour Volume:	950 vehicles
Vehicle Speed:	25 mph
Near/Far Lane Distance:	12 feet

Site Data

Barrier Height:	**0.0 feet**
Barrier Type (0-Wall, 1-Berm):	0.0
Centerline Dist. to Barrier:	30.0 feet
Centerline Dist. to Observer:	40.0 feet
Barrier Distance to Observer:	10.0 feet
Observer Height (Above Pad):	23.0 feet
Pad Elevation:	0.0 feet
Road Elevation:	0.0 feet
Barrier Elevation:	0.0 feet
Road Grade:	0.0%

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	15
Medium Trucks (2 Axles):	15
Heavy Trucks (3+ Axles):	15

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	77.5%	12.9%	9.6%	97.42%
Medium Trucks:	84.8%	4.9%	10.3%	1.84%
Heavy Trucks:	86.5%	2.7%	10.8%	0.74%

Noise Source Elevations (in feet)

Autos:	0.00		
Medium Trucks:	2.30		
Heavy Trucks:	8.01	*Grade Adjustment:*	0.0

Lane Equivalent Distance (in feet)

Autos:	40.608
Medium Trucks:	39.352
Heavy Trucks:	36.672

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	59.44	0.38	1.25	-1.20	*-7.86*	0.000	0.000
Medium Trucks:	71.09	-16.86	1.46	-1.20	*-9.18*	0.000	0.000
Heavy Trucks:	77.24	-20.82	1.92	-1.20	*-12.94*	0.000	0.000

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	59.9	58.0	56.2	50.2	58.8	59.4
Medium Trucks:	54.5	53.0	46.6	45.1	53.5	53.8
Heavy Trucks:	57.1	55.7	46.7	47.9	56.3	56.4
Vehicle Noise:	62.5	60.8	57.1	53.0	61.5	61.9

Mitigated Noise Levels (with Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	59.9	58.0	56.2	50.2	58.8	59.4
Medium Trucks:	54.5	53.0	46.6	45.1	53.5	53.8
Heavy Trucks:	57.1	55.7	46.7	47.9	56.3	56.4
Vehicle Noise:	62.5	60.8	57.1	53.0	61.5	61.9

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL (CALVENO) - v10/31/19

Scenario: Third Floor With Wall
Road Name: Amherst Ave
Lot No: BLDG 20-21

Project Name: Esperanza Specific Plan
Job Number: 15662
Analyst: B. Maddux

SITE SPECIFIC INPUT DATA

Highway Data

Average Daily Traffic (Adt):	9,500 vehicles
Peak Hour Percentage:	10%
Peak Hour Volume:	950 vehicles
Vehicle Speed:	25 mph
Near/Far Lane Distance:	12 feet

Site Data

Barrier Height:	**0.0 feet**
Barrier Type (0-Wall, 1-Berm):	0.0
Centerline Dist. to Barrier:	30.0 feet
Centerline Dist. to Observer:	40.0 feet
Barrier Distance to Observer:	10.0 feet
Observer Height (Above Pad):	23.0 feet
Pad Elevation:	0.0 feet
Road Elevation:	0.0 feet
Barrier Elevation:	0.0 feet
Road Grade:	0.0%

NOISE MODEL INPUTS

Site Conditions (Hard = 10, Soft = 15)

Autos:	15
Medium Trucks (2 Axles):	15
Heavy Trucks (3+ Axles):	15

Vehicle Mix

VehicleType	*Day*	*Evening*	*Night*	*Daily*
Autos:	77.5%	12.9%	9.6%	97.42%
Medium Trucks:	84.8%	4.9%	10.3%	1.84%
Heavy Trucks:	86.5%	2.7%	10.8%	0.74%

Noise Source Elevations (in feet)

Autos:	0.00		
Medium Trucks:	2.30		
Heavy Trucks:	8.01	*Grade Adjustment:*	0.0

Lane Equivalent Distance (in feet)

Autos:	40.608
Medium Trucks:	39.352
Heavy Trucks:	36.672

FHWA Noise Model Calculations

VehicleType	*REMEL*	*Traffic Flow*	*Distance*	*Finite Road*	*Fresnel*	*Barrier Atten*	*Berm Atten*
Autos:	59.44	0.38	1.25	-1.20	*-7.86*	0.000	0.000
Medium Trucks:	71.09	-16.86	1.46	-1.20	*-9.18*	0.000	0.000
Heavy Trucks:	77.24	-20.82	1.92	-1.20	*-12.94*	0.000	0.000

Unmitigated Noise Levels (without Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	59.9	58.0	56.2	50.2	58.8	59.4
Medium Trucks:	54.5	53.0	46.6	45.1	53.5	53.8
Heavy Trucks:	57.1	55.7	46.7	47.9	56.3	56.4
Vehicle Noise:	62.5	60.8	57.1	53.0	61.5	61.9

Mitigated Noise Levels (with Topo and barrier attenuation)

VehicleType	*Leq Peak Hour*	*Leq Day*	*Leq Evening*	*Leq Night*	*Ldn*	*CNEL*
Autos:	59.9	58.0	56.2	50.2	58.8	59.4
Medium Trucks:	54.5	53.0	46.6	45.1	53.5	53.8
Heavy Trucks:	57.1	55.7	46.7	47.9	56.3	56.4
Vehicle Noise:	62.5	60.8	57.1	53.0	61.5	61.9

APPENDIX 10.1:

HVAC MANUFACTURES SPECIFICATIONS

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24ABC6
Comfort™ 16 Air Conditioner with Puron® Refrigerant 1–1/2 to 5 Nominal Tons

Carrier turn to the experts

Product Data

Puron™ the environmentally sound refrigerant

Comfort SERIES

Carrier's Air Conditioners with Puron® refrigerant provide a collection of features unmatched by any other family of equipment. The 24ABC has been designed utilizing Carrier's Puron refrigerant. The environmentally sound refrigerant allows you to make a responsible decision in the protection of the earth's ozone layer.

This product has been designed and manufactured to meet Energy Star® criteria for energy efficiency when matched with appropriate coil components. Refer to the combination ratings in the Product Data for system combinations that meet Energy Star® guidelines.

NOTE: Ratings contained in this document are subject to change at any time. Always refer to the AHRI directory (www.ahridirectory.org) for the most up-to-date ratings information.

INDUSTRY LEADING FEATURES / BENEFITS

Efficiency

- 14 - 16.5 SEER/11.0- 13.5 EER
- Microtube Technology™ refrigeration system
- Indoor air quality accessories available

Sound

- Sound level as low as 76 dBA
- Sound level as low as 74 dBA with accessory sound blanket

Comfort

- System supports Edge® Thermidistat™ or standard thermostat controls

Reliability

- Puron® refrigerant - environmentally sound, won't deplete the ozone layer and low lifetime servce cost.
- Scroll compressor
- Internal pressure relief valve
- Internal thermal overload
- Filter drier
- Balanced refrigeration system for maximum reliability

Durability

WeatherArmor™ protection package:

- Solid, durable sheet metal construction
- Dense wire coil guard standard
- Baked-on, complete outer coverage, powder paint

Applications

- Long-line - up to 250 feet (76.20 m) total equivalent length, up to 200 feet (60.96 m) condenser above evaporator, or up to 80 ft. (24.38 m) evaporator above condenser (See Longline Guide for more information.)
- Low ambient (down to -20°F/-28.9°C)) with accessory kit

MODEL NUMBER NOMENCLATURE

1	2	3	4	5	6	7	8	9	10	11	12	13
N	N	A	A	A/N	N	N	N	A/N	A/N	A/N	N	N
2	**4**	**A**	**B**	**C**	**6**	**3**	**6**	**A**	**0**	**0**	**3**	0
Product Series		Product Family	Tier	Major Series	SEER	Cooling Capacity		Grille Variations	Open	Open	Voltage	Series
24=AC		A=RES AC	B=Comfort	C=Puron	6=16 SEER			A = Dense W = Standard	0=Not Defined	0=Not Defined	3=208/230–1	0 = Original Series

Puron™ the environmentally sound refrigerant

AHRI CERTIFIED™ www.ahridirectory.org

Use of the AHRI Certified TM Mark indicates a manufacturer's participation in the program For verification of certification for individual products, go to www.ahridirectory.org.

Certified System™

ISO 9001 QMI-SAI Global

c UL us

ENERGY STAR

This product has been designed and manufactured to meet Energy Star® criteria for energy efficiency when matched with appropriate coil components. However, proper refrigerant charge and proper air flow are critical to achieve rated capacity and efficiency. Installation of this product should follow all manufacturing refrigerant charging and air flow instructions. **Failure to confirm proper charge and air flow may reduce energy efficiency and shorten equipment life.**

24ABC6

STANDARD FEATURES

Feature	**18**	**24**	**30**	**36**	**42**	**48 / 49**	**60 / 61**
Puron Refrigerant	X	X	X	X	X	X	X
Maximum SEER *	16.0	16.0	16.5	16.5	16.0	16.0	16.0
Scroll Compressor	X	X	X	X	X	X	X
Field Installed Filter Drier	X	X	X	X	X	X	X
Front Seating Service Valves	X	X	X	X	X	X	X
Internal Pressure Relief Valve	X	X	X	X	X	X	X
Internal Thermal Overload	X	X	X	X	X	X	X
Long Line capability	X	X	X	X	X	X	X
Low Ambient capability with Kit	X	X	X	X	X	X	X
Dense Grille	X	X	X	X	X	X	X

* With approved combinations

X = Standard

PHYSICAL DATA

UNIT SIZE–VOLTAGE, SERIES	**18–31**	**24–30**	**30–30**	**36–30**	**42–30**	**48–31**	**49–30**	**60–30**	**61–30**
Operating Weight lb (kg)	125 (56.7)	147 (66.5)	153 (69.3)	165 (74.8)	213 (96.4)	264 (119.7)	231 (104.8)	272 (123.4)	272 (123.4)
Shipping Weight lb (kg)	154 (69.9)	183 (82.8)	188 (85.2)	204 (92.5)	254 (115.2)	317 (143.8)	269 (222.0)	310 (140.6)	310 (140.6)
Compressor Type	Scroll								
REFRIGERANT	Puron® (R–410A)								
Control	TXV (Puron® Hard Shutoff)								
Charge lb (kg)	4.60 (2.09)	6.00 (2.72)	6.81 (3.09)	7.00 (3.18)	8.62 (3.91)	13.0 (5.90)	9.00 (4.08)	14.50 (6.58)	14.50 (6.58)
COND FAN	Propeller Type, Direct Drive								
Air Discharge	Vertical								Vertical
Air Qty (CFM)	1881	2614	2614	3223	3810	4046	4046	4046	4046
Motor HP	1/12	1/10	1/10	1/12	1/5	1/4	1/4	1/4	1/4
Motor RPM	1100	1100	1100	800	800	800	800	800	800
COND COIL									
Face Area (Sq ft)	11.50	15.10	17.20	17.60	25.15	25.15	25.15	30.15	30.15
Fins per In.	25	25	25	25	25	20	20	20	20
Rows	1	1	1	1	1	2	1	2	2
Circuits	3	4	4	4	6	7	7	8	8
VALVE CONNECT. (In. ID)									
Vapor	3/4	3/4	3/4	7/8	7/8	7/8	7/8	7/8	7/8
Liquid	3/8	3/8	3/8	3/8	3/8	3/8	3/8	3/8	3/8
REFRIGERANT TUBES (In. OD)									
Rated Vapor*	3/4			7/8				1–1/8	
Max Liquid Line †	3/8								

* Units are rated with 25 ft (7.6 m) of lineset length. See Vapor Line Sizing and Cooling Capacity Loss table when using other sizes and lengths of lineset.
Note: See unit Installation Instruction for proper installation.

† See *Liquid Line Sizing For Cooling Only Systems with Puron Refrigerant* tables.

REFRIGERANT PIPING LENGTH LIMITATIONS

Liquid Line Sizing and Maximum Total Equivalent Lengths† for Cooling Only Systems with Puron® Refrigerant:

The maximum allowable length of a residential split system depends on the liquid line diameter and vertical separation between indoor and outdoor units.

See Table below for liquid line sizing and maximum lengths :

Maximum Total Equivalent Length
Outdoor Unit BELOW Indoor Unit

Size	Liquid Line Connection	Liquid Line Diam. w/ TXV	AC with Puron Refrigerant Maximum Total Equivalent Length†: Outdoor unit BELOW Indoor Vertical Separation ft (m)								
			0–5 (0–1.5)	6–10 (1.8–3.0)	11–20 (3.4–6.1)	21–30 (6.4–9.1)	31–40 (9.4–12.2)	41–50 (12.5–15.2)	51–60 (15.5–18.3)	61–70 (18.6–21.3)	71–80 (21.6–24.4)
18000 AC with Puron	3/8	1/4	150	150	125	100	100	75	– –	– –	– –
		5/16	250*	250*	250*	250*	250*	250*	250*	225*	150
		3/8	250*	250*	250*	250*	250*	250*	250*	250*	250*
24000 AC with Puron	3/8	1/4	75	75	75	50	50	– –	– –	– –	– –
		5/16	250*	250*	250*	250*	250*	225*	175	125	100
		3/8	250*	250*	250*	250*	250*	250*	250*	250*	250*
30000 AC with Puron	3/8	1/4	30	– –	– –	– –	– –	– –	– –	– –	– –
		5/16	175	225*	200	175	125	100	75	– –	– –
		3/8	250*	250*	250*	250*	250*	250*	250*	250*	250*
36000 AC with Puron	3/8	5/16	175	150	150	100	100	100	75	– –	– –
		3//8	250*	250*	250*	250*	250*	250*	250*	250*	250*
42000 AC with Puron	3/8	5/16	125	100	100	75	75	50	– –	– –	– –
		3/8	250*	250*	250*	250*	250*	250*	250*	250*	150
48000 AC with Puron	3/8	3/8	250*	250*	250*	250*	250*	250*	230	160	– –
49000 AC with Puron	3/8	3/8	250*	250*	250*	250*	250*	250*	230	160	– –
60000 AC with Puron	3/8	3/8	250*	250*	250*	225*	190	150	110	– –	– –
61000 AC with Puron	3/8	3/8	250*	250*	250*	225*	190	150	110	– –	– –

*** Maximum actual length not to exceed 200 ft (61 m)**

† Total equivalent length accounts for losses due to elbows or fitting. See the Long Line Guideline for details.

– – = outside acceptable range

Maximum Total Equivalent Length
Outdoor Unit ABOVE Indoor Unit

Size	Liquid Line Connection	Liquid Line Diam. w/ TXV	AC with Puron Refrigerant Maximum Total Equivalent Length†: Outdoor unit ABOVE Indoor Vertical Separation ft (m)							
			25 (7.6)	26–50 (7.9–15.2)	51–75 (15.5–22.9)	76–100 (23.2–30.5)	101–125 (30.8–38.1)	126–150 (38.4–45.7)	151–175 (46.0–53.3)	176–200 (53.6–61.0)
18000 AC with Puron	3/8	1/4	175	250*	250*	250*	250*	250*	250*	250*
		5/16	250*	250*	250*	250*	250*	250*	250*	250*
		3/8	250*	250*	250*	250*	250*	250*	250*	250*
24000 AC with Puron	3/8	1/4	100	125	175	200	225*	250*	250*	250*
		5/16	250*	250*	250*	250*	250*	250*	250*	250*
		3/8	250*	250*	250*	250*	250*	250*	250*	250*
30000 AC with Puron	3/8	1/4	30	– –	– –	– –	– –	– –	– –	– –
		5/16	250*	250*	250*	250*	250*	250*	250*	250*
		3/8	250*	250*	250*	250*	250*	250*	250*	250*
36000 AC with Puron	3/8	5/16	225*	250*	250*	250*	250*	250*	250*	250*
		3/8	250*	250*	250*	250*	250*	250*	250*	250*
42000 AC with Puron	3/8	5/16	175	200	250*	250*	250*	250*	250*	250*
		3/8	250*	250*	250*	250*	250*	250*	250*	250*
48000 AC with Puron	3/8	3/8	250*	250*	250*	250*	250*	250*	250*	250*
49000 AC with Puron	3/8	3/8	250*	250*	250*	250*	250*	250*	250*	250*
60000 AC with Puron	3/8	3/8	250*	250*	250*	250*	250*	250*	250*	250*
61000 AC with Puron	3/8	3/8	250*	250*	250*	250*	250*	250*	250*	250*

*** Maximum actual length not to exceed 200 ft (61 m)**

† Total equivalent length accounts for losses due to elbows or fitting. See the Long Line Guideline for details.

– – = outside acceptable range

REFRIGERANT CHARGE ADJUSTMENTS

Liquid Line Size	Puron Charge oz/ft
3/8	0.60 (Factory charge for lineset = 9 oz)
5/16	0.40
1/4	0.27

Units are factory charged for 15 ft (4.6 m) of 3/8" liquid line. The factory charge for 3/8" lineset 9 oz. When using other length or diameter liquid lines, charge adjustments are required per the chart above.

Charging Formula:

[(Lineset oz/ft x total length) – (factory charge for lineset)] = charge adjustment

Example 1: System has 15 ft of line set using existing 1/4" liquid line. What charge adjustment is required?

Formula: (.27 oz/ft x 15ft) – (9 oz) = (-4.95) oz.

Net result is to remove 4.95 oz of refrigerant from the system

Example 2: System has 45 ft of existing 5/16" liquid line. What is the charge adjustment?

Formula: (.40 oz/ft. x 45ft) – (9 oz.) = 9 oz.

Net result is to add 9 oz of refrigerant to the system

LONG LINE APPLICATIONS

An application is considered Long Line, when the refrigerant level in the system requires the use of accessories to maintain acceptable refrigerant management for systems reliability. See Accessory Usage Guideline table for required accessories. Defining a system as long line depends on the liquid line diameter, actual length of the tubing, and vertical separation between the indoor and outdoor units.

For Air Conditioner systems, the chart below shows when an application is considered Long Line.

AC WITH PURON® REFRIGERANT LONG LINE DESCRIPTION ft (m)
Beyond these lengths, long line accessories are required

Liquid Line Size	Units On Same Level	Outdoor Below Indoor	Outdoor Above Indoor
1/4	No accessories needed within allowed lengths	No accessories needed within allowed lengths	175 (53.3)
5/16	120 (36.6)	50 (15.2)	120 (36.6)
3/8	80 (24.4)	35 (10.7)	80 (24.4)

Note: See Long Line Guideline for details

VAPOR LINE SIZING AND COOLING CAPACITY LOSS

Acceptable vapor line diameters provide adequate oil return to the compressor while avoiding excessive capacity loss. The suction line diameters shown in the chart below are acceptable for AC systems with Puron refrigerant:

Unit Nominal Size (Btuh)	Maximum Liquid Line Diameters (In. OD)	Vapor Line Diameters (In. OD)	Cooling Capacity Loss (%) Total Equivalent Line Length ft. (m)								
			26–50 (7.9–15.2)	51–80 (15.5–24.4)	81–100 (24.7–30.5)	101–125 (30.8–38.1)	126–150 (38.4–45.7)	151–175 (46.0–53.3)	176–200 (53.6–61.0)	201–225 (61.3–68.6)	226–250 (68.9–76.2)
18000 1 Stage AC with Puron	3/8	1/2	1	2	3	5	6	7	8	9	11
		5/8	0	1	1	1	2	2	2	3	3
		3/4	0	0	0	0	1	1	1	1	1
24000 1 Stage AC with Puron	3/8	5/8	0	1	2	2	3	3	4	5	5
		3/4	0	0	1	1	1	1	1	2	2
		7/8	0	0	0	0	0	1	1	1	1
30000 1 Stage AC with Puron	3/8	5/8	1	2	3	3	4	5	6	7	8
		3/4	0	0	1	1	1	2	2	2	3
		7/8	0	0	0	0	1	1	1	1	1
36000 1 Stage AC with Puron	3/8	5/8	1	2	4	5	6	8	9	10	12
		3/4	0	1	1	2	2	3	3	4	4
		7/8	0	0	0	1	1	1	1	2	2
42000 1 Stage AC with Puron	3/8	3/4	0	1	2	2	3	4	4	5	6
		7/8	0	0	1	1	1	2	2	2	3
		1 1/8	0	0	0	0	0	0	0	0	0
48000, 49000 1 Stage AC with Puron	3/8	3/4	0	1	2	3	4	5	5	6	7
		7/8	0	0	1	1	2	2	2	3	3
		1 1/8	0	0	0	0	0	0	0	1	1
60000, 61000 1 Stage AC with Puron	3/8	3/4	1	2	4	5	6	7	9	10	11
		7/8	0	1	2	2	3	4	4	5	5
		1 1/8	0	0	0	1	1	1	1	1	1

Applications in this area may be long line and may have height restrictions. See the *Residential Piping and Long Line Guideline*.

ACCESSORY THERMOSTATS

PART NUMBER	PROGRAM	GAS	ELECTRIC	HEAT PUMP	HEAT	COOL
Comfort						
TC–PAC01	5–2 Day	√	√		1	1
TC–NAC01	NP	√	√		1	1
TCSNAC01	NP	√	√		1	1

THERMOSTAT ACCESSORIES		
PART NUMBER	**DESCRIPTION**	**THERMOSTATS USED WITH**
TSTATXXCNV10‡	Thermostat Conversion Kit (4 to 5 wire) – 10 pack	All Carrier® branded thermostats
TX–LBP01	Large Decorative Backplate	TP–Pxx, TP–Nxx, TC–Pxx
TX–MBP01	Medium Decorative Backplate	TC–Nxx, TB–Pxx

ACCESSORIES

KIT NUMBER	DESCRIPTION	Unit Sizes – Series								
		18–31	24–30	30–30	36–30	42–30	48–31	49–30	60–30	61–30
KAAFT0101AAA	FREEZE THERMOSTAT	X	X	X	X	X	X	X	X	X
KAATD0101TDR	TIME DELAY RELAY	X	X	X	X	X	X	X	X	X
KSALA0301410	LOW AMBIENT PSW	X	X	X	X	X	X	X	X	X
KSALA0601AAA†	MOTORMASTER 230V	X	X	X	X	X	X	X	X	X
HC32GE234	MOTOR FAN BALL BEARING	X								
HC34GE240	MOTOR FAN BALL BEARING		X	X						
HC32GE229	MOTOR FAN BALL BEARING				X					
HC38GE228	MOTOR FAN BALL BEARING					X				
HC40GE228	MOTOR FAN BALL BEARING						X	X	X	X
KSAHS1701AAA	HARD START (CAP / RELAY)	X	X	X	X	X	X	X	X	X
KSACY0101AAA	CYCLE PROTECTOR	X	X	X	X	X	X	X	X	X
KSASF0101AAA	SUPPORT FEET	X	X	X	X	X	X	X	X	X
KAACS0201PTC	START ASSIST PTC	X	X	X	X	X	X	X	X	X
KAALS0201LLS	LIQUID LINE SOLENOID	X	X	X	X	X	X	X	X	X
KAAWS0101AAA	WINTER START	X	X	X	X	X	X	X	X	X
KAACH1701AAA	CRANKCASE HTR	X	X	X	X					
KAACH1601AAA	CRANKCASE HTR					X	S	S	S	S
KSATX0201PUR	TXV PURON HSO	X	X	X						
KSATX0301PUR	TXV PURON HSO				X					
KSATX0401PUR	TXV PURON HSO					X		X		
KSATX0501PUR	TXV PURON HSO						X		X	X
KSASH0601COP	SOUND HOOD	X	X	X	X			X		
KSASH2101COP	SOUND HOOD					X	X		X	X
KAALP0401PUR	LOW PRESSURE SWITCH	X	X	X	X	X	X	X	X	X
KAAHI0501PUR	HIGH PRESSURE SWITCH	X	X	X	X	X	X	X	X	X

† Required accessories include ball bearing fan motor, compressor start assist (CAP / Relay), crankcase heater, evaporator freeze stat, hard shut–off TXV.
X = Accessory / S – Standard

ACCESSORY USAGE GUIDELINE

ACCESSORY	REQUIRED FOR LOW–AMBIENT COOLING APPLICATIONS (Below 55°F/12.8°C)	REQUIRED FOR LONG LINE APPLICATIONS* (Over 80 ft./24.38 m)	REQUIRED FOR SEA COAST APPLICATIONS (Within 2 miles/3.22 km)
Ball Bearing Fan Motor	Yes†	No	No
Compressor Start Assist Capacitor and Relay	Yes	Yes	No
Crankcase Heater	Yes	Yes	No
Evaporator Freeze Thermostat	Yes	No	No
Hard Shut–Off TXV	Yes	Yes	Yes
Liquid Line Solenoid Valve	No	No	No
Motor Master® Control or Low–ambient Pressure Switch	Yes	No	No
Support Feet	Recommended	No	Recommended
Winter Start Control	Yes	No	No

* For tubing line sets between 80 and 200 ft. (24.38 and 60.96 m) and/or 20 ft. (6.09 m) vertical differential, refer to Residential Split–System Longline Application Guideline.

† Required for Low–Ambient Controller (full modulation feature) MotorMaster® Control.

Accessory Description and Usage (Listed Alphabetically)

1. Ball-Bearing Fan Motor

A fan motor with ball bearings which permits speed reduction while maintaining bearing lubrication.

Usage Guideline:

Required on all units when MotorMaster® is used.

2. Compressor Start Assist - Capacitor and Relay

Start capacitor and relay gives a ”hard” boost to compressor motor at each start up.

Usage Guideline:

Required for reciprocating compressors in the following applications:

Long line

Low ambient cooling

Hard shut off expansion valve on indoor coil

Liquid line solenoid on indoor coil

Required for single-phase scroll compressors in the following applications:

Long line

Low ambient cooling

Suggested for all compressors in areas with a history of low voltage problems.

3. Compressor Start Assist — PTC Type

Solid state electrical device which gives a ”soft” boost to the compressor at each start-up.

Usage Guideline:

Suggested in installations with marginal power supply.

4. Crankcase Heater

An electric resistance heater which mounts to the base of the compressor to keep the lubricant warm during off cycles. Improves compressor lubrication on restart and minimizes the chance of liquid slugging.

Usage Guideline:

Required in low ambient cooling applications.

Required in long line applications.

Suggested in all commercial applications.

5. Cycle Protector

The cycle protector is designed to prevent compressor short cycling. This control provides an approximate 5-minute delay after power to the compressor has been interrupted for any reason, including power outage, protector control trip, thermostat jiggling, or normal cycling.

6. Evaporator Freeze Thermostat

An SPST temperature-actuated switch that stops unit operation when evaporator reaches freeze-up conditions.

Usage Guideline:

Required when low ambient kit has been added.

7. Low-Ambient Pressure Switch Kit

A long life pressure switch which is mounted to outdoor unit service valve. It is designed to cycle the outdoor fan motor in order to maintain head pressure within normal operating limits (approximately 100 psig to 225 psig). The control will maintain working head pressure at low-ambient temperatures down to 0°F (-18°C) when properly installed.

Usage Guideline:

A Low-Ambient Pressure Switch or MotorMaster® Low-Ambient Controller must be used when cooling operation is used at outdoor temperatures below 55°F (12.8°C).

8. MotorMaster® Low-Ambient Controller

A fan-speed control device activated by a temperature sensor, designed to control condenser fan motor speed in response to the saturated, condensing temperature during operation in cooling mode only. For outdoor temperatures down to -20°F (-28.9°C), it maintains condensing temperature at 100°F ±10°F (37.8°C ± 5.5°C).

Usage Guideline:

A MotorMaster® Low Ambient Controller or Low-Ambient Pressure Switch must be used when cooling operation is used at outdoor temperatures below 55°F (12.8°C).

Suggested for all commercial applications.

9. Outdoor Air Temperature Sensor

Designed for use with Carrier Thermostats listed in this publication. This device enables the thermostat to display the outdoor temperature. This device also

is required to enable special thermostat features such as auxiliary heat lock out.

Usage Guideline:

Suggested for all Carrier thermostats listed in this publication.

Accessory Description and Usage (Listed Alphabetically) (Continued)

10. Sound Hood

Wraparound sound reducing cover for the compressor. Reduces the sound level by about 2 dBA.

Usage Guideline:

Suggested when unit is installed closer than 15 ft (4.57 m) to quiet areas, bedrooms, etc.

Suggested when unit is installed between two houses less than 10 ft (3.05 m) apart.

11. Support Feet

Four stick-on plastic feet that raise the unit 4 in. (101.6 mm) above the mounting pad. This allows sand, dirt, and other debris to be flushed from the unit base, minimizing corrosion.

Usage Guideline:

Suggested in the following applications:

Coastal installations.

Windy areas or where debris is normally circulating.

Rooftop installations.

For improved sound ratings.

12. Thermostatic Expansion Valve (TXV)

A modulating flow-control valve which meters refrigerant liquid flow rate into the evaporator in response to the superheat of the refrigerant gas leaving the evaporator.

Kit includes valve, adapter tubes, and external equalizer tube. Hard shut off types are available.

NOTE: When using a hard shut off TXV with single phase reciprocating compressors, a Compressor Start Assist Capacitor and Relay is required.

Usage Guideline:

Required to achieve AHRI ratings in certain equipment combinations. Refer to combination ratings.

Hard shut off TXV or LLS required in air conditioner long line applications.

Required for use on all zoning systems.

13. Time-Delay Relay

An SPST delay relay which briefly continues operation of indoor blower motor to provide additional cooling after the compressor cycles off.

NOTE: Most indoor unit controls include this feature. For those that do not, use the guideline below.

Usage Guideline:

For improved efficiency ratings for certain combinations of indoor and outdoor units. Refer to AHRI Unitary Directory.

14. Winter Start Control

This control is designed to alleviate nuisance opening of the low-pressure switch by bypassing it for the first 3 minutes of operation.

ELECTRICAL DATA

UNIT SIZE	V/PH	OPER VOLTS*		COMPR		FAN	MCA	MIN WIRE SIZE† 60° C	MIN WIRE SIZE† 75° C	MAX LENGTH ft. (m)‡ 60° C	MAX LENGTH ft. (m)‡ 75° C	MAX FUSE** or CKT BRK AMPS
		MAX	MIN	LRA	RLA	FLA						
18–31	208/230/1–60	253	197	48.0	9.0	0.50	11.8	14	14	67 (20.4)	64 (19.5)	20
24–30				58.3	13.5	0.75	17.7	14	14	46 (14.0)	43 (13..1)	25
30–30				64.0	12.8	0.75	16.8	14	14	44 (13.4)	41 (12.5)	25
36–30				77.0	14.1	0.50	18.1	12	12	57 (17.4)	54 (16.5)	30
42–30				112.0	17.9	1.20	23.6	10	10	85 (25.9)	81 (24.7)	40
48–31				109.0	19.9	1.20	26.1	10	10	70 (21.3)	67 (20.4)	40
49–30				117.0	21.8	1.20	26.1	10	10	70 (21.3)	67 (20.4)	40
60–30				135.0	21.4	1.20	28.0	8	10	91 (27.7)	56 (17.1)	40
61–30				134.0	25.0	1.20	32.5	8	10	94 (28.7)	58 (17.7)	50

* Permissible limits of the voltage range at which the unit will operate satisfactorily

† If wire is applied at ambient greater than 30°C, consult table 310–16 of the NEC (NFPA 70). The ampacity of non–metallic–sheathed cable (NM), trade name ROMEX, shall be that of 60°C conditions, per the NEC (NFPA 70) Article 334–80. If other than uncoated (no–plated), 60 or 75°C insulation, copper wire (solid wire for 10 AWG or smaller, stranded wire for larger than 10 AWG) is used, consult applicable tables of the NEC (NFPA 70).

‡ Length shown is as measured one way along wire path between unit and service panel for voltage drop not to exceed 2%.

** Time–Delay fuse.

FLA – Full Load Amps

LRA – Locked Rotor Amps

MCA – Minimum Circuit Amps

RLA – Rated Load Amps

NOTE: Control circuit is 24–V on all units and requires external power source. Copper wire must be used from service disconnect to unit. All motors/compressors contain internal overload protection.

Complies with 2007 requirements of ASHRAE Standards 90.1

24ABC6

A–WEIGHTED SOUND POWER LEVEL (dBA)

Unit Size – Voltage, Series	Standard Rating (dBA)	TYPICAL OCTAVE BAND SPECTRUM (dBA without tone adjustment)						
		125	250	500	1000	2000	4000	8000
018–31	76	52.5	59.0	65.5	70.5	64.5	59.0	54.5
024–30	76	57.5	64.0	69.0	71.0	69.0	64.5	60.0
030–30	76	55.0	63.5	68.0	69.5	67.0	63.5	58.5
036–30	76	50.5	59.5	64.5	70.5	62.0	59.5	54.5
042–30	78	52.5	62.0	66.0	73.5	68.0	62.0	55.5
048–31	78	57.5	61.5	66.0	70.5	65.5	59.5	53.5
049–30	78	51.5	62.0	67.5	73.5	69.0	64.5	62.0
060–30	78	55.0	62.5	67.5	70.5	65.0	61.0	53.5
061–30	78	56.5	63.0	65.5	69.0	67.0	61.5	56.0

NOTE: Tested in accordance with AHRI Standard 270–08 (not listed in AHRI).

A–WEIGHTED SOUND POWER LEVEL (dBA) WITH SOUND SHIELD

Unit Size – Voltage, Series	Standard Rating (dBA)	TYPICAL OCTAVE BAND SPECTRUM (dBA without tone adjustment)						
		125	250	500	1000	2000	4000	8000
018–31	74	55.5	59.0	65.0	68.5	63.5	58.0	52.0
024–30	75	58.0	64.0	69.0	70.5	68.5	64.5	59.5
030–30	75	55.5	63.0	68.0	69.0	67.0	63.0	58.5
036–30	74	51.5	58.5	62.0	65.0	61.0	58.0	52.0
042–30	76	53.0	62.0	65.5	72.0	65.0	61.0	54.0
048–31	76	58.5	61.5	66.0	69.0	64.0	58.5	51.0
049–30	76	53.0	61.5	67.5	72.0	68.0	61.5	59.0
060–30	75	56.5	62.5	66.5	68.0	63.0	59.5	51.5
061–30	75	57.0	63.0	65.5	67.0	65.5	59.0	52.5

NOTE: Tested in accordance with AHRI Standard 270–08 (not listed in AHRI).

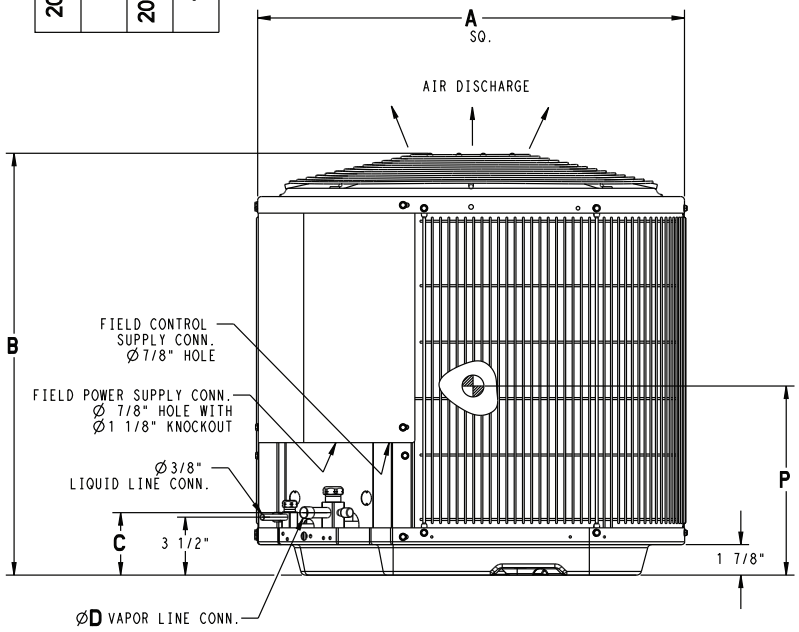
CHARGING SUBCOOLING (TXV–TYPE EXPANSION DEVICE)

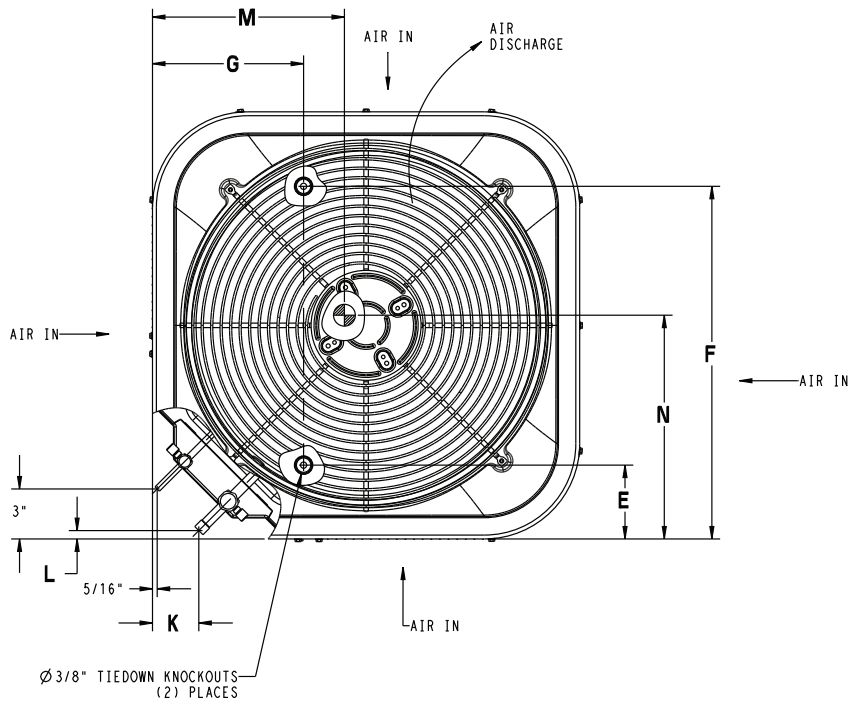
UNIT SIZE–VOLTAGE, SERIES	REQUIRED SUBCOOLING °F (°C)
18–31	10 (5.6)
24–30	10 (5.6)
30–30	10 (5.6)
36–30	10 (5.6)
42–30	9 (5.0)
48–31	10 (5.6)
49–30	8 (4.4)
60–30	9 (5.0)
61–30	9 (5.0)

DIMENSIONS – ENGLISH

UNIT	SERIES	ELECTRICAL CHARACTERISTICS				A	B	C	D	E	F	G	K	L	M	N	P	OPERATING WEIGHT (lbs)	SHIPPING WEIGHT (lbs)	SHIPPING DIMENSIONS (L x W x H)
24ABC618	0	X	O	O	O	23 1/8"	28 11/16"	3 3/4"	3/4"	4 7/16"	18 1/16"	7 13/16"	2 13/16"	1/2"	13"	12"	13"	118	141	24 1/4" X 27 3/8" X 32 9/16"
24ABC624	0	X	O	O	O	31 3/16"	28 5/16"	3 3/4"	3/4"	6 9/16"	24 11/16"	9 1/8"	2 13/16"	1/2"	16"	16"	13"	147	183	32 3/8" X 35 1/2" X 32 9/16"
24ABC630	0	X	O	O	O	31 3/16"	32 5/16"	3 3/4"	3/4"	6 9/16"	24 11/16"	9 1/8"	2 13/16"	1/2"	15 1/2"	16"	14 1/4"	153	188	32 3/8" X 35 1/2" X 35 15/16"
24ABC636	0	X	O	O	O	35"	28 5/16"	3 7/8"	7/8"	6 9/16"	28 7/16"	9 1/8"	2 15/16"	5/8"	16"	16"	13"	165	204	36 1/8" X 39 5/16" X 32 9/16"
24ABC642	0	X	O	O	O	35"	39 1/8"	3 7/8"	7/8"	6 9/16"	28 7/16"	9 1/8"	2 15/16"	5/8"	16 1/2"	17 1/2"	17 1/2"	213	254	36 1/8" X 39 5/16" X 42 3/4"
24ABC648	0	X	O	O	O	35"	32 5/16"	3 7/8"	7/8"	6 9/16"	28 7/16"	9 1/8"	2 15/16"	5/8"	17"	17 1/2"	14 1/4"	231	274	36 1/8" X 39 5/16" X 35 15/16"
24ABC660	0	X	O	O	O	35"	45 15/16"	3 7/8"	7/8"	6 9/16"	28 7/16"	9 1/8"	2 15/16"	5/8"	16 1/2"	17"	16 1/4"	272	310	36 1/8" X 39 5/16" X 49 9/16"
24ABC618	1	X	O	O	O	25 3/4"	28 11/16"	3 3/4"	3/4"	4 7/16"	21 1/4"	7 13/16"	2 13/16"	1/2"	13 5/8"	13 1/2"	12 3/4"	125	154	26 7/8" X 30 1/16" X 32 9/16"
24ABC661	0	X	O	O	O	35"	45 15/16"	3 7/8"	7/8"	6 9/16"	28 7/16"	9 1/8"	2 15/16"	5/8"	16 1/2"	17"	16 1/4"	272	310	36 1/8" X 39 5/16" X 49 9/16"
24ABC648	1	X	O	O	O	35"	39 1/8"	3 7/8"	7/8"	6 9/16"	28 7/16"	9 1/8"	2 15/16"	5/8"	17 1/2"	16 1/2"	15"	264	317	36 1/8" X 39 5/16" X 42 3/4"
24ABC649	0	X	O	O	O	35"	39 1/8"	3 7/8"	7/8"	6 9/16"	28 7/16"	9 1/8"	2 15/16"	5/8"	17 1/2"	16 1/2"	15"	231	269	36 1/8" X 39 5/16" X 42 3/4"
		208-230-1-60	230-1-60	208/230-3-60	460-3-60															

X = YES
O = NO



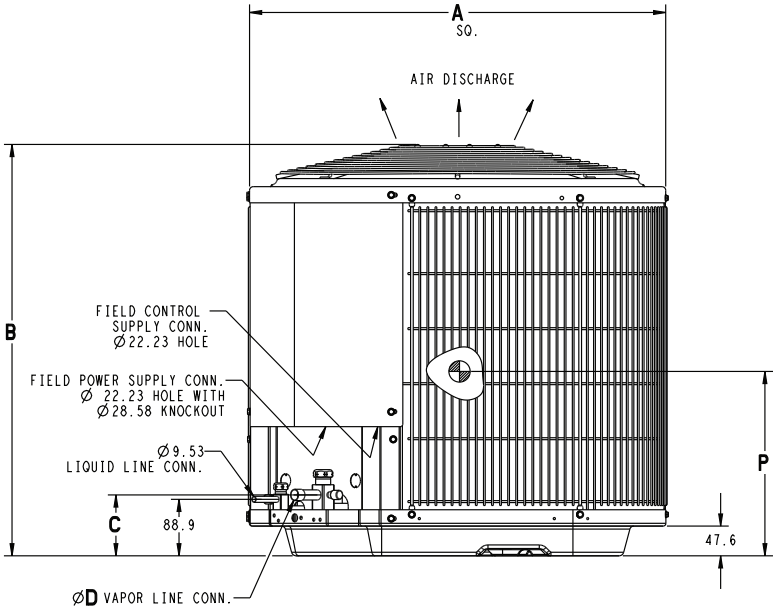


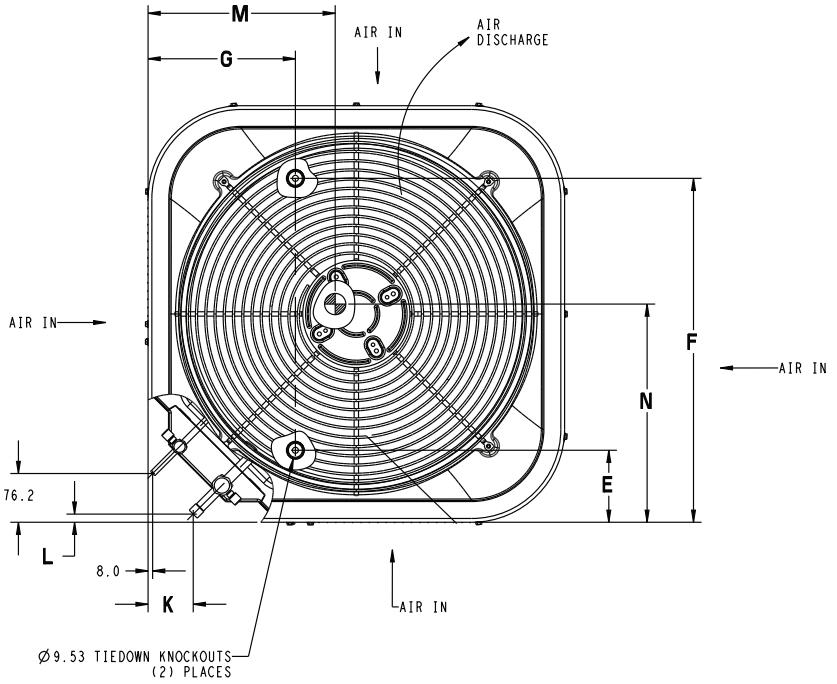
UNIT SIZE	MINIMUM MOUNTING PAD DIMENSIONS
18	26" X 26"
24,30	31 1/2" X 31 1/2"
36, 48, 49, 60, 61	35" X 35"

DIMENSIONS – SI

UNIT	SERIES	ELECTRICAL CHARACTERISTICS				A	B	C	D	E	F	G	K	L	M	N	P	OPERATING WEIGHT (Kgs)	SHIPPING WEIGHT (Kgs)	SHIPPING DIMENSIONS (L x W x H)
24ABC618	0	X	O	O	O	587.3	728.7	95.2	19.0	112.7	458.8	198.4	71.4	12.7	330.2	304.8	330.2	53.4	64.0	616.0 X 695.3 X 827.1
24ABC624	0	X	O	O	O	792.2	719.2	95.2	19.0	166.7	627.1	231.8	71.4	12.7	406.4	406.4	330.2	66.5	82.8	822.3 X 901.7 X 827.1
24ABC630	0	X	O	O	O	792.2	820.8	95.2	19.0	166.7	627.1	231.8	71.4	12.7	393.7	406.4	362.0	69.3	85.2	822.3 X 901.7 X 912.8
24ABC636	0	X	O	O	O	889.0	719.2	98.6	22.2	166.7	722.3	231.8	74.6	15.9	406.4	406.4	330.2	74.8	92.5	917.6 X 998.6 X 827.1
24ABC642	0	X	O	O	O	889.0	993.8	98.6	22.2	166.7	722.3	231.8	74.6	15.9	419.1	444.5	444.5	96.4	115.2	917.6 X 998.6 X 1085.8
24ABC648	0	X	O	O	O	889.0	820.8	98.6	22.2	166.7	722.3	231.8	74.6	15.9	431.8	444.5	362.0	104.8	124.3	917.6 X 998.6 X 912.8
24ABC660	0	X	O	O	O	889.0	1166.8	98.6	22.2	166.7	722.3	231.8	74.6	15.9	419.1	431.8	412.8	123.4	140.6	917.6 X 998.6 X 1258.9
24ABC618	1	X	O	O	O	654.0	728.7	95.2	19.0	112.7	539.8	198.4	71.4	12.7	346.1	342.9	323.9	56.7	69.9	682.6 X 763.6 X 827.1
24ABC661	0	X	O	O	O	889.0	1166.8	98.6	22.2	166.7	722.3	231.8	74.6	15.9	419.1	431.8	412.8	123.4	140.6	917.6 X 998.6 X 1258.9
24ABC648	1	X	O	O	O	889.0	993.8	98.6	22.2	166.7	722.3	231.8	74.6	15.9	444.5	419.1	381.0	119.7	143.8	917.6 X 998.6 X 1085.8
24ABC649	0	X	O	O	O	889.0	993.8	98.6	22.2	166.7	722.3	231.8	74.6	15.9	444.5	419.1	381.0	104.8	122.0	917.6 X 998.6 X 1085.8
		208-230-1-60	230-1-60	208/230-3-60	460-3-60															

X = YES
O = NO

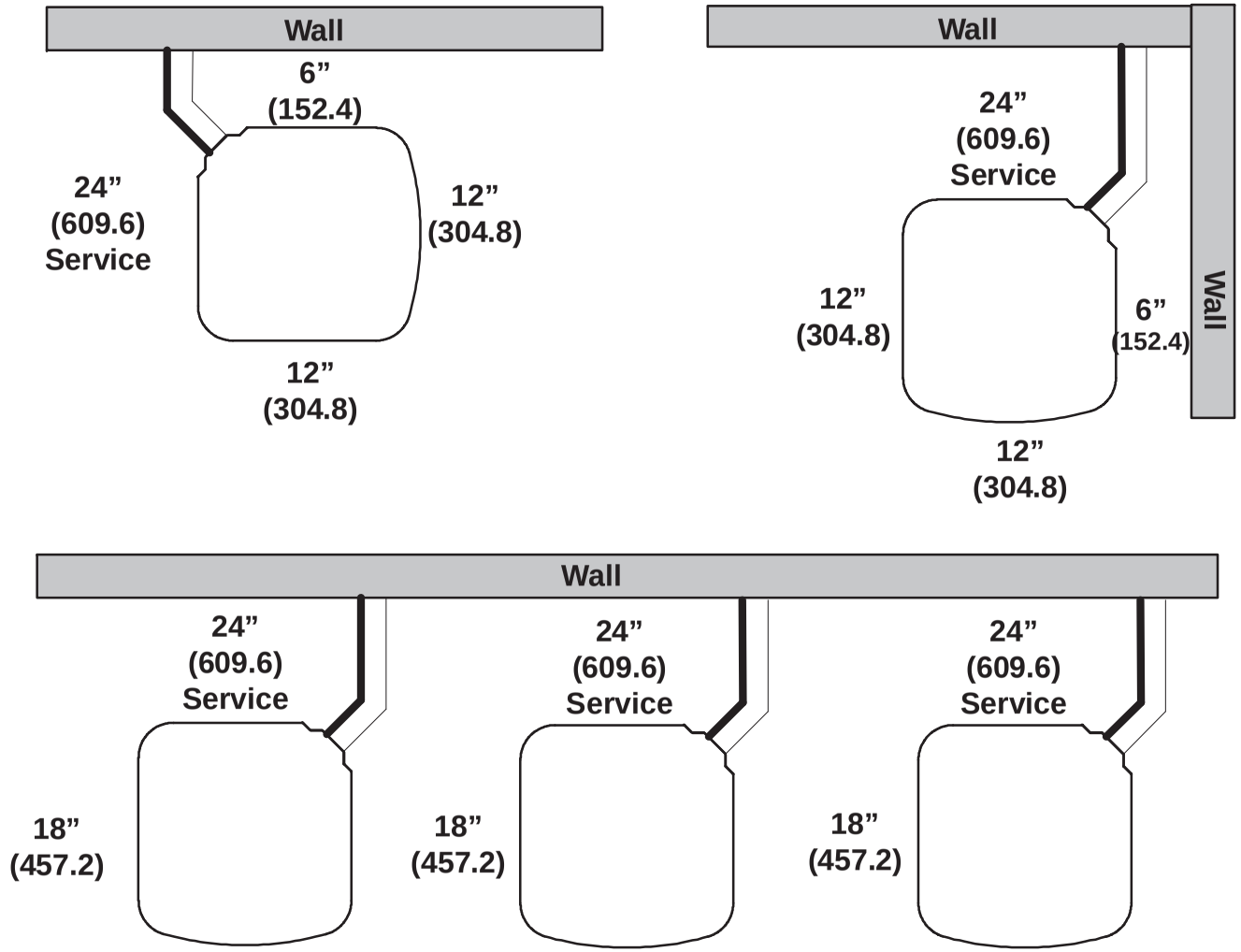




UNIT SIZE	MINIMUM MOUNTING PAD DIMENSIONS
18	660.4 X 660.4
24,30	800.1 X 800.1
36, 48, 49, 60, 61	889.0 X 889.0

CLEARANCES

Clearances (various examples)



Note: Numbers in ( ) = mm

IMPORTANT: When installing multiple units in an alcove, roof well, or partially enclosed area, ensure there is adequate ventilation to prevent re-circulation of discharge air.

APPENDIX 10.2:

CADNAA OPERATION NOISE MODEL INPUTS

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15662 - Ontario Esperanza PA-11

CadnaA Noise Prediction Model: 15662-05_Operation.cna
Date: 24.04.25
Analyst: B. Maddux

Calculation Configuration

Configuration	
Parameter	**Value**
General	
Max. Error (dB)	**0.00**
Max. Search Radius (ft)	**6561.70**
Min. Dist Src to Rcvr	**0.00**
Partition	
Raster Factor	**0.50**
Max. Length of Section (ft)	**3280.80**
Min. Length of Section (ft)	**3.30**
Min. Length of Section (%)	**0.00**
Proj. Line Sources	**On**
Proj. Area Sources	**On**
Ref. Time	
Daytime Penalty (dB)	**0.00**
Recr. Time Penalty (dB)	**5.00**
Night-time Penalty (dB)	**10.00**
DTM	
Standard Height (m)	**0.00**
Model of Terrain	**Triangulation**
Reflection	
max. Order of Reflection	**2**
Search Radius Src	**328.08**
Search Radius Rcvr	**328.08**
Max. Distance Source - Rcvr	**3280.84 3280.84**
Min. Distance Rvcr - Reflector	**3.28 3.28**
Min. Distance Source - Reflector	**0.33**
Industrial (ISO 9613 (1996))	
Lateral Diffraction	**some Obj**
Obst. within Area Src do not shield	**On**
Screening	**Incl. Ground Att. over Barrier**
	Dz with limit (20/25)
Barrier Coefficients C1,2,3	**3.0 20.0 0.0**
Temperature (°F)	**50**
rel. Humidity (%)	**70**
Ground Absorption G	**0.50**
Wind Speed for Dir. (mph)	**6.7**
Roads (TNM)	
Railways (FTA/FRA)	
Aircraft (???)	
Strictly acc. to AzB	

Receiver Noise Levels

Name	M.	ID	Level Lr			Limit. Value			Land Use			Height		Coordinates			
			Day	Night	CNEL	Day	Night	CNEL	Type	Auto	Noise Type			X	Y	Z	
			(dBA)	(dBA)	(dBA)	(dBA)	(dBA)	(dBA)				(ft)		(ft)	(ft)	(ft)	
R1		R1	46.4	44.1	50.7	0.0	0.0	0.0		x	Total	5.00	r	6164064.26	2307541.04	5.00	
R2		R2	38.3	35.9	42.6	0.0	0.0	0.0		x	Total	5.00	r	6163933.45	2307702.79	5.00	
R3		R3	40.3	37.8	44.5	0.0	0.0	0.0		x	Total	5.00	r	6163414.11	2307485.36	5.00	
R4		R4	43.8	41.4	48.0	0.0	0.0	0.0		x	Total	5.00	r	6163268.40	2307065.85	5.00	
R5		R5	39.3	36.9	43.5	0.0	0.0	0.0		x	Total	5.00	r	6163701.04	2306426.26	5.00	
R6		R6	38.3	35.8	42.5	0.0	0.0	0.0		x	Total	5.00	r	6164053.38	2306904.23	5.00	

Point Source(s)

Name	M.	ID	Result. PWL			Lw / Li			Operating Time			Height		Coordinates		
			Day	Evening	Night	Type	Value	norm.	Day	Special	Night			X	Y	Z
			(dBA)	(dBA)	(dBA)			dB(A)	(min)	(min)	(min)	(ft)		(ft)	(ft)	(ft)
AC001		AC001	76.0	76.0	76.0	Lw	76		675.00	0.00	270.00	3.00	g	6163563.62	2307448.24	3.00
AC002		AC002	76.0	76.0	76.0	Lw	76		675.00	0.00	270.00	3.00	g	6163577.17	2307419.34	3.00
AC003		AC003	76.0	76.0	76.0	Lw	76		675.00	0.00	270.00	3.00	g	6163584.98	2307404.23	3.00
AC004		AC004	76.0	76.0	76.0	Lw	76		675.00	0.00	270.00	3.00	g	6163594.09	2307384.44	3.00
AC005		AC005	76.0	76.0	76.0	Lw	76		675.00	0.00	270.00	3.00	g	6163603.21	2307364.91	3.00
AC006		AC006	76.0	76.0	76.0	Lw	76		675.00	0.00	270.00	3.00	g	6163613.10	2307344.34	3.00
AC007		AC007	76.0	76.0	76.0	Lw	76		675.00	0.00	270.00	3.00	g	6163660.76	2307490.95	3.00
AC008		AC008	76.0	76.0	76.0	Lw	76		675.00	0.00	270.00	3.00	g	6163710.24	2307387.05	3.00
AC009		AC009	76.0	76.0	76.0	Lw	76		675.00	0.00	270.00	3.00	g	6163674.30	2307462.05	3.00
AC010		AC010	76.0	76.0	76.0	Lw	76		675.00	0.00	270.00	3.00	g	6163682.11	2307446.94	3.00
AC011		AC011	76.0	76.0	76.0	Lw	76		675.00	0.00	270.00	3.00	g	6163700.34	2307407.62	3.00
AC012		AC012	76.0	76.0	76.0	Lw	76		675.00	0.00	270.00	3.00	g	6163691.23	2307427.15	3.00
AC013		AC013	76.0	76.0	76.0	Lw	76		675.00	0.00	270.00	3.00	g	6163700.34	2307467.77	3.00
AC014		AC014	76.0	76.0	76.0	Lw	76		675.00	0.00	270.00	3.00	g	6163717.27	2307432.88	3.00

Name	M.	ID	Result. PWL			Lw / Li			Operating Time			Height		Coordinates		
			Day	Evening	Night	Type	Value	norm.	Day	Special	Night			X	Y	Z
			(dBA)	(dBA)	(dBA)			dB(A)	(min)	(min)	(min)	(ft)		(ft)	(ft)	(ft)
AC015		AC015	76.0	76.0	76.0	Lw	76		675.00	0.00	270.00	3.00	g	6163686.80	2307496.68	3.00
AC016		AC016	76.0	76.0	76.0	Lw	76		675.00	0.00	270.00	3.00	g	6163726.38	2307413.35	3.00
AC017		AC017	76.0	76.0	76.0	Lw	76		675.00	0.00	270.00	3.00	g	6163708.16	2307452.67	3.00
AC018		AC018	76.0	76.0	76.0	Lw	76		675.00	0.00	270.00	3.00	g	6163769.37	2307535.59	3.00
AC019		AC019	76.0	76.0	76.0	Lw	76		675.00	0.00	270.00	3.00	g	6163942.93	2307518.44	3.00
AC020		AC020	76.0	76.0	76.0	Lw	76		675.00	0.00	270.00	3.00	g	6163927.11	2307533.08	3.00
AC021		AC021	76.0	76.0	76.0	Lw	76		675.00	0.00	270.00	3.00	g	6163971.78	2307492.52	3.00
AC022		AC022	76.0	76.0	76.0	Lw	76		675.00	0.00	270.00	3.00	g	6163995.23	2307470.86	3.00
AC023		AC023	76.0	76.0	76.0	Lw	76		675.00	0.00	270.00	3.00	g	6163958.84	2307503.55	3.00
AC024		AC024	76.0	76.0	76.0	Lw	76		675.00	0.00	270.00	3.00	g	6163782.64	2307542.61	3.00
AC025		AC025	76.0	76.0	76.0	Lw	76		675.00	0.00	270.00	3.00	g	6163802.12	2307551.84	3.00
AC026		AC026	76.0	76.0	76.0	Lw	76		675.00	0.00	270.00	3.00	g	6163821.86	2307561.07	3.00
AC027		AC027	76.0	76.0	76.0	Lw	76		675.00	0.00	270.00	3.00	g	6163865.74	2307582.68	3.00
AC028		AC028	76.0	76.0	76.0	Lw	76		675.00	0.00	270.00	3.00	g	6163836.92	2307568.97	3.00
AC029		AC029	76.0	76.0	76.0	Lw	76		675.00	0.00	270.00	3.00	g	6163845.61	2307440.92	3.00
AC030		AC030	76.0	76.0	76.0	Lw	76		675.00	0.00	270.00	3.00	g	6163861.45	2307425.96	3.00
AC031		AC031	76.0	76.0	76.0	Lw	76		675.00	0.00	270.00	3.00	g	6163897.69	2307393.10	3.00
AC032		AC032	76.0	76.0	76.0	Lw	76		675.00	0.00	270.00	3.00	g	6163829.86	2307455.64	3.00
AC033		AC033	76.0	76.0	76.0	Lw	76		675.00	0.00	270.00	3.00	g	6163874.34	2307414.86	3.00
AC034		AC034	76.0	76.0	76.0	Lw	76		675.00	0.00	270.00	3.00	g	6164078.91	2307393.77	3.00
AC035		AC035	76.0	76.0	76.0	Lw	76		675.00	0.00	270.00	3.00	g	6164049.95	2307419.57	3.00
AC036		AC036	76.0	76.0	76.0	Lw	76		675.00	0.00	270.00	3.00	g	6164111.78	2307363.96	3.00
AC037		AC037	76.0	76.0	76.0	Lw	76		675.00	0.00	270.00	3.00	g	6164062.93	2307408.59	3.00
AC038		AC038	76.0	76.0	76.0	Lw	76		675.00	0.00	270.00	3.00	g	6164026.40	2307441.13	3.00
AC039		AC039	76.0	76.0	76.0	Lw	76		675.00	0.00	270.00	3.00	g	6164094.79	2307379.20	3.00
AC040		AC040	76.0	76.0	76.0	Lw	76		675.00	0.00	270.00	3.00	g	6163973.23	2307337.23	3.00
AC041		AC041	76.0	76.0	76.0	Lw	76		675.00	0.00	270.00	3.00	g	6163991.78	2307326.26	3.00
AC042		AC042	76.0	76.0	76.0	Lw	76		675.00	0.00	270.00	3.00	g	6164052.98	2307290.85	3.00
AC043		AC043	76.0	76.0	76.0	Lw	76		675.00	0.00	270.00	3.00	g	6163953.44	2307348.61	3.00
AC044		AC044	76.0	76.0	76.0	Lw	76		675.00	0.00	270.00	3.00	g	6164010.49	2307315.09	3.00
AC045		AC045	76.0	76.0	76.0	Lw	76		675.00	0.00	270.00	3.00	g	6164025.47	2307307.04	3.00
AC046		AC046	76.0	76.0	76.0	Lw	76		675.00	0.00	270.00	3.00	g	6163919.84	2307246.34	3.00
AC047		AC047	76.0	76.0	76.0	Lw	76		675.00	0.00	270.00	3.00	g	6163957.10	2307224.20	3.00
AC048		AC048	76.0	76.0	76.0	Lw	76		675.00	0.00	270.00	3.00	g	6163938.40	2307235.38	3.00
AC049		AC049	76.0	76.0	76.0	Lw	76		675.00	0.00	270.00	3.00	g	6163900.05	2307257.72	3.00
AC050		AC050	76.0	76.0	76.0	Lw	76		675.00	0.00	270.00	3.00	g	6163999.59	2307199.96	3.00
AC051		AC051	76.0	76.0	76.0	Lw	76		675.00	0.00	270.00	3.00	g	6163972.09	2307216.16	3.00
AC052		AC052	76.0	76.0	76.0	Lw	76		675.00	0.00	270.00	3.00	g	6163925.12	2307211.42	3.00
AC053		AC053	76.0	76.0	76.0	Lw	76		675.00	0.00	270.00	3.00	g	6163906.56	2307222.38	3.00
AC054		AC054	76.0	76.0	76.0	Lw	76		675.00	0.00	270.00	3.00	g	6163986.31	2307176.01	3.00
AC055		AC055	76.0	76.0	76.0	Lw	76		675.00	0.00	270.00	3.00	g	6163943.82	2307200.24	3.00
AC056		AC056	76.0	76.0	76.0	Lw	76		675.00	0.00	270.00	3.00	g	6163958.80	2307192.20	3.00
AC057		AC057	76.0	76.0	76.0	Lw	76		675.00	0.00	270.00	3.00	g	6163886.77	2307233.76	3.00
AC058		AC058	76.0	76.0	76.0	Lw	76		675.00	0.00	270.00	3.00	g	6163906.46	2307100.01	3.00
AC059		AC059	76.0	76.0	76.0	Lw	76		675.00	0.00	270.00	3.00	g	6163872.77	2307119.23	3.00
AC060		AC060	76.0	76.0	76.0	Lw	76		675.00	0.00	270.00	3.00	g	6163891.48	2307108.06	3.00
AC061		AC061	76.0	76.0	76.0	Lw	76		675.00	0.00	270.00	3.00	g	6163854.22	2307130.20	3.00
AC062		AC062	76.0	76.0	76.0	Lw	76		675.00	0.00	270.00	3.00	g	6163933.97	2307083.82	3.00
AC063		AC063	76.0	76.0	76.0	Lw	76		675.00	0.00	270.00	3.00	g	6163834.42	2307141.57	3.00
AC064		AC064	76.0	76.0	76.0	Lw	76		675.00	0.00	270.00	3.00	g	6163889.53	2307077.88	3.00
AC065		AC065	76.0	76.0	76.0	Lw	76		675.00	0.00	270.00	3.00	g	6163817.50	2307119.44	3.00
AC066		AC066	76.0	76.0	76.0	Lw	76		675.00	0.00	270.00	3.00	g	6163874.55	2307085.92	3.00
AC067		AC067	76.0	76.0	76.0	Lw	76		675.00	0.00	270.00	3.00	g	6163917.04	2307061.68	3.00
AC068		AC068	76.0	76.0	76.0	Lw	76		675.00	0.00	270.00	3.00	g	6163855.85	2307097.10	3.00
AC069		AC069	76.0	76.0	76.0	Lw	76		675.00	0.00	270.00	3.00	g	6163837.29	2307108.06	3.00
AC070		AC070	76.0	76.0	76.0	Lw	76		675.00	0.00	270.00	3.00	g	6163824.81	2306992.95	3.00
AC071		AC071	76.0	76.0	76.0	Lw	76		675.00	0.00	270.00	3.00	g	6163867.30	2306968.71	3.00
AC072		AC072	76.0	76.0	76.0	Lw	76		675.00	0.00	270.00	3.00	g	6163806.11	2307004.13	3.00
AC073		AC073	76.0	76.0	76.0	Lw	76		675.00	0.00	270.00	3.00	g	6163767.76	2307026.47	3.00
AC074		AC074	76.0	76.0	76.0	Lw	76		675.00	0.00	270.00	3.00	g	6163787.55	2307015.09	3.00
AC075		AC075	76.0	76.0	76.0	Lw	76		675.00	0.00	270.00	3.00	g	6163839.79	2306984.91	3.00
AC076		AC076	76.0	76.0	76.0	Lw	76		675.00	0.00	270.00	3.00	g	6163751.87	2307004.33	3.00
AC077		AC077	76.0	76.0	76.0	Lw	76		675.00	0.00	270.00	3.00	g	6163851.42	2306946.58	3.00
AC078		AC078	76.0	76.0	76.0	Lw	76		675.00	0.00	270.00	3.00	g	6163771.66	2306992.96	3.00
AC079		AC079	76.0	76.0	76.0	Lw	76		675.00	0.00	270.00	3.00	g	6163790.22	2306981.99	3.00
AC080		AC080	76.0	76.0	76.0	Lw	76		675.00	0.00	270.00	3.00	g	6163808.93	2306970.82	3.00
AC081		AC081	76.0	76.0	76.0	Lw	76		675.00	0.00	270.00	3.00	g	6163823.91	2306962.77	3.00
AC082		AC082	76.0	76.0	76.0	Lw	76		675.00	0.00	270.00	3.00	g	6163753.98	2306880.19	3.00
AC083		AC083	76.0	76.0	76.0	Lw	76		675.00	0.00	270.00	3.00	g	6163796.47	2306855.95	3.00
AC084		AC084	76.0	76.0	76.0	Lw	76		675.00	0.00	270.00	3.00	g	6163735.27	2306891.37	3.00
AC085		AC085	76.0	76.0	76.0	Lw	76		675.00	0.00	270.00	3.00	g	6163716.72	2306902.33	3.00
AC086		AC086	76.0	76.0	76.0	Lw	76		675.00	0.00	270.00	3.00	g	6163768.96	2306872.15	3.00
AC087		AC087	76.0	76.0	76.0	Lw	76		675.00	0.00	270.00	3.00	g	6163696.03	2307278.49	3.00
AC088		AC088	76.0	76.0	76.0	Lw	76		675.00	0.00	270.00	3.00	g	6163759.94	2307308.73	3.00
AC089		AC089	76.0	76.0	76.0	Lw	76		675.00	0.00	270.00	3.00	g	6163655.85	2307259.63	3.00
AC090		AC090	76.0	76.0	76.0	Lw	76		675.00	0.00	270.00	3.00	g	6163676.46	2307269.45	3.00
AC091		AC091	76.0	76.0	76.0	Lw	76		675.00	0.00	270.00	3.00	g	6163715.85	2307287.54	3.00

Name	M.	ID	Result. PWL			Lw / Li			Operating Time			Height		Coordinates		
			Day	Evening	Night	Type	Value	norm.	Day	Special	Night			X	Y	Z
			(dBA)	(dBA)	(dBA)			dB(A)	(min)	(min)	(min)	(ft)		(ft)	(ft)	(ft)
AC092		AC092	76.0	76.0	76.0	Lw	76		675.00	0.00	270.00	3.00	g	6163730.98	2307295.30	3.00
AC093		AC093	76.0	76.0	76.0	Lw	76		675.00	0.00	270.00	3.00	g	6163852.22	2307373.65	3.00
AC094		AC094	76.0	76.0	76.0	Lw	76		675.00	0.00	270.00	3.00	g	6163842.06	2307356.20	3.00
AC095		AC095	76.0	76.0	76.0	Lw	76		675.00	0.00	270.00	3.00	g	6163831.91	2307338.23	3.00
AC096		AC096	76.0	76.0	76.0	Lw	76		675.00	0.00	270.00	3.00	g	6163821.49	2307320.53	3.00
AC097		AC097	76.0	76.0	76.0	Lw	76		675.00	0.00	270.00	3.00	g	6163811.33	2307302.30	3.00
AC098		AC098	76.0	76.0	76.0	Lw	76		675.00	0.00	270.00	3.00	g	6163799.61	2307284.07	3.00
AC099		AC099	76.0	76.0	76.0	Lw	76		675.00	0.00	270.00	3.00	g	6163725.66	2307156.72	3.00
AC100		AC100	76.0	76.0	76.0	Lw	76		675.00	0.00	270.00	3.00	g	6163747.53	2307193.18	3.00
AC101		AC101	76.0	76.0	76.0	Lw	76		675.00	0.00	270.00	3.00	g	6163757.95	2307210.89	3.00
AC102		AC102	76.0	76.0	76.0	Lw	76		675.00	0.00	270.00	3.00	g	6163778.26	2307246.31	3.00
AC103		AC103	76.0	76.0	76.0	Lw	76		675.00	0.00	270.00	3.00	g	6163737.37	2307174.95	3.00
AC104		AC104	76.0	76.0	76.0	Lw	76		675.00	0.00	270.00	3.00	g	6163768.10	2307228.86	3.00
AC105		AC105	76.0	76.0	76.0	Lw	76		675.00	0.00	270.00	3.00	g	6163703.78	2307118.96	3.00
AC106		AC106	76.0	76.0	76.0	Lw	76		675.00	0.00	270.00	3.00	g	6163662.89	2307047.61	3.00
AC107		AC107	76.0	76.0	76.0	Lw	76		675.00	0.00	270.00	3.00	g	6163673.05	2307065.84	3.00
AC108		AC108	76.0	76.0	76.0	Lw	76		675.00	0.00	270.00	3.00	g	6163683.47	2307083.55	3.00
AC109		AC109	76.0	76.0	76.0	Lw	76		675.00	0.00	270.00	3.00	g	6163693.62	2307101.52	3.00
AC110		AC110	76.0	76.0	76.0	Lw	76		675.00	0.00	270.00	3.00	g	6163727.86	2306729.15	3.00
AC111		AC111	76.0	76.0	76.0	Lw	76		675.00	0.00	270.00	3.00	g	6163659.25	2306681.20	3.00
AC112		AC112	76.0	76.0	76.0	Lw	76		675.00	0.00	270.00	3.00	g	6163694.31	2306705.26	3.00
AC113		AC113	76.0	76.0	76.0	Lw	76		675.00	0.00	270.00	3.00	g	6163744.35	2306740.79	3.00
AC114		AC114	76.0	76.0	76.0	Lw	76		675.00	0.00	270.00	3.00	g	6163677.49	2306692.91	3.00
AC115		AC115	76.0	76.0	76.0	Lw	76		675.00	0.00	270.00	3.00	g	6163711.15	2306717.03	3.00
AC116		AC116	76.0	76.0	76.0	Lw	76		675.00	0.00	270.00	3.00	g	6163584.78	2306798.64	3.00
AC117		AC117	76.0	76.0	76.0	Lw	76		675.00	0.00	270.00	3.00	g	6163566.54	2306786.93	3.00
AC118		AC118	76.0	76.0	76.0	Lw	76		675.00	0.00	270.00	3.00	g	6163618.44	2306822.76	3.00
AC119		AC119	76.0	76.0	76.0	Lw	76		675.00	0.00	270.00	3.00	g	6163635.15	2306834.88	3.00
AC120		AC120	76.0	76.0	76.0	Lw	76		675.00	0.00	270.00	3.00	g	6163601.60	2306810.99	3.00
AC121		AC121	76.0	76.0	76.0	Lw	76		675.00	0.00	270.00	3.00	g	6163651.64	2306846.52	3.00
AC122		AC122	76.0	76.0	76.0	Lw	76		675.00	0.00	270.00	3.00	g	6163586.17	2306859.96	3.00
AC123		AC123	76.0	76.0	76.0	Lw	76		675.00	0.00	270.00	3.00	g	6163547.62	2306842.03	3.00
AC124		AC124	76.0	76.0	76.0	Lw	76		675.00	0.00	270.00	3.00	g	6163623.20	2306877.98	3.00
AC125		AC125	76.0	76.0	76.0	Lw	76		675.00	0.00	270.00	3.00	g	6163567.54	2306850.56	3.00
AC126		AC126	76.0	76.0	76.0	Lw	76		675.00	0.00	270.00	3.00	g	6163641.39	2306886.73	3.00
AC127		AC127	76.0	76.0	76.0	Lw	76		675.00	0.00	270.00	3.00	g	6163604.72	2306868.79	3.00
AC128		AC128	76.0	76.0	76.0	Lw	76		675.00	0.00	270.00	3.00	g	6163507.12	2306977.12	3.00
AC129		AC129	76.0	76.0	76.0	Lw	76		675.00	0.00	270.00	3.00	g	6163562.79	2307004.54	3.00
AC130		AC130	76.0	76.0	76.0	Lw	76		675.00	0.00	270.00	3.00	g	6163544.31	2306995.35	3.00
AC131		AC131	76.0	76.0	76.0	Lw	76		675.00	0.00	270.00	3.00	g	6163487.20	2306968.59	3.00
AC132		AC132	76.0	76.0	76.0	Lw	76		675.00	0.00	270.00	3.00	g	6163525.75	2306986.52	3.00
AC133		AC133	76.0	76.0	76.0	Lw	76		675.00	0.00	270.00	3.00	g	6163580.98	2307013.30	3.00
AC134		AC134	76.0	76.0	76.0	Lw	76		675.00	0.00	270.00	3.00	g	6163502.64	2307082.33	3.00
AC135		AC135	76.0	76.0	76.0	Lw	76		675.00	0.00	270.00	3.00	g	6163539.31	2307100.28	3.00
AC136		AC136	76.0	76.0	76.0	Lw	76		675.00	0.00	270.00	3.00	g	6163521.12	2307091.52	3.00
AC137		AC137	76.0	76.0	76.0	Lw	76		675.00	0.00	270.00	3.00	g	6163465.46	2307064.10	3.00
AC138		AC138	76.0	76.0	76.0	Lw	76		675.00	0.00	270.00	3.00	g	6163484.09	2307073.50	3.00
AC139		AC139	76.0	76.0	76.0	Lw	76		675.00	0.00	270.00	3.00	g	6163445.54	2307055.57	3.00
AC140		AC140	76.0	76.0	76.0	Lw	76		675.00	0.00	270.00	3.00	g	6163421.85	2307181.32	3.00
AC141		AC141	76.0	76.0	76.0	Lw	76		675.00	0.00	270.00	3.00	g	6163383.30	2307163.38	3.00
AC142		AC142	76.0	76.0	76.0	Lw	76		675.00	0.00	270.00	3.00	g	6163477.07	2307208.09	3.00
AC143		AC143	76.0	76.0	76.0	Lw	76		675.00	0.00	270.00	3.00	g	6163458.88	2307199.33	3.00
AC144		AC144	76.0	76.0	76.0	Lw	76		675.00	0.00	270.00	3.00	g	6163403.22	2307171.91	3.00
AC145		AC145	76.0	76.0	76.0	Lw	76		675.00	0.00	270.00	3.00	g	6163440.40	2307190.14	3.00
AC146		AC146	76.0	76.0	76.0	Lw	76		675.00	0.00	270.00	3.00	g	6163479.14	2307402.21	3.00
AC147		AC147	76.0	76.0	76.0	Lw	76		675.00	0.00	270.00	3.00	g	6163516.21	2307327.17	3.00
AC148		AC148	76.0	76.0	76.0	Lw	76		675.00	0.00	270.00	3.00	g	6163525.24	2307309.11	3.00
AC149		AC149	76.0	76.0	76.0	Lw	76		675.00	0.00	270.00	3.00	g	6163506.75	2307345.51	3.00
AC150		AC150	76.0	76.0	76.0	Lw	76		675.00	0.00	270.00	3.00	g	6163497.65	2307363.93	3.00
AC151		AC151	76.0	76.0	76.0	Lw	76		675.00	0.00	270.00	3.00	g	6163487.96	2307382.41	3.00
AC152		AC152	76.0	76.0	76.0	Lw	76		675.00	0.00	270.00	3.00	g	6163323.99	2307328.85	3.00
AC153		AC153	76.0	76.0	76.0	Lw	76		675.00	0.00	270.00	3.00	g	6163379.52	2307356.54	3.00
AC154		AC154	76.0	76.0	76.0	Lw	76		675.00	0.00	270.00	3.00	g	6163304.11	2307320.23	3.00
AC155		AC155	76.0	76.0	76.0	Lw	76		675.00	0.00	270.00	3.00	g	6163342.57	2307338.35	3.00
AC156		AC156	76.0	76.0	76.0	Lw	76		675.00	0.00	270.00	3.00	g	6163361.08	2307347.26	3.00
AC157		AC157	76.0	76.0	76.0	Lw	76		675.00	0.00	270.00	3.00	g	6163452.83	2307238.05	3.00
AC158		AC158	76.0	76.0	76.0	Lw	76		675.00	0.00	270.00	3.00	g	6163396.13	2307211.28	3.00
AC159		AC159	76.0	76.0	76.0	Lw	76		675.00	0.00	270.00	3.00	g	6163414.71	2307220.77	3.00
AC160		AC160	76.0	76.0	76.0	Lw	76		675.00	0.00	270.00	3.00	g	6163376.25	2307202.65	3.00
AC161		AC161	76.0	76.0	76.0	Lw	76		675.00	0.00	270.00	3.00	g	6163433.22	2307229.68	3.00
AC162		AC162	76.0	76.0	76.0	Lw	76		675.00	0.00	270.00	3.00	g	6163585.42	2307213.44	3.00
TRASH1		TRASH1	89.0	89.0	89.0	Lw	89		150.00	0.00	90.00	8.00	a	6163795.92	2307459.32	8.00
TRASH2		TRASH2	89.0	89.0	89.0	Lw	89		150.00	0.00	90.00	8.00	a	6163959.98	2307388.14	8.00
TRASH3		TRASH3	89.0	89.0	89.0	Lw	89		150.00	0.00	90.00	8.00	a	6163682.21	2306944.12	8.00
TRASH4		TRASH4	89.0	89.0	89.0	Lw	89		150.00	0.00	90.00	8.00	a	6163542.88	2307206.28	8.00

Line Source(s)

Name	M.	ID	Result. PWL			Result. PWL'			Lw / Li			Operating Time			Moving Pt. Src				Height
			Day	Evening	Night	Day	Evening	Night	Type	Value	norm.	Day	Special	Night	Number			Speed	
			(dBA)	(dBA)	(dBA)	(dBA)	(dBA)	(dBA)			dB(A)	(min)	(min)	(min)	Day	Evening	Night	(mph)	(ft)

Name	ID	Height		Coordinates			
		Begin	End	x	y	z	Ground
		(ft)	(ft)	(ft)	(ft)	(ft)	(ft)

Area Source(s)

Name	M.	ID	Result. PWL			Result. PWL''			Lw / Li			Operating Time			Height	
			Day	Evening	Night	Day	Evening	Night	Type	Value	norm.	Day	Special	Night	(ft)	
			(dBA)	(dBA)	(dBA)	(dBA)	(dBA)	(dBA)			dB(A)	(min)	(min)	(min)		
PARK1		PARK1	79.0	79.0	79.0	53.8	53.8	53.8	Lw	79					0.	a
PARK2		PARK2	76.0	76.0	76.0	54.2	54.2	54.2	Lw	76					0.	a
PARK3		PARK3	73.0	73.0	73.0	55.4	55.4	55.4	Lw	73					0.	a
PARK4		PARK4	76.0	76.0	76.0	54.1	54.1	54.1	Lw	76					0.	a
PARK5		PARK5	76.0	76.0	76.0	54.5	54.5	54.5	Lw	76					0.	a
PARK6		PARK6	76.0	76.0	76.0	54.0	54.0	54.0	Lw	76					0.	a

Name	ID	Height		Coordinates			
		Begin	End	x	y	z	Ground
		(ft)	(ft)	(ft)	(ft)	(ft)	(ft)
PARK1	PARK1	0.00	a	6163565.58	2307196.74	0.00	0.00
				6163651.82	2307015.82	0.00	0.00
				6163634.80	2307008.01	0.00	0.00
				6163550.39	2307189.36	0.00	0.00
PARK2	PARK2	0.00	a	6163987.43	2307389.83	0.00	0.00
				6164054.62	2307329.15	0.00	0.00
				6164041.86	2307316.65	0.00	0.00
				6163975.45	2307376.28	0.00	0.00
PARK3	PARK3	0.00	a	6163692.31	2306935.77	0.00	0.00
				6163678.25	2306943.93	0.00	0.00
				6163694.92	2306975.87	0.00	0.00
				6163710.72	2306967.02	0.00	0.00
PARK4	PARK4	0.00	a	6163764.18	2307355.75	0.00	0.00
				6163778.61	2307366.60	0.00	0.00
				6163789.24	2307380.92	0.00	0.00
				6163792.93	2307389.28	0.00	0.00
				6163796.29	2307406.96	0.00	0.00
				6163794.67	2307425.52	0.00	0.00
				6163811.70	2307429.10	0.00	0.00
				6163813.76	2307417.60	0.00	0.00
				6163813.00	2307394.59	0.00	0.00
				6163809.97	2307383.20	0.00	0.00
				6163798.57	2307362.58	0.00	0.00
				6163782.62	2307346.31	0.00	0.00
				6163772.86	2307339.91	0.00	0.00
PARK5	PARK5	0.00	a	6163624.85	2307269.15	0.00	0.00
				6163557.44	2307235.25	0.00	0.00
				6163548.11	2307252.83	0.00	0.00
				6163616.17	2307286.95	0.00	0.00
PARK6	PARK6	0.00	a	6163789.05	2306789.91	0.00	0.00
				6163773.95	2306778.80	0.00	0.00
				6163715.46	2306857.75	0.00	0.00
				6163730.57	2306867.65	0.00	0.00
				6163761.06	2306823.92	0.00	0.00

Barrier(s)

Name	Sel.	M.	ID	Absorption		Z-Ext.	Cantilever		Height		Coordinates			
				left	right		horz.	vert.	Begin	End	x	y	z	Ground
						(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(ft)
B1			B1						6.00 r		6163422.44	2307554.16	6.00	0.00
											6163448.92	2307497.30	6.00	0.00
											6163448.48	2307486.02	6.00	0.00
											6163382.51	2307453.47	6.00	0.00
											6163330.86	2307430.03	6.00	0.00
											6163284.42	2307405.72	6.00	0.00
											6163260.55	2307396.61	6.00	0.00
											6163235.81	2307452.60	6.00	0.00
B2			B2						6.00 r		6164064.80	2307742.52	6.00	0.00
											6163927.82	2307674.29	6.00	0.00
											6163892.41	2307729.50	6.00	0.00
											6163859.07	2307792.00	6.00	0.00
											6163840.32	2307837.31	6.00	0.00
B3			B3						6.00 r		6163869.37	2306484.47	6.00	0.00
											6163820.54	2306538.72	6.00	0.00
											6163819.46	2306558.25	6.00	0.00

Name	Sel.	M.	ID	Absorption		Z-Ext.	Cantilever		Height			Coordinates			
				left	right		horz.	vert.	Begin		End	x	y	z	Ground
						(ft)	(ft)	(ft)	(ft)		(ft)	(ft)	(ft)	(ft)	(ft)
												6163883.48	2306635.29	6.00	0.00
												6163954.01	2306747.05	6.00	0.00
												6164021.28	2306864.24	6.00	0.00
												6164087.47	2306979.26	6.00	0.00
												6164158.00	2307088.85	6.00	0.00
												6164187.30	2307150.70	6.00	0.00
												6164229.62	2307215.80	6.00	0.00
												6164307.74	2307159.38	6.00	0.00

Building(s)

Name	Sel.	M.	ID	RB	Residents	Absorption	Height		Coordinates			
							Begin		x	y	z	Ground
							(ft)		(ft)	(ft)	(ft)	(ft)
2-Story10			2-Story10	x	0		0.00	a	6163582.07	2307021.44	0.00	0.00
									6163605.68	2306972.49	0.00	0.00
									6163494.57	2306918.67	0.00	0.00
									6163470.61	2306967.97	0.00	0.00
2-Story09			2-Story09	x	0		0.00	a	6163626.17	2306931.17	0.00	0.00
									6163649.78	2306881.17	0.00	0.00
									6163536.58	2306827.69	0.00	0.00
									6163512.63	2306878.04	0.00	0.00
2-Story08			2-Story08	x	0		0.00	a	6163524.43	2307149.22	0.00	0.00
									6163550.13	2307095.75	0.00	0.00
									6163434.85	2307040.89	0.00	0.00
									6163408.81	2307094.71	0.00	0.00
2-Story07			2-Story07	x	0		0.00	a	6163487.97	2307221.10	0.00	0.00
									6163511.24	2307170.75	0.00	0.00
									6163398.74	2307118.32	0.00	0.00
									6163375.13	2307169.01	0.00	0.00
2-Story06			2-Story06	x	0		0.00	a	6163436.39	2307281.40	0.00	0.00
									6163458.62	2307231.75	0.00	0.00
									6163364.52	2307186.96	0.00	0.00
									6163341.95	2307236.96	0.00	0.00
2-Story05			2-Story05	x	0		0.00	a	6163392.64	2307372.18	0.00	0.00
									6163416.86	2307321.77	0.00	0.00
									6163321.38	2307277.67	0.00	0.00
									6163297.07	2307326.71	0.00	0.00
2-Story04			2-Story04	x	0		0.00	a	6163483.46	2307412.11	0.00	0.00
									6163537.27	2307300.65	0.00	0.00
									6163488.66	2307277.39	0.00	0.00
									6163434.15	2307388.85	0.00	0.00
2-Story03			2-Story03	x	0		0.00	a	6163660.19	2306862.34	0.00	0.00
									6163691.03	2306816.52	0.00	0.00
									6163588.29	2306744.78	0.00	0.00
									6163557.05	2306790.88	0.00	0.00
2-Story02			2-Story02	x	0		0.00	a	6163719.51	2306781.66	0.00	0.00
									6163751.77	2306736.49	0.00	0.00
									6163649.27	2306664.36	0.00	0.00
									6163616.60	2306709.81	0.00	0.00
2-Story01			2-Story01	x	0		0.00	a	6163704.59	2307136.36	0.00	0.00
									6163754.58	2307109.35	0.00	0.00
									6163702.78	2307020.87	0.00	0.00
									6163654.02	2307045.49	0.00	0.00
3-Story01			3-Story01	x	0		0.00	a	6163826.31	2306882.61	0.00	0.00
									6163803.31	2306842.89	0.00	0.00
									6163704.57	2306899.97	0.00	0.00
									6163727.14	2306939.46	0.00	0.00
3-Story02			3-Story02	x	0		0.00	a	6163853.04	2307393.24	0.00	0.00
									6163905.21	2307365.01	0.00	0.00
									6163841.59	2307256.36	0.00	0.00
									6163788.93	2307284.67	0.00	0.00
3-Story03			3-Story03	x	0		0.00	a	6163778.22	2307265.75	0.00	0.00
									6163826.50	2307236.85	0.00	0.00
									6163765.26	2307128.86	0.00	0.00
									6163717.34	2307156.34	0.00	0.00
3-Story04			3-Story04	x	0		0.00	a	6163892.17	2307512.56	0.00	0.00
									6163922.42	2307546.46	0.00	0.00
									6164006.72	2307469.00	0.00	0.00
									6163977.59	2307435.47	0.00	0.00
3-Story05			3-Story05	x	0		0.00	a	6163873.42	2307594.07	0.00	0.00
									6163893.48	2307553.44	0.00	0.00
									6163770.82	2307494.59	0.00	0.00
									6163751.55	2307535.99	0.00	0.00
3-Story06			3-Story06	x	0		0.00	a	6163864.51	2306946.84	0.00	0.00
									6163841.50	2306907.13	0.00	0.00
									6163724.10	2306975.49	0.00	0.00

Name	Sel.	M.	ID	RB	Residents	Absorption	Height		Coordinates			
							Begin		x	y	z	Ground
							(ft)		(ft)	(ft)	(ft)	(ft)
									6163746.67	2307014.99	0.00	0.00
3-Story07			3-Story07	x	0		0.00	a	6163893.15	2306998.49	0.00	0.00
									6163870.15	2306958.78	0.00	0.00
									6163752.74	2307027.14	0.00	0.00
									6163775.31	2307066.64	0.00	0.00
3-Story08			3-Story08	x	0		0.00	a	6163931.78	2307063.60	0.00	0.00
									6163908.78	2307023.88	0.00	0.00
									6163791.37	2307092.24	0.00	0.00
									6163813.94	2307131.74	0.00	0.00
3-Story09			3-Story09	x	0		0.00	a	6163959.99	2307113.94	0.00	0.00
									6163936.99	2307074.23	0.00	0.00
									6163819.58	2307142.59	0.00	0.00
									6163842.15	2307182.09	0.00	0.00
3-Story10			3-Story10	x	0		0.00	a	6163997.32	2307178.61	0.00	0.00
									6163974.31	2307138.90	0.00	0.00
									6163856.91	2307207.26	0.00	0.00
									6163879.48	2307246.76	0.00	0.00
3-Story11			3-Story11	x	0		0.00	a	6164024.66	2307227.66	0.00	0.00
									6164001.66	2307187.95	0.00	0.00
									6163884.25	2307256.31	0.00	0.00
									6163906.82	2307295.80	0.00	0.00
3-Story12			3-Story12	x	0		0.00	a	6164065.89	2307293.20	0.00	0.00
									6164042.89	2307253.48	0.00	0.00
									6163925.49	2307321.84	0.00	0.00
									6163948.06	2307361.34	0.00	0.00
3-Story13			3-Story13	x	0		0.00	a	6163994.00	2307420.11	0.00	0.00
									6164024.24	2307454.02	0.00	0.00
									6164124.17	2307362.23	0.00	0.00
									6164095.04	2307328.70	0.00	0.00
3-Story14			3-Story14	x	0		0.00	a	6163817.44	2307456.04	0.00	0.00
									6163847.68	2307489.95	0.00	0.00
									6163931.72	2307411.45	0.00	0.00
									6163902.59	2307377.92	0.00	0.00
3-Story15			3-Story15	x	0		0.00	a	6163766.91	2307418.02	0.00	0.00
									6163725.51	2307398.75	0.00	0.00
									6163676.55	2307502.14	0.00	0.00
									6163717.17	2307521.67	0.00	0.00
3-Story16			3-Story16	x	0		0.00	a	6163719.26	2307380.26	0.00	0.00
									6163677.85	2307360.99	0.00	0.00
									6163622.12	2307482.87	0.00	0.00
									6163662.75	2307502.40	0.00	0.00
3-Story17			3-Story17	x	0		0.00	a	6163652.33	2307347.19	0.00	0.00
									6163610.92	2307327.92	0.00	0.00
									6163555.20	2307449.79	0.00	0.00
									6163595.82	2307469.33	0.00	0.00
3-Story18			3-Story18	x	0		0.00	a	6163653.70	2307247.61	0.00	0.00
									6163633.71	2307288.68	0.00	0.00
									6163754.61	2307346.50	0.00	0.00
									6163774.84	2307306.22	0.00	0.00
PoolBLDG			PoolBLDG	x	0		0.00	a	6163574.38	2307220.04	0.00	0.00
									6163628.55	2307245.56	0.00	0.00
									6163637.66	2307227.33	0.00	0.00
									6163582.97	2307201.81	0.00	0.00

Ground Absorption(s)

Name	Sel.	M.	ID	G	Coordinates	
					x	y
					(ft)	(ft)

Contour(s)

Name	Sel.	M.	ID	OnlyPts	Height		Coordinates		
					Begin	End	x	y	z
					(ft)	(ft)	(ft)	(ft)	(ft)

Vertical Area Source(s)

Name	ID	Height		Coordinates			
		Begin	End	x	y	z	Ground
		(ft)	(ft)	(ft)	(ft)	(ft)	(ft)

Rail

Name	Sel.	M.	ID	Lw'		Train Class	Correct.	Vmax
				Day	Night		Track	
				(dBA)	(dBA)		(dB)	(km(mph)

Sound Level Spectra

Name	ID	Type	Oktave Spectrum (dB)											Source
			Weight.	31.5	63	125	250	500	1000	2000	4000	8000	A	lin	

Roads

Name	Sel.	M.	ID	Lme			Count Data		exact Count Data						Speed Limit		SCS	Surface		Gradient	Mult. Reflection		
				Day	Evening	Night	DTV	Str.class.	M			p (%)			Auto	Truck	Dist.	Dstro	Type		Drefl	Hbuild	Dist.
				(dBA)	(dBA)	(dBA)			Day	Evening	Night	Day	Evening	Night	(mph)	(mph)		(dB)		(%)	(dB)	(ft)	(ft)

RoadsGeo

Name	Height				Coordinates				Dist	LSlope
	Begin		End		x	y	z	Ground	(ft)	(%)
	(ft)		(ft)		(ft)	(ft)	(ft)	(ft)		

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APPENDIX 11.1:

CADNAA CONSTRUCTION NOISE MODEL INPUTS

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15662 - Ontario Esperanza PA-11

CadnaA Noise Prediction Model: 15662-05_Construction.cna
Date: 24.04.25
Analyst: B. Maddux

Calculation Configuration

Configuration	
Parameter	**Value**
General	
Max. Error (dB)	**0.00**
Max. Search Radius (ft)	**6561.70**
Min. Dist Src to Rcvr	**0.00**
Partition	
Raster Factor	**0.50**
Max. Length of Section (ft)	**3280.80**
Min. Length of Section (ft)	**3.30**
Min. Length of Section (%)	**0.00**
Proj. Line Sources	**On**
Proj. Area Sources	**On**
Ref. Time	
Daytime Penalty (dB)	**0.00**
Recr. Time Penalty (dB)	**5.00**
Night-time Penalty (dB)	**10.00**
DTM	
Standard Height (m)	**0.00**
Model of Terrain	**Triangulation**
Reflection	
max. Order of Reflection	**2**
Search Radius Src	**328.08**
Search Radius Rcvr	**328.08**
Max. Distance Source - Rcvr	**3280.84 3280.84**
Min. Distance Rvcr - Reflector	**3.28 3.28**
Min. Distance Source - Reflector	**0.33**
Industrial (ISO 9613 (1996))	
Lateral Diffraction	**some Obj**
Obst. within Area Src do not shield	**On**
Screening	**Incl. Ground Att. over Barrier**
	Dz with limit (20/25)
Barrier Coefficients C1,2,3	**3.0 20.0 0.0**
Temperature (°F)	**50**
rel. Humidity (%)	**70**
Ground Absorption G	**0.50**
Wind Speed for Dir. (mph)	**6.7**
Roads (TNM)	
Railways (FTA/FRA)	
Aircraft (???)	
Strictly acc. to AzB	

Receiver Noise Levels

Name	M.	ID	Level Lr			Limit. Value			Land Use			Height		Coordinates			
			Day	Night	CNEL	Day	Night	CNEL	Type	Auto	Noise Type			X	Y	Z	
			(dBA)	(dBA)	(dBA)	(dBA)	(dBA)	(dBA)				(ft)		(ft)	(ft)	(ft)	
R1		R1	65.3	-34.7	62.3	0.0	0.0	0.0		x	Total	5.00	r	6164064.26	2307541.04	5.00	
R2		R2	63.8	-36.2	60.8	0.0	0.0	0.0		x	Total	5.00	r	6163960.44	2307660.13	5.00	
R3		R3	64.3	-35.7	61.3	0.0	0.0	0.0		x	Total	5.00	r	6163414.11	2307485.36	5.00	
R4		R4	61.0	-39.0	58.0	0.0	0.0	0.0		x	Total	5.00	r	6163268.40	2307065.85	5.00	
R5		R5	57.2	-42.8	54.2	0.0	0.0	0.0		x	Total	5.00	r	6163701.04	2306426.26	5.00	
R6		R6	62.0	-38.0	59.0	0.0	0.0	0.0		x	Total	5.00	r	6164053.38	2306904.23	5.00	

Point Source(s)

Name	M.	ID	Result. PWL			Lw / Li			Operating Time			Height		Coordinates		
			Day	Evening	Night	Type	Value	norm.	Day	Special	Night			X	Y	Z
			(dBA)	(dBA)	(dBA)			dB(A)	(min)	(min)	(min)	(ft)		(ft)	(ft)	(ft)

Line Source(s)

Name	M.	ID	Result. PWL			Result. PWL'			Lw / Li			Operating Time			Moving Pt. Src				Height	
			Day	Evening	Night	Day	Evening	Night	Type	Value	norm.	Day	Special	Night	Number			Speed		
			(dBA)	(dBA)	(dBA)	(dBA)	(dBA)	(dBA)			dB(A)	(min)	(min)	(min)	Day	Evening	Night	(mph)	(ft)	

Name	ID	Height		Coordinates			
		Begin	End	x	y	z	Ground
		(ft)	(ft)	(ft)	(ft)	(ft)	(ft)

Area Source(s)

Name	M.	ID	Result. PWL			Result. PWL''			Lw / Li			Operating Time			Height	
			Day	Evening	Night	Day	Evening	Night	Type	Value	norm.	Day	Special	Night	(ft)	
			(dBA)	(dBA)	(dBA)	(dBA)	(dBA)	(dBA)			dB(A)	(min)	(min)	(min)		
CA		CA1	115.6	15.6	15.6	69.3	-30.7	-30.7	PWL-Pt	115.6					8	a

Name	ID	Height			Coordinates			
		Begin		End	x	y	z	Ground
		(ft)		(ft)	(ft)	(ft)	(ft)	(ft)
CA	CA1	8.00	a		6164168.97	2307351.23	8.00	0.00
					6164154.42	2307333.20	8.00	0.00
					6164143.16	2307318.49	8.00	0.00
					6164119.04	2307284.49	8.00	0.00
					6164103.94	2307261.15	8.00	0.00
					6163938.77	2306975.94	8.00	0.00
					6163830.57	2306788.91	8.00	0.00
					6163786.70	2306725.09	8.00	0.00
					6163759.41	2306691.81	8.00	0.00
					6163730.15	2306660.25	8.00	0.00
					6163697.34	2306660.26	8.00	0.00
					6163657.03	2306705.64	8.00	0.00
					6163627.35	2306743.01	8.00	0.00
					6163607.82	2306770.12	8.00	0.00
					6163591.91	2306793.94	8.00	0.00
					6163579.27	2306814.18	8.00	0.00
					6163569.55	2306830.61	8.00	0.00
					6163406.23	2307166.18	8.00	0.00
					6163313.54	2307360.00	8.00	0.00
					6163319.66	2307377.33	8.00	0.00
					6163454.49	2307441.81	8.00	0.00
					6163628.11	2307524.84	8.00	0.00
					6163661.12	2307538.03	8.00	0.00
					6163757.66	2307569.42	8.00	0.00
					6163771.15	2307574.13	8.00	0.00
					6163797.44	2307585.28	8.00	0.00
					6163827.58	2307601.59	8.00	0.00
					6163844.32	2307612.52	8.00	0.00
					6163888.91	2307643.60	8.00	0.00
					6163908.95	2307642.78	8.00	0.00
					6163952.01	2307592.23	8.00	0.00
					6163999.21	2307545.54	8.00	0.00
					6164171.37	2307389.23	8.00	0.00

Barrier(s)

Name	Sel.	M.	ID	Absorption		Z-Ext.	Cantilever		Height		Coordinates			
				left	right		horz.	vert.	Begin	End	x	y	z	Ground
						(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(ft)

Building(s)

Name	Sel.	M.	ID	RB	Residents	Absorption	Height	Coordinates				
							Begin	x	y	z	Ground	
							(ft)	(ft)	(ft)	(ft)	(ft)	

Ground Absorption(s)

Name	Sel.	M.	ID	G	Coordinates	
					x	y
					(ft)	(ft)

Contour(s)

Name	Sel.	M.	ID	OnlyPts	Height		Coordinates		
					Begin	End	x	y	z
					(ft)	(ft)	(ft)	(ft)	(ft)

Vertical Area Source(s)

Name	ID	Height			Coordinates			
		Begin		End	x	y	z	Ground
		(ft)		(ft)	(ft)	(ft)	(ft)	(ft)

Rail

Name	Sel.	M.	ID	Lw'		Train Class	Correct.	Vmax
				Day	Night		Track	
				(dBA)	(dBA)		(dB)	(km(mph)

Sound Level Spectra

Name	ID	Type	Oktave Spectrum (dB)												Source
			Weight.	31.5	63	125	250	500	1000	2000	4000	8000	A	lin	

Roads

Name	Sel.	M.	ID	Lme			Count Data		exact Count Data						Speed Limit		SCS	Surface		Gradient	Mult. Reflection		
				Day	Evening	Night	DTV	Str.class.	M			p (%)			Auto	Truck	Dist.	Dstro	Type		Drefl	Hbuild	Dist.
				(dBA)	(dBA)	(dBA)			Day	Evening	Night	Day	Evening	Night	(mph)	(mph)		(dB)		(%)	(dB)	(ft)	(ft)

RoadsGeo

Name	Height				Coordinates				Dist	LSlope
	Begin		End		x	y	z	Ground	(ft)	(%)
	(ft)		(ft)		(ft)	(ft)	(ft)	(ft)		

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MEMORANDUM

URBAN | CROSSROADS

DATE: May 29, 2024
TO: Dave Waters, Genstar Development Company/GDCI-13
FROM: Charlene So, Urban Crossroads
JOB NO: 15662-04 TG Letter

ESPERANZA SPECIFIC PLAN TRIP GENERATION ASSESSMENT

Urban Crossroads, Inc. is pleased to submit the following Trip Generation Assessment for Esperanza Specific Plan development (Project) to support the proposed Specific Plan Amendment (SPA), located on the northeast corner of Eucalyptus Avenue and Amherst Avenue in the City of Ontario. This letter describes the proposed Project trip generation methodology and determines whether any traffic operations analysis is required based on San Bernardino County's Transportation Impact Study Guidelines (July 9, 2019, County Guidelines). The County Guidelines have been utilized as the City does not have their own adopted guidelines.

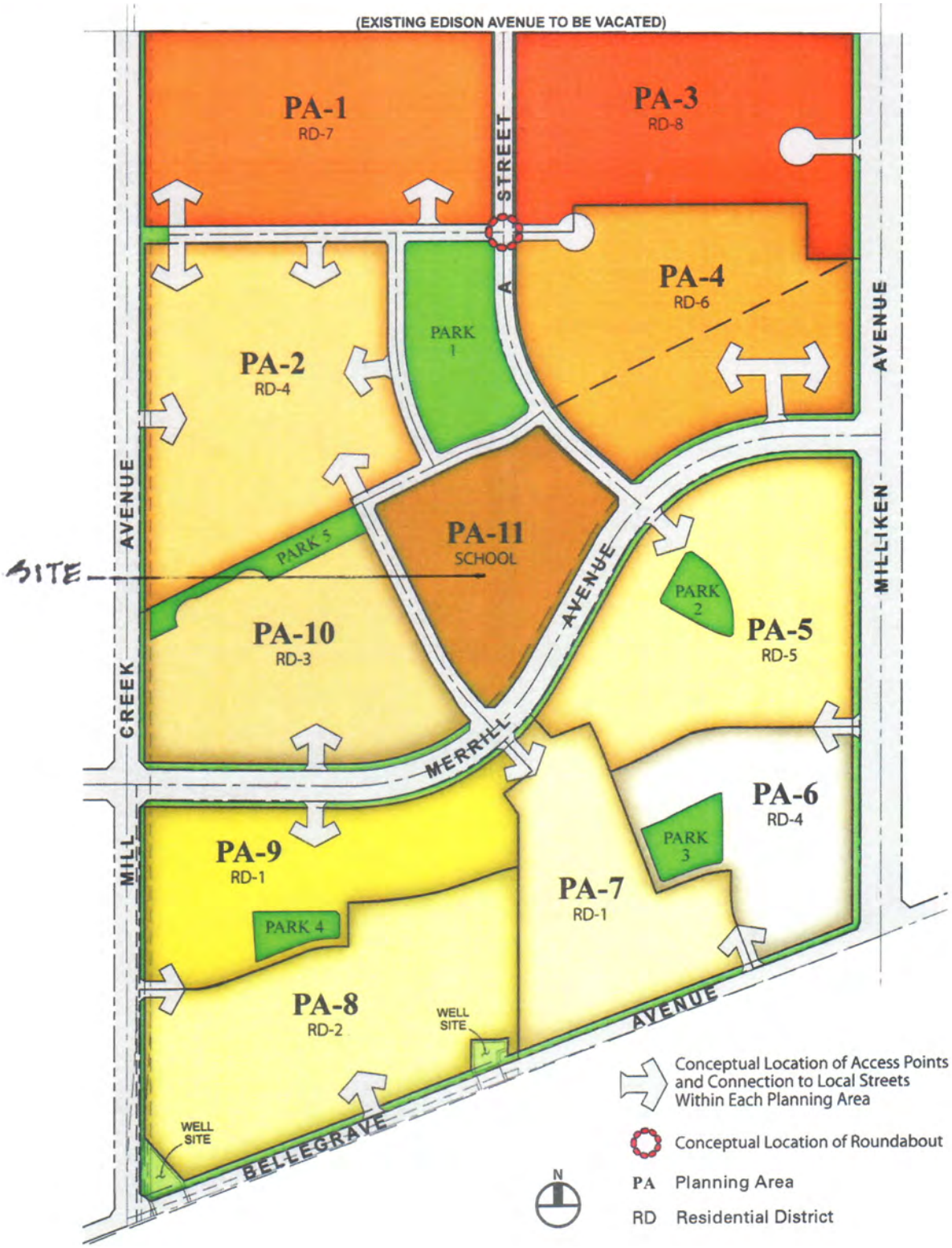
PROPOSED PROJECT

It is our understanding that the proposed Project is to consist of 161 multi-family residential dwelling units (with a density of approximately 16.1 dwelling units to the net acre). The Project is located within the Esperanza Specific Plan. The original currently-approved Specific Plan contemplated a 736-student elementary school within Planning Area 11. The land use will be updated from "School" to "MDR Medium Density Residential" consistent with the adjacent land use to the northeast.

Exhibit 1 shows the preliminary site plan. For comparison purposes, Exhibit 2 shows the currently-approved land use plan identifying Planning Area 11 with a school.

EXHIBIT 1: PRELIMINARY SITE PLAN

EXHIBIT 2: CURRENTLY APPROVED LAND USE PLAN



TRIP GENERATION

Trip generation represents the amount of traffic, which is both attracted to, and produced by, a development. Determining traffic generation for a specific project is therefore based upon forecasting the amount of traffic that is expected to be both attracted to, and produced by, the specific land uses being proposed for a given development.

APPROVED SPECIFIC PLAN

As noted previously, the site is located within the Esperanza Specific Plan. Specifically, the Project is located within Planning Area 11, which was approved with a 736-student elementary school. The Esperanza Specific Plan Traffic Impact Study Report (prepared by Albert A. Webb Associates, dated November 10, 2005, referred to as **2005 Traffic Study**) evaluated the 736-student elementary school within Planning Area 11. The trip generation is summarized in Table 1 and excerpts from the 2005 Traffic Study are included in Attachment A. The approved elementary school site is anticipated to generate an average of 949 two-way trips per day, with 309 trips during the AM peak hour and 206 trips during the PM peak hour.

TABLE 1: APPROVED SP TRIP GENERATION FOR PLANNING AREA 11

			AM Peak Hour			PM Peak Hour			
Land Use	Quantity	Units[1]	In	Out	Total	In	Out	Total	Daily
PA 11: Elementary School	736	STU	169	140	309	96	110	206	949

Source: Esperanza Specific Plan Traffic Impact Study Report (prepared by Albert A. Webb Associates, dated November 10, 2005).

[1] STU = Students

PROPOSED PROJECT

The proposed Project consists of 161 multi-family (low-rise) residential dwelling units. In order to develop the traffic characteristics of the proposed Project, trip-generation statistics published in the Institute of Transportation Engineers (ITE) Trip Generation Manual (11th Edition, 2021) were used for the Project. Table 2 summarizes the trip generation rates for Multifamily (Low-Rise) Residential (ITE Code 220).

The trip generation summary illustrating daily, and peak hour trip generation estimates for the proposed Project are also summarized in Table 2. The proposed Project is anticipated to generate 944 vehicle trip-ends per day with 108 AM peak hour trips and 125 PM peak hour trips.

TABLE 2: PROPOSED PROJECT TRIP GENERATION SUMMARY

Land Use[1]	Units[2]	ITE LU Code	AM Peak Hour In	AM Peak Hour Out	AM Peak Hour Total	PM Peak Hour In	PM Peak Hour Out	PM Peak Hour Total	Daily
Multifamily (Low-Rise) Residential	DU	220	0.17	0.50	0.67	0.45	0.33	0.78	5.86

[1] Trip Generation Source: Institute of Transportation Engineers (ITE), Trip Generation Manual, 11th Edition (2021).

[2] DU = dwelling units

Land Use	Quantity	Units[1]	AM Peak Hour In	AM Peak Hour Out	AM Peak Hour Total	PM Peak Hour In	PM Peak Hour Out	PM Peak Hour Total	Daily
PA 11: Esperanza Multi-Family	161	DU	27	81	108	72	53	125	944

[1] DU = dwelling units

TRIP GENERATION COMPARISON

Table 3 shows the trip generation comparison between the approved use (elementary school) and proposed Project (multi-family residential) and identifies the resulting net change in trips. As shown, the Project is anticipated to generate a net reduction of 5 two-way trips per day with a reduction of 201 AM peak hour trips and 81 fewer PM peak hour trips as compared to the approved elementary school use.

TABLE 3: TRIP GENERATION COMPARISON

Project	AM Peak Hour In	AM Peak Hour Out	AM Peak Hour Total	PM Peak Hour In	PM Peak Hour Out	PM Peak Hour Total	Daily
Esperanza SP: Elementary School	169	140	309	96	110	206	949
Proposed Project: Multifamily Residential	27	81	108	72	53	125	944
Net Change in Trips	**-142**	**-59**	**-201**	**-24**	**-57**	**-81**	**-5**

FINDINGS

The City of Ontario adheres to the County Guidelines, which have been used to determine whether additional traffic analysis is necessary for the proposed Project. The County Guidelines indicate that development projects that generate a net increase of 100 or more peak hour vehicle trips (without pass-by reductions) would require the preparation and submittal of a Transportation Impact Analysis.

The Project is anticipated to generate fewer than 100 net new peak hour trips during the morning and evening peak hours (Project results in a net reduction from the currently approved land use). The Project would therefore contribute fewer than 50 net new peak hour trips to any off-site intersection. As such, additional peak hour traffic operations analysis is not necessary based on the County Guidelines.

If you have any questions or comments, I can be reached at cso@urbanxroads.com.

ATTACHMENT A: ESPERANZA SPECIFIC PLAN
TRIP GENERATION EXCERPTS

SECTION 4 - PROJECTED TRAFFIC

SITE TRAFFIC

Trip Generation

Trip generation represents the amount of traffic traveling to and from the proposed project. The traffic generation figures determined for the project are based upon the development of 765 single family residential dwelling units, 645 multi-family residential dwelling units, and a 736 student elementary school as currently proposed. Trip generation rates are based upon a publication entitled "Trip Generation" by the Institute of Transportation Engineers (ITE), seventh edition.

Table 4-1 shows the peak hour trip generation rates for the proposed project. The peak hour rates are based on the average peak hour generation rate multiplied by the directional distribution provided in ITE's trip generation publication referenced above.

Table 4-1 – Trip Generation Rates

Land Use	Unit of Measurement	AM Peak Hour			PM Peak Hour			Daily
		Total	In	Out	Total	In	Out	
Single Family Detached Land Use Category: 210	DU	0.75	0.19	0.56	1.01	0.64	0.37	9.57
Residential Condominium/Townhouse Land Use Category: 230	DU	0.44	0.07	0.37	0.52	0.35	0.17	5.86
Elementary School Land Use Category: 520	Students	0.42	0.23	0.19	0.28	0.13	0.15	1.29

Trip generation from *Trip Generation Manual, 7th Edition* by the Institute of Transportation Engineers (ITE), 2003.
DU – Dwelling Units, TSF – Thousand Square Feet

Table 4-2 shows the daily and peak hour trip generation for the proposed project. The project is estimated to generate approximately 12,050 daily trip-ends, including 1,166 trip-ends during the AM Peak hour and 1,315 trip-ends during the PM Peak hour.

Table 4-2 – Project Trip Generation

Land Use	Unit	Qty	AM Peak Hour			PM Peak Hour			Daily
			Total	In	Out	Total	In	Out	
Single Family Detached	DU	765	573	145	428	773	490	283	7,321
Residential Condominium/Townhouse	DU	645	284	45	239	336	226	110	3,780
Elementary School	Students	736	309	169	140	206	96	110	949
TOTAL			**1,166**	**359**	**807**	**1,315**	**812**	**503**	**12,050**

DU – Dwelling Units
TSF – Thousand Square Feet

The current City of Ontario General Plan circulation element is shown on Figure 4-1.

Trip Distribution

Trip distribution represents the directional orientation of traffic to and from the project site. Trip distribution is influenced by the geographical location of the site, type of land use in the study area, such as shopping centers and recreational sites, and proximity to the regional freeway system. The directional distribution of traffic for the proposed project was determined based upon the 2015 New Model Colony Traffic Forecast (Figure 4-2).

Modal Split

The traffic reducing potential of public transit has not been considered in this study. Therefore, the traffic projections provided in this report are considered conservative since public transit could reduce traffic volumes in the project area.

Trip Assignment

Trip assignment is the result of using the previously discussed trip generation numbers and trip distribution percentages. Figure 4-3 shows the project related traffic volumes, which are based upon the identified project traffic generation and distribution. AM and PM peak hour intersection turning movement volumes for the proposed project are shown on Figures 4-4 and 4-5, respectively.

MEMORANDUM

URBAN CROSSROADS

DATE: May 29, 2024
TO: Dave Waters, Genstar Development Company/GDCI-13
FROM: Alex So, Urban Crossroads, Inc.
JOB NO: 15662-03 VMT

PA-11 OF THE ESPERANZA SPECIFIC PLAN VEHICLE MILES TRAVELED (VMT) ANALYSIS

Urban Crossroads, Inc. is pleased to provide the following Vehicle Miles Traveled (VMT) Analysis for PA-11 of The Esperanza Specific Plan (**Project**), located on the northeast corner of Amherst Avenue and Eucalyptus Avenue in the City of Ontario.

PROJECT OVERVIEW

It is our understanding that the Project proposes a General Plan Amendment to change the land use from Public School to Medium Density Residential (MDR 11.1-24 du/ac) and an amendment to the Esperanza Specific Plan to change the land use designation for Planning Area 11 from Public School to Residential Development 9 (RD-9). More specifically the proposes 161 multi-family (townhome) residential dwelling units with a density of approximately 16.1 dwelling units to the net acre that would replace a 736-student elementary school. A preliminary site plan can be found in Attachment A.

BACKGROUND

The California Environmental Quality Act (CEQA) mandates that all lead agencies use VMT as the measure for identifying transportation impacts in land use projects. In June 2020, the City of Ontario developed and adopted its VMT methodologies and thresholds (Resolution No. 2020-071) (**City Guidelines**) (1). This VMT analysis is based on the adopted City Guidelines.

VMT ANALYSIS

TRAFFIC MODELING METHODOLOGY

Consistent with City Guidelines, a project-level VMT analysis shall be conducted using the San Bernardino Traffic Analysis Model (SBTAM) as the appropriate tool for conducting VMT analysis for land use projects within the City of Ontario. SBTAM is a useful tool to estimate VMT as it considers interaction between different land uses based on socio-economic data such as population, households, and employment.

As part of The Ontario Plan (TOP) 2050 implementation, the City of Ontario recently adopted an updated version of SBTAM, also referred to as the TOP model. This updated version includes the latest roadway network and socio-economic data specific to the City of Ontario, in alignment with the City's recently-adopted TOP. The model encompasses a base year of 2019 and a General Plan Buildout projection for 2050.

VMT ANALYSIS METHODOLOGY

As stated within the City's Guidelines, the analysis should include 'project-generated VMT' and 'project effect on VMT' estimates for the project transportation/traffic analysis zone (TAZ) for baseline and cumulative conditions. For the purposes of this analysis, Project VMT estimates have been prepared using the Origin/Destination (OD) method to estimate project-generated VMT and Boundary method to estimate project effect on VMT. VMT has been presented as total VMT and total VMT per service population (i.e., population and employees).

ORIGIN/DESTINATION (OD) VMT

The OD method for calculating VMT sums all weekday VMT generated by trips with at least one trip-end in the study area (i.e., Project boundary or City boundary) and tracks those trips to their origin or destination. Origins are all vehicle trips that start in a specific TAZ, while destinations are all vehicle trips that end in a specific TAZ. The OD method accounts for all trips (i.e., both passenger cars and trucks) and trip purposes (i.e., total VMT).

BOUNDARY VMT METHOD

The boundary method is the sum of all weekday VMT on the roadway network within a designated boundary (i.e., City boundary or other designated geographic area). The boundary method estimates VMT by multiplying vehicle trips on each roadway segment within the boundary by that segment's length. This approach consists of all trips, including those trips that do not begin or end in the designated boundary. Consistent with City VMT Guidelines, the City of Ontario was used as the boundary for this assessment. In addition, as the Project is located near the southeastern edge of the City, an additional assessment of a ten-mile boundary area surrounding the Project site has also been conducted to ensure trips associated with the Project are not omitted.

VMT METRIC AND SIGNIFICANCE THRESHOLD

The City of Ontario has adopted the following thresholds of significance related to VMT for land use projects:

The SBTAM model should be used to forecast total daily VMT per Service Population (SP) and is the required method for estimating VMT.

- A significant impact would occur if the project VMT per SP exceeds the Citywide average VMT per SP under General Plan Buildout Conditions.
- A significant impact would occur if the project caused total daily VMT per SP within the City to be higher than the no project scenario under cumulative conditions.

The City of Ontario's average VMT per SP under General Plan Buildout conditions has been calculated using the TOP General Plan Buildout (2050) model. Table 1 presents the Citywide average VMT per SP for General Plan Buildout (2050) conditions.

TABLE 1: CITYWIDE VMT PER SERVICE POPULATION

Ontario	TOP 2050
Service Population	707,369
VMT	19,506,377
VMT per SP	27.6

As shown in Table 1, the City of Ontario's VMT per SP for General Plan Buildout (2050) conditions has been calculated as **27.6 VMT per SP**.

VMT ESTIMATES

To estimate project-generated VMT, standard land use information such as the number of residential dwelling units must first be converted into a SBTAM compatible dataset. The SBTAM model utilizes socio-economic data (SED) (e.g., population, households, and employment) for the purposes of vehicle trip estimation. Table 2 summarizes the SED inputs used to represent the Project. Project SED data was then coded into the Project's TAZ to obtain project-generated VMT.

TABLE 2: POPULATION ESTIMATES

Land Use	Quantity	Conversion Factor[1]	Estimated Population
Residential	161 Dwelling Units	3.5 people per household	564

PROJECT-GENERATED VMT

Project-level VMT estimates were extracted from SBTAM using the OD trip matrices, which includes project-generated VMT for all vehicle trips (both passenger cars and trucks) and trip purposes. Project-generated VMT estimates for the Project are presented in Table 3.

TABLE 3: PROJECT-GENERATED VMT SUMMARY

	Baseline	General Plan Buildout Year (2050)
SP[1]	564	564
OD VMT	12,582	13,364
OD VMT per SP	22.3	23.7
City Threshold	27.6	27.6
Potentially Significant?	No	No

[1] SP = Service Population which refers to the Project's population estimate.

As shown in Table 3, project-generated VMT is forecast to be below the City's adopted threshold.

[1] Factors obtained consistent with land use assumptions within the TOP 2050 model.

PROJECT EFFECT ON VMT

The Project's effect on VMT has been calculated using the boundary method. Land use information representing the proposed land use changes contemplated by the Project were coded into the Project TAZ to represent the "With Project" condition. Table 4 summarizes the boundary VMT under the No Project and With Project scenarios for both baseline and cumulative conditions using the City boundary and a 10-mile radius from the Project site.

TABLE 4: GENERAL PLAN BUILDOUT (2050) BOUNDARY VMT RESULTS

	City Boundary		10-Mile Boundary	
Scenario	No Project	With Project	No Project	With Project
Service Population	706,494	707,058	2,579,062	2,579,626
Boundary VMT	9,602,250	9,598,040	41,605,554	41,614,834
VMT per SP	13.6	13.6	16.1	16.1
Change in VMT	0.0		0.0	
Potentially Significant?	No		No	

The boundary VMT is found to increase under the With Project scenario for both the baseline and cumulative conditions, as expected when increases in development are added to the model. However, to measure the efficiency of a land use project or land use plan, the boundary VMT is divided by the service population to frame an efficiency metric. The resulting VMT per service population was found to remain unchanged in the With Project scenario. The Project does not result in an increase total daily VMT per SP as compared to the No Project scenario.

ACTIVE TRANSPORTATION AND PUBLIC TRANSIT REVIEW

Potential impacts to:

- Circulation system
- Public transit
- Pedestrian facilities and travel
- Bicycle facilities

Were analyzed to determine if the proposed Project conflicts with adopted policies, plans, programs, and if the Project has the potential to decrease the performance or safety of such facilities.

CIRCULATION SYSTEM

Traffic is anticipated to be distributed through the City of Ontario, extending into the neighboring jurisdiction of the City of Eastvale. In general, the study area has a moderate level of active transportation facilities and transit service. Bicycle and pedestrian facilities are proposed as part of the City of Ontario and City of Eastvale General Plans on most roadways throughout the study area.

CITY OF ONTARIO GENERAL PLAN CIRCULATION ELEMENT EVALUATION

The Project site is located within the City of Ontario. Exhibit 1 shows The Ontario Plan 2050 mobility element. (2)

Principal Arterials serve the major centers and corridor of activity, carry the highest volumes of traffic, and serve the longest trips of all city roadways. The study area roadways that are classified as 8-lane Principal Arterials are identified as having four lanes of travel in each direction. The following study area roadway within the City of Ontario is classified as an 8-lane Principal Arterial:

- Ontario Ranch Road

The study area roadways that are classified as 6-lane Principal Arterials are identified as having three lanes of travel in each direction. The following study area roadway within the City of Ontario is classified as a 6-lane Principal Arterial:

- Hamner Avenue

The study area roadways that are classified as 4-lane Principal Arterials are identified as having two lanes of travel in each direction. The following study area roadway within the City of Ontario is classified as a 4-lane Principal Arterial:

- Haven Avenue

Minor Arterials accommodate less traffic than Principal Arterials and are for trips of moderate length. Minor Arterials allow more access to abutting properties and connect the community. The study area roadway that is classified as a 4-lane Minor Arterial is identified as having two lanes of travel in each direction. The following study area roadway within the City of Ontario is classified as a 6-lane Minor Arterial:

- Bellegrave Avenue

Collector streets provide access to abutting properties and traffic circulation within residential neighborhoods and business areas. Collector streets allow access to local and arterial roadways. The study area roadways that are classified as 4-lane Collector Streets are identified as having two lanes of travel in each direction. The following study area roadways within the City of Ontario are classified as 4-lane Collector Streets:

- Mill Creek Avenue
- Eucalyptus Avenue
- Merrill Avenue

CITY OF EASTVALE GENERAL PLAN CIRCULATION ELEMENT

Exhibit 2 shows the City of Eastvale General Plan Circulation Element. (3)

BICYCLE FACILITIES

There are four bicycle facility classifications recognized by the City of Ontario. The four bicycle facility classifications are as follows:

Class I Bikeways (Bike Paths)

Class I bikeways are dedicated for exclusive use by bicyclists along rivers, channels, and utility right-of-way.

Class II Bikeways (Bike Lanes)

Class II bikeways are dedicated lanes along streets, with no parking allowed in the bike lane.

Class III Bikeways (Bike Routes)

Class III bikeways are bike routes normally shared with motor vehicles on the street or with pedestrians on sidewalks, and parking is allowed.

Class IV Bikeways (Separated Bikeways)

Class IV bikeways are dedicated for exclusive use of bicycles and are physically separated from motor traffic with a vertical feature.

Many of the City of Ontario's bicycle paths are combined with sidewalks along each side of major streets.

The City of Ontario and City of Eastvale bike networks are shown on Exhibits 3 and 4, respectively. Adjacent to the Project site, there is a Class II bike lane along Eucalyptus Avenue. A Class I bike path is proposed along Hamner Avenue, east of the Project site. Many bicycle facilities are either existing or proposed within the study area on most major streets. As the study area builds out consistent with the City's proposed trail and bicycle facilities, the Project will be part of a well-connected bicycle network.

PEDESTRIAN FACILITIES

Pedestrian facilities include sidewalks, crosswalks, pedestrian signals, and multi-use trails. Exhibit 5 illustrates the existing crosswalks throughout the study area. As shown in Exhibit 5, pedestrian facilities are built out along portions of Eucalyptus Avenue, Hamner Avenue, and many other study area roadways. Under the assumption that pedestrian facilities will continue to be constructed as the study area develops, the Project will be part of a safe and efficient pedestrian network. The Project is to develop the sidewalks along the roadways adjacent to the Project.

PUBLIC TRANSIT REVIEW

There are bus and regional transit service options available to the City of Ontario. Limited routes and transit options are available near the Project site. It is anticipated that new routes will be proposed to support the future development, but those routes have not been identified at this time. Existing transit services and routes in the study area are shown on Exhibit 6.

Omnitrans

The study area is currently served by Omnitrans, a public transit agency serving various jurisdictions within San Bernardino County. Omnitrans provides countywide bus service and currently has five bus routes in the City of Ontario that provide connections between rail stations, Ontario International Airport (ONT), major employment and shopping centers, and residential areas. Exhibit 6 shows the existing transit facilities, which indicates that Omnitrans Route 87 could serve the Project site. Route 87 runs along portions of Hamner Avenue and Ontario Ranch Road. The nearest bus stop is at the intersection of Hamner Avenue and Eucalyptus Avenue, approximately 1,000 feet east of the Project site. Transit service is reviewed and updated by Omnitrans periodically to address ridership, budget, and community demand needs. Changes in land use can affect these periodic adjustments which may lead to either enhanced or reduced service where appropriate. As such, it is recommended that the Applicant work in conjunction with Omnitrans to potentially provide bus service to the site.

Metrolink

Commuter train service in the City of Ontario is provided by Metrolink, which provides service throughout the Southern California region. The nearest Metrolink station is the East Ontario Metrolink station, located approximately 4 miles north of the Project site. The Riverside Line links Riverside to Union Station in downtown Los Angeles and various other destinations. This line runs weekdays during peak commute hours only.

TRANSPORTATION IMPACT ANALYSIS

This assessment addresses the following Transportation thresholds stated in *CEQA Guidelines* Appendix G:

T-1 Potential to conflict with a program, plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities.

T-2 Potential to conflict or be inconsistent with *CEQA Guidelines* Section 15064.3(b) regarding policies to reduce vehicle miles traveled (VMT).

T-3 Potential to substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment).

T-4 Potential to result in inadequate emergency access.

T-1 ASSESSMENT

The analysis presented here considers the degree to which the Project may hinder the safe and comfortable access to the Project site from other locations, with a special focus on people relying on transit services or active transportation modes such as biking or walking.

Applicable programs, plans, and policies addressing the circulation system are established under TOP 2050. Project consistency with applicable provisions of TOP 2050 is summarized at Table 5. As provided for under CEQA, the analysis presented here considers program, plan, and policy inconsistencies that could result in potentially significant environmental impacts. As a matter of law, the Project would be required to comply with City ordinances addressing the study area circulation system.

TABLE 5: TOP 2050 CONSISTENCY ANALYSIS

MOBILITY ELEMENT		
M-1 Roadway System		
Goal M1 A system of roadways that meets the mobility needs of a dynamic and prosperous Ontario.		
Policies		**Remarks**
M-1.1	**Roadway Design and Maintenance.** We require our roadways to: • Comply with federal, state and local design and safety standards. • Meet the needs of multiple transportation modes and users. • Handle the capacity envisioned in City of Ontario Master Plan of Streets and Highways. • Be maintained in accordance with best practices. • Be compatible with the streetscape and surrounding land uses.	**Consistent.** Project roadway designs and all proposed improvements would conform with the City's Master Plan of Streets and Highways, City design standards and applicable federal/state design and safety standards. City design review processes would ensure compliance with all applicable standards. Streetscape design concepts implemented pursuant to the Specific Plan establish compatible continuation of existing perimeter streetscapes. All public roadways would be maintained in accordance with City requirements to include implementation of City Best Management Practices and City Right-of-Way Management Plan.

TABLE 5: TOP 2050 CONSISTENCY ANALYSIS

MOBILITY ELEMENT		
	• Promote the efficient flow of all modes of traffic through the implementation of intelligent transportation systems and travel demand strategies.	On this basis, the Project is considered consistent with Policy M-1.1.
M-1.2	**Mitigation of Impacts.** We require development to mitigate its traffic impacts.	**Consistent.** The Project would not result in potentially significant VMT impacts. Level of Service (LOS) deficiencies are no longer CEQA considerations. Recommended improvements addressing any potential LOS deficiencies would be implemented consistent with City Conditions of Approval. On this basis, the Project is considered consistent with Policy M-1.2.
M-1.3	**Agency Coordination on Roadway Improvements.** We work with Caltrans, SBCTA and others to identify, fund and implement needed improvements to roadways when necessary. We work with neighboring jurisdictions to promote regional connectivity, access, and meet operational level of service standards at the City limits.	**Consistent.** Please refer to remarks at Policies M-1.1, M-1.2.
M-1.4	**Complete Streets.** We work to provide a complete, balanced, context-aware, multimodal transportation network that meets the needs of all users of streets, roads, and highways, including motorists, pedestrians, bicyclists, children, persons with disabilities, seniors, movers of commercial goods, and users of public transportation. We prioritize implementation of complete streets improvements in environmental justice areas to facilitate opportunities for residents to use active transportation systems.	**Consistent.** The Project would construct all circulation system improvements consistent with applicable provisions of the Specific Plan, TOP 2050 Mobility Element, and as required under City Conditions of Approval. On this basis, the Project is considered consistent with Policy M-1.4.
M-1.5	**Level of Service.** Maintain a peak hour Level of Service (LOS) E or better at all intersections. Maintain Level of Service D or better on arterial streets in the City. Develop and maintain a list of locations where LOS E or LOS F are considered acceptable and would be exempt from this level of service policy. Considerations for LOS exemption include being restricted by environmental constraints, lacking available right-of-way, deterring an	**Consistent.** The City recognizes that vehicle delay (Level of Service, LOS) deficiencies are no longer environmental impacts under CEQA. Recommended improvements addressing any LOS deficiencies would be implemented per City Conditions of Approval. On this basis, the Project is considered consistent with Policy M-1.5.

TABLE 5: TOP 2050 CONSISTENCY ANALYSIS

MOBILITY ELEMENT		
	increase in VMT, or degrading other modes of travel (such as bicycle or pedestrian infrastructure).	
M-1.6	**Reduce Vehicle Miles Traveled.** We will strive to reduce VMT through a combination of land use, transportation projects, travel demand management strategies, and other trip reduction measures in coordination with development projects and public capital improvement projects.	**Consistent.** While roadway improvements associated with the Project may facilitate vehicular travel within the City and surrounding areas, total VMT and environmental impacts of such travel would not result in any potentially significant VMT and VMT-related impacts. On this basis, the Project is considered consistent with Policy M-1.6.
M-2 Active Transportation		
Goal M-2 A system of trails and corridors that facilitate and encourage active modes of transportation.		
Policies		**Remarks**
M-2.1	**Active Transportation.** We maintain our Active Transportation Master Plan to create a comprehensive system of on- and off-street bikeways and pedestrian facilities that are safe, comfortable, and accessible and connect residential areas, businesses, schools, parks, and other key destination points.	**Consistent.** Bikeways and pedestrian facilities would be implemented consistent with provisions of the Specific Plan and as required under City Conditions of Approval. The Project does not propose or require facilities or operations that would conflict with the City's Active Transportation Master Plan. On this basis, the Project is considered consistent with Policy M-2.1.
M-2.2	**Bicycle System.** We provide off-street multipurpose trails and Class II bikeways as our preferred paths of travel and use the Class III for connectivity in constrained circumstances. When truck routes and bicycle facilities share a right-of-way, we prefer Class I or Class IV bicycle facilities. We require new development to include bicycle facilities, such as bicycle parking and secure storage areas.	**Consistent.** Bikeways and bicycle amenities would be implemented consistent with provisions of the Specific Plan and as required under City Conditions of Approval. On this basis, the Project is considered consistent with Policy M-2.2.
M-2.3	**Pedestrian Walkways.** We require streets to include sidewalks and visible crosswalks at major intersections where necessary to promote safe and comfortable mobility between residential areas, businesses, schools, parks, recreation areas, and other key destination points.	**Consistent.** Pedestrian paths would be provided within the Project site and along the Project perimeter consistent with City standards, provisions of the Specific Plan, and as required under City Conditions of Approval. On this basis, the Project is considered consistent with Policy M-2.3.

TABLE 5: TOP 2050 CONSISTENCY ANALYSIS

MOBILITY ELEMENT		
M.2-4	**Network Opportunities.** We use public rights-of-way and easements such as, utility easements, levees, drainage corridors, road rights-of-way, medians, and other potential options to maintain and expand our bicycle and pedestrian network. In urban, mixed-use, and transit-oriented Place Types, we encourage the use of underutilized public and private spaces to expand our public realm and improve pedestrian and bicycle connectivity.	**Consistent.** Bikeways and pedestrian facilities would be implemented consistent with provisions of the Specific Plan and as required under City Conditions of Approval. On this basis, the Project is considered consistent with Policy M-2.4.
M-3 Public Transit		
Goal M-3 A public transit system that is a viable alternative to automobile travel and meets basic transportation needs of the transit-dependent.		
Policies		**Remarks**
M-3.1	**Transit Partners.** We maintain a proactive working partnership with transit providers to ensure that adequate public transit service is available, cost-efficient, and convenient, particularly for residents in environmental justice areas.	**Consistent.** The Project would not interfere with or otherwise obstruct the City's cooperative partnership with transit providers. On this basis, the Project is considered consistent with Policy M-3.1.
M-3.2	**Alternative Transit Facilities at New Development.** We require new development adjacent to an existing or planned transit stop to contribute to the creation of transit facilities, such as bus shelters, transit bays and turnouts, and bicycle facilities, such as secure storage areas.	**Consistent.** The Project would support and would not conflict with City efforts to contribute to the creation of transit facilities. To these ends, the Applicant would coordinate Project development with the City and transit agencies to implement transit service and supporting amenities. On this basis, the Project is considered consistent with Policy M-3.2.
M-3.3	**Transit-Oriented Development.** We may provide additional development-related incentives to those inherent in the Land Use Plan for projects that promote transit use and reduce vehicle miles traveled.	**Consistent.** The Project would not interfere with or otherwise obstruct the City's incentive programs and policies. On this basis, the Project is considered consistent with Policy M-3.3.
M-3.4	**Bus Rapid Transit (BRT) Corridors.** We work with regional transit agencies to implement BRT service and reduce vehicle miles traveled by targeting destinations and corridors with the highest number of potential riders.	**Consistent.** The Project would not interfere with or otherwise obstruct the City's cooperative efforts with regional transit agencies. On this basis, the Project is considered consistent with Policy M-3.4.

TABLE 5: TOP 2050 CONSISTENCY ANALYSIS

MOBILITY ELEMENT		
M-3.5	**Light Rail.** We support extension of the Metro Rail Gold Line to Ontario, and will work to secure station locations at the proposed multimodal transit center.	**Consistent.** The Specific Plan area is not located near the potential Metro Rail Gold Line extension to the City; nor the proposed multimodal transit center. The Project would not impact, nor be impacted by, rail operations. On this basis, the Project is considered consistent with Policy M-3.5.
M-3.6	**Metrolink Expansion.** We advocate expansion of Metrolink service to include the Downtown and the multimodal transit center.	**Consistent.** The Project site is not located near the Metrolink rail line; nor the proposed multimodal transit center. The Project would not impact, nor be impacted by, Metrolink expansion. On this basis, the Project is considered consistent with Policy M-3.6.
M-3.7	**High Speed Rail.** We encourage the development of high-speed rail systems that would enhance regional mobility in Southern California and serve the City of Ontario.	**Consistent.** No railways exist within or near the Specific Plan area. The Project would not interfere with or otherwise obstruct the development of high-speed rail systems. On this basis, the Project is considered consistent with Policy M-3.7.
M-3.8	**Feeder Systems.** We work with regional transit agencies to secure convenient feeder service from the Metrolink station and the proposed multimodal transit center to employment centers in Ontario.	**Consistent.** The Project site is located in an area already served by public transit. The Project would implement feeder transit facilities as required by the City through its coordination with transit agencies serving the area. On this basis, the Project is considered consistent with Policy M-3.8.
M-3.9	**Ontario Airport Metro Center Circulator.** We will explore development of a convenient mobility system, including but not limited to shuttle service, people mover, and shared car system, for the Ontario Airport Metro Center.	**Consistent.** The Specific Plan area is not located in or near the Ontario Airport Metro Center. The Project would not interfere with or otherwise obstruct the City's development of a mobility system in this area. On this basis, the Project is considered consistent with Policy M-3.9.
M-3.10	**Multimodal Transportation Center.** We intend to ensure the development of a multimodal transportation center near ONT airport to serve as a transit hub with amenities for transit riders, pedestrians, and bicyclists transitioning to local buses, BRT, the Gold Line, high-speed rail, the proposed Ontario Airport Metro Center Circulator, and other future transit modes. We support locations for the multimodal	**Consistent.** The Specific Plan area is not located in/near the area intended for development of the Multimodal Transportation Center. The Project would not interfere with or otherwise obstruct the implementation of this transit hub. On this basis, the Project is considered consistent with Policy M-3.10.

TABLE 5: TOP 2050 CONSISTENCY ANALYSIS

MOBILITY ELEMENT		
	transportation center that are north of ONT airport, between Vineyard Avenue and Interstate 15.	
M-3.11	**Transit and Community Facilities.** We require the future development of community-wide serving facilities to be sited in transit-ready areas that can be served and made accessible by public transit. Conversely, we plan (and coordinate with other transit agencies to plan) future transit routes to serve existing community facilities.	**Consistent.** The Project site is located in an area already served by public transit. The Applicant would also coordinate with the City and transit agencies to implement transit service and thereby reduce vehicle miles traveled. On this basis, the Project is considered consistent with Policy M-3.11.
M-4 Goods Movement		
Goal M-4 An efficient flow of goods through the City that maximizes economic benefits and minimizes negative impacts.		
Policies		**Remarks**
M-4.1	**Truck Routes.** We designate and maintain a network of City truck routes that provide for the safe and efficient transport of goods while minimizing negative impacts on local circulation and noise-sensitive land uses, as shown on Exhibit M-04, Truck Routes. We will minimize conflicts on truck routes through the design and implementation of buffers between travel lanes and pedestrian and bicycle facilities on designated truck routes.	**Consistent.** The Project does not propose uses or activities that would generate substantial truck traffic. Any trucks accessing the Specific Plan area would utilize the City's designated truck routes, thereby minimizing negative impacts on local circulation and noise-sensitive land uses. On this basis, the Project is considered consistent with Policy M-4.1.
M-4.2	**Regional Participation.** We work with regional and subregional transportation agencies and adjacent cities to plan and implement goods movement strategies, including regional truck routes, plans and projects that improve mobility, support the efficient movement of goods, and minimize negative environmental impacts.	**Consistent.** The Project land uses take advantage of proximate available improved transportation systems acting generally to facilitate mobility, goods movement, and goods delivery on a local, sub-regional and regional basis. The Project would not interfere with or otherwise obstruct City efforts and actions to coordinate regional and sub-regional plans and strategies facilitating mobility, goods movement, and goods delivery. On this basis, the Project is considered consistent with Policy M-4.2.
M-4.3	**Railroad Grade Separations.** We eliminate at-grade rail crossings identified on Exhibit M-01, Roadway Classifications.	**Consistent.** No at-grade rail crossings are located within or adjacent to the Project site. The Project would not interfere with or otherwise obstruct the City's elimination actions in this regard.

TABLE 5: TOP 2050 CONSISTENCY ANALYSIS

MOBILITY ELEMENT		
		On this basis, the Project is considered consistent with Policy M-4.3.
M-4.4	**Environmental Considerations.** We support both local and regional efforts to reduce/eliminate the negative environmental impacts of goods movement through the planning and implementation of truck routing and the development of a plan to evaluate the future needs of clean fueling/recharging and electrified truck parking.	**Consistent.** The Specific Plan Design Guidelines and Development Regulations act globally to minimize potential environmental impacts of goods movement associated with the Project. Please refer also to remarks at Policies M-4.1, M-4.2.
M-4.5	**Air Cargo.** We support and promote a ONT airport that accommodates 1.6 million tons of cargo per year, as long as the impacts associated with that level of operations are planned for and mitigated.	**Consistent.** The Specific Plan area is not located within an identified Safety Zone of the ONT airport. The Project would not impact, nor be impacted by, ONT airport cargo operations. On this basis, the Project is considered consistent with Policy M-4.5.
M-5 Regional Transportation		
Goal M-5 A proactive leadership role in helping identify and facilitate implementation of strategies that address regional transportation challenges.		
Policies		**Remarks**
M-5.1	**Regional Leadership.** We maintain a leadership role to help identify and implement potential solutions to long-term regional transportation problems.	**Consistent.** The Project would not interfere with or otherwise obstruct the City's leadership efforts and actions. On this basis, the Project is considered consistent with Policy M-5.1.
M-5.2	**Land Use Compatibility with Regional Transportation Facilities.** We work with ONT, railroads, Caltrans, SBCTA, and other transportation agencies to minimize impacts.	**Consistent.** The Project would not interfere with or otherwise obstruct the City's cooperative efforts with regional transportation agencies. On this basis, the Project is considered consistent with Policy M-5.2.

Sources: Goal and Policy statements from TOP 2050; remarks by Urban Crossroads.

Prior to the issuance of Building Permits, the City would review the final Project designs to ensure consistency with City programs, plans, and policies as outlined above. Consistency with applicable City ordinance requirements is required as a matter of law.

Level of Significance: Less-Than-Significant. As summarized at Table 5, the Project does not propose or require uses or facilities that would conflict with applicable programs, plans, and

policies addressing the circulation system. Project impacts in these regards would therefore be **less-than-significant**.

T-2 ASSESSMENT

The Project is consistent with *CEQA Guidelines* section 15064.3, subdivision (b) regarding policies to reduce VMT. The City of Ontario has adopted the following thresholds of significance related to VMT for land use plans:

The SBTAM model should be used to forecast total daily VMT per Service Population (SP) is the required method for estimating VMT.

- A significant impact would occur if the project VMT per SP exceeds the Citywide average VMT per SP under General Plan Buildout Conditions.
- A significant impact would occur if the project caused total daily VMT per SP within the City to be higher than the no project scenario under cumulative conditions.

Based on the VMT analysis previously presented in this technical memorandum, Project-generated VMT per service population was found to be less than the City of Ontario VMT per service population under General Plan Buildout Conditions. Additionally, total daily VMT per service population within the City is forecast to remain unchanged under "With Project" for cumulative conditions. The Project therefore results in a **less-than-significant** VMT impact.

T-3 ASSESSMENT

Efficient and safe operations of the Project would be provided by on-site and localized circulation and intersection improvements to be developed as the Project individual site and building designs are finalized. The City would ensure that all on-site and localized circulation and intersection improvements would be designed and constructed consistent with applicable provisions of the Specific Plan and pursuant to City site plan and Building Permit review processes and requirements.

Traffic signing and striping would be implemented in conjunction with detailed Project construction plans. Sight distance at each Project access point would be reviewed with respect to standard Caltrans and City of Ontario sight distance standards at the time of preparation of final grading, landscape and street improvement plans.

The Project would generate passenger car trips typical of the proposed uses. As part of established site and Building Permit review processes, the City would require implementation of designated travel paths, signing, and traffic controls to ensure that traffic conflicts are minimized or avoided. Land uses proximate to the Project site are planned for, or are developed with urban uses similar to those proposed by the Project. These uses would generate urban traffic types similar to traffic generated by the Project and would not generate traffic that would be incompatible with the Project traffic types.

As supported by the preceding discussions, the potential for the Project to substantially increase hazards to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment); is considered **less-than-significant.**

T-4 ASSESSMENT

EMERGENCY ACCESS

Access to the Specific Plan area is provided by improved urban roadways. As part of the City's established design review processes, design and implementation of all Project circulation improvements, as well as final design(s) of the Project site plan(s), to include locations and design of proposed driveways, would be required to be reviewed and approved by the City Traffic Engineer. In addition, as part of the City's established design review processes, representatives of the City's Police and Fire Departments would review the Project's plans in regard to emergency access. Efficient and safe access within, and access to, the Project is provided by the Specific Plan design concepts, site access improvements, and site adjacent roadway improvements included as components of the Project. In combination, these elements act to facilitate emergency access and avoid conditions that would restrict or limit access under emergency conditions.

OTHER CONSIDERATIONS

It is also recognized that temporary and interim traffic detours and traffic disruptions could occur during Project construction. To minimize effects of Project construction on area traffic patterns, it is recommended that the following or similar Construction Area Traffic Management Plan (Plan) be implemented as a Project Condition of Approval. Typical elements and information incorporated in the Plan would include, but not be limited to:

- Name of on-site construction superintendent and contact phone number.
- Identification of Construction Contract Responsibilities - For example, for excavation and grading activities, describe the approximate depth of excavation, and quantity of soil import/export (if any).
- Identification and Description of Truck Routes - to include the number of trucks and their staging location(s) (if any).
- Identification and Description of Material Storage Locations (if any).
- Location and Description of Construction Trailer (if any).
- Identification and Description of Traffic Controls - Traffic controls shall be provided per the Manual of Uniform Traffic Control Devices (MUTCD) if the occupation or closure of any traffic lanes, parking lanes, parkways or any other public right-of-way is required. If the right-of-way occupation requires configurations or controls not identified in the MUTCD, a separate traffic control plan must be submitted to the City for review and approval. All right-of-way encroachments would require permitting through the City.
- Identification and Description of Parking - Estimate the number of workers and identify parking areas for their vehicles.
- Identification and Description of Maintenance Measures - Identify and describe measures taken to ensure that the work site and public right-of-way would be maintained (including dust control).

The Plan would be reviewed and approved by the City prior to the issuance of the first building permit. The Plan and its requirements would also be required to be provided to all contractors as one component of building plan/contract document packages.

Based on the preceding, the potential for the Project to result in inadequate emergency access would be **less-than-significant.**

If you have any questions, please contact me directly at aso@urbanxroads.com.

REFERENCES

1. **City of Ontario.** *SB 743 VMT Thresholds.* City of Ontario : s.n., June 2020.
2. —. *The Ontario Plan 2050.* City of Ontario : PlaceWorks, August 2022.
3. **City of Eastvale.** *Eastvale General Plan 2040.* City of Eastvale : PlaceWorks, March 2024. Volume I.

ATTACHMENT A

PROJECT SITE PLAN

EXHIBIT A-1: PRELIMINARY SITE PLAN

DEXTER WILSON ENGINEERING, INC.

WATER • WASTEWATER • RECYCLED WATER

CONSULTING ENGINEERS

WATER SYSTEM ANALYSIS FOR THE ESPERANZA PA 11 PROJECT IN ONTARIO RANCH IN THE CITY OF ONTARIO

April 17, 2025

2234 FARADAY AVENUE • CARLSBAD, CA • (760) 438-4422

WATER SYSTEM ANALYSIS FOR THE ESPERANZA PA 11 PROJECT IN ONTARIO RANCH IN THE CITY OF ONTARIO

April 17, 2025

4-17-2025

Prepared by:
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Job No. 1551-001

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April 17, 2025 1551-001

Walden & Associates
2552 White Road, Suite B
Irvine, CA 92614

Attention: Marcos Padilla, P.E., President

Subject: Water System Analysis for Esperanza PA 11 Project in the City of Ontario

Introduction

The Esperanza PA 11 project is located in the City of Ontario north of Eucalyptus Avenue between Amherst Avenue and Chatham Street. Access to the project will be from Amherst Avenue and Chatham Street. Water service for Esperanza PA 11 project will be provided by City of Ontario (City).

The proposed project is a mixed-use development consisting of 161 units on approximately 10 acres.

A Vicinity Map for the project is shown on Figure 1.

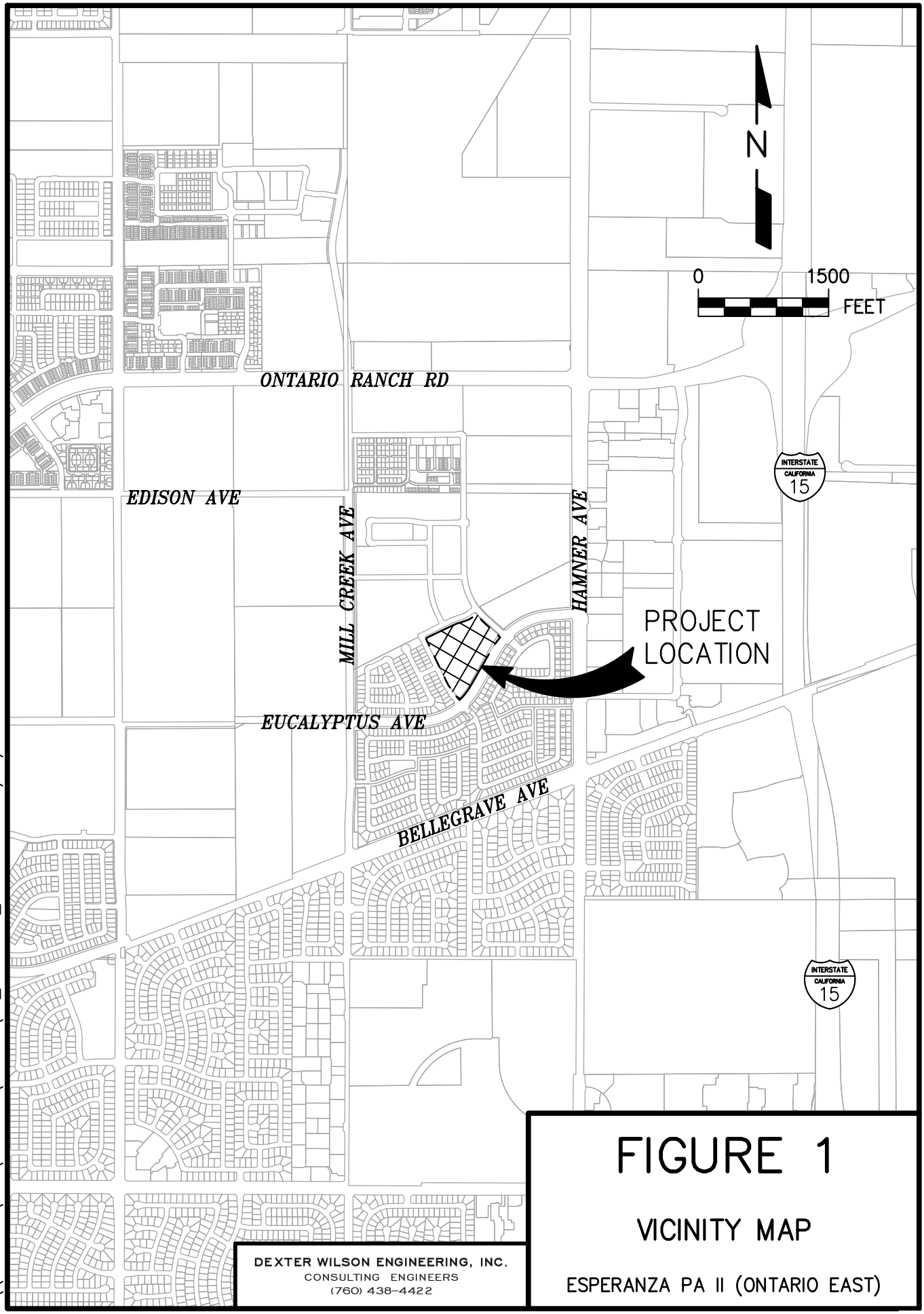

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FIGURE 1

VICINITY MAP

ESPERANZA PA II (ONTARIO EAST)

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Purpose of Study

The purpose of this letter report is to analyze the existing and proposed water system for Esperanza PA 11 project and determine if there are any water system deficiencies created by the proposed development of this property and land use change from school site to residential. This report will address any offsite (public) water system improvements are needed for the development of the project so that the offsite water system will be in conformance with the City water system design standards.

A previous Master Plan of Water was prepared for the entire project in 2015 for the overall developer.

Study Area and Available Water System Pressure

In general, the study area for this water report is Esperanza PA 11 project boundary. The extent of the existing water system which was incorporated into the analysis of the project site was based on the existing water distribution system that serves the project area.

Figure 2 presents the existing and proposed water facilities in the project area.

Water service to the project will be from the 925 Pressure Zone of the City's public water system. Finished floor elevations on the project property range between 705 feet and 711 feet. This results in a maximum static water pressure range of 93 psi to 95 psi on the project site.

Water System Design Criteria

The design criteria used for the evaluation of the proposed water system by Esperanza PA 11 project are based on City design criteria. This water design criteria is presented in the City's most recent Master Plan for the overall project. A copy of the pertinent sections where the design criteria is located is attached as Appendix A.

Water Demand Rates. The water demand rates for the project and surrounding area are presented as Table 1 below.

TABLE 1
ESPERANZA PA 11 WATER DEMAND FACTORS

Land Use	Demand Factor
Residential – Attached Dwellings (11-25 units/acre)	323 gpd/unit

Peaking Factors. The peaking factors utilized in this study are identified in the City's Master Plan. To convert average day demand to maximum day demand a peaking factor of 1.55 was utilized and to convert average day demand to peak hour demand a peaking factor of 1.98 was utilized.

Existing and Proposed Water System

There are existing public water facilities directly adjacent to the project site. There is an existing 24-inch diameter public water line in Eucalyptus Avenue and existing 8-inch public water lines surrounding the project. The project will be connecting its onsite private water systems to two existing water lines in Amherst Avenue and Chatham Street.

Figure 2 presents the existing and proposed water system in the project vicinity.

NOTE: ALL EXISTING AND PROPOSED WATER LINES ARE IN THE 925 PRESSURE ZONE.

N

0 200 FEET

DOMESTIC METER WITH BACKUP BYPASS METER AND BACKFLOW PREVENTER

PROPOSED POINT OF CONNECTION

8" FIRE BACKFLOW PREVENTER

PROPOSED POINT OF CONNECTION

8" FIRE BACKFLOW PREVENTER

LEGEND

- PROJECT BOUNDARY
- EXISTING PUBLIC POTABLE WATER LINE
- PROPOSED PUBLIC POTABLE WATER LINE
- PROPOSED PRIVATE DOMESTIC SYSTEM
- PROPOSED PRIVATE FIRE PROTECTION SYSTEM
- EXISTING PUBLIC FIRE HYDRANT
- PROPOSED PRIVATE FIRE HYDRANT
- PROPOSED BACKFLOW PREVENTER
- PROPOSED WATER METER

CHATHAM ST

S EL REY PRIVADO

S AMHERST AVE

MILL CREEK AVE

EUCALYPTUS AVE

HAMNER AVE

EX.8" EX.12" EX.24"

FIGURE 2

EXISTING AND PROPOSED WATER FACILITIES

ESPERANZA PA 11 (ONTARIO EAST)

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\\MERIDIAN\DWG\1551001\REPORT\EH_WTR_FIGURE-2_EXPROWTR.DWG 4/17/2025 2:49:30 PM LAYOUT:11x17 USER:James

Table 2 provides the summary of projected water demand for the project.

TABLE 2
ESPERANZA PA 11 PROJECTED WATER DEMAND

Description	Quantity	Unit Demand Factor	Total Avg. Demand, gpd
Medium Density Residential	161 units	323 gpd/unit	52,003

Per the City design criteria, the maximum day demand calculates to be 80,605 gpd (56 gpm) and the peak hour demand calculates to be 102,966 (72 gpm).

Private Water System

Per the City's requirement, the onsite water system for Esperanza PA 11 will be private. One connection will be made for the domestic service and two connections will be made for the fire protection service to the project site. Connections will be made at Chatham Street and Amherst Avenue.

Domestic Meter and Service. The preliminary water fixture count (WFU) for the proposed units are estimated to be 30 to 35 WFUs per unit. Based on a WFU count of between 30 and 35 fixture units per home and an extrapolation curve as shown in Appendix B, the design demand for water meter sizing is estimated to be approximately 675 gpm for the project.

Based on the meter capacities established in AWWA C700-20, the project will likely require a 4-inch or 6-inch meter. A bypass meter will be provided in the event that the primary meter is temporarily of service. The final sizing of the service laterals and meters will need to be confirmed once the fixture units and plumbing plans for each home are finalized.

Private Fire Protection Service. The private fire protection system will consist of two DCDA backflow preventers at each connection point and 8-inch diameter water lines throughout the project. The 8-inch diameter private fire protection system will sufficiently convey the projected 1,500 gpm fire flow requirement. This was confirmed by a hydraulic computer model that is presented in the next section of this water study.

Hydraulic Model Development

The KYPIPE computer software program developed by the University of Kentucky was used to analyze the proposed onsite and existing offsite public water system. KYPIPE utilizes the Hazen-Williams equation for determining head loss in pipes. The program also determines the flow and velocity in the pipes as well as the available pressure at nodes in the water system. An assumed roughness coefficient "C" value of 120 was used for all pipes.

Available Hydraulic Grade Line. **F**ire flow test data in the vicinity of the project was performed by the City and is included in Appendix C for reference. Results from the hydrant flow test show a residual pressure of approximately 58 psi at the fire flow requirement for the project at the hydrant flow test location (Eucalyptus Avenue west of the project site).

Fitting and Valve Losses. To simulate minor losses through pipe fittings and valves, minor loss coefficients or "k" values for all fittings associated with pipes were included in the hydraulic model.

Meter and Backflow Assembly Losses. The pressure loss through the proposed meters and backflow preventers was incorporated into the computer model. Appendix B presents candidate DCDA and RP backflow preventers. The manufacturer's literature includes charts which show pressure loss through the backflow preventer as a function of flow. These charts were used to incorporate the pressure losses reflected in the computer modeling.

Hydraulic Model Analysis

Hydraulic modeling of the proposed onsite and existing offsite water system for the Esperanza PA 11 project was performed to confirm the pipe sizes necessary to provide adequate domestic and fire protection service. The water system was analyzed under an onsite 1,500 gpm fire flow scenario.

Appendix C provides the results of the computer model for the analyzed water system. Exhibit A at the back of Appendix C provides the Node and Pipe Diagram of the analyzed water system.

The results of the hydraulic analyses presented in Appendix C show that the proposed water system for the project site is adequate for domestic service and fire protection. For fire protection, the results of the computer runs show that a fire flow of 1,500 gpm can be delivered to the any fire hydrant within the project site with a residual pressure at the hydrant of greater than 20 psi. The minimum residual pressures are 31 psi under a 1,500 gpm fire flow scenario. Domestic demands can be provided with residual pressures of at least 58 psi.

The results of the computer hydraulic analyses for Esperanza PA 11 project indicate that the existing public water system can provide sufficient flow and pressure for the projects' domestic and expected fire protection service needs.

Conclusions and Recommendations

The following conclusions and recommendations are summarized based on the water system analysis prepared for the proposed Esperanza PA 11 project.

1. The project will be supplied from the existing City 925 Zone water system.

2. The project is proposing to make two connections to the existing public water system. These include a connection to an existing 8-inch diameter line in Chatham Street and a connection to an existing 8-inch line in Amherst Avenue.

3. Figure 2 presents the existing and proposed water system surrounding the project.

4. The estimated WFU count and corresponding peak water demand (675 gpm approximate) is provided on page 6 of this report.

5. A maximum day demand plus fire flow of 1,500 gpm can be met at the project site with existing and the proposed piping with all residual pressures greater than 20 psi.

6. **F**ire flow test data in the vicinity of the project was performed by the City and is included in Appendix C for reference

7. This report presents the sizing and a general schematic layout of the proposed onsite water system. The design engineer for the water system should incorporate valves, fittings, and appurtenances in accordance with the design guidelines of the City of Ontario.

8. The recommended material specification for all new potable water lines is AWWA C900 DR18 PVC.

Thank you for the opportunity to assist you with the water system planning for Esperanza PA 11 project. If you have any questions regarding the information and conclusions presented in this report, please do not hesitate to call.

Dexter Wilson Engineering, Inc.

Steven Henderson, P.E.

Attachments

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APPENDIX A

DESIGN CRITERIA

EXHIBIT C-2R

WATER DEMAND EQUIVALENTS BY LAND USE

Available Water Supply - See Exhibit C-1R for Net MDD Available

Table A - Water Demand Equivalents By Land Use

The Ontario Plan Land Use	Potable Water			Recycled Water	
	Water Demand Factor (ADD)		Water Demand Equivalents (WDE)[2]	Recycled Water Demand Factor[1] (ADD)	Recycled Water Demand Of Total Water Demand
	(gpd/du)	(gpd/ac)	(gpm/unit)	(gpd/ac)	(%)
Detached Dwellings (less than 5 units per acre)	544		0.57	900	28%
Detached or Attached Dwellings (between 5 and 11 units per acre)	464		0.48	1,000	21%
Attached Dwellings (between 11 and 25 units per acre)	323		0.34	1,500	18%
High Density Dwellings (25+ units per acre)	152		0.16	1,500	27%
Commercial Lodging	150		0.16	1,700	50%
Retail/Services Uses		2,200	2.29	2,300	51%
Office Uses		3,400	3.54	2,300	40%
Business Park Uses		2,200	2.29	2,200	50%
Industrial Uses		2,000	2.08	2,200	52%
Institutional Use		2,200	2.29	1,600	42%
Parks		1,000	1.04	1,400	58%
Schools		3,500	3.65	1,600	31%

[1]Recycled Water Demands include irrigation for right-of-way (medians and parkways), neighborhood edge, pocket parks, and common areas.

[2] The WDE is based on the Maximum Day Demand (MDD) with a peaking factor of 1.5 in the NMC for all land use categories.

Table B - Example Water Supply Calculation

Land Use	Acres[1] (gross)	Residential Units	WDE Factor (gpm)	Potable MDD (gpm)	Recycled Water ADD (gpm)
Development					
Detached Dwellings (less than 5 units per acre)	1,284	5,061	0.57	2,868	803
Detached or Attached Dwellings (between 5 and 11 units per acre)	369	2,530	0.48	1,223	256
Attached Dwellings (between 11 and 25 units per acre)	194	3,410	0.34	1,147	202
Retail/Services Uses (per acre)[2]	104		2.29	239	166
TOTAL	1,950	11,001		5,477	1,428

Three (3) Wells Are required to Support this example, assuming each well produces 2,000 gpm and connection to the Recycled Water System maximizing Recycled Water Use.

[1] Residential Acres are estimated based on the weighted average derived from the average number of units per land use category.

[2] Commercial acreage is calculated from a total square footage of 1,361,000 SF with an average Floor to Area Ratio (FAR) of 0.30 for commercial services in The Ontario Plan.

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SECTION 4
WATER USE

4-1 Historic Water Production and Purchase

The City obtains its potable water supply from groundwater wells in Chino Basin and imported water from the Water Facilities Authority (WFA) and the Chino Basin Desalter Authority (CDA). Currently, the City operates seventeen (17) active wells.

The total annual water production and purchase from January 2007 to December 2018 is shown in Table 4-1 and on Figure 4-1. Figure 4-2 illustrates the historic water production and purchase by month. Over the last twelve years, the annual supply has averaged a total of 35,774 AFY (31.9 mgd). The average groundwater production is 23,520 AFY (21.0 mgd). Per the Chino Basin Watermaster 41st Annual Report, the City of Ontario has appropriative rights to 16,337 AFY, and its share of the initial operating safe yield is 11,374 AFY or 21 percent of the appropriative pool rights. The City has secured additional supply through transfers, purchase, and groundwater recharge. The average amount of imported water purchased is 12,253 AFY (10.9 mgd).

There has been a decrease in production over the past twelve years. This may be attributed to the expansion of the City's recycled water system, as well as a conscientious water conservation effort by the customers. Water conservation is discussed further in Section 4-9.

Table 4-1

Historic Water Production and Purchase (Annual)

	Imported Water Purchased						Groundwater Well Production					Total Production and Purchase	
Calendar Year	CDA (AFY)	WFA (AFY)	SAWCO (AFY)	Total (AFY)	Total (mgd)	% of Total	Local (AFY)	DYY Shift (AFY)	Total (AFY)	mgd	% of Total	AFY	mgd
2007	5,125	12,734	0	17,859	15.9	40%	26,946	0	26,946	24.1	60%	44,806	40.0
2008	5,498	8,740	0	14,238	12.7	33%	27,064	2,000	29,064	25.9	67%	43,302	38.7
2009	5,047	3,494	0	8,541	7.6	22%	28,996	2,000	30,996	27.7	78%	39,537	35.3
2010	5,327	7,666	0	12,993	11.6	37%	20,955	1,043	21,997	19.6	63%	34,990	31.2
2011	5,162	8,883	0	14,046	12.5	41%	20,442	0	20,442	18.3	59%	34,488	30.8
2012	4,911	10,415	0	15,326	13.7	43%	20,226	0	20,226	18.1	57%	35,552	31.7
2013	4,987	10,967	0	15,954	14.2	44%	19,967	0	19,967	17.8	56%	35,921	32.1
2014	5,288	10,135	0	15,423	13.8	43%	20,274	0	20,274	18.1	57%	35,697	31.9
2015	3,543	6,413	443	10,399	9.3	35%	19,544	0	19,544	17.5	65%	29,943	26.7
2016	3,029	2,398	107	5,534	4.9	19%	24,132	0	24,132	21.5	81%	29,666	26.5
2017	3,039	3,035	294	6,367	5.7	20%	25,797	0	25,797	23.0	80%	32,164	28.7
2018	4,413	5,589	359	10,361	9.3	31%	22,860	0	22,860	20.4	69%	33,221	29.7
Average	**4,614**	**7,539**	**100**	**12,253**	**10.9**	**34%**	**23,100**	**420**	**23,520**	**21.0**	**66%**	**35,774**	**31.9**

Figure 4-1

Historical Water Production and Purchase (Annual)

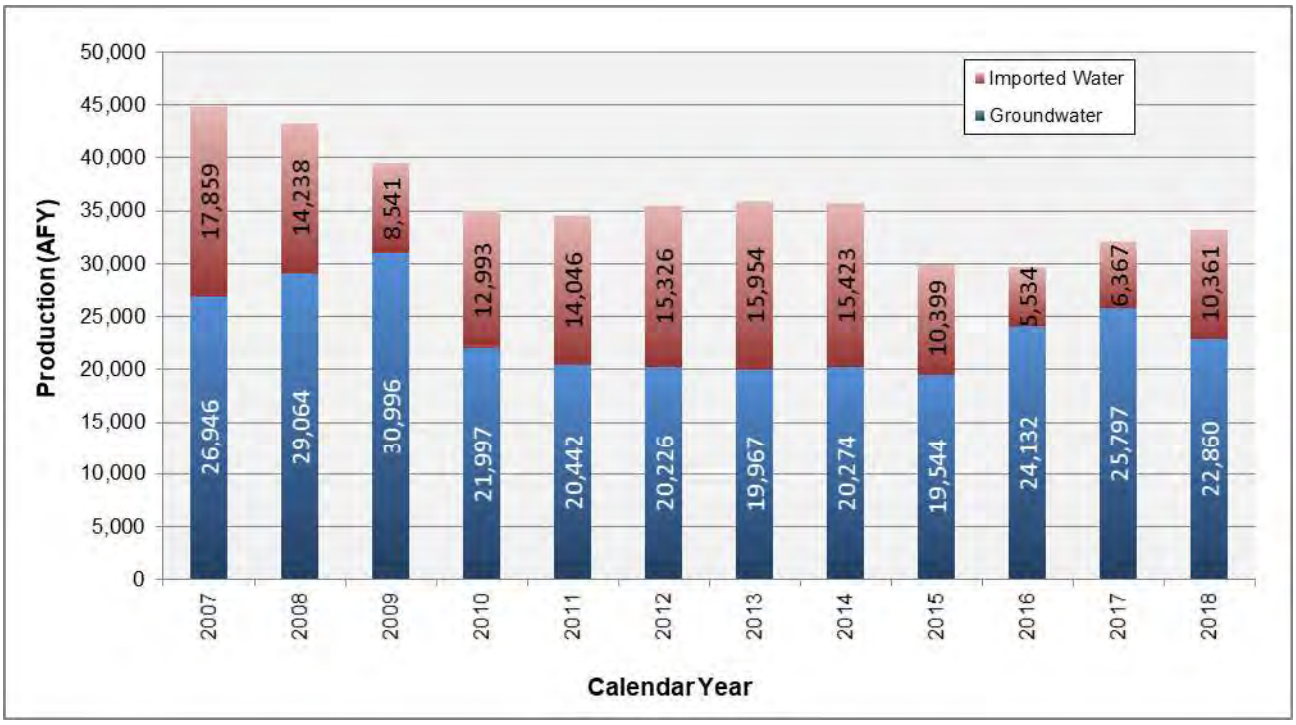
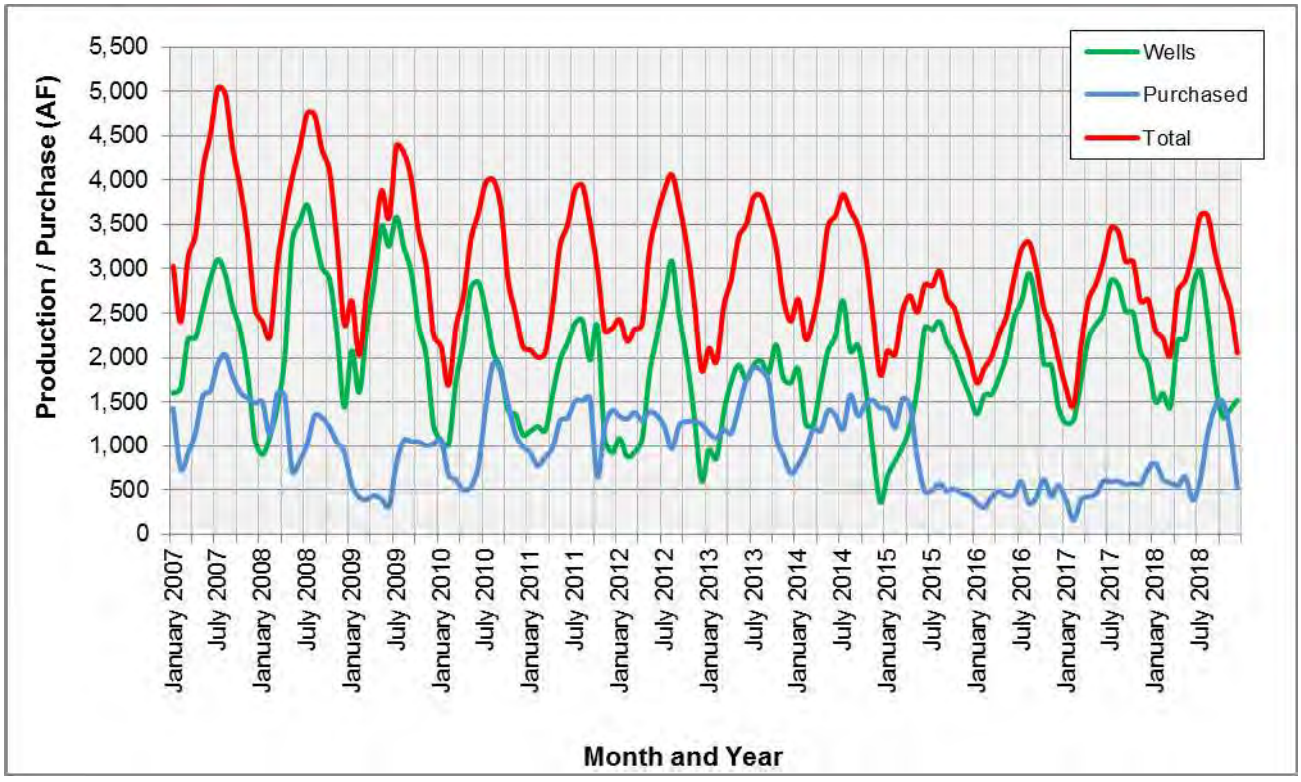


Figure 4-2

Historical Water Production and Purchase (Monthly)



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4-2 Water Consumption versus Water Production / Purchase

The City typically purchases/produces more water than the quantity measured by the customer meters. Table 4-2 summarizes the difference between the measured consumption and production from 2007 to 2018. Figure 4-3 graphically shows the City's water consumption versus production/purchase.

Table 4-2

Water Consumption versus Water Production/Purchase

Calendar Year	Water Consumption[1] (AFY)	Water Production/ Purchase[2] (AFY)	Non-Revenue Water (%)	Population[3]	Per Capita Production/ Purchase (gpcd)	Per Capita Consumption (gpcd)
2007	44,286	44,806	1.2%	158,405	253	250
2008	42,072	43,302	2.8%	158,181	244	237
2009	37,708	39,537	4.6%	157,539	224	214
2010	35,403	34,990	-1.2%	158,154	198	200
2011	37,735	34,488	-9.4%	160,723	192	210
2012	37,652	35,552	-5.9%	160,827	197	209
2013	34,212	35,921	4.8%	161,812	198	189
2014	35,160	35,697	1.5%	162,778	196	193
2015[4]	29,346	29,943	2.0%	164,389	163	159
2016[4]	29,056	29,666	2.1%	165,966	160	156
2017[4]	30,817	32,164	4.2%	169,387	170	162
2018[4]	33,026	33,221	0.6%	171,819	173	172
Average	**35,539**	**35,774**	**2.6%**	**162,498**	**197**	**196**

[1] Consumption from annual Department of Water Resources Public Water System Statistics Report.

[2] Water Production/Purchase data extracted from City's Anuual System Operations Data

[3] Population data from California Department of Finance, E-5 Population and Housing Estimates for Cities 2000-2018, excluding estimate of population for areas in Ontario served by CVWD.

[4] Water consumption estimates are from monthly water billing data.

Per the historical records, the consumption between 2010 and 2012 was more than the amount of water produced and/or purchased, which could not have actually happened. Possible explanations for the discrepancy in data include the following:

- During this time, the City was expanding its recycled water system. Some customers were converted from potable water use to recycled water use. Some of the consumption data might have actually been a combination of the potable and recycled water use.
- City staff has been updating and reclassifying meter types in its billing database. Some of the data provided in the historical DWR reports might have been misclassified at the time the report was created.
- Meters are not always perfectly calibrated. The margin of error in few large meters that measure production and purchase amounts or the thousands of small meters measuring consumption could contribute to the discrepancy in data.

The water consumption data before the 2015 Calendar Year is based on Department of Water Resources Public Water System Statistics Reports. After the 2015 Calendar Year, the consumption data is based on the monthly water billing data. Non-revenue water makes up between 0.6% and 4.8% of the total production and purchase supply, respectively. The City strives to keep the percentage as low as possible. The City's non-revenue water is 2.6%, on average.

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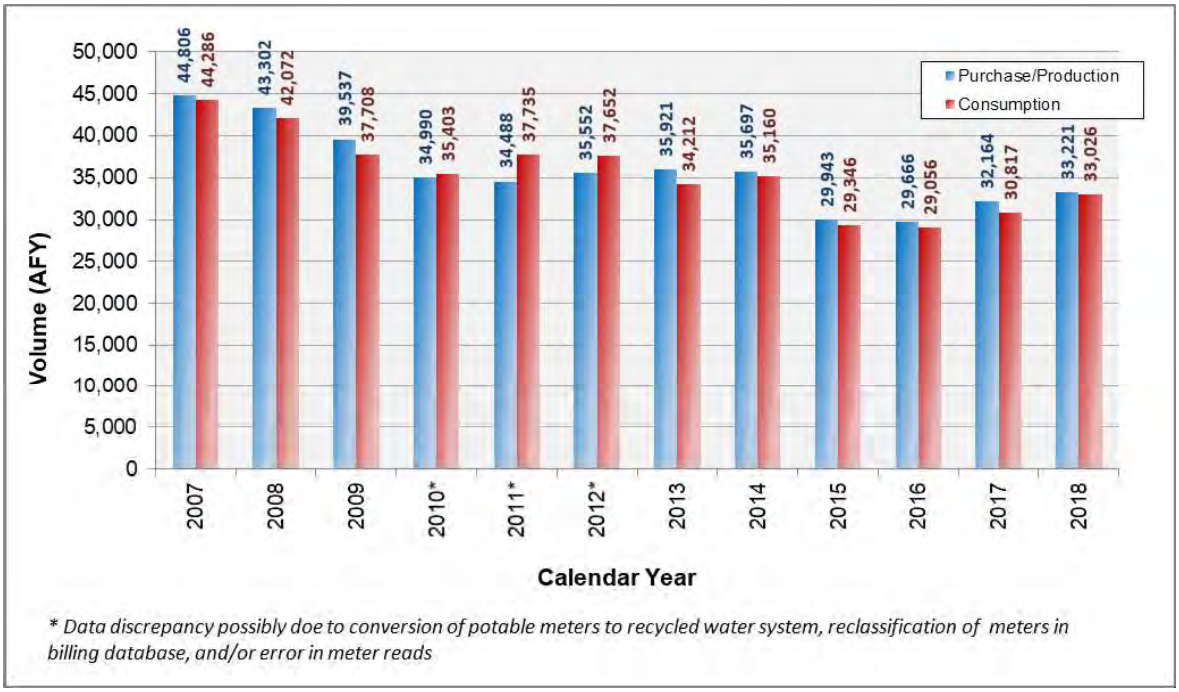
Non-revenue water occurs in all water systems. There will be differences in the accuracies of the few large meters which measure purchases and production, and the thousands of small customer meters which measure sales. Non-revenue water can also be due to unmeasured uses such as water main flushing and other maintenance related tasks. The remainder may be due to leaks from the system. The City's average non-revenue water rate of 2.6%.

Figure 4-3

Water Consumption versus Water Production/Purchase



4-3 Water Demand Variations

Demand variations through a year are influenced by seasonal effects such as temperature, humidity, and precipitation. System demand variations throughout a day are influenced by the customer base and the daily lifestyles of the customers. In primarily residential areas, the peak demands within a day typically occur in the morning hours between 6:00 am and 9:00 am, when customers wake to begin their daily routine. In largely commercial and industrial areas, the peaks may occur mid-day or the demand may even remain relatively constant throughout the work day. For this study, the variations are expressed as a ratio to the average demand, with the average demand being equal to one.

For the purpose of this master plan, the average day demand was based on the most recent twelve consecutive months of production and purchase data that was available at the time the hydraulic model was created. The average day demand is summarized in Table 4-3.

Table 4-3
Average Day Demand for the Hydraulic Water Model

	AF	MGD	gpm
September 2018	3,179	34.53	23,980
October 2018	2,850	29.95	20,800
November 2018	2,583	28.06	19,483
December 2018	2,053	21.58	14,988
January 2019	1,915	20.13	13,980
February 2019	1,503	17.49	12,147
March 2019	1,831	19.25	13,366
April 2019	2,708	29.41	20,425
May 2019	2,682	28.19	19,574
June 2019	2,966	32.22	22,373
July 2019	3,404	35.78	24,847
August 2019	3,479	36.57	25,397
Total	**31,153**	**27.76**	**19,280**

4-4 Monthly Demand Variations

Typical of most Southern California communities, the City's water consumption exhibits a distinct seasonal pattern. Peak and low monthly consumption occur during the dry summer months and wet winter months, respectively. Monthly demand

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totals and factors for 2007 to 2018 are shown in Table 4-4. Peak demands typically occur in July and August. Low demands typically occur in February. The highest and lowest monthly demand factor for the 2018 Calendar year is 1.46 and 0.82, respectively.

The maximum month factor is estimated to be 1.46 times the ADD, which is representative of the OMC demands, since there is very little existing usage in the OR area. The OR maximum day peaking factor was estimated to be 1.36, which was developed by excluding a portion of the water use that is expected to be served through the recycled water system.

Table 4-4

Monthly Water Demand Totals and Factors

	2007		2008		2009		2010		2011		2012		2013	
Month	AF	Factor	AF	Factor	AF	Factor	AF	Factor	AF	Factor	AF	Factor	AF	Factor
January	3,031	0.81	2,402	0.67	2,639	0.80	2,134	0.73	2,090	0.73	2,427	0.82	2,108	0.70
February	2,402	0.64	2,238	0.62	2,033	0.62	1,690	0.58	2,004	0.70	2,190	0.74	1,958	0.65
March	3,127	0.84	3,055	0.85	2,726	0.83	2,345	0.80	2,060	0.72	2,317	0.78	2,583	0.86
April	3,387	0.91	3,588	0.99	3,297	1.00	2,683	0.92	2,574	0.90	2,369	0.80	2,883	0.96
May	4,132	1.11	4,032	1.12	3,880	1.18	3,325	1.14	3,267	1.14	3,212	1.08	3,362	1.12
June	4,511	1.21	4,363	1.21	3,574	1.08	3,621	1.24	3,493	1.22	3,597	1.21	3,500	1.17
July	5,039	1.35	4,750	1.32	4,385	1.33	3,970	1.36	3,895	1.36	3,881	1.31	3,808	1.27
August	4,974	1.33	4,733	1.31	4,307	1.31	4,005	1.37	3,939	1.37	4,061	1.37	3,824	1.28
September	4,359	1.17	4,338	1.20	4,008	1.22	3,714	1.27	3,524	1.23	3,722	1.26	3,574	1.19
October	3,925	1.05	4,105	1.14	3,403	1.03	2,878	0.99	3,004	1.05	3,276	1.11	3,251	1.09
November	3,369	0.90	3,323	0.92	3,028	0.92	2,500	0.86	2,307	0.80	2,641	0.89	2,657	0.89
December	2,549	0.68	2,374	0.66	2,257	0.69	2,125	0.73	2,331	0.81	1,860	0.63	2,411	0.81
Average	**3,734**		**3,609**		**3,295**		**2,916**		**2,874**		**2,963**		**2,993**	

	2014		2015		2016		2017		2018		Average	
Month	AF	Factor	AF	Factor	AF	Factor	AF	Factor	AF	Factor	AF	Factor
January	2,657	0.89	2,080	0.83	1,717	0.69	1,647	0.66	2,309	0.93	2,270	0.77
February	2,210	0.74	2,039	0.82	1,884	0.76	1,465	0.59	2,223	0.90	2,028	0.69
March	2,434	0.82	2,523	1.01	2,020	0.82	2,133	0.85	2,034	0.82	2,446	0.83
April	2,859	0.96	2,698	1.08	2,271	0.92	2,650	1.06	2,744	1.11	2,834	0.94
May	3,487	1.17	2,513	1.01	2,476	1.00	2,830	1.13	2,867	1.16	3,282	1.11
June	3,596	1.21	2,822	1.13	2,890	1.17	3,104	1.24	3,181	1.29	3,521	1.19
July	3,838	1.29	2,809	1.13	3,226	1.30	3,458	1.39	3,596	1.45	3,888	1.30
August	3,657	1.23	2,977	1.19	3,301	1.34	3,421	1.37	3,601	1.46	3,900	1.31
September	3,494	1.17	2,664	1.07	3,008	1.22	3,085	1.24	3,179	1.29	3,556	1.20
October	3,168	1.07	2,550	1.02	2,554	1.03	3,083	1.24	2,850	1.15	3,171	1.06
November	2,488	0.84	2,252	0.90	2,347	0.95	2,634	1.06	2,583	1.04	2,677	0.89
December	1,809	0.61	2,016	0.81	1,973	0.80	2,654	1.06	2,053	0.83	2,201	0.72
Average	**2,975**		**2,495**		**2,472**		**2,680**		**2,768**		**2,981**	

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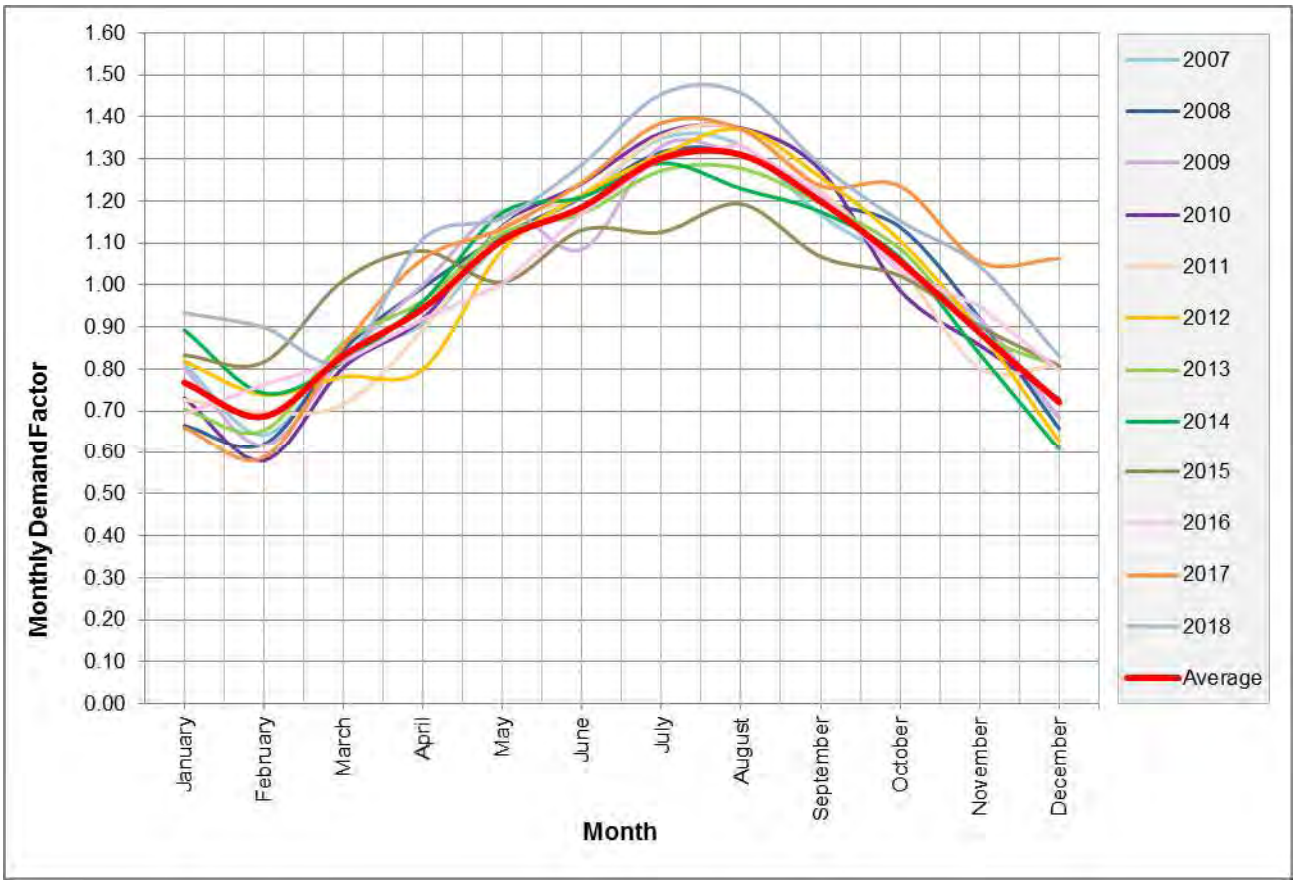
Figure 4-4

Monthly Demand Factors



4-5 Daily Demand Variations

In the predominately developed OMC service area, the MDD is estimated to be 1.60 times the ADD. The OR maximum day peaking factor was estimated to be 1.50, which was developed by excluding a portion of the water use that is expected to be served through the recycled water system. The MDD estimate is summarized in Table 4-5.

In the hydraulic model, demands and patterns for high water users were allocated based on field data that was captured during the calibration period. For modeling purposes, the calibration diurnal pattern and demands were used for the ADD and MDD scenarios.

Table 4-5

Maximum Day Demand Summary

	ADD (gpm)			MDD/ADD Peaking Factor	MDD (gpm)		
	Non-HWU	HWU[1]	Total		Non-HWU	HWU[1]	Total
Original Model Colony (OMC)	17,196	1,691	18,887	1.6	27,512	1,691	29,202
Ontario Ranch (OR)	391	2	393	1.5	586	2	588
Total	17,587	1,693	19,280		28,097	1,693	29,790

[1] *High water user demand and diurnal patterns are based on the calibration period*

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4-6 Hourly Demand Variations

Knowledge of accurate demand variations over a 24-hour period is essential for proper analysis of water systems. For this study, diurnal use patterns were developed for each hydraulic zone. Customer specific diurnal patterns were developed for high water users. The development of diurnal use patterns are described in detail in Section 5 (Diurnal Patterns) of this report.

4-7 System Demands and Peaking Factors

It is important to evaluate a water system during various incremental peak demands. Typically, a water system is designed to meet the maximum demands placed on it. The system components must be designed to cope with these demands as they occur. Maximum month and maximum day demands are important factors in sizing a system's supply capability. Maximum day demands usually dictate the design criteria for both system transmission and storage needs. Peak hour criterion is a measure of the system's overall adequacy with respect to its transmission and distribution elements, as well as its operational storage capacity.

The peaking factors for Ontario Ranch (OR) was further refined to account for the fact that it is planned to be largely residential in nature and there were a dual recycled water system constructed in all major streets. The City anticipates a target of 12 percent of the total water use in low density residential areas to be provided by the recycled water system. It is expected that this percentage will increase as the residential density increases. With more recycled water and less irrigation use on the domestic water system, the peaking factors in OR are reduced as detailed in Table 4-6. These factors are utilized for future demand estimates in Ontario Ranch. The relationships between the peaking factors developed for this study with respect to the average day demand estimate are displayed graphically on Figure 4-5.

Table 4-6

Existing Water System Demands and Peaking Factors

Demand Description	OMC Demand (gpm)	OR Demand (gpm)	HWU Demand[1] (gpm)	Total System Demand (gpm)	Total System Demand (mgd)	Total System Demand (AFY)	(OMC) Peaking Factor	(OR) Peaking Factor	Total System Peaking Factor
Average Day	17,196	391	1,693	19,280	27.76	31,098	1.00	1.00	1.00
Max Month	25,107	531	1,693	27,331	39.36	44,085	1.46	1.36	1.42
Max Day	27,512	586	1,693	29,790	42.90	48,051	1.60	1.50	1.55
Peak Hour[2]	N.A.	N.A.	N.A.	36,934	53.19	59,575	N.A.	N.A.	1.98

[1] *High water user demand and diurnal patterns are based on the calibration period*

[2] *System Wide Peak Hour Factor was developed with multiple diurnal patterns that differ by zone, meter type, and for high water users.*

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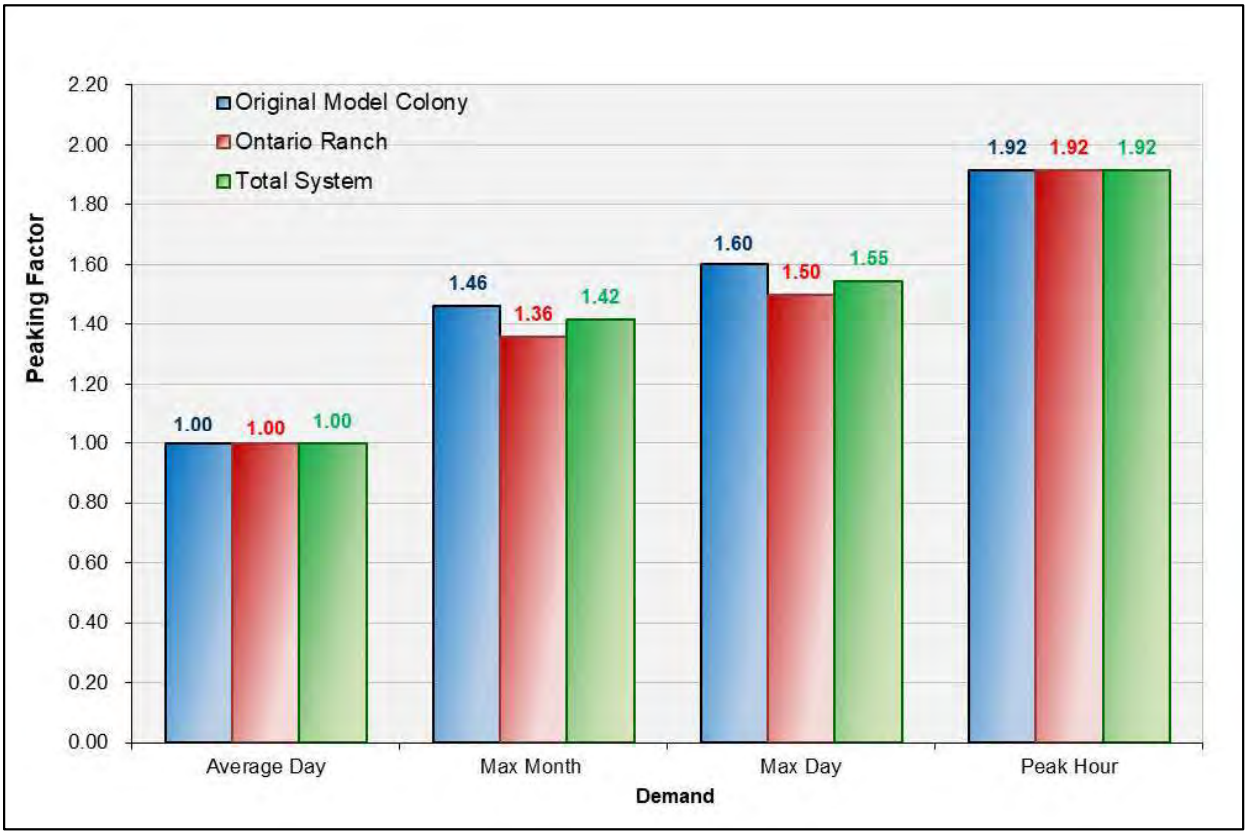
Figure 4-5

Water Demand Peaking Factors



4-7.1 Existing Demands

- **Average Day -** As detailed in Table 4-2, the average day demand is based on the City of Ontario's average daily production and purchase data between September 2018 and August 2019. As shown in Table 4-5, the average day demand is 31,153 AFY (19,280 gpm).
- **Maximum Month -** As detailed in Table 4-6, the maximum month peaking factor for OMC and OR are 1.46 and 1.36, respectively. The maximum month demand is estimated as 45,341 AFY (28,109 gpm).
- **Maximum Day -** As detailed in Table 4-6, the maximum day peaking factor for OMC and OR are 1.6 and 1.5, respectively. The maximum day demand is estimated as 48,051 AFY (29,790 gpm).
- **Peak Hour Demands -** Modeled peak hour demands were based upon the diurnal patterns that were developed for the hydraulic model, as detailed in Section 5. The overall peak hour system demand is estimated to be 1.98 times the average day demand or 61,656 AFY (38,224 gpm). This factor varies by zone depending on the diurnal patterns developed by zone, meter type, and for high water users.
- **Existing Water Demands by Zone -** Existing water demands by zone are shown in Table 4-5. These estimates are based upon the demand distribution generated from water billing historical data linked to the City's meter geodatabase. The average day demands (ADD) were distributed in the model using the 12-month consumption data from the City's billing department, adjusted to the most-recent production and purchase data (31,094 AFY; 27.8 mgd; 19,280 gpm) which takes into consideration non-revenue water.

  Generally, the ADD were increased with the factors included in Table 4-6 to develop the Maximum Day Demands (MDD), which are summarized by zone in Table 4-7. It should be noted that the MDD model demands for the high water users are based on actual field data collected during the calibration period, and they are not estimated with the MDD peaking factor included in Table 4-6. The MDD total 48,051 AFY (42.9 mgd; 29,790 gpm).

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Table 4-7

Existing Water Demands by Zone

Zone	Average Day Demand				Maximum Day Demand[1]			
	gpm	mgd	AFY	% of Total	gpm	mgd	AFY	% of Total
1348	2,059	2.96	3,321	10.7%	3,273	4.71	5,280	11.0%
1212	8,947	12.88	14,432	46.4%	13,718	19.75	22,127	46.0%
1074	3,839	5.53	6,192	19.9%	5,939	8.55	9,579	19.9%
1010	4,153	5.98	6,698	21.5%	6,439	9.27	10,386	21.6%
925	282	0.41	455	1.5%	422	0.61	680	1.4%
Total	**19,280**	**27.76**	**31,098**	**100.0%**	**29,790**	**42.90**	**48,051**	**100.0%**

[1] *MDD for high water users model demands are based on actual field data collected, not MDD peaking factors included in Table 4-6*

4-7.2 Water Unit Demand Factors

Existing consumption data was used in this study to represent the water use of existing customers. For future developments, water unit demand factors were used to estimate future water use. Potable water unit demand factors are generally based on the factors that were developed as a part of a study completed in May 2016 entitled "*Ultimate Citywide Water Demand Estimate*".

The revised potable water unit demand factors are shown in Table 4-8.

The residential unit demand factors were first developed in terms of gpd/person. Then the maximum densities (people/du and du/ac) were applied to determine the factors in other units. The resulting unit factors in terms of gpd/du and gpd/ac represent the maximum expected demand factors.

The 2016 study included maximum residential densities in the Ontario Ranch area, which were based on historical development projections that were provided by the City's planning department. Some of the recent actual projections are higher than those included in the Ontario Plan, which needed to be updated to appropriately develop the demand factors and the future demand estimate.

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Table 4-8

Potable Water Unit Demand Factors

Landuse		Max Density (du/ac)[1]	Density (people/ du)[2]	Domestic Water Unit Demand Factors[3]			
				gpd	unit	gpd/ac	gpd/du
Residential							
Rural Residential	RR	2	3.997	172	gpd/person	1,375	687
Low Density Residential (w/o RW)	LDR	4	3.997	123	gpd/person	1,970	492
Low Density Residential (w/ RW)	LDR	5	3.997	95	gpd/person	1,900	380
Low Medium Density Residential (w/o RW)	LMDR	8.5	3.997	105	gpd/person	3,570	420
Low Medium Density Residential (w/ RW)	LMDR	11	3.997	90	gpd/person	3,960	360
Medium Density Residential (w/o RW)	MDR	18	3.347	90	gpd/person	5,420	301
Medium Density Residential (w/ RW)	MDR	25	3.347	80	gpd/person	6,690	268
High Density Residential (w/o RW)	HDR	35	3.347	70	gpd/person	8,200	234
High Density Residential (w/ RW)	HDR	40	3.347	60	gpd/person	8,030	201
Commercial							
Business Park (w/o RW)	BP			103	gpd/job	3,140	
Business Park (w/ RW)	BP	-	-	59	gpd/job	1,800	-
General Commercial (w/o RW)	GC			258	gpd/job	3,140	
General Commercial (w/ RW)	GC	-	-	148	gpd/job	1,800	-
Hospitality[4] (w/o RW)	HOS			155	gpd/room	5,980	
Hospitality[4] (w/ RW)	HOS	-	-	130	gpd/room	5,000	-
Neighborhood Commercial (w/o RW)	NC			99	gpd/job	3,140	
Neighborhood Commercial (w/ RW)	NC	-	-	57	gpd/job	1,800	-
Office Commercial (w/o RW)	OC			53	gpd/job	3,840	
Office Commercial (w/ RW)	OC	-	-	35	gpd/job	2,500	-
Industrial							
Industrial (w/o RW)	IND	-	-	110	gpd/job	2,290	-
Industrial (w/ RW)	IND	-	-	67	gpd/job	1,400	-
Mixed Use[5]							
High Density Residential (w/o RW)	MU-HDR	35	2.000	70	gpd/person	4,900	140
High Density Residential (w/ RW)	MU-HDR	40	2.000	60	gpd/person	4,800	120
Office (w/o RW)	MU-O			53	gpd/job	3,840	
Office (w/ RW)	MU-O	-	-	35	gpd/job	2,500	-
Non-Office (w/o RW)	MU-NO			179	gpd/job	2,690	
Non-Office (w/ RW)	MU-NO	-	-	102	gpd/job	1,800	-
Open Space							
Open Space Non-Recreational (w/o RW)	OS-NR					2,340	
Open Space Non-Recreational (w/ RW)	OS-NR	-	-		-	1,000	-
Open Space Recreational (w/o RW)	OS-R					2,340	
Open Space Recreational (w/ RW)	OS-R	-	-		-	1,000	-

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Table 4-8 (Continued)

Potable Water Unit Demand Factors

Landuse		Max Density (du/ac)[1]	Density (people/ du)[2]	Domestic Water Unit Demand Factors[3]			
				gpd	unit	gpd/ac	gpd/du
Public							
Public Facility (w/o RW)	PF					3,040	
Public Facility (w/ RW)	PF	-	-		-	1,700	-
Public Middle or High School (w/o RW)	PS	-	-	50	gpd/student	3,500	-
Public Middle or High School (w/RW)	PS	-	-	10	gpd/student	1,800	-
Public Elementary School (w/o RW)	PS	-	-	30	gpd/student	3,500	-
Public Elementary School (w/RW)	PS	-	-	10	gpd/student	1,800	-

[1] *Max Density per the City's 2010 General Plan (The Ontario Plan) for OMC without recycled water. Density for LDR, LMDR, MDR, and HDR with recycled water (Ontario Ranch) were increased per the City Planning Department recommendation (March 2016).*

[2] *Density per the City's 2010 General Plan (The Ontario Plan)*

[3] *Unit Flow Factor Abbreviations:*

ac = acre *du = dwelling unit* *gpd = gallons per day*

room = hotel/motel room *stu = student* *tsf = thousand square feet*

[4] *If possible it is recommended to use 130 - 155 gpd/room on a case by case basis. It is difficult to estimate the number of rooms or square footage per acre.*

[5] *Mixed Use demands should be based on the types of landuse that make up the specific area and the unit demand factors provided above. The City's 2010 General Plan (The Ontario Plan) provides detailed information on the landuses that make up each mixed use area.*

4-7.3 Future Demands

The City of Ontario's Future water system demands utilized in this study are detailed in Table 4-9 by zone. Generally, the ADD were increased with the factors included in Table 4-6 to develop the Maximum Day Demands (MDD), which are summarized by zone in Table 4-7. It should be noted that the MDD model demands for the high water users are based on actual field data collected during the calibration period, and they are not estimated with the MDD peaking factor included in Table 4-6. The MDD total 48,051 AFY (42.9 mgd; 29,790 gpm).

Table 4-9

Future Water demands by Zone

Zone	Average Day Demand				Maximum Day Demand[1]			
	gpm	mgd	AFY	% of Total	gpm	mgd	AFY	% of Total
1348	2,137	3.08	3,446	6.0%	3,398	4.89	5,481	6.2%
1212	11,298	16.27	18,224	31.6%	17,481	25.17	28,196	31.9%
1074	4,103	5.91	6,618	11.5%	6,361	9.16	10,261	11.6%
1010	6,292	9.06	10,149	17.6%	9,706	13.98	15,657	17.7%
925	11,886	17.12	19,172	33.3%	17,831	25.68	28,762	32.6%
Total	**35,716**	**51.43**	**57,610**	**100.0%**	**54,778**	**78.88**	**88,357**	**100.0%**

[1] *MDD for high water users model demands are based on actual field data collected, not MDD peaking factors included in Table 4-6*

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The increase in future water demand is due to development of Ontario Ranch, anticipated densification in land use and population per the City's 2010 General Plan, and the assumption that the area within the service area will be fully occupied (vacant land will be built upon and occupied).

The total water maximum day demand for the future system is estimated 54,778 gpm (78.88 mgd; 88,357 AFY). This Subsection describes the process of developing the future system demands for the areas that are going to be developed or redeveloped and distributing the demands in the hydraulic model. The existing demands remained the same unless an area was going to be redeveloped.

In summary, the following steps were used to estimate the future demands:

1. Existing meter data was used for existing uses.
2. Used Water Demand Factors included in Table 4-7 to estimate demand for the vacant and future densification areas. In areas of redevelopment the existing demands were updated with the estimated flows for the future development.
3. The "City Buildout Table" approved in April 2015 (*Appendix 4-1*) provided the population and job estimates for all future mixed use areas as defined by the Ontario Plan (General Plan). The unit flow factors provided in Table 4-7 were used to estimate the total average day water demand for mixed use areas. Any existing water demands were deducted from the total future average water demand estimate. If the existing demands were greater than the calculated future demands, the existing water demand was maintained in the hydraulic model. The difference was then applied to the hydraulic model in the specific mixed use area.
4. In the Original Model Colony, future average water demands were calculated for currently vacant parcels, assuming that they will be developed in the future per the land use designated in the General Plan. The parcel acreage and the water demand factors provided in Table 4-7 were utilized to estimate the total water demand.
5. All available specific plans and other more current planning information were utilized for Ontario Ranch. The specific plan areas are shown on Figure 4-6. The City compiled the information and provided table specifying the proposed land uses (*Appendix 4-1: Ontario Ranch Proposed Land Uses per Specific Plans*). The detailed land use information and the water demand factors provided in Table 4-7 were utilized for calculating the future water demands. Demands were applied to the nearest model junction. If less than 50 percent of a specific plan area was constructed at the time of this study, all existing water demand was removed and replaced with the projected future water demand. If a specific plan area was mostly constructed, the difference in existing and future water demand was added to the model in that particular area.
6. On the west side of Ontario Ranch, where no specific plans yet exist, the future water demands were calculated utilizing the General Plan land uses, parcel acreages, and the water demand factors provided in Table 4-7. Demands were applied to the nearest model junction.

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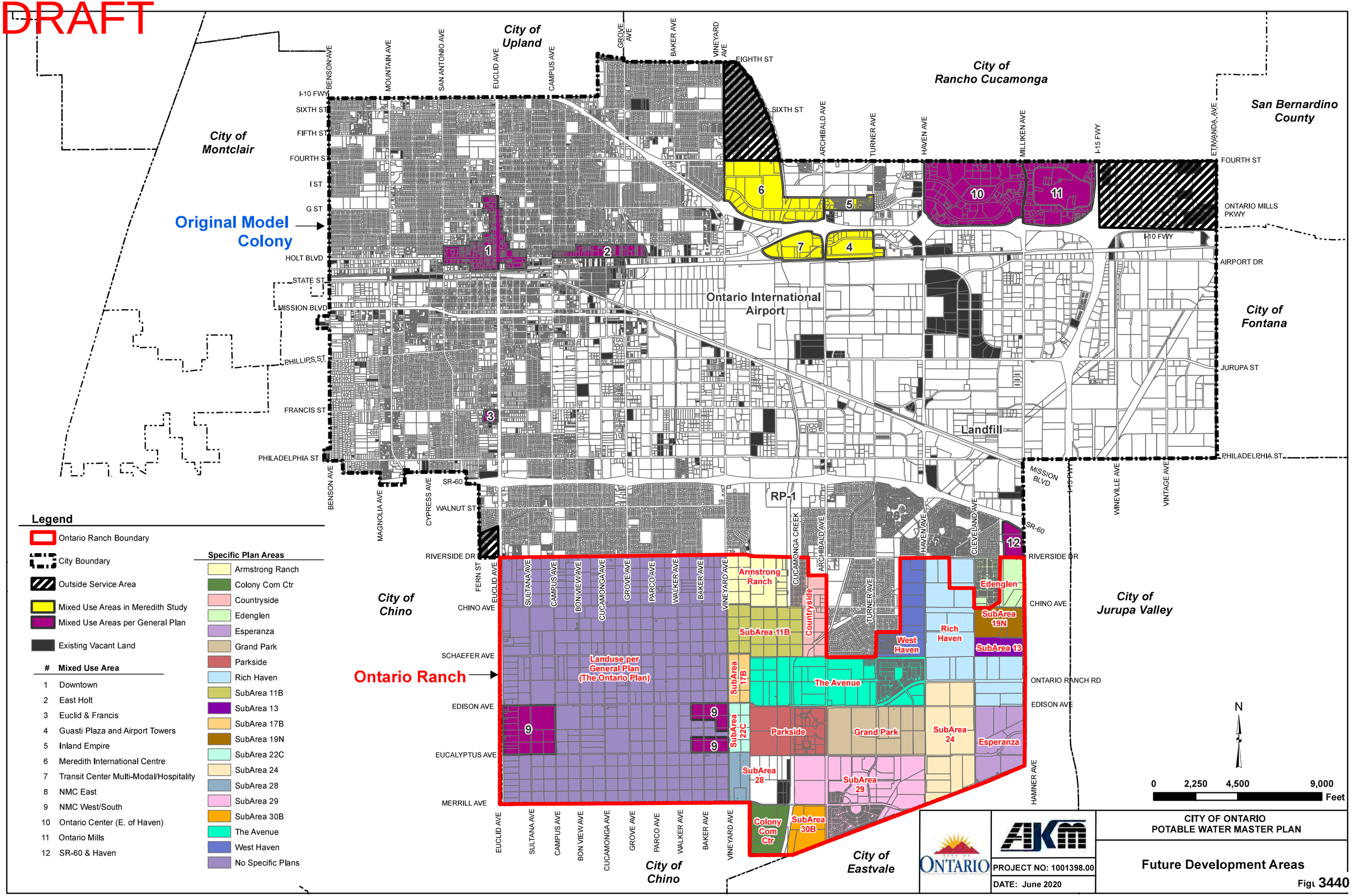

Legend

- Ontario Ranch Boundary
- City Boundary
- Outside Service Area
- Mixed Use Areas in Meredith Study
- Mixed Use Areas per General Plan
- Existing Vacant Land

#	Mixed Use Area
1	Downtown
2	East Holt
3	Euclid & Francis
4	Guasti Plaza and Airport Towers
5	Inland Empire
6	Meredith International Centre
7	Transit Center Multi-Modal/Hospitality
8	NMC East
9	NMC West/South
10	Ontario Center (E. of Haven)
11	Ontario Mills
12	SR-60 & Haven

Specific Plan Areas

- Armstrong Ranch
- Colony Com Ctr
- Countryside
- Edenglen
- Esperanza
- Grand Park
- Parkside
- Rich Haven
- SubArea 11B
- SubArea 13
- SubArea 17B
- SubArea 19N
- SubArea 22C
- SubArea 24
- SubArea 28
- SubArea 29
- SubArea 30B
- The Avenue
- West Haven
- No Specific Plans

CITY OF ONTARIO
POTABLE WATER MASTER PLAN

Future Development Areas

PROJECT NO: 1001398.00
DATE: June 2020

Figure 3440

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4-8 Recycled Water

The City's recycled water use was 9,653 AFY (3,042 gpm) in Fiscal Year 2018. The recycled water is supplied by Inland Empire Utilities Agency (IEUA). Recycled water from IEUA's treatment plants are conveyed through IEUA's pipe conveyance system to the City's recycled distribution system. According to the City's billing data, there are approximately 370 recycled customer meters in the City.

The City's Recycled Water Master Plan was last updated in April 2006. It is being updated concurrent to this master plan. Potable water customers that are anticipated to be converted to the recycled water system in the future will be identified as part of the recycled water master plan update.

4-9 Water Conservation

Title 6, Chapter 8A, The Emergency Water Conservation Plan of the City's Municipal Code addresses water conservation issues. The reference for this Chapter is Ordinance 2907, which became effective June 16, 2009.

Voluntary conservation is encouraged to limit the amount of water used to the amount absolutely necessary for health, business, and irrigation. The following elements of conservation apply at all times on a voluntary basis:

- Avoid hose washing of sidewalks, walkways, driveways, parking areas or other paved surfaces, except as required for sanitary purposes.
- Wash motor vehicles, trailers, boats and other types of mobile equipment using a hand held bucket or a hose equipped with a positive shutoff nozzle for quick rinses, or at the immediate premises of a commercial car wash or with recycled wastewater for approved uses.
- Avoid using water to clean, fill or maintain levels in decorative fountains, ponds, lakes or other similar aesthetic structures unless such water is part of a recycling system.
- Encourage restaurants, hotels, cafés, cafeterias or other public places where food is sold, served or offered for sale, to serve drinking water only to those customers expressly requesting water.
- Promptly repair all leaks from indoor and outdoor plumbing fixtures.
- Avoid watering lawn, landscape or other turf area more often than every other day and during the hours between 6:00 a.m. and 6:00 p.m.
- Avoid causing or allowing the water to run off landscape areas into adjoining streets, sidewalks or other paved areas due to incorrectly directed or maintained sprinklers or excessive watering.

The City maintains water conservation information on their website for viewing by the public. Information includes water use efficiency and conservation tips, links to other websites pertaining to water conservation, and links to IEUA's website where indoor and outdoor rebates are offered for residents of the IEUA service area. Indoor and outdoor rebates are also offered to commercial businesses

4-9.1 California Water Conservation

A variety of executive orders have been issued since 2009 regarding water conservation in the state of California. The following is a brief summary:

1. **November 2009 – Senate Bill SBx7-7 (i.e. The Water Conservation Act of 2009) enacted**
   - Requires State of California Department of Water Resources (DWR) in consultation with other state agencies, to develop a single standardized water use reporting form that can be used by both urban and agricultural water agencies.
   - For urban water conservation, the legislation sets an overall goal of reducing per capita urban water use by 20 percent by December 31, 2020.
2. **April 2014 Proclamation**
   - Governor declares a drought State of Emergency to exist in California due to severe drought conditions.

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- Calls on Californians to reduce their water usage by 20 percent.
- Suspends California Environmental Quality Act to allow the emergency regulation and other actions to take place as quickly as possible

3. **December 2014 - Executive Order B-28-14**
   - Extends the California Environmental Quality Act suspension through May 2016
4. **April 2015 - Executive Order B-29-15**
   - Imposes restrictions on urban water suppliers to achieve a statewide 25 percent reduction in potable urban usage through February 2016
   - Requires commercial, industrial, and institutional users to implement water efficiency measures
   - Prohibits irrigation with potable water of ornamental turf in public street medians
   - Prohibits irrigation with potable water outside newly constructed homes and buildings that is not delivered by drip or microspray systems
   - Directs urban suppliers to develop rate structures and other pricing mechanisms to promote water conservation
   - Requires urban suppliers to increase enforcement against water waste
5. **November 2015 – Executive Order B-26-15**
   - Directs State agencies to prioritize and accelerate approvals for projects that enhance the ability of a local or state agency to capture high precipitation events
   - Extends drought restrictions through October 2016
6. **May 2016 - Executive Order B-37-16**
   - Aims to bolster California's climate and drought resilience by instructing State agencies to help Californians adopt permanent changes to use water more wisely.
   - Directs the State Water Resources Control Board to develop new mandatory water conservation regulations
   - Directs the Department of Water Resources to update new water use targets for urban water agencies. These new targets will build upon the existing requirement to achieve 20% reduction in usage by 2020. The executive order states that new targets would be developed no later than 2020, with the goal of reaching full compliance by 2025.
   - Directs the State Water Resources Control Board to eliminate water waste by
     - **i.** permanently prohibits practices that waste potable water
     - **ii.** directing actions to minimize water system leaks
     - **iii.** directing urban and agricultural water suppliers to accelerate data collection, improve water system management and prioritize capital projects to reduce water waste
   - Directs the Department of Water Resources to strengthen local drought resilience by updating requirements for Water Shortage Contingency Plans
   - Directs the Department of Water Resources to improve agricultural water use efficiency and drought planning
7. **April 2017 – Executive Order B-40-17 was issued**
   - Terminates the January 17, 2014 Drought State of Emergency
   - Rescinds Executive Orders B-26-14, B-28-14, B-29-15, and B-36-15

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- Most of Executive Order B-37-16 (Making Water Conservation a California Way of Life) remains in full force. The Department of Water Resources and State Water Resources Control Board continues to:

  i. develop permanent prohibitions on wasteful water use and requirements for reporting water use by urban water agencies. Permanent restrictions include:

  - ✓ Hosing off sidewalks, driveways and other hardscapes
  - ✓ Washing automobiles with hoses not equipped with shut-off nozzle
  - ✓ Using non-recirculated water in a fountain or other decorative water feature
  - ✓ Watering lawns in a manner that causes runoff, or within 48 hours after measurable precipitation
  - ✓ Irrigating ornamental turf on public street medians

  ii. develop standards that urban water suppliers will use to set new urban water use efficiency targets

  iii. direct actions to minimize water system leaks that waste large amounts of water.

  iv. direct urban and agricultural water suppliers to accelerate their data collection, improve water system management, and prioritize capital projects to reduce water waste

  v. work with agencies and suppliers to identify mechanisms that would encourage and facilitate the adoption of rate structures and other pricing mechanisms that promote water conservation

8. Assembly Bill No. 606 – May 31, 2018

- authorizes State Water Resources Control Board (SWRCB), along with the Department of Water Resources (DWR) to issue regulation requiring wholesale water suppliers, urban retail water suppliers, or distributors of public water supply to submit information relating to water production, water use, or water conservation.
- require urban water suppliers to submit a urban water usage objective report by November 1, 2023
- updates the requirements of the urban water management plans

9. Assembly Bill No. 1668 – May 31, 2018

- authorizes State Water Board, along with the Department of Water Resources (DWR) to issue regulation requiring wholesale water suppliers, urban retail water suppliers, or distributors of public water supply to submit information relating to water production, water use, or water conservation.
- establishes 55 gallons per capita daily as the standard for indoor residential water use beginning January 1, 2025 and 50 gallons per capita daily beginning January 1, 2030
- require DWR and SWRCB to adopt standards to monitor the performance of commercial, industrial, and institutional water use.
- Includes penalties of $1,000 to $10,000 per day to the water supplier for violations to this order

APPENDIX B

PRIVATE WATER REFERENCE

APPENDIX A

RECOMMENDED RULES FOR SIZING THE WATER SUPPLY SYSTEM

The provisions contained in this appendix are not mandatory unless specifically adopted by a state agency, or referenced in the adopting ordinance.

A 101.0 General.

A 101.1 Applicability. This appendix provides a general procedure for sizing a water supply system. Because of the variable conditions encountered, it is impractical to lay down definite detailed rules of procedure for determining the sizes of water supply pipes in an appendix, which shall necessarily be limited in length. For an adequate understanding of the problems involved, refer to Water-Distributing Systems for Buildings, Report BMS 79 of the National Bureau of Standards; and Plumbing Manual, Report BMS 66, also published by the National Bureau of Standards.

A 102.0 Preliminary Information.

A 102.1 Daily Service Pressure. Obtain the necessary information regarding the minimum daily service pressure in the area where the building is to be located.

A 102.2 Water Meter. Where the building supply is to be metered, obtain information regarding friction loss relative to the rate of flow of meters in the range of sizes likely to be used. Friction-loss data is capable of being obtained from most manufacturers of water meters. Friction losses for disk-type meters shall be permitted to be obtained from Chart A 102.2.

A 102.3 Local Information. Obtain available local information regarding the use of different kinds of pipe with respect both to durability and to decrease in capacity with the length of service in the particular water supply.

A 103.0 Demand Load.

A 103.1 Supply Demand. Estimate the supply demand for the building main, the principal branches and risers of the system by totaling the fixture units on each, Table A 103.1, and then by reading the corresponding ordinate from Chart A 103.1(1) or Chart A 103.1(2), whichever is applicable.

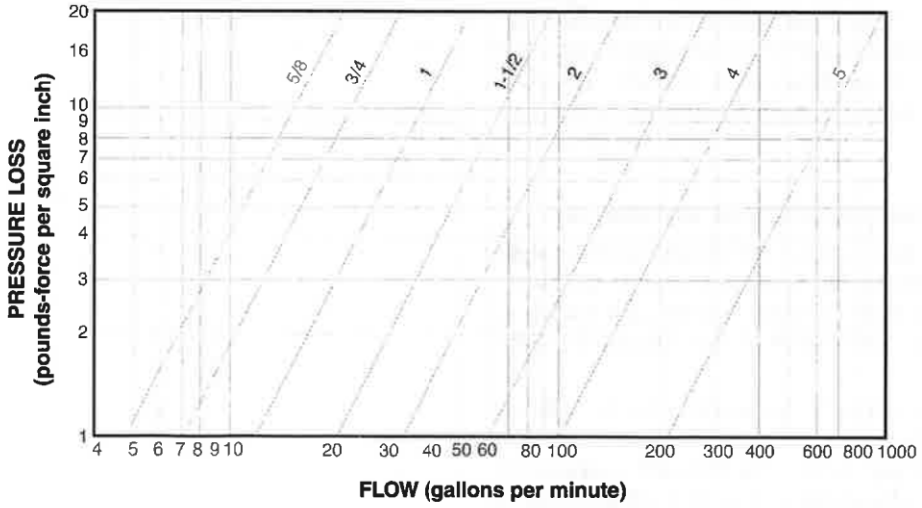
A 103.2 Continuous Supply Demand. Estimate continuous supply demands in gallons per minute (gpm) (L/s) for lawn sprinklers, air conditioners, etc., and add the sum to the total demand for fixtures. The result is the estimated supply demand of the building supply.

A 104.0 Permissible Friction Loss.

A 104.1 Residual Pressure. Decide what is the desirable minimum residual pressure that shall be maintained at the highest fixture in the supply system. Where the highest group of fixtures contains flushometer valves, the residual pressure for the group shall be not less than 15 pounds-force per square inch (psi) (103 kPa). For flush tank supplies, the available residual pressure shall be not less than 8 psi (55 kPa).

A 104.2 Elevation. Determine the elevation of the highest fixture or group of fixtures above the water (street) main. Multiply this difference in elevation by 0.43. The result is the loss of static pressure in psi (kPa).

CHART A 102.2
FRICTION LOSSES FOR DISK-TYPE WATER METERS



For SI units: 1 inch = 25 mm, 1 pound-force per square inch = 6.8947 kPa, 1 gallon per minute = 0.06 L/s

A 104.3 Available Pressure. Subtract the sum of loss in static pressure and the residual pressure to be maintained at the highest fixture from the average minimum daily service pressure. The result will be the pressure available for friction loss in the supply pipes, where no water meter is used. Where a meter is to be installed, the friction loss in the meter for the estimated maximum demand should also be subtracted from the service pressure to determine the pressure loss available for friction loss in the supply pipes.

A 104.4 Developed Length. Determine the developed length of pipe from the water (street) main to the highest fixture. Where close estimates are desired, compute with the aid of Table A 104.4(1), Table A 104.4(2), or Table A 104.4(3), whichever is applicable, the equivalent length of pipe for fittings in the line from the water (street) main to the highest fixture and add the sum to the developed length. The pressure available for friction loss in psi (kPa), divided by the developed lengths of pipe from the water (street) main to the highest fixture, times 100, will be the average permissible friction loss per 100 feet (30 480 mm) length of pipe.

A 105.0 Size of Building Supply.

A 105.1 Diameter. Knowing the permissible friction loss per 100 feet (30 480 mm) of pipe and the total demand, the diameter of the building supply pipe shall be permitted to be obtained from Chart A 105.1(1), Chart A 105.1(2), Chart A 105.1(3), Chart A 105.1(4) Chart A 105.1(5), Chart A 105.1(6), or Chart A 105.1(7), whichever is applicable. The diameter of pipe on or next above the coordinate point corresponding to the estimated total demand and the permissible friction loss will be the size needed up to the first branch from the building supply pipe.

A 105.2 Copper and Copper Alloy Piping. Where copper tubing or copper alloy pipe is to be used for the supply piping and where the character of the water is such that slight changes in the hydraulic characteristics are expected, Chart A 105.1(1) shall be permitted to be used.

A 105.3 Hard Water. Chart A 105.1(2) shall be used for ferrous pipe with the most favorable water supply in regards to corrosion and caking. Where the water is hard or corrosive, Chart A 105.1(3) or Chart A 105.1(4) will be applicable. For extremely hard water, it will be advisable to make additional allowances for the reduction of the capacity of hot-water lines in service.

A 106.0 Size of Principal Branches and Risers.

A 106.1 Size. The required size of branches and risers shall be permitted to be obtained in the same manner as the building supply, by obtaining the demand load on each branch or riser and using the permissible friction loss computed in Section A 104.0.

A 106.2 Branches. Where fixture branches to the building supply are sized for the same permissible friction loss per 100 feet (30 480 mm) of pipe as the branches and risers to the highest level in the building and lead to the inadequate water supply to the upper floor of a building, one of the following shall be provided:

(1) Selecting the sizes of pipe for the different branches so that the total friction loss in each lower branch is approximately equal to the total loss in the riser, including both friction loss and loss in static pressure.

(2) Throttling each such branch using a valve until the preceding balance is obtained.

(3) Increasing the size of the building supply and risers above the minimum required to meet the maximum permissible friction loss.

A 106.3 Water Closets. The size of branches and mains serving flushometer tanks shall be consistent with sizing procedures for flush tank water closets.

A 107.0 General.

A 107.1 Velocities. Velocities shall not exceed 10 feet per second (ft/s) (3 m/s), except as otherwise approved by the Authority Having Jurisdiction.

A 107.2 Pressure-Reducing Valves. Where a pressure-reducing valve is used in the building supply, the developed length of supply piping and the permissible friction loss shall be computed from the building side of the valve.

A 107.3 Fittings. The allowances in Table A 104.4(1) for fittings are based on non-recessed threaded fittings. For recessed threaded fittings and streamlined soldered fittings, one-half of the allowances given in the table will be ample.

TABLE A 103.1
WATER SUPPLY FIXTURE UNITS (WSFU) AND MINIMUM FIXTURE BRANCH PIPE SIZES[3]

APPLIANCES, APPURTENANCES, OR FIXTURES[2]	MINIMUM FIXTURE BRANCH PIPE SIZE[1,4] (inches)	PRIVATE	PUBLIC	ASSEMBLY[6]
Bathtub or Combination Bath/Shower (fill)	½	4.0	4.0	–
¾ inch Bathtub Fill Valve	¾	10.0	10.0	–
Bidet	½	1.0	–	–
Clothes Washer	½	4.0	4.0	–
Dental Unit, cuspidor	½	–	1.0	–
Dishwasher, domestic	½	1.5	1.5	–
Drinking Fountain or Water Cooler	½	0.5	0.5	0.75
Hose Bibb	½	2.5	2.5	–
Hose Bibb, each additional[7]	½	1.0	1.0	–
Lavatory	½	1.0	1.0	1.0
Lawn Sprinkler, each head[5]	–	1.0	1.0	–
Mobile Home, each (minimum)	–	12.0	–	–
Sinks	–	–	–	–
Bar	½	1.0	2.0	–
Clinical Faucet	½	–	3.0	–
Clinical Flushometer Valve with or without faucet	1	–	8.0	–
Kitchen, domestic	½	1.5	1.5	–
Laundry	½	1.5	1.5	–
Service or Mop Basin	½	1.5	3.0	–
Washup, each set of faucets	½	–	2.0	–
Shower per head	½	2.0	2.0	–
Urinal, 1.0 GPF Flushometer Valve	¾	3.0	4.0	5.0
Urinal, greater than 1.0 GPF Flushometer Valve	¾	4.0	5.0	6.0
Urinal, flush tank	½	2.0	2.0	3.0
Wash Fountain, circular spray	¾	–	4.0	–
Water Closet, 1.6 GPF Gravity Tank	½	2.5	2.5	3.5
Water Closet, 1.6 GPF Flushometer Tank	½	2.5	2.5	3.5
Water Closet, 1.6 GPF Flushometer Valve	1	5.0	5.0	8.0
Water Closet, greater than 1.6 GPF Gravity Tank	½	3.0	5.5	7.0
Water Closet, greater than 1.6 GPF Flushometer Valve	1	7.0	8.0	10.0

For SI units: 1 inch = 25 mm

Notes:

1 Size of the cold branch pipe, or both the hot and cold branch pipes.

2 Appliances, appurtenances, or fixtures not included in this table shall be permitted to be sized by reference to fixtures having a similar flow rate and frequency of use.

3 The listed fixture unit values represent their total load on the cold water building supply. The separate cold water and hot water fixture unit value for fixtures having both cold and hot water connections shall be permitted to be three-quarters of the listed total value of the fixture.

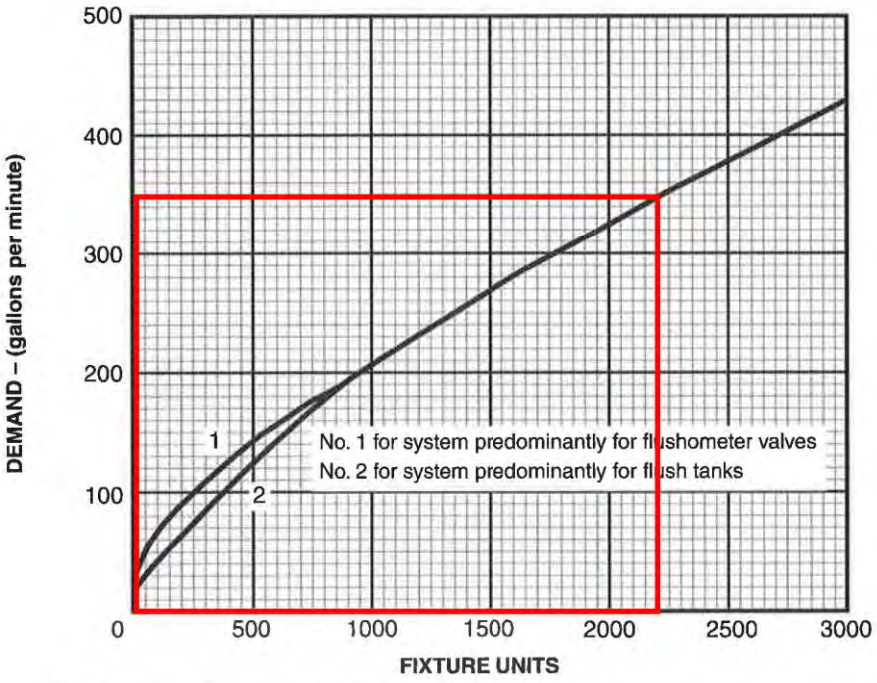
4 The listed minimum supply branch pipe sizes for individual fixtures are the nominal (I.D.) pipe size.

5 For fixtures or supply connections likely to impose continuous flow demands, determine the required flow in gallons per minute (gpm) (L/s) and add it separately to the demand in gpm (L/s) for the distribution system or portions thereof.

6 Assembly [Public Use (see Table 422.1)].

7 Reduced fixture unit loading for additional hose bibbs is to be used where sizing total building demand and for pipe sizing where more than one hose bibb is supplied by a segment of water distribution pipe. The fixture branch to each hose bibb shall be sized by 2.5 fixture units.

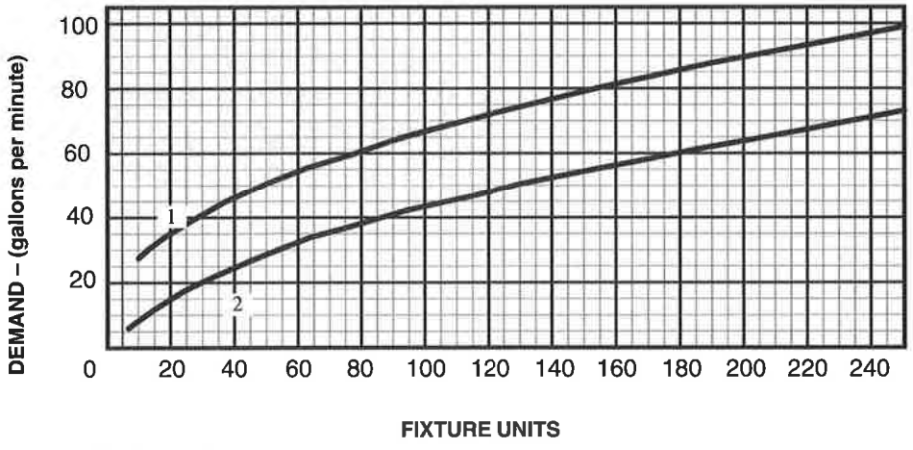
CHART A 103.1(1)
ESTIMATE CURVES FOR DEMAND LOAD



For SI units: 1 gallon per minute = 0.06 L/s

350 gpm

CHART A 103.1(2)
ENLARGED SCALE DEMAND LOAD



For SI units: 1 gallon per minute = 0.06 L/s

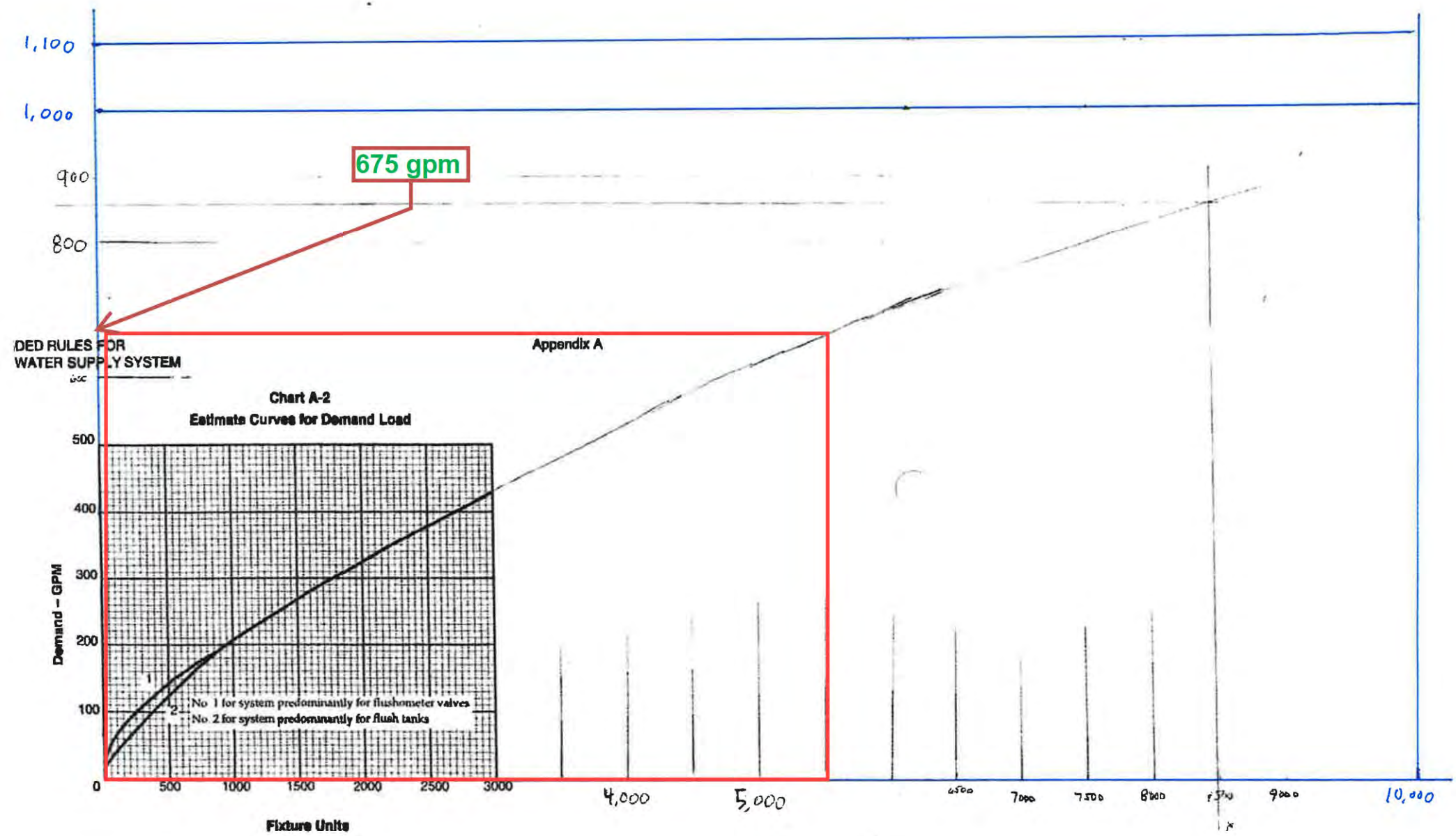

675 gpm
1,100
1,000
900
800
DED RULES FOR
WATER SUPPLY SYSTEM
Appendix A
Chart A-2
Estimate Curves for Demand Load
500
400
300
200
100
0
Demand – GPM
No. 1 for system predominantly for flushometer valves
No. 2 for system predominantly for flush tanks
500
1000
1500
2000
2500
3000
Fixture Units
4,000
5,000
7000
7500
8000
9000
10,000

Table 1 Operating Characteristics

Nominal Meter Size *in.*	Safe Maximum Operating Capacity *gpm*	Maximum Rate for Continuous Duty *gpm*	Maximum Loss of Head at Safe Maximum Operating Capacity* *psi*	Normal Test-Flow Limits *gpm*
Class I—Vertical-Shaft and Low-Velocity Horizontal Type				
1 1/2	100	50	15	12–80
2	160	80	15	16–120
3	350	175	15	24–250
4	600	300	15	40–400
6	1250	625	15	80–1000
8	1800	900	15	140–1600
10	2900	1450	15	225–2500
12	4300	2150	15	400–4000
Class II—In-Line (High-Velocity) Type				
2	160	100	7	4–160
3	350	240	7	8–350
4	630	420	7	15–630
6	1400	920	7	30–1400
8	2400	1600	7	50–2400
10	3800	2500	7	75–3800
12	5000	3300	7	120–5000

*Does not include strainer, which may be required in some applications.

Sec. 3.2 Capacity

The nominal capacity ratings and the related pressure-loss limits shall be the same as those shown in Table 1 for the safe maximum operating capacities.

Sec. 3.3 Length, Width, and Height

Maximum overall meter length, face to face of spuds or flanges, shall not be greater than shown in Table 2. A filler piece may be used to increase the length of a shorter meter to meet this requirement. Meter width and height shall not be greater than shown in Table 2. The distance from the centerline of the meter outlet to the lowest point on the meter bottom shall not be greater than shown in Table 2.

Sec. 3.4 Test Plugs

The test plug is optional for the manufacturer.

Sec. 3.5 Pressure Requirement

Meters supplied under this standard shall operate without leakage or damage to any part when operated continuously at a working pressure of 150 psi (1050 kPa).

Sec. 3.6 Accessibility

Meters shall be designed for easy removal of all interior parts without disturbing the connections to the pipeline. Straightening vanes need not be removable while the meter case is still connected in line.

For Non-Health Hazard Applications

Job Name _____ Contractor _____

Job Location _____ Approval _____

Engineer _____ Contractor's P.O. No. _____

Approval _____ Representative _____

Series 774DCDA

Double Check Detector Assemblies

Sizes 2½" – 12" (65 – 300mm)

Series 774DCDA Double Check Detector Assemblies are designed for use in accordance with water utility non-health hazard containment requirements. It is mandatory to prevent the reverse flow of fire protection system substances, i.e., glycerin wetting agents, stagnant water and water of non-potable quality from being pumped or siphoned into the potable water supply.

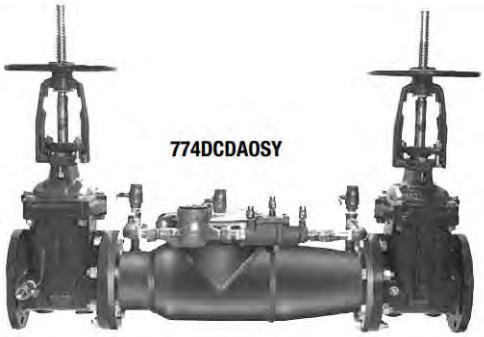
Features

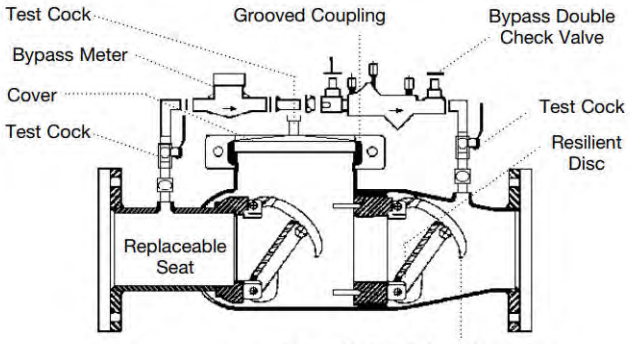
- Torsion spring check valve provides low head loss
- Short lay length is ideally suited for retrofit installations
- Stainless steel body is half the weight of competitive designs reducing installation and shipping cost
- Stainless steel construction provides long term corrosion protection and maximum strength
- Single top access cover with two-bolt grooved style coupling for ease of maintenance
- Thermoplastic and stainless steel check valves for trouble-free operation
- No special tools required for servicing
- Compact construction allows for smaller vaults and enclosures
- Furnished with ⅝" x ¾" (16x19mm) bronze meter (gpm or cfm)
- Detects underground leaks and unauthorized water use
- May be installed horizontal or vertical "flow up" position

Specifications

A Double Check Detector Assembly shall be installed on fire protection systems when connected to a potable water supply. Degree of hazard present is determined by the local authority having jurisdiction. The assembly shall consist of two positive seating check valves located between two resilient seated shutoffs with a hydraulically balanced bypass line and four test cocks. The main valve body shall be manufactured from 300 Series stainless steel to provide corrosion resistance. The check valves shall be of thermoplastic construction with stainless steel hinge pins, cam arm and cam bearing. The check valves shall utilize a single torsion spring design to minimize pressure drop through the assembly. The check valves shall be modular and shall seal to the main valve body by the use of an O-ring. There shall be no brass or bronze parts used within the check valve assembly. The check valve seats shall be of molded thermoplastic construction. The use of seat screws as a retention method is prohibited. All internal parts shall be accessible through a single cover on the valve assembly. The valve cover shall be held in place through the use of a single grooved style two-bolt coupling. The bypass line shall be hydraulically sized to accurately measure low flow. The bypass line shall consist of a meter, a small diameter double check assembly with test cocks and isolation valves. The bypass line double check valve shall have two independently operating modular poppet check valves, and top mounted test cocks. The assembly shall be a Watts Series 774DCDA.

FIRE PROTECTION





Laser Cut Polished Cam Arm

Available Models

Suffix:

LF –	without shutoff valves
OSY –	UL/FM outside stem and yoke resilient seated gate valves
*OSY FxG –	flanged inlet gate connection and grooved outlet gate connection
*OSY GxF –	grooved inlet gate connection and flanged outlet gate connection
*OSY GxG –	grooved inlet gate connection and grooved outlet gate connection
CFM –	cubic feet per minute meter
GPM –	gallons per minute meter

Available with grooved NRS gate valves - consult factory*
Post indicator plate and operating nut available - consult factory*
*Consult factory for dimensions

Now Available
WattsBox Insulated Enclosures.
For more information, send for literature ES-WB.

NOTICE

Inquire with governing authorities for local installation requirements

Watts product specifications in U.S. customary units and metric are approximate and are provided for reference only. For precise measurements, please contact Watts Technical Service. Watts reserves the right to change or modify product design, construction, specifications, or materials without prior notice and without incurring any obligation to make such changes and modifications on Watts products previously or subsequently sold.

WATTS®

Materials

All internal metal parts: 300 Series stainless steel, Main valve body: 300 Series stainless steel, Check assembly: Noryl® Flange dimensions in accordance with AWWA Class D.

Pressure - Temperature

Temperature Range: 33°F – 110°F (0.5°C – 43°C) continuous
Pressure Range: 175psi (12.1 bar)

Standards

AWWA C510, CSA B64.5

Approvals

(2½" - 10" only)
(65 - 250mm)

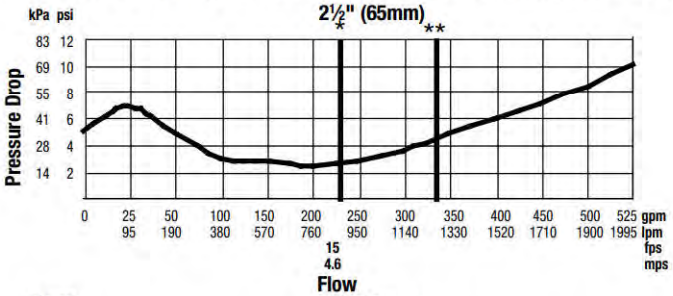
ASSE 1048

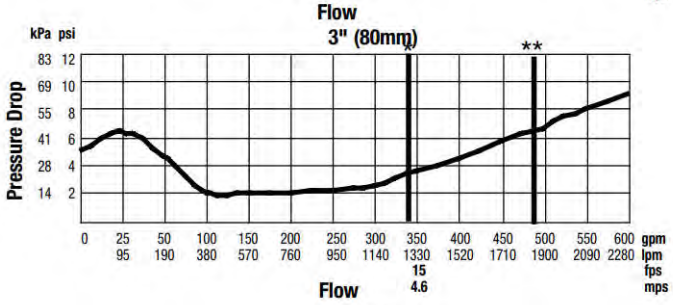
CLASSIFIED c UL us (OSY only)

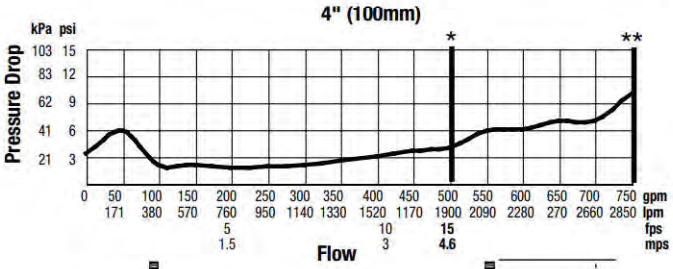
FM Approved

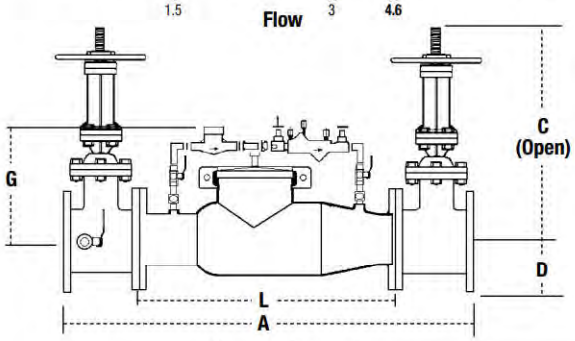
Capacity

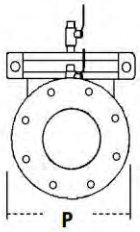
Flow curves as tested by Underwriters Laboratory per UL 1469, 1996 * Rated flow **UL Tested

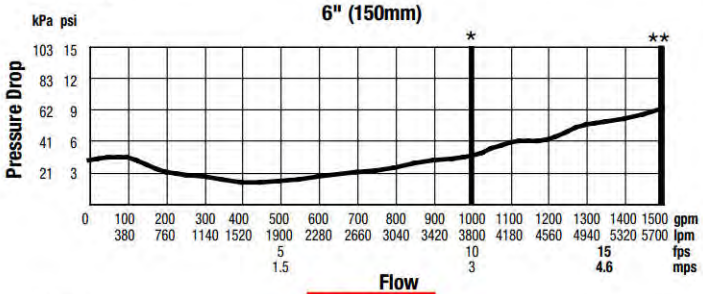


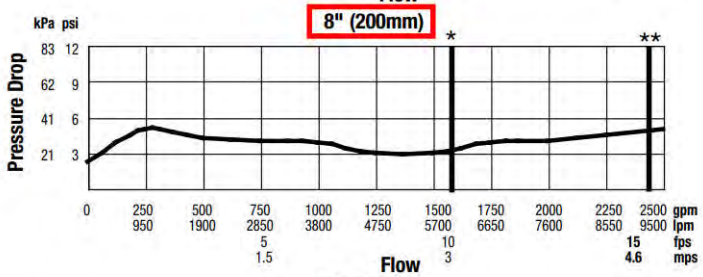


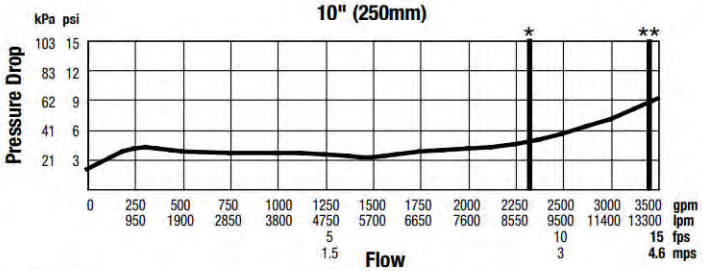


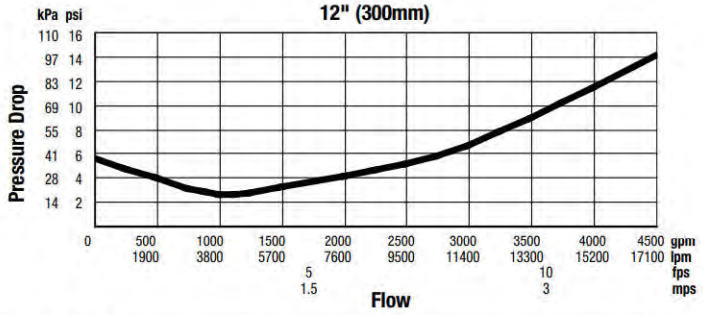












SIZE (DN)		DIMENSIONS												WEIGHT			
		A		C (OSY)		D		G		L		P		w/Gates		w/o Gates	
in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	lbs.	kgs.	lbs.	kgs.
2½	65	37	940	16⅜	416	3½	89	10	250	22	559	12½	318	155	70	68	31
3	80	38	965	18⅞	479	3¾	95	10	250	22	559	13	330	230	104	70	32
4	100	40	1016	22¾	578	4½	114	10	250	22	559	14½	368	240	109	73	33
6	150	48½	1232	30⅛	765	5½	140	15	381	27½	699	15½	394	390	177	120	54
8	200	52½	1334	37¾	959	6¾	171	15	381	29½	749	18¼	464	572	259	180	82
10	250	55½	1410	45¾	1162	8	200	15	381	29½	749	19½	495	774	351	190	86
12	300	57½	1461	53⅛	1349	9½	241	15	381	29½	749	21	533	1044	474	220	100

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WATTS®

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SPECIFICATION SHEET

FEBCO®

MASTER series®

LEAD FREE*

MasterSeries® LF860

Reduced Pressure Zone Backflow Prevention Assemblies

Size: 2½" - 10" (65mm - 250mm)

The FEBCO MasterSeries LF860 Reduced Pressure Zone Assembly is specifically designed to protect against possible backpressure and backsiphonage conditions for high hazard [i.e., toxic] application in accordance with Local Governing Water Utility Code. This Backflow Prevention Assembly is primarily used on potable drinking water systems where Local Governing Code mandates protection from non-potable water being pumped or siphoned back into the potable water system.

The LF860 features Lead Free* construction to comply with low lead installation requirements. The Lead Free* Reduced Pressure Zone Assemblies shall comply with state codes and standards, where applicable, requiring reduced lead content.

Series LF860 Reduced Pressure Zone Assembly

Features

- Inline Serviceable Assembly
- No Special Tools Required for Servicing
- Captured Modular Spring Assembly
- Reversible & Replaceable Discs
- Field Replaceable Seats
- Ductile Iron Valve Body Design
- Stainless Steel Check Components
- Modular Pressure Differential Relief Valve
- Repairable Pressure Differential Relief Valve
- Clapper Check Assembly
- Captured O-ring Design

DOMESTIC

Specifications

The FEBCO MasterSeries LF860 Reduced Pressure Zone Assembly shall be installed on the potable water supply and at each point of cross-connection to protect against possible backpressure and backsiphonage conditions for high hazard [i.e., toxic] applications. The assembly shall consist of a main line valve body composed of a pressure differential relief valve located in a zone between two (2) independently acting approved clapper style check modules with replaceable seats and disc rubbers. Servicing of the pressure differential relief valve and both check modules does not require any special tools; both check modules are accessed through independently top entry covers. This assembly shall be fitted with AWWA Compliant inlet/outlet resilient seated shutoff valves; when used on a Fire-Sprinkler application, the assembly shall be fitted with approved UL/FM inlet/outlet resilient seated shutoff valves and contain four (4) properly located resilient seated test cocks as specified by AWWA Standard C511. Flow and pressure loss performance parameters shall meet the requirements of AWWA Standard C511.

NOTICE

This information is not intended to replace the product installation and safety information available or the experience of a trained product installer. Please refer to the product installation and safety instructions for further information.

***The wetted surface of this product contacted by consumable water contains less than 0.25% of lead by weight.**

Job Name _____ Contractor _____

Job Location _____ Approval _____

Engineer _____ Contractor's P.O. No. _____

Approval _____ Representative _____

FEBCO product specifications in U.S. customary units and metric are approximate and are provided for reference only. For precise measurements, please contact FEBCO. FEBCO reserves the right to change or modify product design, construction, specifications, or materials without prior notice and without incurring any obligation to make such changes and modifications on FEBCO products previously or subsequently sold.

Options - Suffix

OSY: UL/FM Approved OS&Y Gate Valves (ANSI/AWWA C515 Compliant)

NRS: Non-Rising Stem Gate Valves (ANSI/AWWA C509 Compliant)

LG: Less Shut-off valves; This is NOT an APPROVED ASSEMBLY

Example Ordering Descriptions:

4" LF860-OSY - Valve Assembly fitted with OS&Y Shutoff Valves

4" LF860-NRS - Valve Assembly fitted with NRS Shutoff Valves

Assembly Flow Orientation:

- Horizontal (2½" – 10") - Approved by FCCCHR-USC, ASSE, cULus, FM, IAPMO and CSA

Approvals - Standards

- Approved by the Foundation for Cross-Connection Control and Hydraulic Research at The University of Southern California (FCCCHR-USC)
- ASSE 1013 Listed
- **UL Classified (US & Canada)
- **FM Approved
- IAPMO
- AWWA Standard C511 Compliant
- End Connections: Compliant to ASME B16.1 Class 125 & AWWA Class D Flange

**Assembly configured with UL/FM Approved OS&Y RW Gate Valves. Less gate valve assemblies are not UL/FM approved configurations.

1048 B64.4

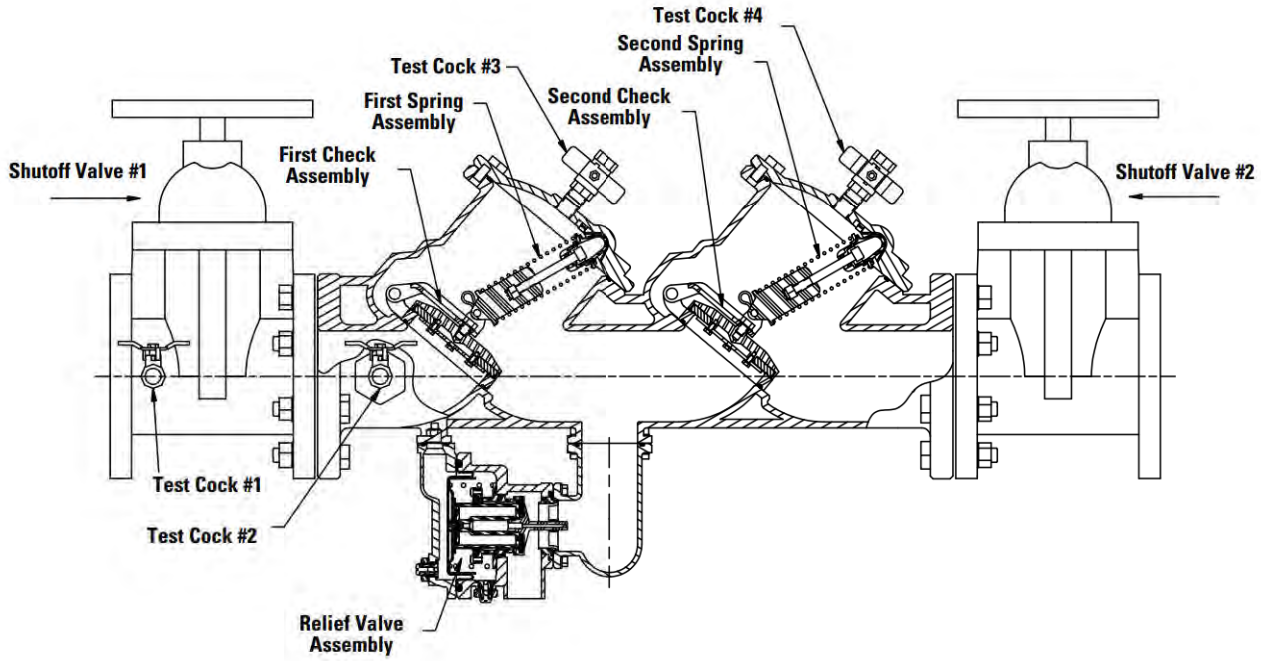
Materials

Below is a general materials list of the Series LF860. All assemblies size 2-1/2" through 10" is similar in materials and construction. Please contact your local FEBCO Representative if you require further information.

Main Valve Body:	Ductile iron Grade 65-45-12
Relief Valve Body:	Ductile iron Grade 65-45-12
Coating:	Fusion epoxy coated internal and external AWWA C550
Shutoff Valves:	NRS resilient wedge gate valve AWWA C509 (Standard) OSY resilient wedge gate valve AWWA C515 (UL/FM)
Check Seats:	Stainless Steel
Disc Holder:	Stainless Steel
Elastomer Disc:	Silicone
Spring:	Stainless Steel
Clamp:	AWWA C606 (10" Only)

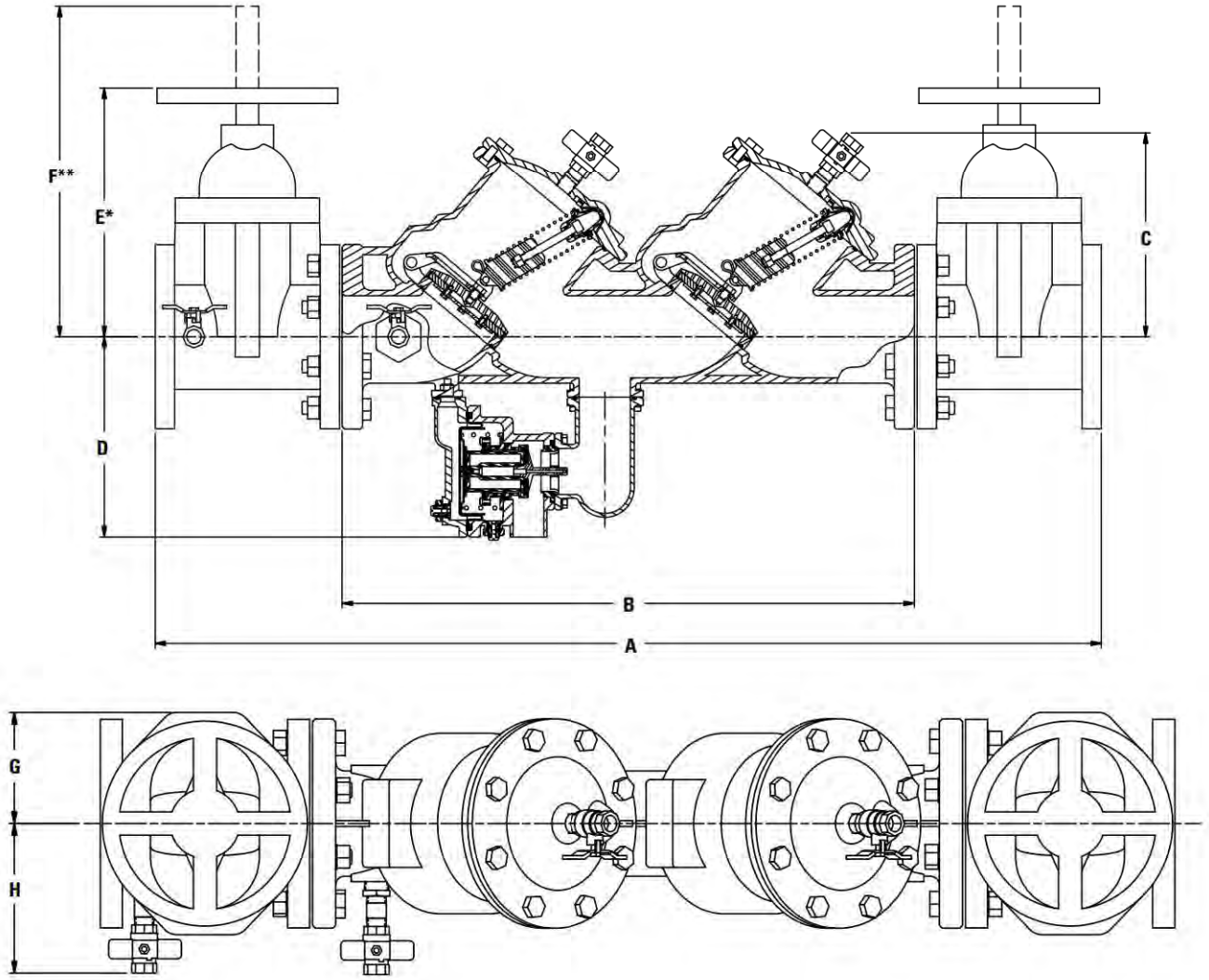
Pressure - Temperature

Max. Working Pressure:	175 psi (12.1 bar)
Min. Working Pressure:	20 psi (1.4 bar)
Hydrostatic Test Pressure:	350 psi (24.1 bar)
Hydrostatic Safety Pressure:	700 psi (48.3 bar)
Temperature Range:	33°F - 140°F (0.5°C - 60°C) Continuous



Dimensions & Weights

Below are the nominal dimensions and physical weights for the Series LF860 size 2-1/2" through 10". Allowances must be made for normal manufacturing tolerances. Please visit our website to download a copy of this product's installation instructions, or contact your local FEBCO Representative for more information.



LF860

SIZE (DN)		DIMENSIONS																WEIGHT***			
		A		B		C		D		E*		F**		G		H		NRS		OSY	
in.	*mm*	*in.*	*mm*	*in.*	*mm*	*in.*	*mm*	*in.*	*mm*	*in.*	*mm*	*in.*	*mm*	*in.*	*mm*	*in.*	*mm*	*lbs.*	*kg.*	*lbs.*	*kg.*
2½	65	40¾	1035	25½	648	10	254	10	254	12⅝	321	16⅜	416	4½	114	7⅛	181	250	113	254	115
3	80	41⅞	1064	25⅝	651	10	254	10	254	12⅞	327	22¼	565	4½	114	7⅜	187	276	125	280	127
4	100	46¼	1175	28	711	10⅛	257	10⅛	257	14⅜	365	23¼	591	5½	140	8⅛	206	335	152	347	157
6	150	56	1422	34¾	883	12¾	324	11⅛	283	18⅞	479	30⅛	765	6½	165	9⅞	251	503	228	523	237
8	200	65	1651	41¾	1061	15⅝	397	12¼	311	23½	597	37¾	959	7	178	11⅛	283	807	366	835	379
10	250	72⅝	1845	46⅜	1178	15⅝	397	12⅜	314	27½	699	48	1219	9	229	12⅜	314	1205	547	1243	564

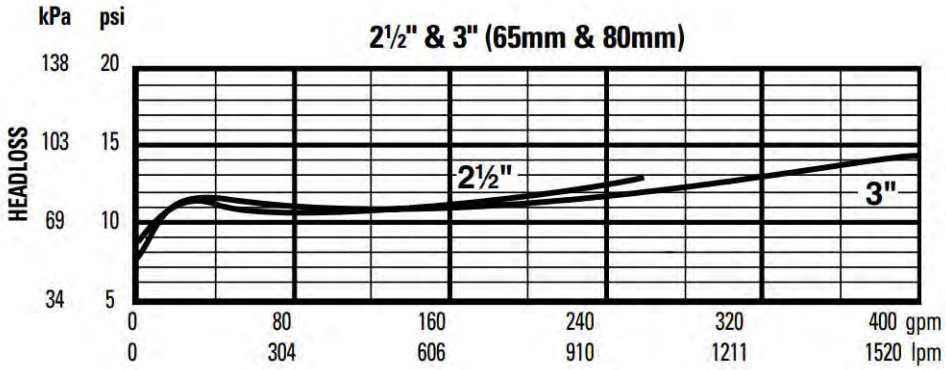
* Indicates nominal dimensions with NRS Gate Valves
** Indicates nominal dimensions with OSY Gate Valves (Full Open Position)
*** Indicates weight of complete Backflow Assemblies with specified Gate Valves

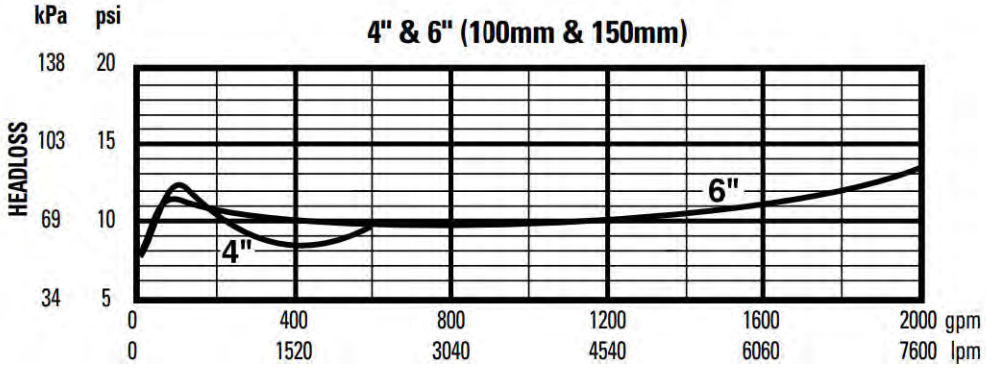
The gap drain is not designed to catch the maximum discharge possible from the relief valve. The installation of the FEBCO air gap with the drain line terminating above a floor drain will handle any normal discharge or nuisance spitting through the relief valve. However, floor drain size may need to be designed to prevent water damage caused by a catastrophic failure condition. Do not reduce the size of the drain line from the air gap fitting.

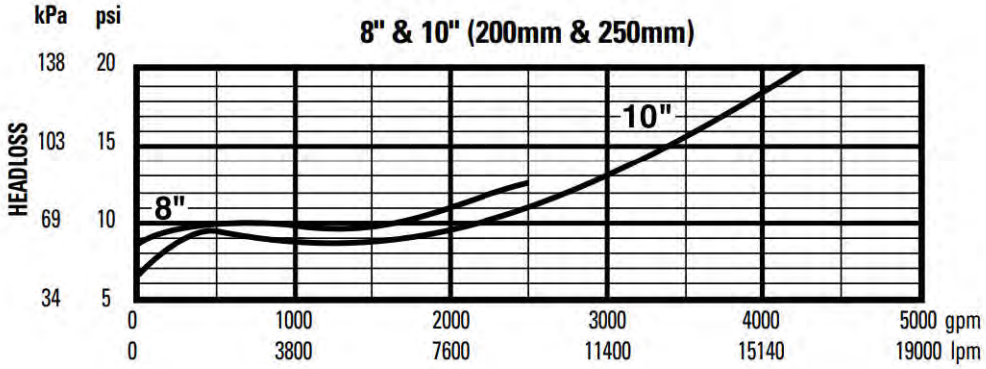
Performance

Flow capacity chart identifies valve performance based upon rated water Velocity up to 20fps

- Maximum service flow rate is determined by maximum rated Velocity of 7.5fps.
- AWWA Manual M-22 (Appendix C) recommends that the maximum water Velocity in the services be not more than 10fps.
- UL flow rate is determined by typically rated Velocity of 15 feet/sec.







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APPENDIX C

COMPUTER MODELING OUTPUT

The following conditions were modeled:

0. Average Day Demand
1. Peak Hour Demand
2. Maximum Day Demand plus 1,500 gpm Fire Flow at Node 123
3. Maximum Day Demand plus 1,500 gpm Fire Flow at Node 125
4. Peak Domestic Demand – WFU Based

- Node and Pipe Diagram – Exhibit A

```
* * * * * * * * * * * * K Y P I P E * * * * * * * * * * * *
*                                                           *
*  Pipe Network Modeling Software                           *
*                                                           *
*  CopyRighted by KYPIPE LLC (www.kypipe.com)               *
*  Version: 12.009b  03-25-2024                             *
*  Company:  DEXWIL        Serial #:  580753                *
*  Interface:  Classic                                      *
*   Licensed for Pipe2018                                   *
*                                                           *
* * * * * * * * * * * * * * * * * * * * * * * * * * * * * *

 Date & Time:  Thu Apr 17 14:59:08 2025

 Master File : k:\1551001\esperanza pa 11 ky pipe jan 2025.KYP\esperanza pa 11 ky pipe jan
2025.P2K

              ********************************************
               S U M M A R Y   O F   O R I G I N A L   D A T A
              ********************************************


 U N I T S   S P E C I F I E D

    FLOWRATE ............ = gallons/minute
    HEAD (HGL) .......... = feet
    PRESSURE ............ = psig
```

P I P E L I N E D A T A

STATUS CODE: XX -CLOSED PIPE CV -CHECK VALVE

P I P E N A M E	NODE NAMES #1	#2	LENGTH (ft)	DIAMETER (in)	ROUGHNESS COEFF.	MINOR LOSS COEFF.
P-1	J-1	J-7	950.00	24.00	120.0000	0.00
P-2	J-1	FF Test	5000.00	24.00	120.0000	0.00
P-3	J-3	J-1	350.00	12.00	120.0000	0.00
P-4	J-4	J-3	620.00	8.00	120.0000	0.00
P-5	J-5	J-4	290.00	8.00	120.0000	0.00
P-6	J-6	J-5	410.00	8.00	120.0000	0.00
P-7	J-7	J-6	470.00	8.00	120.0000	0.00
P-8	J-3	I-BF-1	20.00	8.00	120.0000	1.50
P-9	J-9	J-8	260.00	4.00	120.0000	1.40
P-10	J-9	J-10	120.00	6.00	120.0000	1.40
P-11	J-5	I-Meter 1	20.00	6.00	120.0000	2.50
P-12	J-10	J-11	240.00	6.00	120.0000	1.75
P-13	J-11	J-13	90.00	6.00	120.0000	0.75
P-14	J-13	J-14	120.00	6.00	120.0000	0.75
P-15	J-14	J-12	160.00	6.00	120.0000	1.15
P-16	J-12	J-15	190.00	4.00	120.0000	1.40
P-17	J-12	J-16	300.00	6.00	120.0000	1.00
P-18	J-16	J-17	170.00	4.00	120.0000	1.00
P-19	J-16	J-18	410.00	6.00	120.0000	1.40
P-20	J-18	J-19	170.00	4.00	120.0000	1.00
P-21	J-9	J-18	370.00	6.00	120.0000	0.40
P-23	O-BF-1	J-121	200.00	8.00	120.0000	1.50
P-24	O-Meter 1	J-10	200.00	6.00	120.0000	1.50
P-25	J-5	I-BF-2	20.00	8.00	120.0000	0.00
P-26	O-BF-2	J-122	250.00	8.00	120.0000	0.00
P-127	J-122	J-121	340.00	8.00	120.0000	1.40
P-128	J-121	J-123	500.00	8.00	120.0000	3.00
P-131	J-125	J-122	350.00	8.00	120.0000	4.50

P U M P/L O S S E L E M E N T D A T A

THERE IS A DEVICE AT NODE Meter 1 DESCRIBED BY THE FOLLOWING DATA: (ID= 2)

HEAD (ft)	FLOWRATE (gpm)	EFFICIENCY (%)
-18.46	0.00	75.00 (Default)
-19.62	200.00	75.00 (Default)
-20.77	400.00	75.00 (Default)
-21.92	600.00	75.00 (Default)
-23.08	800.00	75.00 (Default)

THERE IS A DEVICE AT NODE BF-1 DESCRIBED BY THE FOLLOWING DATA: (ID= 1)

HEAD (ft)	FLOWRATE (gpm)	EFFICIENCY (%)
-16.15	0.00	75.00 (Default)
-18.46	500.00	75.00 (Default)
-20.77	1000.00	75.00 (Default)
-23.08	1500.00	75.00 (Default)
-25.38	2000.00	75.00 (Default)

THERE IS A DEVICE AT NODE BF-2 .....> (ID= 1)

N O D E D A T A

NODE NAME	NODE TITLE	EXTERNAL DEMAND (gpm)	JUNCTION ELEVATION (ft)	EXTERNAL GRADE (ft)
FF Test		----	0.00	886.00
O-Meter 1		0.00	712.00	
O-BF-1		0.00	707.00	
O-BF-2		0.00	712.00	
J-1		0.00	705.00	
J-3		0.00	707.00	
J-4		0.00	711.00	
J-5		0.00	712.00	
J-6		0.00	715.00	
J-7		0.00	715.00	
J-8		3.00	709.00	
J-9		3.00	708.00	
J-10		3.00	710.00	
J-11		3.00	710.00	
J-12		3.00	709.00	
J-13		3.00	711.00	
J-14		3.00	711.00	
J-15		3.00	709.00	
J-16		3.00	708.00	
J-17		3.00	708.00	
J-18		3.00	706.00	
J-19		3.00	706.00	
J-121		0.00	708.00	
J-122		0.00	710.00	
J-123		0.00	710.00	
J-125		0.00	711.00	
I-Meter 1		0.00	712.00	
I-BF-1		0.00	707.00	
I-BF-2		0.00	712.00	

O U T P U T O P T I O N D A T A

OUTPUT SELECTION: ALL RESULTS ARE INCLUDED IN THE TABULATED OUTPUT
MAXIMUM AND MINIMUM PRESSURES = 3
MAXIMUM AND MINIMUM VELOCITIES = 3

S Y S T E M C O N F I G U R A T I O N

NUMBER OF PIPES .....(P) = 28
NUMBER OF END NODES .....(J) = 25
NUMBER OF PRIMARY LOOPS .....(L) = 3
NUMBER OF SUPPLY NODES .....(F) = 1
NUMBER OF SUPPLY ZONES .....(Z) = 1

==========

Case: 0

RESULTS OBTAINED AFTER 200 TRIALS: ACCURACY = 0.13216E+01

AVERAGE DAY DEMAND

S I M U L A T I O N D E S C R I P T I O N (L A B E L)

P I P E L I N E R E S U L T S

STATUS CODE: XX -CLOSED PIPE CV -CHECK VALVE

PIPE NAME	NODE NUMBERS #1	#2	FLOWRATE gpm	HEAD LOSS ft	MINOR LOSS ft	LINE VELO. ft/s	HL+ML/ 1000 ft/f	HL/ 1000 ft/f
P-1	J-1	J-7	45.45	0.00	0.00	0.03	0.00	0.00
P-2	J-1	FF Test	-36.00	0.00	0.00	0.03	0.00	0.00
P-3	J-3	J-1	9.45	0.00	0.00	0.03	0.00	0.00
P-4	J-4	J-3	124.30	0.28	0.00	0.79	0.45	0.45
P-5	J-5	J-4	124.30	0.13	0.00	0.79	0.45	0.45
P-6	J-6	J-5	45.45	0.03	0.00	0.29	0.07	0.07
P-7	J-7	J-6	45.45	0.03	0.00	0.29	0.07	0.07
P-8	J-3	I-BF-1	114.85	0.01	0.01	0.73	1.01	0.38
P-9	J-9	J-8	3.00	0.00	0.00	0.08	0.01	0.01
P-10	J-9	J-10	-17.25	0.01	0.00	0.20	0.05	0.05
P-11	J-5	I-Meter 1	36.00	0.00	0.01	0.41	0.51	0.18
P-12	J-10	J-11	15.75	0.01	0.00	0.18	0.04	0.04
P-13	J-11	J-13	12.75	0.00	0.00	0.14	0.03	0.03
P-14	J-13	J-14	9.75	0.00	0.00	0.11	0.02	0.02
P-15	J-14	J-12	6.75	0.00	0.00	0.08	0.01	0.01
P-16	J-12	J-15	3.00	0.00	0.00	0.08	0.01	0.01
P-17	J-12	J-16	0.75	0.00	0.00	0.01	0.00	0.00
P-18	J-16	J-17	3.00	0.00	0.00	0.08	0.01	0.01
P-19	J-16	J-18	-5.25	0.00	0.00	0.06	0.01	0.01
P-20	J-18	J-19	3.00	0.00	0.00	0.08	0.01	0.01
P-21	J-9	J-18	11.25	0.01	0.00	0.13	0.02	0.02
P-23	O-BF-1	J-121	114.85	0.08	0.01	0.73	0.45	0.38
P-24	O-Meter 1	J-10	36.00	0.04	0.00	0.41	0.20	0.18
P-25	J-5	I-BF-2	-114.85	0.01	0.00	0.73	0.38	0.38
P-26	O-BF-2	J-122	-114.85	0.10	0.00	0.73	0.38	0.38
P-127	J-122	J-121	-114.85	0.13	0.01	0.73	0.42	0.38
P-128	J-121	J-123	0.00	0.00	0.00	0.00	0.00	0.00
P-131	J-125	J-122	0.00	0.00	0.00	0.00	0.00	0.00

P U M P/L O S S E L E M E N T R E S U L T S

NAME	FLOWRATE gpm	INLET HEAD ft	OUTLET HEAD ft	PUMP HEAD ft	EFFIC-ENCY %	USEFUL POWER Hp	INCREMTL COST $	TOTAL COST $	#PUMPS PARALLEL	#PUMPS SERIES	NPSH Avail. ft	Case
Meter 1	36.00	173.93	155.26	-18.7	75.00	0.	0.0	0.0	**	**	207.1	0.0000
BF-1	114.85	178.98	162.30	-16.7	75.00	0.	0.0	0.0	**	**	212.2	0.0000
Warning P2K107:Device BF-2 is operating out of range.												
BF-2	-114.85	173.95	158.32	-15.6	75.00	0.	0.0	0.0	**	**	207.1	0.0000

N O D E R E S U L T S

NODE NAME	NODE TITLE	EXTERNAL DEMAND gpm	HYDRAULIC GRADE ft	NODE ELEVATION ft	PRESSURE HEAD ft	NODE PRESSURE psi
FF Test		----	886.00			
O-Meter 1		0.00	867.26	712.00	155.26	67.28
O-BF-1		0.00	869.30	707.00	162.30	70.33
O-BF-2		0.00	870.32	712.00	158.32	68.61
J-1		0.00	886.00	705.00	181.00	78.43
J-3		0.00	886.00	707.00	179.00	77.57
J-4		0.00	886.28	711.00	175.28	75.95
J-5		0.00	885.94	712.00	173.94	75.37
J-6		0.00	885.97	715.00	170.97	74.09
J-7		0.00	886.00	715.00	171.00	74.10
J-8		3.00	867.21	709.00	158.21	68.56
J-9		3.00	867.21	708.00	159.21	68.99
J-10		3.00	867.22	710.00	157.22	68.13
J-11		3.00	867.21	710.00	157.21	68.12
J-12		3.00	867.20	709.00	158.20	68.55
J-13		3.00	867.21	711.00	156.21	67.69
J-14		3.00	867.20	711.00	156.20	67.69
J-15		3.00	867.20	709.00	158.20	68.55
J-16		3.00	867.20	708.00	159.20	68.99
J-17		3.00	867.20	708.00	159.20	68.99
J-18		3.00	867.20	706.00	161.20	69.85
J-19		3.00	867.20	706.00	161.20	69.85
J-121		0.00	869.21	708.00	161.21	69.86
J-122		0.00	869.06	710.00	159.06	68.93
J-123		0.00	869.21	710.00	159.21	68.99
J-125		0.00	869.06	711.00	158.06	68.49
I-Meter 1		0.00	885.93	712.00	173.93	75.37
I-BF-1		0.00	885.98	707.00	178.98	77.56
I-BF-2		0.00	885.95	712.00	173.95	75.38

M A X I M U M A N D M I N I M U M V A L U E S

P R E S S U R E S

JUNCTION NUMBER	MAXIMUM PRESSURES psi	JUNCTION NUMBER	MINIMUM PRESSURES psi
J-1	78.43	O-Meter 1	67.28
J-3	77.57	J-14	67.69
I-BF-1	77.56	J-13	67.69

V E L O C I T I E S

PIPE NUMBER	MAXIMUM VELOCITY (ft/s)	PIPE NUMBER	MINIMUM VELOCITY (ft/s)
P-4	0.79	P-17	0.01
P-5	0.79	P-2	0.03
P-8	0.73	P-3	0.03

S U M M A R Y O F I N F L O W S A N D O U T F L O W S

(+) INFLOWS INTO THE SYSTEM FROM SUPPLY NODES
(-) OUTFLOWS FROM THE SYSTEM INTO SUPPLY NODES

NODE NAME	FLOWRATE gpm	NODE TITLE
FF Test	36.00	

NET SYSTEM INFLOW = 36.00
NET SYSTEM OUTFLOW = 0.00
NET SYSTEM DEMAND = 36.00

==========

Case: 1

C H A N G E S F O R N E X T S I M U L A T I O N (Change Number = 1)

Peak Hour Demand

JUNCTION DEMANDS CHANGED - PLEASE SEE RESULTS TABLE

RESULTS OBTAINED AFTER 200 TRIALS: ACCURACY = 0.12917E+01

P I P E L I N E R E S U L T S

STATUS CODE: XX -CLOSED PIPE CV -CHECK VALVE

PIPE NAME	NODE NUMBERS #1	#2	FLOWRATE gpm	HEAD LOSS ft	MINOR LOSS ft	LINE VELO. ft/s	HL+ML/ 1000 ft/f	HL/ 1000 ft/f
P-1	J-1	J-7	30.48	0.00	0.00	0.02	0.00	0.00
P-2	J-1	FF Test	-72.00	0.00	0.00	0.05	0.00	0.00
P-3	J-3	J-1	-41.52	0.00	0.00	0.12	0.01	0.01
P-4	J-4	J-3	57.65	0.07	0.00	0.37	0.11	0.11
P-5	J-5	J-4	57.65	0.03	0.00	0.37	0.11	0.11
P-6	J-6	J-5	30.48	0.01	0.00	0.19	0.03	0.03
P-7	J-7	J-6	30.48	0.02	0.00	0.19	0.03	0.03
P-8	J-3	I-BF-1	99.17	0.01	0.01	0.63	0.76	0.29
P-9	J-9	J-8	6.00	0.01	0.00	0.15	0.05	0.05
P-10	J-9	J-10	-34.51	0.02	0.00	0.39	0.20	0.17
P-11	J-5	I-Meter 1	72.00	0.01	0.03	0.82	1.95	0.66
P-12	J-10	J-11	31.49	0.03	0.00	0.36	0.16	0.14
P-13	J-11	J-13	25.49	0.01	0.00	0.29	0.11	0.10

P-14	J-13	J-14	19.49	0.01	0.00	0.22	0.06	0.06
P-15	J-14	J-12	13.49	0.00	0.00	0.15	0.03	0.03
P-16	J-12	J-15	6.00	0.01	0.00	0.15	0.05	0.05
P-17	J-12	J-16	1.49	0.00	0.00	0.02	0.00	0.00
P-18	J-16	J-17	6.00	0.01	0.00	0.15	0.05	0.05
P-19	J-16	J-18	-10.51	0.01	0.00	0.12	0.02	0.02
P-20	J-18	J-19	6.00	0.01	0.00	0.15	0.05	0.05
P-21	J-9	J-18	22.51	0.03	0.00	0.26	0.08	0.08
P-23	O-BF-1	J-121	99.17	0.06	0.01	0.63	0.34	0.29
P-24	O-Meter 1	J-10	72.00	0.13	0.02	0.82	0.74	0.66
P-25	J-5	I-BF-2	-99.17	0.01	0.00	0.63	0.29	0.29
P-26	O-BF-2	J-122	-99.17	0.07	0.00	0.63	0.29	0.29
P-127	J-122	J-121	-99.17	0.10	0.01	0.63	0.32	0.29
P-128	J-121	J-123	0.00	0.00	0.00	0.00	0.00	0.00
P-131	J-125	J-122	0.00	0.00	0.00	0.00	0.00	0.00

P U M P/L O S S E L E M E N T R E S U L T S

NAME	FLOWRATE gpm	INLET HEAD ft	OUTLET HEAD ft	PUMP HEAD ft	EFFIC-ENCY %	USEFUL POWER Hp	INCREMTL COST $	TOTAL COST $	#PUMPS PARALLEL	#PUMPS SERIES	NPSH Avail. ft	Case
Meter 1	72.00	173.93	155.05	-18.9	75.00	0.	0.0	0.0	**	**	207.1	1.0000
BF-1	99.17	178.98	162.37	-16.6	75.00	0.	0.0	0.0	**	**	212.2	1.0000
Warning P2K107:Device BF-2 is operating out of range.												
BF-2	-99.17	173.97	158.28	-15.7	75.00	0.	0.0	0.0	**	**	207.2	1.0000

N O D E R E S U L T S

NODE NAME	NODE TITLE	EXTERNAL DEMAND gpm	HYDRAULIC GRADE ft	NODE ELEVATION ft	PRESSURE HEAD ft	NODE PRESSURE psi
FF Test		----	886.00			
O-Meter 1		0.00	867.05	712.00	155.05	67.19
O-BF-1		0.00	869.37	707.00	162.37	70.36
O-BF-2		0.00	870.28	712.00	158.28	68.59
J-1		0.00	886.00	705.00	181.00	78.43
J-3		0.00	885.99	707.00	178.99	77.56
J-4		0.00	886.06	711.00	175.06	75.86
J-5		0.00	885.97	712.00	173.97	75.39
J-6		0.00	885.98	715.00	170.98	74.09
J-7		0.00	886.00	715.00	171.00	74.10
J-8		6.00(2.00)	866.87	709.00	157.87	68.41
J-9		6.00(2.00)	866.88	708.00	158.88	68.85
J-10		6.00(2.00)	866.90	710.00	156.90	67.99
J-11		6.00(2.00)	866.87	710.00	156.87	67.98
J-12		6.00(2.00)	866.84	709.00	157.84	68.40
J-13		6.00(2.00)	866.86	711.00	155.86	67.54
J-14		6.00(2.00)	866.85	711.00	155.85	67.53
J-15		6.00(2.00)	866.83	709.00	157.83	68.39
J-16		6.00(2.00)	866.84	708.00	158.84	68.83
J-17		6.00(2.00)	866.84	708.00	158.84	68.83
J-18		6.00(2.00)	866.85	706.00	160.85	69.70
J-19		6.00(2.00)	866.84	706.00	160.84	69.70
J-121		0.00	869.30	708.00	161.30	69.90
J-122		0.00	869.19	710.00	159.19	68.98
J-123		0.00	869.30	710.00	159.30	69.03
J-125		0.00	869.19	711.00	158.19	68.55
I-Meter 1		0.00	885.93	712.00	173.93	75.37
I-BF-1		0.00	885.98	707.00	178.98	77.56
I-BF-2		0.00	885.97	712.00	173.97	75.39

M A X I M U M A N D M I N I M U M V A L U E S

P R E S S U R E S

JUNCTION NUMBER	MAXIMUM PRESSURES psi	JUNCTION NUMBER	MINIMUM PRESSURES psi
J-1	78.43	O-Meter 1	67.19
J-3	77.56	J-14	67.53
I-BF-1	77.56	J-13	67.54

V E L O C I T I E S

PIPE NUMBER	MAXIMUM VELOCITY (ft/s)	PIPE NUMBER	MINIMUM VELOCITY (ft/s)
P-11	0.82	P-17	0.02
P-24	0.82	P-1	0.02
P-8	0.63	P-2	0.05

S U M M A R Y O F I N F L O W S A N D O U T F L O W S

(+) INFLOWS INTO THE SYSTEM FROM SUPPLY NODES
(-) OUTFLOWS FROM THE SYSTEM INTO SUPPLY NODES

NODE NAME	FLOWRATE gpm	NODE TITLE
FF Test	72.00	

NET SYSTEM INFLOW = 72.00
NET SYSTEM OUTFLOW = 0.00
NET SYSTEM DEMAND = 72.00

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Case: 2

C H A N G E S F O R N E X T S I M U L A T I O N (Change Number = 2)

Maximum Day Demand plus 1,500 gpm Fire Flow at Node 123

JUNCTION DEMANDS CHANGED - PLEASE SEE RESULTS TABLE

TANK at node FF Test has a new HGL of 837.000

RESULTS OBTAINED AFTER 5 TRIALS: ACCURACY = 0.25646E-05

P I P E L I N E R E S U L T S

STATUS CODE: XX -CLOSED PIPE CV -CHECK VALVE

PIPE NAME	NODE NUMBERS #1	#2	FLOWRATE gpm	HEAD LOSS ft	MINOR LOSS ft	LINE VELO. ft/s	HL+ML/ 1000 ft/f	HL/ 1000 ft/f
P-1	J-1	J-7	379.07	0.02	0.00	0.27	0.02	0.02
P-2	J-1	FF Test	-1557.60	1.14	0.00	1.10	0.23	0.23
P-3	J-3	J-1	-1178.53	1.40	0.00	3.34	3.99	3.99

P-4	J-4	J-3	-270.60	1.17	0.00	1.73	1.88	1.88
P-5	J-5	J-4	-270.60	0.55	0.00	1.73	1.88	1.88
P-6	J-6	J-5	379.07	1.44	0.00	2.42	3.51	3.51
P-7	J-7	J-6	379.07	1.65	0.00	2.42	3.51	3.51
P-8	J-3	I-BF-1	907.93	0.35	0.78	5.79	56.82	17.72
P-9	J-9	J-8	4.80	0.01	0.00	0.12	0.03	0.03
P-10	J-9	J-10	-27.60	0.01	0.00	0.31	0.13	0.11
P-11	J-5	I-Meter 1	57.60	0.01	0.02	0.65	1.26	0.44
P-12	J-10	J-11	25.20	0.02	0.00	0.29	0.10	0.09
P-13	J-11	J-13	20.40	0.01	0.00	0.23	0.07	0.06
P-14	J-13	J-14	15.60	0.00	0.00	0.18	0.04	0.04
P-15	J-14	J-12	10.80	0.00	0.00	0.12	0.02	0.02
P-16	J-12	J-15	4.80	0.01	0.00	0.12	0.03	0.03
P-17	J-12	J-16	1.20	0.00	0.00	0.01	0.00	0.00
P-18	J-16	J-17	4.80	0.01	0.00	0.12	0.03	0.03
P-19	J-16	J-18	-8.40	0.01	0.00	0.10	0.01	0.01
P-20	J-18	J-19	4.80	0.01	0.00	0.12	0.03	0.03
P-21	J-9	J-18	18.00	0.02	0.00	0.20	0.05	0.05
P-23	O-BF-1	J-121	907.93	3.54	0.78	5.79	21.63	17.72
P-24	O-Meter 1	J-10	57.60	0.09	0.01	0.65	0.49	0.44
P-25	J-5	I-BF-2	592.07	0.16	0.00	3.78	8.03	8.03
P-26	O-BF-2	J-122	592.07	2.01	0.00	3.78	8.03	8.03
P-127	J-122	J-121	592.07	2.73	0.31	3.78	8.94	8.03
P-128	J-121	J-123	1500.00	22.45	4.27	9.57	53.43	44.89
P-131	J-125	J-122	0.00	0.00	0.00	0.00	0.00	0.00

P U M P/L O S S E L E M E N T R E S U L T S

NAME	FLOWRATE gpm	INLET HEAD ft	OUTLET HEAD ft	PUMP HEAD ft	EFFIC- ENCY %	USEFUL POWER Hp	INCREMTL COST $	TOTAL COST $	#PUMPS PARALLEL	#PUMPS SERIES	NPSH Avail. ft	Case
Meter 1	57.60	120.72	101.93	-18.8	75.00	0.	0.0	0.0	**	**	153.9	2.0000
BF-1	907.93	126.33	105.98	-20.3	75.00	-5.	0.0	-0.1	**	**	159.0	2.0000
BF-2	592.07	120.59	101.70	-18.9	75.00	-3.	0.0	0.1	**	**	153.6	2.0000

N O D E R E S U L T S

NODE NAME	NODE TITLE	EXTERNAL DEMAND gpm	HYDRAULIC GRADE ft	NODE ELEVATION ft	PRESSURE HEAD ft	NODE PRESSURE psi
FF Test		----	837.00			
O-Meter 1		0.00	813.93	712.00	101.93	44.17
O-BF-1		0.00	812.98	707.00	105.98	45.93
O-BF-2		0.00	813.70	712.00	101.70	44.07
J-1		0.00	835.86	705.00	130.86	56.70
J-3		0.00	834.46	707.00	127.46	55.23
J-4		0.00	833.29	711.00	122.29	52.99
J-5		0.00	832.75	712.00	120.75	52.32
J-6		0.00	834.19	715.00	119.19	51.65
J-7		0.00	835.84	715.00	120.84	52.36
J-8		4.80(1.60)	813.81	709.00	104.81	45.42
J-9		4.80(1.60)	813.82	708.00	105.82	45.85
J-10		4.80(1.60)	813.83	710.00	103.83	44.99
J-11		4.80(1.60)	813.81	710.00	103.81	44.98
J-12		4.80(1.60)	813.79	709.00	104.79	45.41
J-13		4.80(1.60)	813.80	711.00	102.80	44.55
J-14		4.80(1.60)	813.80	711.00	102.80	44.55
J-15		4.80(1.60)	813.79	709.00	104.79	45.41
J-16		4.80(1.60)	813.79	708.00	105.79	45.84

J-17	4.80(1.60)	813.79	708.00	105.79	45.84
J-18	4.80(1.60)	813.80	706.00	107.80	46.71
J-19	4.80(1.60)	813.79	706.00	107.79	46.71
J-121	0.00	808.66	708.00	100.66	43.62
J-122	0.00	811.70	710.00	101.70	44.07
J-123	1500.00	781.94	710.00	71.94	31.17
J-125	0.00	811.70	711.00	100.70	43.63
I-Meter 1	0.00	832.72	712.00	120.72	52.31
I-BF-1	0.00	833.33	707.00	126.33	54.74
I-BF-2	0.00	832.59	712.00	120.59	52.25

M A X I M U M A N D M I N I M U M V A L U E S

P R E S S U R E S

JUNCTION NUMBER	MAXIMUM PRESSURES psi	JUNCTION NUMBER	MINIMUM PRESSURES psi
J-1	56.70	J-123	31.17
J-3	55.23	J-121	43.62
I-BF-1	54.74	J-125	43.63

V E L O C I T I E S

PIPE NUMBER	MAXIMUM VELOCITY (ft/s)	PIPE NUMBER	MINIMUM VELOCITY (ft/s)
P-128	9.57	P-17	0.01
P-8	5.79	P-19	0.10
P-23	5.79	P-15	0.12

S U M M A R Y O F I N F L O W S A N D O U T F L O W S

(+) INFLOWS INTO THE SYSTEM FROM SUPPLY NODES
(-) OUTFLOWS FROM THE SYSTEM INTO SUPPLY NODES

NODE NAME	FLOWRATE gpm	NODE TITLE
FF Test	1557.60	

NET SYSTEM INFLOW = 1557.60
NET SYSTEM OUTFLOW = 0.00
NET SYSTEM DEMAND = 1557.60

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Case: 3

C H A N G E S F O R N E X T S I M U L A T I O N (Change Number = 3)

Maximum Day Demand plus 1,500 gpm Fire Flow at Node 125

JUNCTION DEMANDS CHANGED - PLEASE SEE RESULTS TABLE

TANK at node FF Test has a new HGL of 837.000

RESULTS OBTAINED AFTER 4 TRIALS: ACCURACY = 0.12494E-05

P I P E L I N E R E S U L T S

STATUS CODE: XX -CLOSED PIPE CV -CHECK VALVE

PIPE NAME	NODE NUMBERS #1	#2	FLOWRATE gpm	HEAD LOSS ft	MINOR LOSS ft	LINE VELO. ft/s	HL+ML/ 1000 ft/f	HL/ 1000 ft/f
P-1	J-1	J-7	466.21	0.02	0.00	0.33	0.02	0.02
P-2	J-1	FF Test	-1557.60	1.14	0.00	1.10	0.23	0.23
P-3	J-3	J-1	-1091.39	1.21	0.00	3.10	3.46	3.46
P-4	J-4	J-3	-388.68	2.28	0.00	2.48	3.68	3.68
P-5	J-5	J-4	-388.68	1.07	0.00	2.48	3.68	3.68
P-6	J-6	J-5	466.21	2.11	0.00	2.98	5.16	5.16
P-7	J-7	J-6	466.21	2.42	0.00	2.98	5.16	5.16
P-8	J-3	I-BF-1	702.70	0.22	0.47	4.48	34.45	11.02
P-9	J-9	J-8	4.80	0.01	0.00	0.12	0.03	0.03
P-10	J-9	J-10	-27.60	0.01	0.00	0.31	0.13	0.11
P-11	J-5	I-Meter 1	57.60	0.01	0.02	0.65	1.26	0.44
P-12	J-10	J-11	25.20	0.02	0.00	0.29	0.10	0.09
P-13	J-11	J-13	20.40	0.01	0.00	0.23	0.07	0.06
P-14	J-13	J-14	15.60	0.00	0.00	0.18	0.04	0.04
P-15	J-14	J-12	10.80	0.00	0.00	0.12	0.02	0.02
P-16	J-12	J-15	4.80	0.01	0.00	0.12	0.03	0.03
P-17	J-12	J-16	1.20	0.00	0.00	0.01	0.00	0.00
P-18	J-16	J-17	4.80	0.01	0.00	0.12	0.03	0.03
P-19	J-16	J-18	-8.40	0.01	0.00	0.10	0.01	0.01
P-20	J-18	J-19	4.80	0.01	0.00	0.12	0.03	0.03
P-21	J-9	J-18	18.00	0.02	0.00	0.20	0.05	0.05
P-23	O-BF-1	J-121	702.70	2.20	0.47	4.48	13.37	11.02
P-24	O-Meter 1	J-10	57.60	0.09	0.01	0.65	0.49	0.44
P-25	J-5	I-BF-2	797.30	0.28	0.00	5.09	13.93	13.93
P-26	O-BF-2	J-122	797.30	3.48	0.00	5.09	13.93	13.93
P-127	J-122	J-121	-702.70	3.75	0.44	4.48	12.31	11.02
P-128	J-121	J-123	0.00	0.00	0.00	0.00	0.00	0.00
P-131	J-125	J-122	-1500.00	15.71	6.40	9.57	63.19	44.89

P U M P/L O S S E L E M E N T R E S U L T S

NAME	FLOWRATE gpm	INLET HEAD ft	OUTLET HEAD ft	PUMP HEAD ft	EFFIC-ENCY %	USEFUL POWER Hp	INCREMTL COST $	TOTAL COST $	#PUMPS PARALLEL	#PUMPS SERIES	NPSH Avail. ft	Case
Meter 1	57.60	119.27	100.48	-18.8	75.00	0.	0.0	0.0	**	**	152.5	3.0000
BF-1	702.70	126.96	107.56	-19.4	75.00	-3.	-0.2	-0.3	**	**	159.8	3.0000
BF-2	797.30	119.02	99.18	-19.8	75.00	-4.	-0.1	-0.1	**	**	151.8	3.0000

N O D E R E S U L T S

NODE NAME	NODE TITLE	EXTERNAL DEMAND gpm	HYDRAULIC GRADE ft	NODE ELEVATION ft	PRESSURE HEAD ft	NODE PRESSURE psi
FF Test		----	837.00			
O-Meter 1		0.00	812.48	712.00	100.48	43.54
O-BF-1		0.00	814.56	707.00	107.56	46.61
O-BF-2		0.00	811.18	712.00	99.18	42.98
J-1		0.00	835.86	705.00	130.86	56.70
J-3		0.00	834.65	707.00	127.65	55.31
J-4		0.00	832.36	711.00	121.36	52.59
J-5		0.00	831.30	712.00	119.30	51.70
J-6		0.00	833.41	715.00	118.41	51.31
J-7		0.00	835.83	715.00	120.83	52.36
J-8		4.80(1.60)	812.36	709.00	103.36	44.79
J-9		4.80(1.60)	812.37	708.00	104.37	45.23
J-10		4.80(1.60)	812.38	710.00	102.38	44.37
J-11		4.80(1.60)	812.36	710.00	102.36	44.35
J-12		4.80(1.60)	812.34	709.00	103.34	44.78
J-13		4.80(1.60)	812.35	711.00	101.35	43.92
J-14		4.80(1.60)	812.34	711.00	101.34	43.92
J-15		4.80(1.60)	812.34	709.00	103.34	44.78
J-16		4.80(1.60)	812.34	708.00	104.34	45.21
J-17		4.80(1.60)	812.34	708.00	104.34	45.21
J-18		4.80(1.60)	812.35	706.00	106.35	46.08
J-19		4.80(1.60)	812.34	706.00	106.34	46.08
J-121		0.00	811.89	708.00	103.89	45.02
J-122		0.00	807.70	710.00	97.70	42.34
J-123		0.00	811.89	710.00	101.89	44.15
J-125		1500.00	785.59	711.00	74.59	32.32
I-Meter 1		0.00	831.27	712.00	119.27	51.68
I-BF-1		0.00	833.96	707.00	126.96	55.02
I-BF-2		0.00	831.02	712.00	119.02	51.57

M A X I M U M A N D M I N I M U M V A L U E S

P R E S S U R E S

JUNCTION NUMBER	MAXIMUM PRESSURES psi	JUNCTION NUMBER	MINIMUM PRESSURES psi
J-1	56.70	J-125	32.32
J-3	55.31	J-122	42.34
I-BF-1	55.02	O-BF-2	42.98

V E L O C I T I E S

PIPE NUMBER	MAXIMUM VELOCITY (ft/s)	PIPE NUMBER	MINIMUM VELOCITY (ft/s)
P-131	9.57	P-17	0.01
P-25	5.09	P-19	0.10
P-26	5.09	P-15	0.12

S U M M A R Y O F I N F L O W S A N D O U T F L O W S

(+) INFLOWS INTO THE SYSTEM FROM SUPPLY NODES
(-) OUTFLOWS FROM THE SYSTEM INTO SUPPLY NODES

NODE NAME	FLOWRATE gpm	NODE TITLE
FF Test	1557.60	

NET SYSTEM INFLOW = 1557.60
NET SYSTEM OUTFLOW = 0.00
NET SYSTEM DEMAND = 1557.60

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Case: 4

C H A N G E S F O R N E X T S I M U L A T I O N (Change Number = 4)

Peak Domestic Demand - WFU Based

JUNCTION DEMANDS CHANGED - PLEASE SEE RESULTS TABLE

TANK at node FF Test has a new HGL of 886.000

RESULTS OBTAINED AFTER 14 TRIALS: ACCURACY = 0.97120E-04

P I P E L I N E R E S U L T S

STATUS CODE: XX -CLOSED PIPE CV -CHECK VALVE

PIPE NAME	NODE NUMBERS #1	#2	FLOWRATE gpm	HEAD LOSS ft	MINOR LOSS ft	LINE VELO. ft/s	HL+ML/ 1000 ft/f	HL/ 1000 ft/f
P-1	J-1	J-7	282.34	0.01	0.00	0.20	0.01	0.01
P-2	J-1	FF Test	-673.20	0.24	0.00	0.48	0.05	0.05
P-3	J-3	J-1	-390.86	0.18	0.00	1.11	0.52	0.52
P-4	J-4	J-3	-262.62	1.10	0.00	1.68	1.78	1.78
P-5	J-5	J-4	-262.62	0.52	0.00	1.68	1.78	1.78
P-6	J-6	J-5	282.34	0.84	0.00	1.80	2.04	2.04
P-7	J-7	J-6	282.34	0.96	0.00	1.80	2.04	2.04
P-8	J-3	I-BF-1	128.24	0.01	0.02	0.82	1.25	0.47
P-9	J-9	J-8	56.10	0.78	0.04	1.43	3.16	2.99
P-10	J-9	J-10	-323.14	1.27	0.29	3.67	13.05	10.62
P-11	J-5	I-Meter 1	673.20	0.83	2.26	7.64	154.56	41.33
P-12	J-10	J-11	293.96	2.14	0.30	3.34	10.17	8.91
P-13	J-11	J-13	237.86	0.54	0.08	2.70	6.96	6.02

P-14	J-13	J-14	181.76	0.44	0.05	2.06	4.07	3.66
P-15	J-14	J-12	125.66	0.30	0.04	1.43	2.07	1.85
P-16	J-12	J-15	56.10	0.57	0.04	1.43	3.22	2.99
P-17	J-12	J-16	13.46	0.01	0.00	0.15	0.03	0.03
P-18	J-16	J-17	56.10	0.51	0.03	1.43	3.17	2.99
P-19	J-16	J-18	-98.74	0.48	0.03	1.12	1.25	1.18
P-20	J-18	J-19	56.10	0.51	0.03	1.43	3.17	2.99
P-21	J-9	J-18	210.94	1.78	0.04	2.39	4.91	4.82
P-23	O-BF-1	J-121	128.24	0.09	0.02	0.82	0.55	0.47
P-24	O-Meter 1	J-10	673.20	8.27	1.36	7.64	48.12	41.33
P-25	J-5	I-BF-2	-128.24	0.01	0.00	0.82	0.47	0.47
P-26	O-BF-2	J-122	-128.24	0.12	0.00	0.82	0.47	0.47
P-127	J-122	J-121	-128.24	0.16	0.01	0.82	0.52	0.47
P-128	J-121	J-123	0.00	0.00	0.00	0.00	0.00	0.00
P-131	J-125	J-122	0.00	0.00	0.00	0.00	0.00	0.00

P U M P/L O S S E L E M E N T R E S U L T S

NAME	FLOWRATE gpm	INLET HEAD ft	OUTLET HEAD ft	PUMP HEAD ft	EFFIC-ENCY %	USEFUL POWER Hp	INCREMTL COST $	TOTAL COST $	#PUMPS PARALLEL	#PUMPS SERIES	NPSH Avail. ft	Case
Meter 1	673.20	168.87	146.52	-22.3	75.00	-4.	0.0	-0.1	**	**	201.2	4.0000
BF-1	128.24	178.55	161.81	-16.7	75.00	-1.	-0.2	-0.5	**	**	211.7	4.0000
Warning P2K107:Device BF-2 is operating out of range.												
BF-2	-128.24	171.97	156.40	-15.6	75.00	1.	-0.2	-0.3	**	**	205.2	4.0000

N O D E R E S U L T S

NODE NAME	NODE TITLE	EXTERNAL DEMAND gpm	HYDRAULIC GRADE ft	NODE ELEVATION ft	PRESSURE HEAD ft	NODE PRESSURE psi
FF Test		----	886.00			
O-Meter 1		0.00	858.52	712.00	146.52	63.49
O-BF-1		0.00	868.81	707.00	161.81	70.12
O-BF-2		0.00	868.40	712.00	156.40	67.78
J-1		0.00	885.76	705.00	180.76	78.33
J-3		0.00	885.58	707.00	178.58	77.38
J-4		0.00	884.47	711.00	173.47	75.17
J-5		0.00	883.96	712.00	171.96	74.51
J-6		0.00	884.79	715.00	169.79	73.58
J-7		0.00	885.75	715.00	170.75	73.99
J-8		56.10(**)	846.51	709.00	137.51	59.59
J-9		56.10(**)	847.33	708.00	139.33	60.38
J-10		56.10(**)	848.90	710.00	138.90	60.19
J-11		56.10(**)	846.46	710.00	136.46	59.13
J-12		56.10(**)	845.01	709.00	136.01	58.94
J-13		56.10(**)	845.83	711.00	134.83	58.43
J-14		56.10(**)	845.34	711.00	134.34	58.21
J-15		56.10(**)	844.40	709.00	135.40	58.67
J-16		56.10(**)	845.00	708.00	137.00	59.37
J-17		56.10(**)	844.46	708.00	136.46	59.13
J-18		56.10(**)	845.51	706.00	139.51	60.46
J-19		56.10(**)	844.97	706.00	138.97	60.22
J-121		0.00	868.70	708.00	160.70	69.64
J-122		0.00	868.52	710.00	158.52	68.69
J-123		0.00	868.70	710.00	158.70	68.77
J-125		0.00	868.52	711.00	157.52	68.26
I-Meter 1		0.00	880.87	712.00	168.87	73.18
I-BF-1		0.00	885.55	707.00	178.55	77.37
I-BF-2		0.00	883.97	712.00	171.97	74.52

M A X I M U M A N D M I N I M U M V A L U E S

P R E S S U R E S

JUNCTION NUMBER	MAXIMUM PRESSURES psi	JUNCTION NUMBER	MINIMUM PRESSURES psi
J-1	78.33	J-14	58.21
J-3	77.38	J-13	58.43
I-BF-1	77.37	J-15	58.67

V E L O C I T I E S

PIPE NUMBER	MAXIMUM VELOCITY (ft/s)	PIPE NUMBER	MINIMUM VELOCITY (ft/s)
P-11	7.64	P-17	0.15
P-24	7.64	P-1	0.20
P-10	3.67	P-2	0.48

S U M M A R Y O F I N F L O W S A N D O U T F L O W S

(+) INFLOWS INTO THE SYSTEM FROM SUPPLY NODES
(-) OUTFLOWS FROM THE SYSTEM INTO SUPPLY NODES

NODE NAME	FLOWRATE gpm	NODE TITLE
FF Test	673.20	

NET SYSTEM INFLOW = 673.20
NET SYSTEM OUTFLOW = 0.00
NET SYSTEM DEMAND = 673.20

***** HYDRAULIC ANALYSIS COMPLETED *****

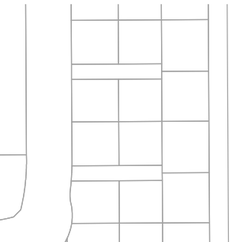
NOTE: ALL EXISTING AND PROPOSED WATER LINES ARE IN THE 925 PRESSURE ZONE.

N

0 200 FEET

LEGEND

- PROJECT BOUNDARY
- EXISTING PUBLIC POTABLE WATER LINE
- PROPOSED PUBLIC POTABLE WATER LINE
- PROPOSED PRIVATE DOMESTIC SYSTEM
- PROPOSED PRIVATE FIRE PROTECTION SYSTEM
- EXISTING PUBLIC FIRE HYDRANT
- PROPOSED PRIVATE FIRE HYDRANT
- PROPOSED BACKFLOW PREVENTER
- PROPOSED WATER METER
- (0) COMPUTER MODEL NODE NUMBER
- [1] COMPUTER MODEL PIPE NUMBER



CHATHAM ST
S AMHERST AVE
S EL REY PRIVADO
EUCALYPTUS AVE
HAMNER AVE
MILL CREEK AVE
METER+1
BF-1
BF-2
F.F. TEST
EX.12"
EX.24"
EX.8"

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EXHIBIT A

NODE AND PIPE DIAGRAM

ESPERANZA PA 11 (ONTARIO EAST)

\\MERIDIAN\DWG\1551001\REPORT\EH_WTR_EXHIBIT-A_NP-DIAGRAM.DWG 4/17/2025 3:52:30 PM LAYOUT:11x17 USER:James

CITY OF ONTARIO
ONTARIO MUNICIPAL UTILITIES COMPANY
UTILITIES ENGINEERING DIVISION
1425 S. Bon View Avenue, Ontario, CA 91761
Phone: (909) 395-2600 FAX: (909) 395-2608

RECORD OF FIRE FLOW TEST # FM-25-0041 HAVEN AV BETWEEN MERRILL & EUCALYPTUS

Date:	3/24/2025
Model Operator:	J. Yang
Reviewed By:	E. Woosley
Approved By:	E. Woosley
Remarks:	

Project Information

Request Number:	**FM-25-0041**
Project Name (if applicable):	
Project Number(if applicable):	
Location:	**HAVEN AV BETWEEN MERRILL & EUCALYPTUS**

Pressure Zone (Max Reservoir HGL): 925 PZ Land Use (GP, TOP): MDR

Allowable Design Criteria
Expected Potable Water System Performance

Fire Hydrant #1 Flow Results	
Fire Hydrant Asset #:	J121
Fire Hydrant Model Node #:	J121
Hydrant elevation:	697 feet
Static Pressure:	82 psi
Flow Test Residual Pressure:	61 psi
Flow Test Observed Flow:	2,000 gpm
Expected Flow at 20 psi	**3,819 gpm**
Potential Peak High Water Pressure*:	99 psi

Main Direct Connection Flow Results	
Main Size	8-inch
Main Model Node #:	J115
In "G" Dr	
Static Pressure:	82 psi
Flow Test Residual Pressure:	66 psi
Flow Test Observed Flow:	2,000 gpm
Expected System Flow at 20 psi	**4,565 gpm**
Maximum Flow Pumped from Main**:	**1,567 gpm**

*Potential Peak High Water Pressure is based on Pressure Zone HGL and Hydrant Elevation.
**Maximum allowable Flow to be safely pumped from the main by a Pump System.

Notes

These results were modeled with a 8-inch main being installed and looped on "A" Street, "B" Street, "C" Street,"E" Street, "D" Street, "F" Dr., "G" Dr., and "H" Dr. from Eucalyptus Ave to Parkview St. If said improvements are not installed, these results are null and void.

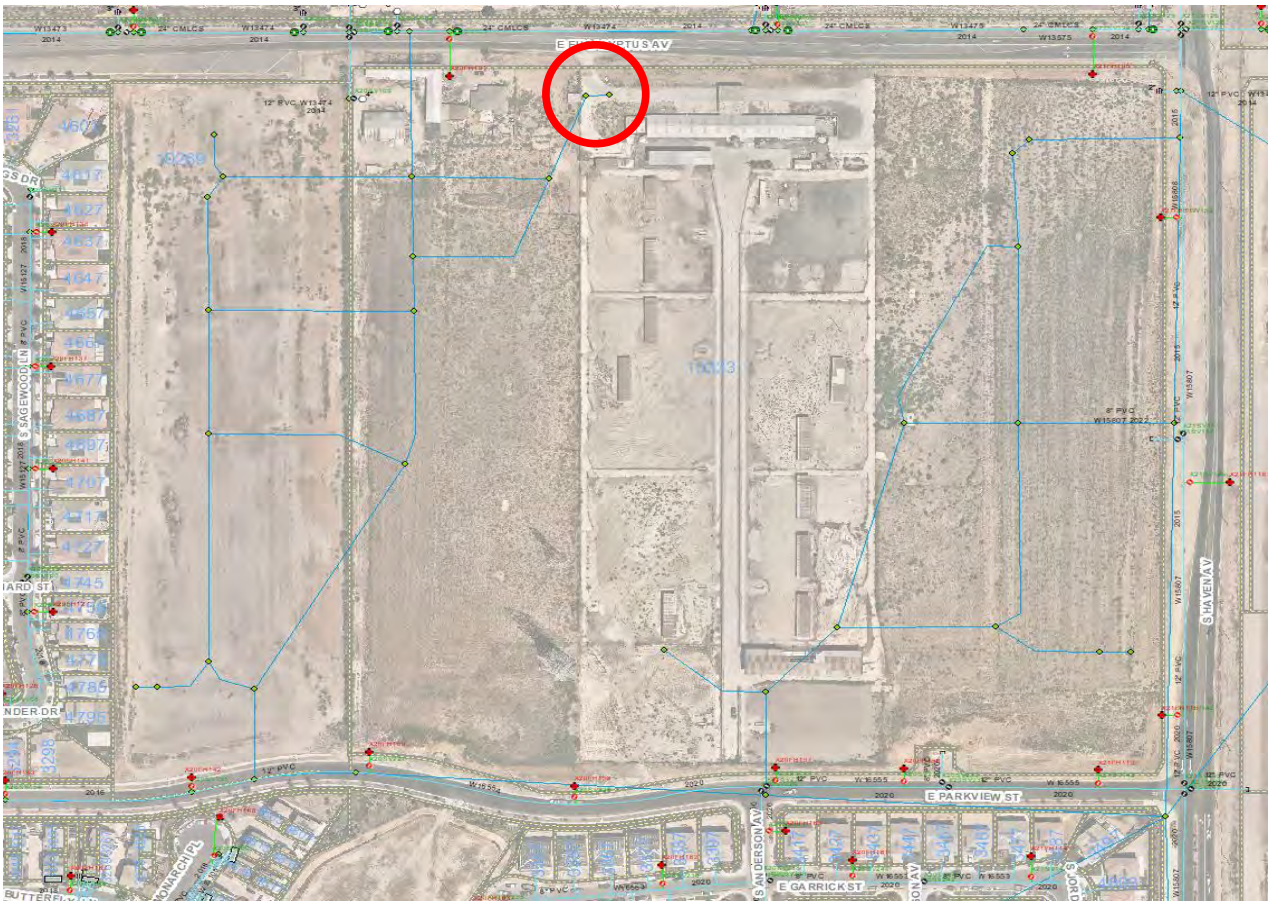
For Information on using Fire Flow Results contact the Fire Prevention Bureau at 909-395-2029.
For Details on how the Fire Flow Results were prepared, contact: UtilityFireFlows@ontarioca.gov

Disclaimer

The allowable design criteria shown above represents projected future maximum day water system conditions at the location of the test as determined by the City of Ontario's hydraulic water system computer model. This allowable design criteria does not constitute a guarantee by the City of the present or future conditions and availability, pursuant to City Resolution 85-85.

Actual water pressure will, in instances, exceed or fall below allowable design criteria due to seasonal and daily pressure variation within the City's water system. The designer is encouraged to provide an allowance in the fire protection system design to maintain adequate protection during such variations in system pressure.

The results are valid for a period of 12 months from the date of the test release unless extended in writing by the Ontario Fire Department.
These Fire Flow Results cannot be used to create Boundary Controls for use in Hydraulic Modeling.


E PARKVIEW ST
E GARRICK ST
S SAGEWOOD DR
S SHAVEN AV
S ANDERSON AV
12" PVC
8" PVC

DEXTER WILSON ENGINEERING, INC.

WATER • WASTEWATER • RECYCLED WATER

CONSULTING ENGINEERS

SEWER SYSTEM ANALYSIS FOR THE ESPERANZA PA 11 PROJECT IN ONTARIO RANCH IN THE CITY OF ONTARIO

April 17, 2025

2234 FARADAY AVENUE • CARLSBAD, CA • (760) 438-4422

SEWER SYSTEM ANALYSIS FOR THE ESPERANZA PA 11 PROJECT IN ONTARIO RANCH IN THE CITY OF ONTARIO

April 17, 2025

4-17-2025

Prepared by:
Dexter Wilson Engineering, Inc.
2234 Faraday Avenue
Carlsbad, CA 92008
(760) 438-4422

Job No. 1551-001

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DEXTER WILSON ENGINEERING, INC.

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STEVEN J. HENDERSON, P.E.
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KATHLEEN H. NOEL, P.E.
WILLIAM W. TODD, P.E.

April 17, 2025 1551-001

Walden & Associates
2552 White Road, Suite B
Irvine, CA 92614

Attention: Marcos Padilla, P.E., President

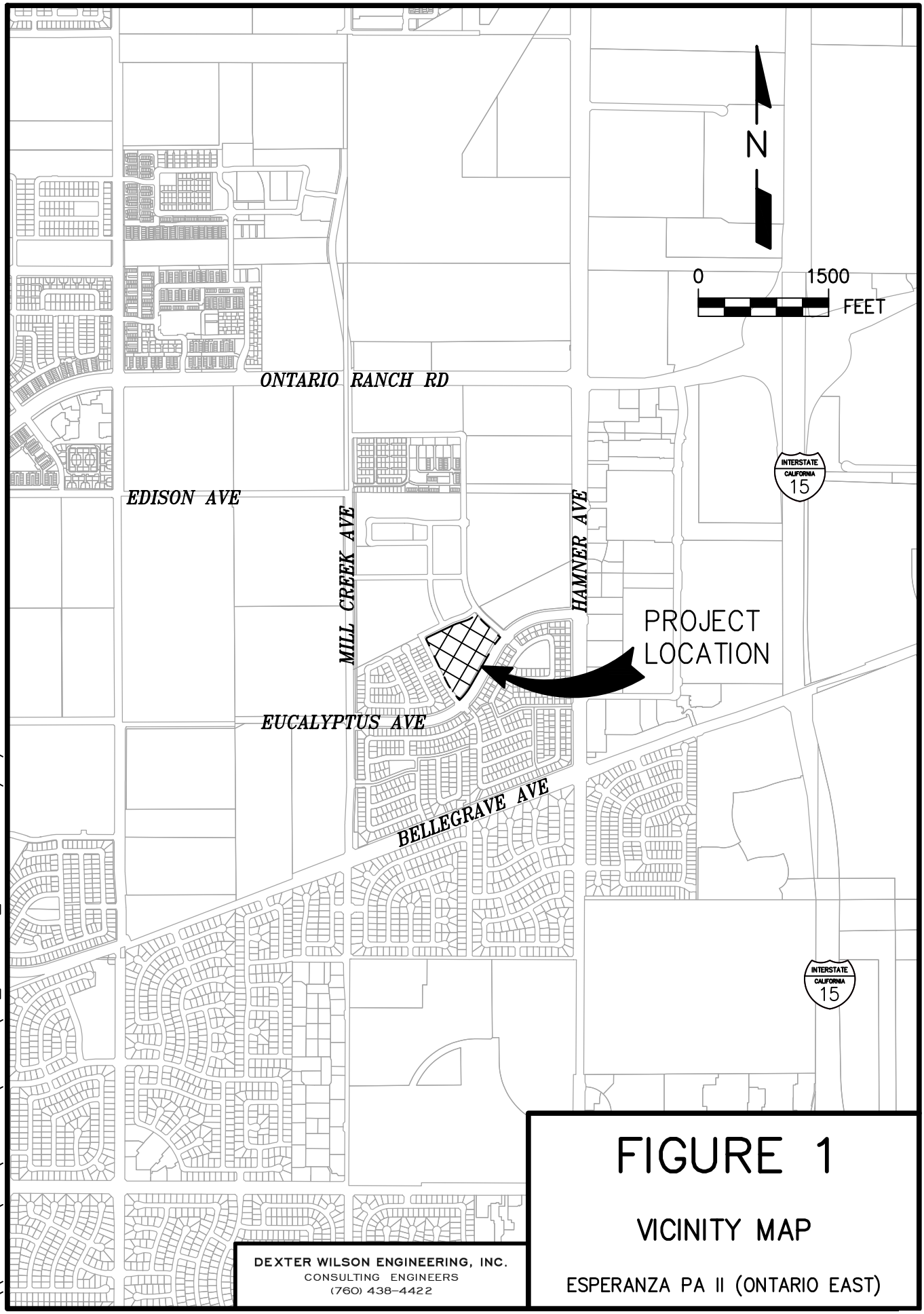
Subject: Sewer System Analysis for Esperanza PA 11 Project in the City of Ontario

Introduction

The Esperanza PA 11 project is located in the City of Ontario north of Eucalyptus Avenue between Amherst Avenue and Chatham Street. Access to the project will be from Amherst Avenue and Chatham Street. Sewer service for Esperanza PA 11 project will be provided by City of Ontario (City).

The proposed project is a mixed-use development consisting of 161 medium density residential units on approximately 10 acres.

A Vicinity Map for the project is shown on Figure 1.



\\MERIDIAN\DWG\1551001\REPORT\EH_FIGURE-1_VICMAP.DWG 7/12/2024 1:38:24 PM LAYOUT:8x11 USER:Karam

FIGURE 1

VICINITY MAP

ESPERANZA PA II (ONTARIO EAST)

DEXTER WILSON ENGINEERING, INC.
CONSULTING ENGINEERS
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Purpose of Study

The purpose of this letter report is to analyze the existing public sewer system downstream of the Esperanza PA 11 project and determine if there are any sewer system deficiencies created by the proposed development of this property and land use change from school site to medium density residential. This report will address any offsite (public) sewer system deficiencies that are created as a result of the development of the residential project.

A previous Ontario Ranch East Master Plan Sewer Study was prepared by L.D. King, Inc. for the overall master plan area in 2022 for the overall developer. This study will utilize that 2022 master plan where appropriate and will serve as an amendment to that 2022 master plan. Red lines of pertinent sections of the L.D. King, Inc. study are included in Appendix B.

Study Area

In general, the study area for this sewer report is the sewer sub-basin comprising of the tributary area surrounding the Esperanza PA 11 project up to the Eastern Trunk Sewer in Archibald Avenue. This sub-basin system collects the wastewater flow from Esperanza PA 11 and adjacent development. The gravity sewer in adjacent Amherst Avenue is an 8-inch sewer line that conveys wastewater to the connection with the 15-inch diameter sewer line running westerly in Eucalyptus Avenue. The 15-inch diameter sewer line in Eucalyptus Avenue turns south at Mill Creek Avenue and increases to 21-inch diameter before increasing to 27-inch diameter at Bellegrave Avenue and Merrill Avenue.

These existing public sewer facilities can be seen on Figure 2 and Exhibit A.

Sewer System Design Criteria

The design criteria used for the evaluation of the offsite sewerage system impacts by Esperanza PA 11 project are based on City design criteria. The City's Master Plan itself was referenced to confirm the pertinent design criteria as well. A copy of the pertinent sections in the City's Master Plan where the design criteria is located is attached as Appendix A.

\\MERIDIAN\DWG\1551001\REPORT\EH_SWR_FIGURE-2_EXPROSWR.DWG 4/17/2025 2:23:48 PM LAYOUT:11x17 USER:James

LEGEND

PROJECT BOUNDARY

EXISTING PUBLIC GRAVITY SEWER

PROPOSED PRIVATE GRAVITY SEWER

N

0 200 FEET

CHATHAM ST

S EL REY PRIVADO

S AMHERST AVE

HAMNER AVE

EUCALYPTUS AVE

MILL CREEK AVE

PROPOSED POINT OF CONNECTION

EX.8"

EX.15"

EX.21"

EUCALYPTUS AVE

EX.15"

EX.21"

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FIGURE 2

EXISTING AND PROPOSED SEWER FACILITIES

ESPERANZA PA 11 (ONTARIO EAST)

Sewer Generation Rates. The sewer generation rates for the project is presented as Table 1 below.

TABLE 1
ESPERANZA PA 11 SEWER GENERATION RATES

Land Use	Generation Rate
Medium Density Residential	174 gpd/unit

Peaking Factors

The peaking factor utilized in this study is identified in City's design criteria. To convert average dry weather flows to peak wet weather flows, the following equation was used:

$Q_{peak\ dry\ weather\ flow} = 1.77 \times Q_{avg}^{\ 0.893}$, where Q_{peak} equals peak flow in MGD (million gallons per day) and Q_{avg} equals average flow in MGD.

$Q_{peak\ wet\ weather\ flow} = 1.34 \times Q_{peak\ dry\ weather\ flow}$

Manning's "n"

The gravity sewer analyses are made using a computer spreadsheet calculation which uses the Manning Equation for all of its calculations. The Manning's "n" used by the computer spreadsheet calculation is held as a constant for all depths in a circular conduit. The value of Manning's "n" used for this study is 0.013 per the City criteria.

Depth and Velocity of Flow in Gravity Sewers

Gravity sewer lines are designed to convey peak flow. For pipes up to 12 inches in diameter, flow depths are maintained at or below a d/D ratio of 0.50 under peak dry weather flows. Pipes that are larger than 12-inches in diameter are designed for a maximum d/D ratio of 0.64 under peak dry weather flows. For either group, the depth of flow to d/D shall not exceed 0.82 with peak wet weather flows.

Gravity sewer lines are designed to maintain a minimum velocity of 2.0 feet per second at peak flow to prevent the deposition of solids.

Existing Sewer System

There are existing gravity sewer lines that are adjacent to the project site. The sewer line that will be utilized by the project is an 8-inch diameter gravity sewer line in Amherst Avenue on the western boundary of the project. This existing sewer line conveys flow southerly and westerly and ultimately connects to the existing Eastern Trunk Sewer line in Archibald Avenue. Appendix B provides reference information of the existing sewer lines utilized by the project.

Existing Sewer Flows. The sewer system analysis for Esperanza PA 11 project will need to consider sewage flows from existing development that is upstream and downstream of the project. Esperanza PA 11 project will be the most upstream development along this particular stretch of gravity sewer. Appendix B summarizes the projected sewage flows from existing downstream development.

Proposed Sewer Facilities

The projected sewer flow from Esperanza PA 11 project is based on the 161 residential unit site plan. Table 2 provides the summary of projected sewage flows for the project.

TABLE 2
ESPERANZA PA 11 PROJECTED SEWAGE FLOWS

Description	Quantity	Unit Flow Factor	Total Avg. Flow
Residential	161 units	174 gpd/unit	28,014

Per the City design criteria, the peak dry weather flow to average flow ratio is approximately 2.59 based on the formula presented earlier this study, resulting in an estimated peak dry weather flow of 72,691 gpd (50 gpm). The peak wet weather flow is calculated to be 97,406 gpd (68 gpm).

The project will construct an onsite gravity sewer collection system within the project's overall street distribution. The onsite sewer system within Esperanza PA 11 project is proposed to consist of 8-inch diameter gravity sewer lines. The existing and proposed sewer facilities for Esperanza PA 11 project are presented on Figure 2 and Exhibit A.

Sewer System Analysis

To analyze the impact of Esperanza PA 11 project on the existing sewer system, a hydraulic analysis was conducted. Appendix C provides the hydraulic analysis output and Exhibit A provides the corresponding Manhole Diagram. To perform this analysis, we obtained As-Built and design drawings information of the existing sewer system so that the pipe sizes and slopes could be inputted to the spreadsheet. A key component of the hydraulic analysis is to estimate existing flows within the sewer lines that will be utilized to serve the Esperanza PA 11 project. Appendix B provided the summary of existing flows from existing offsite upstream and downstream development.

The existing downstream 8-inch, 15-inch, 21-inch, 24-inch, and 27-inch gravity sewer lines were analyzed to the point where it connects to the Eastern Trunk Sewer in Archibald Avenue.

Sewer System Analysis Results

Appendix C presents the results of the hydraulic analysis for Esperanza PA 11 project. The results indicate that the existing system has adequate capacity to serve the project. With the additional sewer flow from Esperanza PA 11 residential project, all sections of downstream sewer lines will flow less than depth criteria during peak flow conditions.

The analysis results in Appendix C also indicate where changes due to the land use occur in the downstream sewer system. These changes are indicated via red lines and comments.

A summary of the impacts of the existing downstream gravity sewer to the proposed project is shown below in Table 3.

TABLE 3
ESPERANZA PA 11 EXISTING DOWNSTREAM SEWER IMPACTS

Existing Downstream Sewer Section	Maximum d/D Ratio		Minimum Velocity, fps	
	PDWF	PWWF	PDWF	PWWF
8-inch Diameter	0.14	0.28	1.7	1.9
15-inch Diameter	0.26	0.32	2.5	2.7
21-inch Diameter	0.35	0.41	4.3	4.7
24-inch Diameter	0.58	0.72	2.3	2.5
27-inch Diameter	0.59	0.73	2.3	2.5

Conclusions and Recommendations

The following conclusions have been made related to providing sewer service to Esperanza PA 11 project.

1. Esperanza PA 11 project can receive sewer service by connecting to an existing public 8-inch diameter gravity sewer line in Amherst Avenue and connecting to its proposed in-tract gravity sewer collection system. The project will construct an 8-inch diameter gravity sewer collection system onsite.

2. The development of the project is projected to result in an average sewage flow of 28,014 gpd.

3. Figure 2 provides the project layout including the location of existing and proposed sewer facilities.

4. A sewer system analysis was conducted (see Appendix C) and indicates that all existing and proposed sewer lines have adequate capacity to convey peak flows from existing development plus Esperanza PA 11 project while maintaining depth-to-diameter ratios of less than City criteria.

5. The sewer system analysis conducted indicates that the existing 8-inch, 15-inch, 21-inch, 24-inch, and 27-inch diameter public gravity sewer lines downstream of the project site up to the Eastern Trunk Sewer in Archibald Avenue can accommodate both existing sewer flow and the sewer flows of the proposed project.

6. A previous Ontario Ranch East Master Plan Sewer Study was prepared by L.D. King, Inc. for the overall master plan area in 2022 for the overall developer. This study will utilize that 2022 master plan where appropriate and will serve as an amendment to that 2022 master plan. Red lines of pertinent sections of the L.D. King, Inc. study are included in Appendix B.

Thank you for the opportunity to assist you with the sewer system planning for Esperanza PA 11 project. If you have any questions regarding the information and conclusions presented in this report, please do not hesitate to call.

Dexter Wilson Engineering, Inc.

Steven Henderson, P.E.

Attachments

SH:ah

APPENDIX A

DESIGN CRITERIA

Table 3-2
Sewer Unit Flow Factors

Landuse		Sewer Unit Flow Factors							
		Max Density (du/ac)[1]	Density (people/ du)[2]	FAR	gpd	unit	gpd/ac	gpd/tsf	gpd/du
Residential									
Rural Residential (OMC)	RR	2	3.997	-	52	gpd/person	420	-	208
Low Density Residential (OMC)	LDR	4	3.997	-	52	gpd/person	840	-	208
Low Density Residential (OR)	LDR	5	3.997	-	52	gpd/person	1,040	-	208
Low Medium Density Residential (OMC)	LMDR	8.5	3.997	-	52	gpd/person	1,785	-	208
Low Medium Density Residential (OR)	LMDR	11	3.997	-	52	gpd/person	2,300	-	208
Medium Density Residential (OMC)	MDR	18	3.347	-	52	gpd/person	3,150	-	174
Medium Density Residential (OR)	MDR	25	3.347	-	52	gpd/person	4,350	-	174
High Density Residential (OMC)	HDR	35	3.347	-	52	gpd/person	6,125	-	174
High Density Residential (OR)	HDR	40	3.347	-	52	gpd/person	6,960	-	174
Commercial									
Business Park	BP	-	-	0.40	53	gpd/job	1,610	90	-
General Commercial	GC	-	-	0.30	132	gpd/job	1,610	120	-
Hospitality[3]	HOS	-	-	1.00	116	gpd/room	-	100	-
Neighborhood Commercial	NC	-	-	0.30	51	gpd/job	1,610	120	-
Office Commercial	OC	-	-	0.75	31	gpd/job	2,250	70	-
Industrial									
Industrial	IND	-	-	0.55	51	gpd/job	1,060	45	-
Mixed Use[4]									
High Density Residential	MU-HDR	35	2.000	-	52	gpd/person	4,200	-	104
Office	MU-O	-	-	-	31	gpd/job	2,250	70	-
Non-Office	MU-NO	-	-	-	91	gpd/job	1,610	120	-
Open Space									
Open Space Non-Recreational	OS-NR	-	-	-	-	-	-	-	-
Open Space Recreational	OS-R	-	-	-	-	-	200	-	-
Public									
Public Facility	PF	-	-	-	-	-	1,450	-	-
Public Middle or High School	PS	-	-	-	8	gpd/student	-	-	
Public Elementary School	PS	-	-	-	8	gpd/student	-	-	-

[1] Max Density per the City's Buildout Table (April 2015) for Original Model Colony. Density for LDR, LMDR, MDR, and HDR in Ontario Ranch were increased per the City Planning Department recommendation (March 2016).

[2] Density per the City's Buildout Table (April 2015)

[3] The sewage generation for a hotel is best estimated by the number of rooms.

[4] Mixed Use demands should be based on the types of landuse that make up the specific area and the unit demand factors provided above. The City's Buildout Table (April 2015) provides detailed information on the landuses that make up each mixed use area.

Definitions: ac = acre; du = dwelling unit; gpd = gallons per day; OMC = Original Model Colony; OR = Ontario Ranch; tsf = thousand sqare feet

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3-3.1 Residential Sewer Unit Flow Factors

As shown on Figure 3-1, the flow monitoring sites were primarily chosen in the Original Model Colony (OMC) areas, which are generally built out. The residential developments in this area is predominately low density residential (LDR) and high density residential (HDR), which were used to develop the sewage generation estimates in gallons per day per person.

The sewer unit flow factor for LDR and HDR were calculated to be 52 and 51 gpd/person, respectively, when applying annual sewer return ratios to the potable water unit flow factors. This calculation shows that the sewage generation per person is very similar, regardless of the residential land use categorization. For planning purposes, the sewage unit flow factor of 52 gpd per person was applied to all residential land use types, as shown in Table 3-2.

The majority of the new development is composed of low density residential (LDR) and low-medium density residential (LMDR) land use types, each with an estimated population density of 3.997 persons per dwelling unit. The sewer unit flow factor for both LDR and LMDR is 208 gpd/DU, when applying the sewage generation factor of 52 gpd per person.

The City's planning department estimates that the medium density residential (MDR) and high density residential (HDR) land use types have population densities of 3.347 persons per dwelling unit. With the sewage generation factor of 52 gpd per person, the unit flow factor for MDR and HDR are 174 gpd per dwelling unit.

3-3.2 Non-Residential Sewer Unit Flow Factors

Commercial Land Uses

The City's water meter billing data accounts for commercial indoor use, outdoor irrigation water use, as well as recycled water use. Excluding irrigation and recycled water use for commercial customers (business park, general commercial, office commercial, neighborhood commercial, and hospitality), a sewer return ratio of 89% of the annual average water use was developed. This return ratio was applied to the developed water demand factors to establish the sewer unit flow factors for commercial uses.

Hospitality Land Uses

The City's 2010 General Plan defines an area along Vineyard Avenue, south of the I-10 Freeway and north of the Ontario International Airport, as the hospitality area. It consists of numerous hotels and restaurants that provide service for patrons of the airport. A sewer return ratio of 89% of the annual average water use was applied to the hospitality land use to establish the sewer unit flow factors.

Industrial Land Uses

Industrial land use types include a wide variety of businesses and manufacturing processes that causes sewage generation to vary significantly from one customer to another. This is evident in the wide range water use for different businesses with these land use categorizations. For example, warehouses typically use a low amount of water and generate low amounts of sewage. On the other hand, some manufacturing businesses can use large of amounts of water and contribute large amounts of sewage to the City's sewer system.

The average sewer return ratio was estimated to be 75% of the annual average water use. For planning purposes and when no other specific planning information is available, the sewage generation will be based on

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the sewer unit flow factor of 1,060 gpd/ac. This factor was based on the number of future estimated jobs and the 51 gpd/job divided by the number of future industrial acres. It is considered quite conservative in comparison to the currently estimated factor of 244 gpd/ac per flow monitoring in a primarily industrial area. The reason the existing factor is so low is because many of the industrial areas consist of warehouse uses that don't use a lot of water. In the future, these warehouses can be converted to manufacturing uses. Therefore, for planning purposes, the calculated unit flow factor of 1,060 gpd/ac is deemed appropriate.

It is recommended that the City evaluate future potential high water users on a case by case basis, as details regarding the proposed development or redevelopment area becomes available. The sewer hydraulic model should be utilized to make sure that the system is capable of handling the proposed sewage generation.

Public Facility and School Land Uses

Sewer return ratios of 85% and 80%, respectively were implemented for public facilities and schools. The sewer unit flow factor for public facilities is 1,450 gpd per acre. For schools, the sewer unit flow factor is 8 gpd per student.

3-4 Peaking Factors

3-4.1 Peak Dry Weather

The wastewater unit flow factors discussed in Section 3-3 are used to generate average dry weather flows (ADWF) entering the collection system. However, the adequacy of a sewage collection system is based upon its ability to convey the peak flows. At any individual point in the system, peak dry weather flow (PDWF) is estimated by converting the total average flow upstream of the point in question to peak dry weather flow by an empirical peak-to-average relationship.

The peaking formula commonly used in sewerage studies is of the following form:

$$PDWF = a \times ADWF^{b}$$

where PDWF = Peak Dry Weather Flow
ADWF = Average Dry Weather Flow
a, b = Peaking Formula Coefficients

In order to develop the peaking formula and establish coefficient "a" and "b", the maximum versus average flow measured was plotted for each flow monitoring site as shown in Figure 3-3.

Based on the best fit line through the data points shown in Figure 3-3, the following peaking relationship was selected for this study:

$$PDWF\ (mgd) = 1.77 \times ADWF\ (mgd)^{0.893}$$

The coefficient "b" factor accounts for smaller tributary areas with smaller ADWF, which generally experience greater PDWF. The change in usage of one customer in a very small tributary area will have a greater effect on its corresponding PDWF than a change in usage of one customer is a very large tributary area.

Note that the units of the selected peaking formula are in million gallons per day (mgd). These peaks are generally observed between the hours of 6:00 a.m. and 9:00 a.m. and 7:00 p.m. and 9:00 p.m. during weekdays and somewhat later in the morning hours during weekends in the predominantly residential areas.

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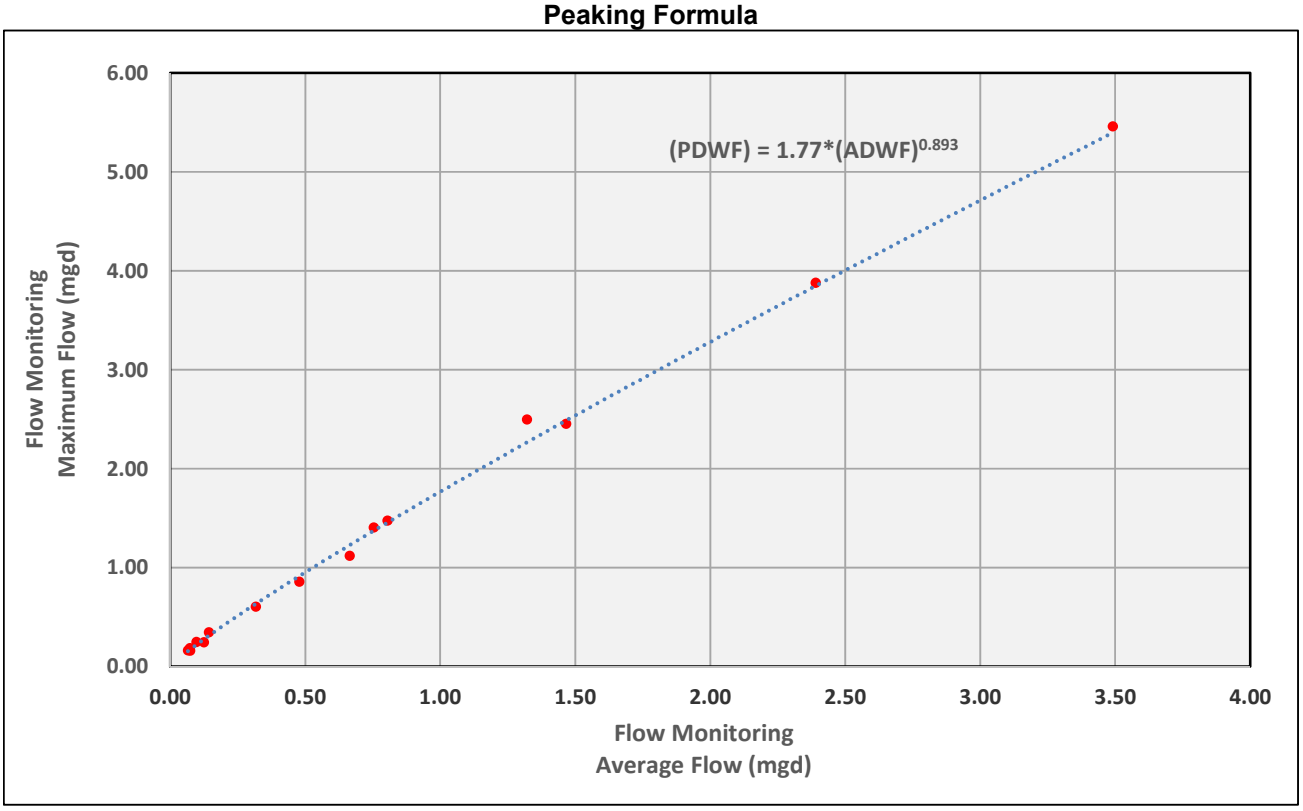
Figure 3-3
Peaking Formula



3-4.2 Peak Wet Weather

The peak wet weather flow (PWWF) has two components: peak dry weather flow (PDWF) and rainfall dependent inflow/infiltration (I/I) as expressed by the following equation:

$$PWWF = PDWF + I/I$$

Inflow and infiltration is discussed further in Section 3-5.

The flow monitoring effort for this study did not cover a wet weather period. Until wet weather flow data can be collected, it is recommended that the peak wet weather flow be estimated as the following:

Peak Wet Weather Flow (PWWF) = 1.34 x Peak Dry Weather Flow (PDWF)

Although the PWWF/PDWF factor of 1.34 may not cover all situations, it is not reasonable or feasible to design the sewer system to carry the flows that would result from the use of a larger ratio. Instead, it is recommended that the City concentrate on projects such as replacing manhole covers, installing plugs in manhole covers, and replacing or relining cracked pipes to reduce inflow and infiltration.

3-5 Inflow and Infiltration

Inflow is the surface water that typically gains entry to the sewer system through perforated or unsealed manhole covers during rainfall events. Infiltration is defined as water entering the collection system from the ground through defective pipes, pipe joint connections, or manhole walls. The sewer system design capacity

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must include allowances for these extraneous flow components, which inevitably become a part of the total flow. The amount of inflow and infiltration (I/I) that enters the system typically depends upon the availability, adequacy, and location of the storm water drainage facilities; age and condition of structures; materials and methods of construction; the location of the groundwater table; and the characteristics of the soil. In the absence of flow monitoring data, many regulating agencies utilize commonly accepted practices for estimating I/I. For example, I/I is often estimated based on the diameter and length of pipeline (100 to 400 gpd/ in. dia/ mile) or as a percentage of the peak flow or pipeline capacity.

AKM's experience from other master planning studies and review of limited flow monitoring information available during severe rainfall events indicate that the peak wet weather flow can vary from 10 percent of average dry weather flows in steeper areas with adequate drainage facilities, to over 400 percent of average dry weather flows in flat areas that lack significant drainage facilities.

For this study, extraneous flow due to inflow and infiltration is included in the peak wet weather flow formula described above. If better data becomes available subsequently for specific areas, the analysis shall be updated based upon that information.

3-6 Sewer System Performance Evaluation Criteria

Sewer system performance evaluation criteria are established to ensure that the wastewater collection system can operate effectively under all flow conditions. Each pipe segment must be capable of carrying peak wet weather flows in the hydraulically stable zone of the pipe. Low flows must be conveyed at a velocity that will prevent solids from settling and blocking the system.

The design capacity of a gravity pipeline is the calculated capacity of the pipeline based on the Manning formula:

$$Q = 1.486 * A * R^{\frac{2}{3}} \frac{S^{\frac{1}{2}}}{n}$$

where, **Q** = flow in cubic feet per second
R = hydraulic radius in feet = A / P
A = cross-sectional area of the pipe in square feet
P = wetted perimeter in feet
S = slope of pipe in feet of rise per foot of length
n = Manning's friction factor

Sewer system capacity is established using a Manning's friction factor of 0.013 for vitrified clay pipe.

The design and analysis of sewer pipes is typically based upon the depth to diameter ratio (d/D). In this study, **existing** pipes are considered capacity deficient if the d/D is above 0.64 at peak dry weather flows. This d/D ratio was arrived at by taking 75% of a pipe's maximum stable flow capacity, which is at a d/D of 0.82. The area above a d/D of 0.82 is considered hydraulically unstable. The 25% pipe capacity above the d/D ratio of 0.64 is reserved for inflow and infiltration.

By setting the maximum allowable PWWF equal to the maximum capacity of the pipe (d/D ratio = 0.82) and setting the maximum allowable PDWF equal to 75% of the maximum pipe capacity (d/D ratio = 0.64), the PWWF/PDWF ratio is 1.34 (100% pipe capacity/75% pipe capacity) as stated in Section 3-4.2.

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The extra pipeline capacity also allows for the possibility that actual wastewater flows may be slightly higher than anticipated PDWF. Additionally, the area above the water surface helps to keep the sewage aerated, reducing the possibility of septic conditions and odors.

For **new construction**, the design and analysis of gravity sewer pipes shall be based on the following depth to diameter ratios:

- Pipes **12-inches and smaller** in diameter shall be designed to flow at a maximum **d/D of 0.50** under peak dry weather flows
- Pipes **15-inches and greater** in diameter shall be designed to flow at a maximum **d/D of 0.64** under peak dry weather flows
- For either group, the depth of flow to diameter ratio shall not exceed **0.82 with peak wet weather flows**

Although this Sewer Master Plan study defined existing pipes as deficient when the d/D ratio exceeded 0.64 under peak dry weather flows, for all practical purposes the aforementioned design criteria must be adhered to. For instance, if the sewer pipe is 12-inches and smaller and was designed to flow at a maximum PDWF d/D of 0.50 and is now constructed. The maximum PDWF d/D must be maintained at 0.50. Additional future development flow should not be allowed to contribute to this sewer pipe if the maximum PDWF d/D ratio is going to exceed 0.50.

At a minimum, all pipes shall be 8 inches or larger in diameter and the velocity of flow in the pipe shall be greater than 2 feet per second at average dry weather flow (ADWF). This velocity will prevent deposition of solids in the sewer and help to re-suspend any materials that may have already settled in the pipe. The minimum corresponding slopes for various pipe sizes are shown in Table 3-3.

It is important to note that the slopes listed in Table 3-3 assume the depth of flow in the pipe is 50 or 64 percent full depending on the size. If there is insufficient flow to create this condition, greater slopes than those shown may be required.

The peak flow velocity shall be less than 10 feet per second in vitrified clay pipe.

The City recognizes that minimum slopes and velocities are sometimes not achievable under certain circumstances. On a case by case basis, the City may approve sewer designs that do not meet these criteria.

Table 3-3
Example Sewer Slopes

Sewer Size	2 ft/s Velocity Slope
8"	0.0057
10"	0.0042
12"	0.0033
15"	0.0019
18"	0.0014
21"	0.0011
24"	0.0008
27"	0.0008
30"	0.0007
33"	0.0006
36" & larger	0.0005

**Pipes 12" and smaller assume depth of flow is 50 percent*

**Pipes 15" and greater assume depth of flow is 64 percent*

3-7 Sewer Pump Station Performance Evaluation Criteria

It is desirable to develop a sewer collection system with as few pump stations as possible due to the associated cost and maintenance required. The City's policy does not allow new pump stations. If a pump station is absolutely necessary, the following criteria shall be minimum standards.

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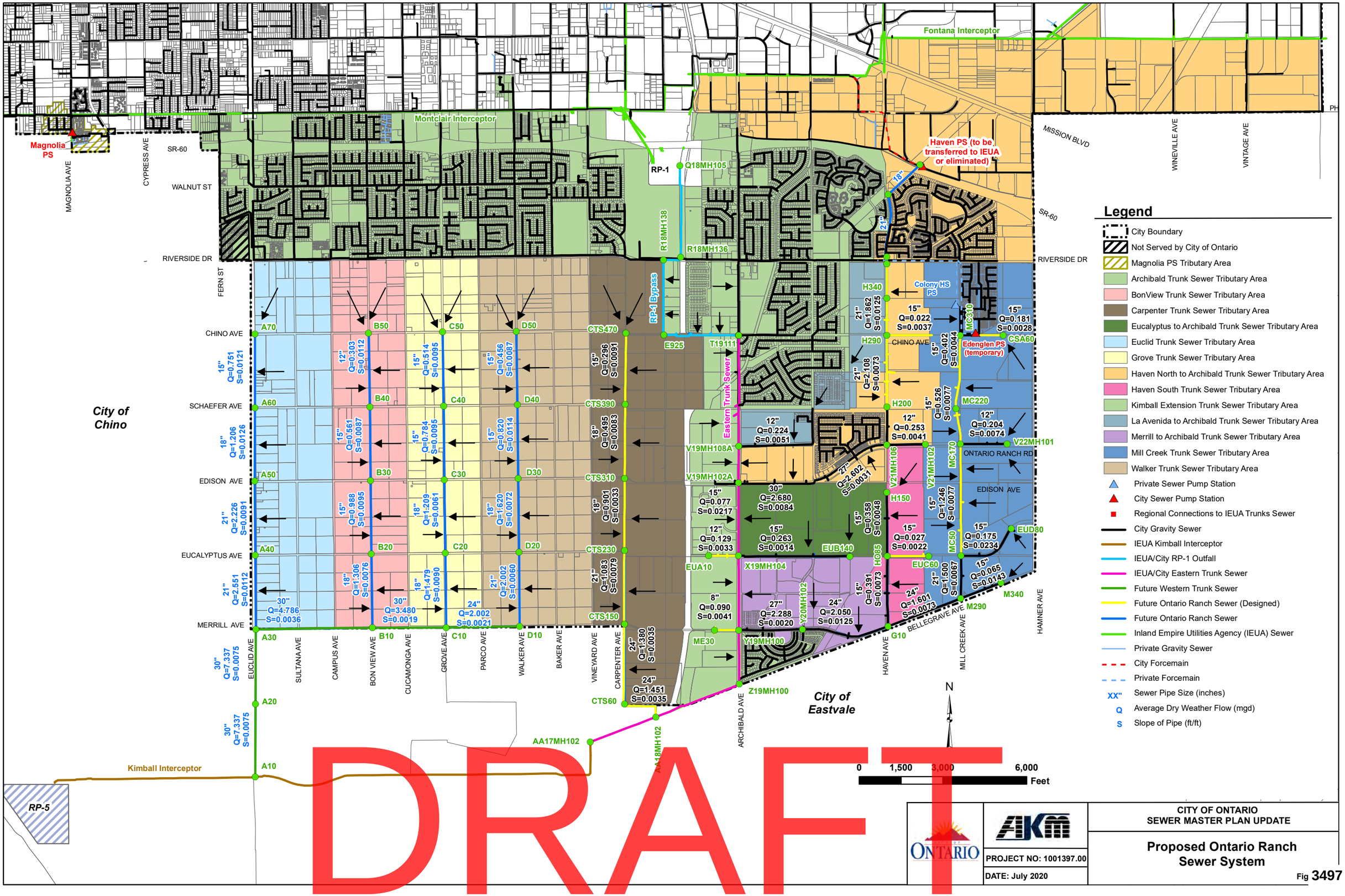

DRAFT

CITY OF ONTARIO
SEWER MASTER PLAN UPDATE

Proposed Ontario Ranch Sewer System

PROJECT NO: 1001397.00

DATE: July 2020

Fig 3497

APPENDIX B

ESPERANZA PA 11 REFERENCE AND RED LINED PERTINENT SECTIONS OF THE 2022 L.D. KING MASTER SEWER STUDY

Ontario Ranch East

Master Plan Line

Sewer Analysis Results

ESPERANZA PA-11 SCHOOL SITE - RESIDENTIAL CONVERSION UPDATE

- Applicable project file numbers (PGPA24-003, PSPA24-004, PMTT24-008 (TM-20730), PDEV24-017).

Prepared For:

Lewis Management Corp.
And Richland

Prepared By:

L.D. King, Inc.
975 N. Haven Avenue, Suite 200
Ontario, California 91764

April 2022
Updated August 2022
Updated October 2022
Updated November 2022

proposed and/or existing sewer lines within the study and the calculated velocities and depth to diameter ratios.

- A **Tributary Area Map** is included for each study.

Sewer Analysis Comments:

Merrill Tributary: Merrill, Bellegrave, Mill Creek

Analysis 1: Using the 2050 TOP Land Uses and high end densities and Existing Uses and SPA for Subarea 29 propoerties

- There is an 80-acre property located on the northeast corner of Mill Creek Avenue and Schaefer Avenue owned by Southern California Edison, (SCE). In Analysis 1, the Land Use for this 80-acre property is Business Park per the 2050 TOP.

- There is a section of an existing and future 8-inch sewer line within the Esperanza Specific Plan where the depth of flow ratio, d/D exceeds the maximum criteria of 0.50. The range of the d/D's in this section is 0.56 to 0.81. The location of the deficient lines are shown in the attached **Master Plan Sewer Location Map.**

Analysis 2: A second analysis of the system was modeled using the following revisions;

- ❖ The Land Use for the existing 80-acre SCE property, which currently contains a Substation, was changed to its existing land use resulting in no sewer flows tributary to the Mill Creek Sewer.

- ❖ The Land Use and densities for the Esperanza Specific Plan Area were taken from the Specific Plan, (SP) in lieu of the 2050 TOP.

- There is still a section within the Esperanza Specific Plan where the 8-inch sewer lines depth of flow ratio, d/D, exceeds the maximum criteria of 0.50 However the d/D is reduced to a range of 0.56 to 0.62.

- The Esperanza PA 11 School Siet has been converted to a 161 unit medium density residential site.

West Haven

Using the TOP 2050 Land Uses and high end densities

MERRILL TRIBUTARY: Merrill Ave to Bellegrave Ave to Mill Creek Ave Including Southern Portion of Haven Ave

Land Use and DU's per 2050 TOP With the Exception of SCE Prop where the Existing Use was used, Esperanza propertes where the SP was used and Subarea 29 properties where the 2022 Amended Subarea 29 Specific Plans was used.

Specific Plan and Planning Area	Acres	Residential Land Use	# Residential Units	DU/ac	Employment Land Use	Employment Square Footage (Bldg SF)	School # Students	Unit Flow Factors: Residential UFF (gpd/du)	Other UFF	Unit	ADWF gpd	Total ADWF	Flow Sum (mgd)	Input MH
TRIBUTARY TO EUCALYPTUS AVENUE														
Rich Haven PA 8B	20		500	25	MDR			174			87,000			
Esperanza PA3	11.4		156	14	MDR			174			27,144	114,144	0.114144	ESP10MH
Esperanza North Por. PA4	12.87		202	16	MDR			174			35,148	35,148	0.035148	ESP21MH
Esperanza South Por. PA4	6.43		101	16	MDR			174			17,574	17,574	0.017574	ESP30MH
Esperanza PA 11	10		161	16.1	MDR		1000	174	3	gpd/st	3,000	3,000	0.020800	EUD5L100
Esperanza PA 10 TM			100					208			20,800	20,800	0.020800	EUD3L10
Esperanza PA 9	17.75		82	11	LMDR			208			17,056	17,056	0.017056	MCL10
TRIBUTARY TO BELLEGRAVE AVENUE														
Esperanza PA 5	23.78		157	11	LMDR			208			32,656			
Esperanza PA 6	13.64		78	11	LMDR			208			16,224	48,880	0.048880	M10L10
Esperanza PA 7	14.36		76	11	LMDR			208			15,808			
Esperanza PA 8	23.72		107	11	LMDR			208			22,256	38,064	0.038064	M300
Subarea 29														
PA 33	47.6		644	13.5	LMDR			174			112,056	112,056	0.112056	M6L10
TRIBUTARY TO HAVEN AVENUE														
Rich Haven 9A and Portion of 9b	62.5				MU				2690	gpd/ac	168,125	168,125	0.168125	H160
The Lakes 24A PA1	25		625	25	MDR			174			108,750	108,750	0.108750	H150
The Lakes 24A PA3	6				NC				1610	gpd/ac	9,660	9,660		
	14		630	45	HDR				174	gpd/acre	109,620	119,280		
	13		143	11	LMDR			208			29,744	149,024	0.149024	EUC5L10
Subarea 29 PA 31	16.1		172	11	LMDR			208			35,776	35,776	0.035776	H4L10
Subarea 29 PA 32	42.5		671	15.8	LMDR			174			116,754	152,530	0.152530	H3L10
School	19						1200		8	gpd/st	9,600	9,600	0.009600	H00
TRIBUTARY TO MERRILL														
Subarea 29 Pa 28 and 29	44.4		222	5	LDR			208			46,176	46176	0.046176	M4L10
TRIBUTARY TO PARKVIEW STREET														
Subarea 29 PA 15	3.15				PF				1450	gpd/acre	4,568			
Subarea 29 PA 16	6.07		41	6.8	LMDR			208			8,528			
Subarea 29 PA 17	8.38		56	6.7	LMDR			208			11,648			
Subarea 29 PA 19	8.95		61	6.8	LMDR			208			12,688			
Subarea 29 PA 20	13.29		67	5.0	LDR			208			13,936	51,368	0.051368	Y19MH161
Subarea 29 PA 4	17.81		88	4.9	LDR			208			18,304			
Subarea 29 PA 5	13.67		68	5.0	LDR			208			14,144	32,448	0.032448	Y19MH158
Subarea 29 PA 9a			7		LMDR			208			1,456	1,456	0.001456	Y19MH127
Subarea 29 PA 11	6.23				OS-R				200	gpd/acre	1,246			
Subarea 29 PA 14	7.64				OS-R				200	gpd/acre	1,528	2,774	0.002774	Y19MH151
Subarea 29 PA 18	11.19				PS-E		750		8	gpd/stu	6,000			
Subarea 29 PA 21	11.48		48	4.2	LDR			208			9,984			
Subarea 29 PA 22	21.34		79	3.7	LDR			208			16,432			
Subarea 29 PA 23	14.41		82	5.7	LMDR			208			17,056			
Subarea 29 PA 24	13.71		73	5.3	LMDR			208			15,184			
Subarea 29 PA 25	18.45		102	5.5	LMDR			208			21,216			
Subarea 29 PA 26	12.03		101	8.4	LMDR			208			21,008			
Subarea 29 PA 30	21.8		180	11	LMDR			208			37,440	144,320	0.144320	Y20MH101
Subarea 29 PA 27	9.58		50	5.2	LMDR			208			10,400	10,400	0.010400	M3AL10
TRIBUTARY TO ARCHIBALD AVE NORTH OF MERRILL AVE														
Subarea 29 PA 1	83.1		432	5.2	LMDR			208			89,856	89,856		
Subarea 29 PA 2	12.1				COM				1610	gpd/ac	19,481	109,337		
Subarea 29 PA 3	34.5		186	5.4	LMDR			208			38,688	148,025	0.148025	
TRIBUTARY TO ARCHIBALD AVE SOUTH OF MERRILL AVE														
Subarea 29 PA 6	13		67	5.2	LMDR			208			13,936	13,936		
Subarea 29 PA 7	15.3		65	4.2	LDR			208			13,520	27,456		
Subarea 29 PA 8	9.1		46	5.1	LMDR			208			9,568	37,024		
Subarea 29 POR. PA 9			62	7	LMDR			208			12,896	49,920		
Subarea 29 PA 10	6.6		57	8.7	LMDR			208			11,856	61,776		
Subarea 29 PA 12	9.5		53	5.6	LMDR			208			11,024	72,800		
Subarea 29 PA 13	7.8		75	9.6	LMDR			208			15,600	88,400	0.088400	

0.028014

28,014

Merrill_Bellgrave_Mill Creek Hydraulic Analysis Results (Table 1 of 2)										
Per TOP with exception of SCE Prop as Existing Use and Esperanza SP area per SP										
General Pipe Information						Ultimate Baseline Scenario				
Pipe ID	U/S MH ID	D/S MH ID	Diameter (in)	Length (ft)	Slope	PDWF (mgd)	ADWF (mgd)	PDWF Velocity (ft/s)	PDWF d/D	PDWF Water Depth (ft)
MC340P	MC340	MC330	12	306	0.0093	0.1474	0.0618	2.48	0.17	0.17
MC350P	MC350	MC340	12	65	0.0089	0.0476	0.0174	1.75	0.10	0.10
MC320P	MC320	MC310	15	312	0.0105	0.1474	0.0618	2.52	0.13	0.16
MC330P	MC330	MC320	12	312	0.0093	0.1474	0.0618	2.48	0.17	0.17
MC310P	MC310	MC300	15	337	0.0072	0.6268	0.3127	3.37	0.28	0.36
CSA10P	CSA10	MC310	15	79	0.0023	0.5148	0.2509	2.11	0.35	0.43
CSA20P	CSA20	CSA10	15	297	0.0027	0.5148	0.2509	2.23	0.33	0.42
CSA30P	CSA30	CSA20	15	295	0.0026	0.5148	0.2509	2.23	0.33	0.42
CSA40P	CSA40	CSA30	15	333	0.0028	0.2993	0.1367	1.94	0.25	0.31
MB120P	MC280	MB120	15	330	0.0043	0.6890	0.3477	2.89	0.34	0.43
MC270P	MC270	MC260	15	343	0.0109	0.6890	0.3477	4.02	0.27	0.34
MC290P	MC295	MC280	15	330	0.0044	0.6890	0.3477	2.90	0.34	0.42
MC300P	MC300	MC295	15	133	0.0079	0.6890	0.3477	3.58	0.29	0.36
CSA50P	CSA50	CSA40	15	332	0.0028	0.2993	0.1367	1.94	0.25	0.31
CSA60P	CSA60	CSA50	15	206	0.0031	0.2993	0.1367	2.02	0.24	0.30
51	MB120	MC270	15	188	0.0106	0.6890	0.3477	3.98	0.27	0.34
MC180P	MC180	MC170	15	257	0.0076	0.8173	0.4209	3.70	0.32	0.40
MC190P	MC190	MC180	15	256	0.0076	0.8173	0.4209	3.71	0.32	0.40
MC200P	MC200	MC190	15	256	0.0073	0.8173	0.4209	3.66	0.32	0.41
MC210P	MC210	MC200	15	271	0.0074	0.8173	0.4209	3.68	0.32	0.40
MC4L10P	MC4L10	MC210	8	95	0.0047	0.0683	0.0261	1.63	0.24	0.16
MC220P	MC220	MC210	15	237	0.0099	0.7719	0.3948	4.01	0.29	0.36
MC230P	MC230	MC220	15	314	0.0102	0.7719	0.3948	4.06	0.29	0.36
MC240P	MC240	MC230	15	216	0.0107	0.7719	0.3948	4.13	0.29	0.36
MC250P	MC250	MC240	15	210	0.0105	0.7719	0.3948	4.10	0.29	0.36
MC260P	MC260	MC250	15	242	0.0107	0.7719	0.3948	4.13	0.29	0.36
MC110P	MC110	MC100	15	340	0.0073	1.4681	0.8111	4.30	0.45	0.56
MC3L10P	MC3L10	MC110	8	84	0.0048	0.0621	0.0235	1.59	0.23	0.15
MC120PP	MC120	MC110	15	345	0.0073	1.4301	0.7876	4.25	0.44	0.55
MC130P	MC130	MC120	15	346	0.0074	1.0929	0.5828	3.98	0.38	0.47
MC130PP	MC140	MC130	15	336	0.0074	1.0929	0.5828	3.99	0.38	0.47
MC150P	MC150	MC140	15	365	0.0073	1.0929	0.5828	3.97	0.38	0.47
MC160P	MC160	MC150	15	325	0.0074	1.0929	0.5828	3.97	0.38	0.47
MC170P	MC170	MC160	15	373	0.0069	0.8173	0.4209	3.57	0.33	0.41
ESP3P	ESP21MH	ESP25MH	8	389	0.0057	0.3239	0.1493	2.68	0.53	0.35
ESP1P	ESP10MH	ESP21MH	8	632	0.0060	0.2548	0.1141	2.57	0.45	0.30
MC40P	MC40	MC30	21	361	0.0062	2.8419	1.1736	4.82	0.34	0.60
MC50P	MC50	MC40	21	362	0.0074	2.8419	1.1736	4.61	0.33	0.57
EUD10P	EUD10	MC50	15	83	0.0226	0.4124	0.1957	4.48	0.17	0.22
MC60P	MC60	MC50	15	307	0.0075	1.7350	0.9779	4.52	0.49	0.61
MC70P	MC70	MC60	15	305	0.0076	1.7350	0.9779	4.54	0.49	0.61
MC80P	MC80	MC70	15	297	0.0074	1.7350	0.9779	4.51	0.49	0.61
MC2L10P	MC2L10	MC80	10	92	0.0047	0.3576	0.1668	2.54	0.42	0.35
MC90P	MC90	MC80	15	336	0.0071	1.4681	0.8111	4.25	0.45	0.56
MC100PP	MC100	MC90	15	336	0.0074	1.4681	0.8111	4.30	0.44	0.56
EUD20P	EUD20	EUD10	15	293	0.0229	0.4124	0.1957	4.58	0.17	0.22
EUD30P	EUD30	EUD20	15	275	0.0045	0.4124	0.1957	2.53	0.26	0.33
EUD3L10P	EUD3L10	EUD30	8	77	0.0075	0.0557	0.0208	1.82	0.19	0.13
EUD50P	EUD50	EUD40	15	282	0.0047	0.3738	0.1749	2.56	0.24	0.30
EUD40P	EUD40	EUD30	15	400	0.0043	0.3738	0.1749	2.42	0.25	0.31
EUD60P	EUD60	EUD50	15	348	0.0028	0.3577	0.1669	2.05	0.27	0.34
EUD5L10P	EUD5L100	EUD50	8	105	0.0053	0.0227	0.0080	1.25	0.14	0.09
EUD70P	EUD70	EUD60	15	319	0.0028	0.3577	0.1669	2.04	0.27	0.34
EUD80P	EUD80	EUD70	15	276	0.0023	0.3577	0.1669	1.91	0.29	0.36
EUD8L10P	EUD8L10	EUD80	8	92	0.0052	0.3577	0.1669	2.65	0.58	0.38
ESP6P	ESP30MH	EUD8L10	8	411	0.0057	0.3577	0.1669	2.75	0.56	0.37
ESP4P	ESP25MH	ESP30MH	8	312	0.0057	0.3239	0.1493	2.68	0.53	0.35
M29	M290	M280	24	314	0.0011	2.2028	1.2776	2.35	0.47	0.94
M30	M300	M290	15	348	0.0143	0.1999	0.0869	3.07	0.14	0.17
M31	M310	M300	15	300	0.0043	0.1195	0.0489	1.73	0.14	0.18
M32	M320	M310	15	286	0.0043	0.1195	0.0489	1.73	0.14	0.18
M33	M330	M320	15	255	0.0043	0.1195	0.0489	1.73	0.14	0.18
M34	M340	M330	15	324	0.0058	0.1195	0.0489	1.92	0.13	0.17
MC100P	MC10	M290	21	314	0.0065	2.0694	1.1896	4.44	0.34	0.60
MC120P	MC20	MC10	21	236	0.0061	2.0694	1.1896	4.34	0.35	0.61
MC30P	MC30	MC20	21	253	2.3821	2.0694	1.1896	35.48	0.08	0.14
MCL10P	MCL10	MC30	8	39	0.0744	0.0467	0.0171	3.85	0.10	0.07
M10L10P	M10L10	M340	8	25	0.0060	0.1195	0.0489	2.09	0.30	0.20
M24	M240	M230	24	297	0.0011	2.3745	1.5036	2.36	0.50	0.99

2.0731, 1.1936, 4.35, 0.35, 0.61

2.0731, 1.1936, 4.63, 0.33, 0.58

0.4499, 0.2157, 4.59, 0.18, 0.23

0.4499, 0.2157, 4.61, 0.18, 0.23

0.4499, 0.2157, 2.59, 0.27, 0.34

0.4110, 0.1949, 2.56, 0.26, 0.32

0.4110, 0.1949, 2.56, 0.26, 0.33

0.0727, 0.0281, 1.73, 0.24, 0.16

2.1613, 1.2506, 2.32, 0.47, 0.94

2.1304, 1.2306, 4.45, 0.35, 0.61

2.0994, 1.2106, 4.34, 0.35, 0.61

2.0994, 1.2106, 7.06, 0.25, 0.43

2.4355, 1.4296, 2.39, 0.50, 1.00

Assuming this slope is a typo?

Merrill_Bellgrave_Mill Creek Hydraulic Analysis Results (Table 2 of 2)											
Per TOP with exception of SCE Prop as Existing Use and Esperanza SP area per SP											
General Pipe Information						Ultimate Baseline Scenario					
Pipe ID	U/S MH ID	D/S MH ID	Diameter (in)	Length (ft)	Slope	PDWF (mgd)	ADWF (mgd)	PDWF Velocity (ft/s)	PDWF d/D	PDWF Water Depth (ft)	
M25	M250	M240	24	300	0.0011	2.3745	1.3696	2.38	0.49	0.99	2.4050, 1.4096, 2.38, 0.50, 0.99
M26	M260	M250	24	344	0.0011	2.2828	1.2776	2.34	0.47	0.94	2.2336, 1.2976, 2.34, 0.48, 0.95
M27	M270	M260	24	321	0.0011	2.2828	1.2776	2.33	0.47	0.95	2.2336, 1.2976, 2.34, 0.48, 0.95
M28	M280	M270	24	274	0.0011	2.2828	1.2776	2.33	0.47	0.95	2.2336, 1.2976, 2.34, 0.48, 0.95
H10P	H010	H00	15	300	0.0068	1.1249	0.6019	3.88	0.39	0.49	
H20P	H020	H010	15	206	0.0091	1.1249	0.6019	4.32	0.36	0.45	
H30P	H030	H020	15	210	0.0090	1.1249	0.6019	4.31	0.36	0.46	
H40P	H040	H030	15	192	0.0090	1.1249	0.6019	4.30	0.36	0.46	
H50P	H050	H040	15	195	0.0089	1.1249	0.6019	4.30	0.36	0.46	
H3L10	H3L10	H050	8	60	0.0182	0.3063	0.1402	4.06	0.37	0.25	
H60P	H060	H050	15	334	0.0091	0.8876	0.4617	4.04	0.32	0.40	
H70P	H070	H060	15	280	0.0091	0.8876	0.4617	4.04	0.32	0.40	
H4L10P	H4L10	H070	8	92	0.0070	0.0904	0.0358	2.03	0.25	0.17	
H80P	H080	H070	15	312	0.0091	0.8259	0.4259	3.96	0.31	0.39	
H082P	H082	H080	15	310	0.0091	0.8259	0.4259	3.97	0.31	0.39	
M6L10P	M6L10	M250	8	68	0.0089	0.2507	0.1121	2.96	0.40	0.27	
M19	M190	M180	24	321	0.0013	3.2880	2.0011	2.75	0.57	1.14	3.3179, 2.0211, 2.74, 0.58, 1.15
M20	G10	M190	24	315	0.0013	3.2880	2.0011	2.75	0.57	1.14	3.3179, 2.0211, 2.74, 0.58, 1.15
M21	M210	G10	24	296	0.0073	2.3745	1.3696	4.74	0.50	0.99	2.4355, 1.4296, 4.77, 0.30, 0.60
M22	M220	M210	24	297	0.0011	2.3745	1.3696	2.39	0.49	0.98	2.4355, 1.4296, 2.39, 0.50, 1.00
M23	M230	M220	24	297	0.0011	2.3745	1.3696	2.39	0.49	0.98	2.4355, 1.4296, 2.39, 0.50, 1.00
H00P	H00	G10	15	94	0.0063	1.1409	0.6115	3.79	0.40	0.51	
H85P	H085	H082	15	91	0.0079	0.8259	0.4259	3.77	0.32	0.40	
H87P	H087	H085	15	93	0.0045	0.5623	0.2769	2.77	0.30	0.38	
H90P	H090	H087	15	211	0.0061	0.5623	0.2769	3.08	0.28	0.35	
H100P	H100	H090	15	352	0.0056	0.5623	0.2769	2.99	0.29	0.36	
H110P	H110	H100	15	350	0.0056	0.5623	0.2769	3.00	0.29	0.36	
H120P	H120	H110	15	350	0.0056	0.5623	0.2769	2.99	0.29	0.36	
H130P	H130	H120	15	230	0.00566	0.5623	0.2769	3.00	0.29	0.36	
H140P	H140	H130	15	345	0.00514	0.5623	0.27688	2.90	0.29	0.37	
EUC20P	EUC20	H085	15	361	0.00224	0.3234	0.14902	1.84	0.27	0.34	
EUC30	EUC30	EUC20	15	371	0.00216	0.3234	0.14902	1.82	0.28	0.34	
EUC40P	EUC40	EUC30	15	371	0.00219	0.3234	0.14902	1.82	0.27	0.34	
EUC50P	EUC50	EUC40	15	185	0.00211	0.3234	0.14902	1.80	0.28	0.35	
EUC5L10P	EUC5L10	EUC50	12	80	0.0033	0.3234	0.1490	2.15	0.34	0.34	
H150P	H150	H140	15	349	0.0099	0.5623	0.2769	3.66	0.25	0.31	
H160P	H160	H150	15	505	0.0100	0.3601	0.1681	3.23	0.20	0.25	
M13	M140	Y20MH120	24	126	0.0014	3.3715	2.0577	2.80	0.57	1.15	3.4008, 2.0777, 2.84, 0.57, 1.14
M15	M150	M140	24	302	0.0013	3.3715	2.0577	2.75	0.58	1.16	3.4008, 2.0777, 2.76, 0.58, 1.17
M16	M160	M150	24	363	0.0013	3.2880	2.0011	2.74	0.57	1.14	3.3179, 2.0211, 2.74, 0.58, 1.15
M17	M170	M160	24	147	0.0014	3.2880	2.0011	2.75	0.58	1.15	3.3179, 2.0211, 2.74, 0.58, 1.15
M18	M180	M170	24	322	0.0013	3.2880	2.0011	2.72	0.57	1.15	3.3179, 2.0211, 2.74, 0.58, 1.15
M3AL10P	M3AL10	M150	8	86	0.0110	0.0300	0.0104	1.73	0.13	0.09	
M4L10P	M4L10	M150	8	95	0.0121	0.1136	0.0462	2.65	0.25	0.16	
Y20CL1017	Y20MH120	Y20MH121	24	321	0.0013	3.3715	2.0577	2.77	0.58	1.16	3.4008, 2.0777, 2.76, 0.58, 1.17
Y20CL1001	Y20MH101	Y20MH102	10	95	0.0042	0.3142	0.1443	2.37	0.40	0.34	
Y20CL1018	Y20MH121	Y20MH122	24	324	0.0013	3.3715	2.0577	2.76	0.58	1.16	3.4008, 2.0777, 2.76, 0.58, 1.17
Y20CL1000	Y20MH100	Y20MH102	24	282	0.0128	3.3715	2.0577	6.41	0.31	0.61	3.4008, 2.0777, 6.41, 0.31, 0.62
Y20CL1019	Y20MH122	Y20MH100	24	280	0.0013	3.3715	2.0577	2.75	0.58	1.16	3.4008, 2.0777, 2.76, 0.58, 1.17
Y20CL1002	Y20MH104	Y20MH102	8	95	0.0099	0.0052	0.0015	0.98	0.06	0.04	
Y20CL1003	Y20MH102	Y20MH103	27	194	0.0008	3.5840	2.2035	2.56	0.57	1.28	3.6131, 2.2235, 2.34, 0.58, 1.31
Y19CL1067	Y20MH103	Y19MH151	27	326	0.0008	3.5840	2.2035	2.53	0.58	1.30	3.6131, 2.2235, 2.34, 0.58, 1.31
Y20CL1004	Y20MH105	Y20MH104	8	146	0.02445	0.0052	0.0015	1.34	0.05	0.03	
Y20CL1005	Y20MH106	Y20MH105	8	137	0.0100	0.0052	0.0015	0.98	0.06	0.04	
Y19CL1066	Y19MH151	Y19MH152	27	330	0.0008	3.5881	2.2063	2.52	0.58	1.30	3.6172, 2.2263, 2.34, 0.58, 1.31
Y19CL1068	Y19MH152	Y19MH153	27	330	0.0008	3.5881	2.2063	2.50	0.57	1.29	3.6172, 2.2263, 2.34, 0.58, 1.31
Y19CL1070	Y19MH153	Y19MH154	27	216	0.0008	3.5947	2.2108	2.52	0.58	1.31	3.6237, 2.2308, 2.34, 0.58, 1.31
Y19CL1071	Y19MH154	Y19MH156	27	264	0.0008	3.6092	2.2822	2.54	0.59	1.32	3.6983, 2.2822, 2.35, 0.59, 1.33
Y19CL1073	Y19MH155	Y19MH154	8	92	0.0261	0.1249	0.0514	3.57	0.21	0.14	
Y19CL1077	Y19MH161	Y19MH162	8	244	0.0057	0.1249	0.0514	2.08	0.31	0.21	
Y19CL1078	Y19MH162	Y19MH155	8	96	0.0056	0.1249	0.0514	2.07	0.31	0.21	
Y19CL1069	Y19MH156	Y19MH157	27	296	0.0008	3.6092	2.2822	2.56	0.58	1.31	3.6983, 2.2822, 2.35, 0.59, 1.33
Y19CL1072	Y19MH157	Y19MH159	27	203	0.0008	3.7461	2.2946	2.56	0.58	1.32	3.7450, 2.3146, 2.35, 0.59, 1.34
Y19CL1074	Y19MH158	Y19MH157	8	61	0.0419	0.0829	0.0324	3.74	0.15	0.10	
Y19CL1075	Y19MH159	Y19MH100	27	90	0.0020	3.7461	2.2946	3.33	0.45	1.01	3.7450, 2.3146, 3.33, 0.45, 1.02

MERRILL TRIBUTARY

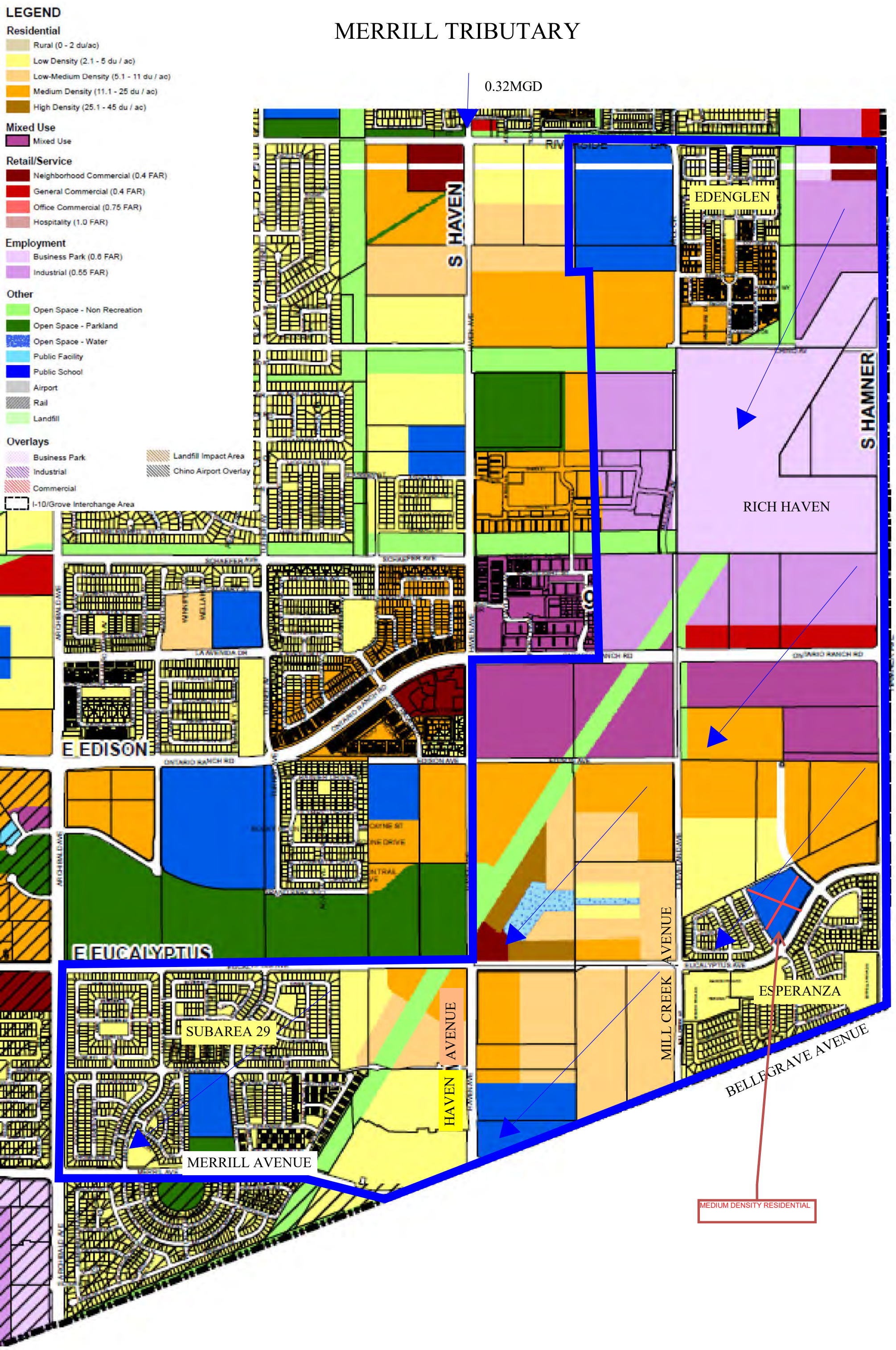

Exhibit 8
Land Use Plan

LAND USE	UNITS	GROSS ACRES	UNITS/ GROSS ACRES	NET ACRES	UNITS/ NET ACRES
Residential Uses					
PA-1 (RD-7/ Row Townhomes, RD-8/ Motorcourt Townhomes)	319 DU	29.35 AC	10.87 DU/AC	28.97 AC	11.01 DU/AC
PA-2 (RD-4/ SFD Cottages, RD-6/ 6-Pack Courtyard)	113 DU	22.84 AC	4.95 DU/AC	17.36 AC	6.51 DU/AC
PA-3 (RD-7 & RD-8/ Row Townhomes)	156 DU	11.40 AC	13.68 DU/AC	11.10 AC	14.05 DU/AC
PA-4 (RD-6/ 6-Pack Courtyard, 8-Pack Courtyard, Row Townhomes)	303 DU	27.41 AC	11.05 DU/AC	19.30 AC	15.70 DU/AC
PA-5 (RD-5/ 4-Pack Courtyard)	157 DU	23.78 AC	6.60 DU/AC	17.64 AC	8.90 DU/AC
PA-6 (RD-4/ SFD Cottages)	78 DU	13.64 AC	5.72 DU/AC	10.00 AC	7.80 DU/AC
PA-7 (RD-1/ SFD 50' wide lots)	76 DU	14.36 AC	5.29 DU/AC	12.56 AC	6.05 DU/AC
PA-8 (RD-2/ SFD 55' wide lots)	107 DU	23.72 AC	4.51 DU/AC	19.26 AC	5.56 DU/AC
PA-9 (RD-1/ SFD 50' x 80')	82 DU	17.75 AC	4.62 DU/AC	13.27 AC	6.18 DU/AC
PA-10 (RD-3/ SFD 2-Pack)	100 DU	19.92 AC	5.02 DU/AC	14.62 AC	6.84 DU/AC
Park 1		5.75*AC			
Residential land Use Total	**1491 DU**	**209.90 AC**	**7.10 DU/AC**	**164.08 AC**	**9.09 DU/AC**
Parks				9.89 AC	
Neighborhood Edge Buffers				6.62 AC	
Roadways				28.25 AC	
SCE Easements and Well Sites				4.14 AC	
Community Facilities Use					
PA-11 ~~(School)~~ Med. Density. Res.	161 DU	13.10 AC		10.02 AC	16.1 DU/AC
PROJECT TOTAL	~~1491~~ **DU** 1652	**223.00 AC**		**223.00 AC**	

NOTES:

1. *Gross residential acres do not include the 13.10 gross acres for a school site.*
2. *Net residential acres are gross acres less parks, neighborhood edge buffers, roadways, easements and net area for school site.*

** PA-2 includes 3.45 AC of Park 1*

Table 2
Land Use Summary

APPENDIX C

SEWER ANALYSIS RESULTS

The following conditions were modeled for Esperanza PA 11 Project:

1. Existing Flows (Peak Dry Weather Flow)
2. Existing Flows (Peak Wet Weather Flow)
3. Existing Plus Project Flows (Peak Dry Weather Flow)
4. Existing Plus Project Flows (Peak Wet Weather Flow)

- Reference Exhibit A for Manhole Diagram

SEWER STUDY SUMMARY

DATE: 1/24/2025 Esperanza PA 11 (Ontario Ranch East) Sewer Capacity Analysis - Existing Flow Only - Peak Dry Weather Flow

JOB NUMBER: 1551-001

General Pipe Information						Ultimate Baseline Scenario				
PIPE ID	U/S MH ID	D/S MH ID	Diameter (in)	Length (ft)	Slope	PDWF (mgd)	ADWF (mgd)	PDWF Velocity (ft/s)	PDWF d/D	PDWF Water Depth (ft)
EUD5L10P	EUD5L100	EUD50	8	105	0.0053	0.0237	0.0080	1.24	0.14	0.09
EUD50P	EUD50	EDU40	15	282	0.0047	0.3731	0.1749	2.49	0.24	0.30
EUD40P	EDU40	EUD30	15	400	0.0043	0.3731	0.1749	2.41	0.25	0.31
EUD40P	EUD30	EUD20	15	275	0.0045	0.4124	0.1957	2.53	0.26	0.32
EUD20P	EUD20	EUD10	15	293	0.0229	0.4124	0.1957	4.49	0.17	0.22
EUD10P	EUD10	MC50	15	83	0.0226	0.4124	0.1957	4.47	0.17	0.22
MC50P	MC50	MC40	21	362	0.0074	2.0420	1.1736	4.61	0.33	0.57
MC40P	MC40	MC30	21	361	0.0062	2.0420	1.1736	4.33	0.34	0.60
MC30P	MC30	MC20	21	253	0.0238	2.0684	1.1906	7.03	0.24	0.43
MC120P	MC20	MC10	21	236	0.0061	2.0684	1.1906	4.32	0.35	0.61
MC100P	MC10	M290	21	348	0.0065	2.0684	1.1906	4.42	0.34	0.60
M29	M290	M280	24	314	0.0011	2.0684	1.1906	2.29	0.46	0.91
M28	M280	M270	24	274	0.0011	2.2028	1.2776	2.33	0.47	0.95
M27	M270	M260	24	321	0.0011	2.2028	1.2776	2.33	0.47	0.95
M26	M260	M250	24	344	0.0011	2.2028	1.2776	2.33	0.47	0.95
M25	M250	M240	24	300	0.0011	2.3745	1.3896	2.38	0.49	0.99
M24	M240	M230	24	297	0.0011	2.3745	1.3896	2.38	0.49	0.99
M23	M230	M220	24	297	0.0011	2.3745	1.3896	2.38	0.49	0.99
M22	M220	M210	24	297	0.0011	2.3745	1.3896	2.38	0.49	0.99
M21	M210	G10	24	296	0.0073	2.3745	1.3896	4.74	0.30	0.59
M20	G10	M190	24	315	0.0013	3.2886	2.0011	2.74	0.57	1.14
M19	M190	M180	24	321	0.0013	3.2886	2.0011	2.74	0.57	1.14
M18	M180	M170	24	322	0.0013	3.2886	2.0011	2.74	0.57	1.14
M17	M170	M160	24	147	0.0013	3.2886	2.0011	2.74	0.57	1.14
M16	M160	M150	24	363	0.0013	3.2886	2.0011	2.74	0.57	1.14
M15	M150	M140	24	302	0.0013	3.3715	2.0577	2.75	0.58	1.16
M13	M140	Y20MH120	24	126	0.0014	3.3715	2.0577	2.83	0.57	1.14
Y20CL1017	Y20MH120	Y20MH121	24	321	0.0013	3.3715	2.0577	2.75	0.58	1.16
Y20CL1018	Y20MH121	Y20MH122	24	324	0.0013	3.3715	2.0577	2.75	0.58	1.16
Y20CL1019	Y20MH122	Y20MH100	24	280	0.0013	3.3715	2.0577	2.75	0.58	1.16
Y20CL1000	Y20MH100	Y20MH102	24	282	0.0128	3.3715	2.0577	6.39	0.31	0.61
Y20CL1003	Y20MH102	Y20MH103	27	194	0.0008	3.5840	2.2035	2.33	0.58	1.30
Y19CL1067	Y20MH103	Y19MH151	27	326	0.0008	3.5840	2.2035	2.33	0.58	1.30
Y19CL1066	Y19MH151	Y19MH152	27	330	0.0008	3.5881	2.2063	2.33	0.58	1.30
Y19CL1068	Y19MH152	Y19MH153	27	330	0.0008	3.5881	2.2063	2.33	0.58	1.30
Y19CL1070	Y19MH153	Y19MH154	27	216	0.0008	3.5946	2.2108	2.33	0.58	1.30
Y19CL1071	Y19MH154	Y19MH156	27	264	0.0008	3.6692	2.2622	2.34	0.59	1.32
Y19CL1069	Y19MH156	Y19MH157	27	296	0.0008	3.6692	2.2622	2.34	0.59	1.32
Y19CL1072	Y19MH157	Y19MH159	27	203	0.0008	3.7161	2.2946	2.35	0.59	1.33
Y19CL1075	Y19MH159	Archibald/ ETS	27	90	0.002	3.7161	2.2946	3.32	0.45	1.01

[1] K' based on n = 0.013

[2] dn/D using K' in Brater King Table 7-14

[3] From Brater King Table 7-4 based on dn/D

SEWER STUDY SUMMARY

DATE: 1/24/2025 Esperanza PA 11 (Ontario Ranch East) Sewer Capacity Analysis - Existing Flow Only - Peak Wet Weather Flow

JOB NUMBER: 1551-001

General Pipe Information						Ultimate Baseline Scenario				
PIPE ID	U/S MH ID	D/S MH ID	Diameter (in)	Length (ft)	Slope	PWWF (mgd)	ADWF (mgd)	PWWF Velocity (ft/s)	PWWF d/D	PWWF Water Depth (ft)
EUD5L10P	EUD5L100	EUD50	8	105	0.0053	0.0318	0.0080	1.36	0.16	0.11
EUD50P	EUD50	EDU40	15	282	0.0047	0.4999	0.1749	2.71	0.28	0.35
EUD40P	EDU40	EUD30	15	400	0.0043	0.4999	0.1749	2.63	0.29	0.36
EUD40P	EUD30	EUD20	15	275	0.0045	0.5527	0.1957	2.75	0.30	0.38
EUD20P	EUD20	EUD10	15	293	0.0229	0.5527	0.1957	4.90	0.20	0.25
EUD10P	EUD10	MC50	15	83	0.0226	0.5527	0.1957	4.88	0.20	0.25
MC50P	MC50	MC40	21	362	0.0074	2.7363	1.1736	5.00	0.38	0.67
MC40P	MC40	MC30	21	361	0.0062	2.7363	1.1736	4.69	0.40	0.70
MC30P	MC30	MC20	21	253	0.0238	2.7716	1.1906	7.65	0.28	0.50
MC120P	MC20	MC10	21	236	0.0061	2.7716	1.1906	4.68	0.41	0.71
MC100P	MC10	M290	21	348	0.0065	2.7716	1.1906	4.79	0.40	0.70
M29	M290	M280	24	314	0.0011	2.7716	1.1906	2.46	0.54	1.08
M28	M280	M270	24	274	0.0011	2.9518	1.2776	2.50	0.56	1.13
M27	M270	M260	24	321	0.0011	2.9518	1.2776	2.50	0.56	1.13
M26	M260	M250	24	344	0.0011	2.9518	1.2776	2.50	0.56	1.13
M25	M250	M240	24	300	0.0011	3.1818	1.3896	2.55	0.59	1.18
M24	M240	M230	24	297	0.0011	3.1818	1.3896	2.55	0.59	1.18
M23	M230	M220	24	297	0.0011	3.1818	1.3896	2.55	0.59	1.18
M22	M220	M210	24	297	0.0011	3.1818	1.3896	2.55	0.59	1.18
M21	M210	G10	24	296	0.0073	3.1818	1.3896	5.14	0.34	0.69
M20	G10	M190	24	315	0.0013	4.4067	2.0011	2.91	0.70	1.40
M19	M190	M180	24	321	0.0013	4.4067	2.0011	2.91	0.70	1.40
M18	M180	M170	24	322	0.0013	4.4067	2.0011	2.91	0.70	1.40
M17	M170	M160	24	147	0.0013	4.4067	2.0011	2.91	0.70	1.40
M16	M160	M150	24	363	0.0013	4.4067	2.0011	2.91	0.70	1.40
M15	M150	M140	24	302	0.0013	4.5178	2.0577	2.92	0.71	1.43
M13	M140	Y20MH120	24	126	0.0014	4.5178	2.0577	3.01	0.69	1.39
Y20CL1017	Y20MH120	Y20MH121	24	321	0.0013	4.5178	2.0577	2.92	0.71	1.43
Y20CL1018	Y20MH121	Y20MH122	24	324	0.0013	4.5178	2.0577	2.92	0.71	1.43
Y20CL1019	Y20MH122	Y20MH100	24	280	0.0013	4.5178	2.0577	2.92	0.71	1.43
Y20CL1000	Y20MH100	Y20MH102	24	282	0.0128	4.5178	2.0577	6.94	0.36	0.71
Y20CL1003	Y20MH102	Y20MH103	27	194	0.0008	4.8026	2.2035	2.47	0.71	1.59
Y19CL1067	Y20MH103	Y19MH151	27	326	0.0008	4.8026	2.2035	2.47	0.71	1.59
Y19CL1066	Y19MH151	Y19MH152	27	330	0.0008	4.8081	2.2063	2.47	0.71	1.59
Y19CL1068	Y19MH152	Y19MH153	27	330	0.0008	4.8081	2.2063	2.47	0.71	1.59
Y19CL1070	Y19MH153	Y19MH154	27	216	0.0008	4.8168	2.2108	2.48	0.71	1.59
Y19CL1071	Y19MH154	Y19MH156	27	264	0.0008	4.9167	2.2622	2.48	0.72	1.62
Y19CL1069	Y19MH156	Y19MH157	27	296	0.0008	4.9167	2.2622	2.48	0.72	1.62
Y19CL1072	Y19MH157	Y19MH159	27	203	0.0008	4.9795	2.2946	2.49	0.73	1.64
Y19CL1075	Y19MH159	Archibald/ ETS	27	90	0.002	4.9795	2.2946	3.57	0.53	1.20

[1] K' based on n = 0.013

[2] dn/D using K' in Brater King Table 7-14

[3] From Brater King Table 7-4 based on dn/D

SEWER STUDY SUMMARY

DATE: 1/24/2025 Esperanza PA 11 (Ontario Ranch East) Sewer Capacity Analysis - Existing plus Project Flows - Peak Dry Weather Flow

JOB NUMBER: 1551-001

General Pipe Information						Ultimate Baseline Scenario				
PIPE ID	U/S MH ID	D/S MH ID	Diameter (in)	Length (ft)	Slope	PDWF (mgd)	ADWF (mgd)	PDWF Velocity (ft/s)	PDWF d/D	PDWF Water Depth (ft)
EUD5L10P	EUD5L100	EUD50	8	105	0.0053	0.0727	0.0280	1.73	0.24	0.16
EUD50P	EUD50	EDU40	15	282	0.0047	0.4110	0.1949	2.56	0.26	0.32
EUD40P	EDU40	EUD30	15	400	0.0043	0.4110	0.1949	2.48	0.26	0.33
EUD40P	EUD30	EUD20	15	275	0.0045	0.4499	0.2157	2.59	0.27	0.34
EUD20P	EUD20	EUD10	15	293	0.0229	0.4499	0.2157	4.61	0.18	0.23
EUD10P	EUD10	MC50	15	83	0.0226	0.4499	0.2157	4.59	0.18	0.23
MC50P	MC50	MC40	21	362	0.0074	2.0731	1.1936	4.63	0.33	0.58
MC40P	MC40	MC30	21	361	0.0062	2.0731	1.1936	4.35	0.35	0.61
MC30P	MC30	MC20	21	253	0.0238	2.0994	1.2106	7.06	0.25	0.43
MC120P	MC20	MC10	21	236	0.0061	2.0994	1.2106	4.34	0.35	0.61
MC100P	MC10	M290	21	348	0.0065	2.1304	1.2306	4.45	0.35	0.61
M29	M290	M280	24	314	0.0011	2.1613	1.2506	2.32	0.47	0.94
M28	M280	M270	24	274	0.0011	2.2336	1.2976	2.34	0.48	0.95
M27	M270	M260	24	321	0.0011	2.2336	1.2976	2.34	0.48	0.95
M26	M260	M250	24	344	0.0011	2.2336	1.2976	2.34	0.48	0.95
M25	M250	M240	24	300	0.0011	2.4050	1.4096	2.38	0.50	0.99
M24	M240	M230	24	297	0.0011	2.4355	1.4296	2.39	0.50	1.00
M23	M230	M220	24	297	0.0011	2.4050	1.4096	2.38	0.50	0.99
M22	M220	M210	24	297	0.0011	2.4050	1.4096	2.38	0.50	0.99
M21	M210	G10	24	296	0.0073	2.4355	1.4296	4.77	0.30	0.60
M20	G10	M190	24	315	0.0013	3.3179	2.0211	2.74	0.58	1.15
M19	M190	M180	24	321	0.0013	3.3179	2.0211	2.74	0.58	1.15
M18	M180	M170	24	322	0.0013	3.3179	2.0211	2.74	0.58	1.15
M17	M170	M160	24	147	0.0013	3.3179	2.0211	2.74	0.58	1.15
M16	M160	M150	24	363	0.0013	3.3179	2.0211	2.74	0.58	1.15
M15	M150	M140	24	302	0.0013	3.4008	2.0777	2.76	0.58	1.17
M13	M140	Y20MH120	24	126	0.0014	3.4008	2.0777	2.84	0.57	1.14
Y20CL1017	Y20MH120	Y20MH121	24	321	0.0013	3.4008	2.0777	2.76	0.58	1.17
Y20CL1018	Y20MH121	Y20MH122	24	324	0.0013	3.4008	2.0777	2.76	0.58	1.17
Y20CL1019	Y20MH122	Y20MH100	24	280	0.0013	3.4008	2.0777	2.76	0.58	1.17
Y20CL1000	Y20MH100	Y20MH102	24	282	0.0128	3.4008	2.0777	6.41	0.31	0.62
Y20CL1003	Y20MH102	Y20MH103	27	194	0.0008	3.6131	2.2235	2.34	0.58	1.31
Y19CL1067	Y20MH103	Y19MH151	27	326	0.0008	3.6131	2.2235	2.34	0.58	1.31
Y19CL1066	Y19MH151	Y19MH152	27	330	0.0008	3.6172	2.2263	2.34	0.58	1.31
Y19CL1068	Y19MH152	Y19MH153	27	330	0.0008	3.6172	2.2263	2.34	0.58	1.31
Y19CL1070	Y19MH153	Y19MH154	27	216	0.0008	3.6237	2.2308	2.34	0.58	1.31
Y19CL1071	Y19MH154	Y19MH156	27	264	0.0008	3.6982	2.2822	2.35	0.59	1.33
Y19CL1069	Y19MH156	Y19MH157	27	296	0.0008	3.6982	2.2822	2.35	0.59	1.33
Y19CL1072	Y19MH157	Y19MH159	27	203	0.0008	3.7450	2.3146	2.35	0.59	1.34
Y19CL1075	Y19MH159	Archibald/ ETS	27	90	0.002	3.7450	2.3146	3.33	0.45	1.02

[1] K' based on n = 0.013

[2] dn/D using K' in Brater King Table 7-14

[3] From Brater King Table 7-4 based on dn/D

SEWER STUDY SUMMARY

DATE: 1/24/2025 Esperanza PA 11 (Ontario Ranch East) Sewer Capacity Analysis - Existing plus Project Flows - Peak Wet Weather Flow

JOB NUMBER: 1551-001

General Pipe Information						Ultimate Baseline Scenario				
PIPE ID	U/S MH ID	D/S MH ID	Diameter (in)	Length (ft)	Slope	PWWF (mgd)	ADWF (mgd)	PWWF Velocity (ft/s)	PWWF d/D	PWWF Water Depth (ft)
EUD5L10P	EUD5L100	EUD50	8	105	0.0053	0.0974	0.0280	1.88	0.28	0.19
EUD50P	EUD50	EDU40	15	282	0.0047	0.5507	0.1949	2.79	0.30	0.37
EUD40P	EDU40	EUD30	15	400	0.0043	0.5507	0.1949	2.70	0.30	0.38
EUD40P	EUD30	EUD20	15	275	0.0045	0.6029	0.2157	2.81	0.32	0.39
EUD20P	EUD20	EUD10	15	293	0.0229	0.6029	0.2157	5.03	0.21	0.26
EUD10P	EUD10	MC50	15	83	0.0226	0.6029	0.2157	5.00	0.21	0.26
MC50P	MC50	MC40	21	362	0.0074	2.7779	1.1936	5.02	0.39	0.68
MC40P	MC40	MC30	21	361	0.0062	2.7779	1.1936	4.71	0.40	0.71
MC30P	MC30	MC20	21	253	0.0238	2.8132	1.2106	7.68	0.29	0.50
MC120P	MC20	MC10	21	236	0.0061	2.8132	1.2106	4.70	0.41	0.72
MC100P	MC10	M290	21	348	0.0065	2.8547	1.2306	4.83	0.41	0.71
M29	M290	M280	24	314	0.0011	2.8961	1.2506	2.49	0.56	1.11
M28	M280	M270	24	274	0.0011	2.9931	1.2976	2.51	0.57	1.14
M27	M270	M260	24	321	0.0011	2.9931	1.2976	2.51	0.57	1.14
M26	M260	M250	24	344	0.0011	2.9931	1.2976	2.51	0.57	1.14
M25	M250	M240	24	300	0.0011	3.2227	1.4096	2.55	0.60	1.19
M24	M240	M230	24	297	0.0011	3.2636	1.4296	2.56	0.60	1.20
M23	M230	M220	24	297	0.0011	3.2227	1.4096	2.55	0.60	1.19
M22	M220	M210	24	297	0.0011	3.2227	1.4096	2.55	0.60	1.19
M21	M210	G10	24	296	0.0073	3.2636	1.4296	5.18	0.35	0.70
M20	G10	M190	24	315	0.0013	4.4460	2.0211	2.91	0.70	1.41
M19	M190	M180	24	321	0.0013	4.4460	2.0211	2.91	0.70	1.41
M18	M180	M170	24	322	0.0013	4.4460	2.0211	2.91	0.70	1.41
M17	M170	M160	24	147	0.0013	4.4460	2.0211	2.91	0.70	1.41
M16	M160	M150	24	363	0.0013	4.4460	2.0211	2.91	0.70	1.41
M15	M150	M140	24	302	0.0013	4.5570	2.0777	2.92	0.72	1.44
M13	M140	Y20MH120	24	126	0.0014	4.5570	2.0777	3.02	0.70	1.39
Y20CL1017	Y20MH120	Y20MH121	24	321	0.0013	4.5570	2.0777	2.92	0.72	1.44
Y20CL1018	Y20MH121	Y20MH122	24	324	0.0013	4.5570	2.0777	2.92	0.72	1.44
Y20CL1019	Y20MH122	Y20MH100	24	280	0.0013	4.5570	2.0777	2.92	0.72	1.44
Y20CL1000	Y20MH100	Y20MH102	24	282	0.0128	4.5570	2.0777	6.96	0.36	0.72
Y20CL1003	Y20MH102	Y20MH103	27	194	0.0008	4.8416	2.2235	2.48	0.71	1.60
Y19CL1067	Y20MH103	Y19MH151	27	326	0.0008	4.8416	2.2235	2.48	0.71	1.60
Y19CL1066	Y19MH151	Y19MH152	27	330	0.0008	4.8470	2.2263	2.48	0.71	1.60
Y19CL1068	Y19MH152	Y19MH153	27	330	0.0008	4.8470	2.2263	2.48	0.71	1.60
Y19CL1070	Y19MH153	Y19MH154	27	216	0.0008	4.8557	2.2308	2.48	0.71	1.60
Y19CL1071	Y19MH154	Y19MH156	27	264	0.0008	4.9555	2.2822	2.49	0.72	1.63
Y19CL1069	Y19MH156	Y19MH157	27	296	0.0008	4.9555	2.2822	2.49	0.72	1.63
Y19CL1072	Y19MH157	Y19MH159	27	203	0.0008	5.0183	2.3146	2.49	0.73	1.65
Y19CL1075	Y19MH159	Archibald/ ETS	27	90	0.002	5.0183	2.3146	3.58	0.54	1.21

[1] K' based on n = 0.013

[2] dn/D using K' in Brater King Table 7-14

[3] From Brater King Table 7-4 based on dn/D

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N

0 800 FEET

LEGEND

PROJECT BOUNDARY

EXISTING GRAVITY SEWER

0 MANHOLE NUMBER

S ARCHIBALD AVE

MILL CREEK AVE

HAMNER AVE

SUMNER AVE

EUCALYPTUS AVE

MERRILL AVE

BELLEGRAVE AVE

EASTERN TRUNK SEWER

MC50 EUD10 EUD20 EUD5L100 EUD50 EUD40 EUD30 MC40 MC30 MC20 MC10 M290 M280 M270 M260 M250 M240 M230 M220 M210 G10 M190 M170 M180 M150 M160 M140 Y20MH120 Y20MH121 Y20MH102 Y20MH100 Y20MH122 Y20MH151 Y20MH152 Y20MH153 Y20MH154 Y20MH156 Y20MH157 Y20MH159 Y20MH103

DEXTER WILSON ENGINEERING, INC.
CONSULTING ENGINEERS
(760) 438-4422

EXHIBIT A

MANHOLE DIAGRAM

ESPERANZA PA II (ONTARIO EAST)

RESOLUTION NO. _____

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF ONTARIO, CALIFORNIA, APPROVING FILE NO. PGPA24-003, AN AMENDMENT TO THE LAND USE ELEMENT OF THE POLICY PLAN (GENERAL PLAN), REVISING EXHIBIT LU-01 (OFFICIAL LAND USE PLAN) AND EXHIBIT LU-03 (FUTURE BUILDOUT), AFFECTING PROPERTY, LOCATED SOUTH OF CHATHAM STREET, WEST OF CLIFTON AVENUE, EAST OF AMHERST AVENUE, AND NORTH OF EUCALYPTUS AVENUE, FROM PUBLIC SCHOOL TO MEDIUM DENSITY RESIDENTIAL. AND MAKING FINDINGS IN SUPPORT THEREOF—APN: 1073-101-050. (SEE ATTACHMENTS 1 AND 2) (PART OF CYCLE 2 FOR THE 2025 CALENDAR YEAR).

WHEREAS, GDC Investments13, LP, has filed an Application for the approval of a General Plan Amendment, File No. PGPA24-003, as described in the title of this Resolution (hereinafter referred to as Application or Project); and

WHEREAS, the City of Ontario adopted the Policy Plan (General Plan) as part of the component framework for The Ontario Plan on January 27, 2010, and issued Resolution No. 2010-004; and

WHEREAS, the City of Ontario adopted a Supplemental Environmental Impact Report (SEIR) for the General Plan Amendment for The Ontario Plan 2050 Technical Update (TOP 2050) on August 16, 2022 and issued Resolution No. 2022-129. Since the adoption of TOP 2050, the City has evaluated Exhibits LU-01: Official Land Use Plan and LU-03: Future Buildout further and is proposing modifications; and

WHEREAS, the proposed changes to Exhibit LU-01 Official Land Use Plan include changes to land use designations of certain properties shown on Exhibit A to make the land use designations of these properties consistent with existing adjacent properties; and

WHEREAS, Policy Plan Exhibit LU-03 (Future Buildout) specifies the expected buildout for the City of Ontario, incorporating the adopted land use designations. The proposed changes to Exhibit LU-01 (Official Land Use Plan) will require that Exhibit LU-03 (Future Buildout) is modified to be consistent with Exhibit LU-01 (Official Land Use Plan), as depicted on Exhibit B, attached; and

WHEREAS, the Project proposes to amend TOP Policy Plan Land Use Map and associated buildout tables to change the land use designation of approximately 10.02 acres, located south of Chatham Street, west of Clifton Avenue, east of Amherst Avenue, and north of Eucalyptus Avenue, from Public School to Medium Density Residential (see Exhibit B), establishing a buildout capacity of 224 units; and

WHEREAS, this capacity offsets the loss of 128 units resulting from File No. PGPA23-003 and ensures compliance with SB 330 by maintaining the City's overall housing capacity; and

WHEREAS, the Planning Director of the City of Ontario prepared and approved for attachment to the certified Environmental Impact Report, an Addendum to the Certified EIR (hereinafter referred to as "EIR Addendum") in accordance with the requirements of the California Environmental Quality Act of 1970, together with State and local guidelines implementing said Act, all as amended to date (collectively referred to as "CEQA"); and

WHEREAS, the Application is a project pursuant to the California Environmental Quality Act — Public Resources Code Section 21000 et seq. — (hereinafter referred to as "CEQA") and an EIR Addendum has been prepared to determine possible environmental impacts; and

WHEREAS, Ontario Development Code Table 2.02-1 (Review Matrix) grants the City Council the responsibility and authority to review and act on the subject Application; and

WHEREAS, the Project is located within the Airport Influence Area of Ontario International Airport, which encompasses lands within parts of San Bernardino, Riverside, and Los Angeles Counties, and is subject to, and must be consistent with, the policies and criteria set forth in the Ontario International Airport Land Use Compatibility Plan (hereinafter referred to as "ALUCP"), which applies only to jurisdictions within San Bernardino County, and addresses the noise, safety, airspace protection, and overflight impacts of current and future airport activity; and

WHEREAS, City of Ontario Development Code Division 2.03 (Public Hearings) prescribes the manner in which public notification shall be provided and hearing procedures to be followed, and all such notifications and procedures have been completed; and

WHEREAS, on September 23, 2025, the Planning Commission of the City of Ontario conducted a hearing to consider the SEIR Addendum and the Project, and concluded said hearing on that date, voting to issue Resolution No. PC25-047, recommending the City Council adopt the SEIR Addendum, and voting to issue Resolution No. PC25-048, recommending the City Council approve the Application; and

WHEREAS, as the first action on the Project, on November 4, 2025, the City Council issued a Resolution adopting the SEIR Addendum, finding that the proposed Project introduces no new significant environmental impacts and applying all previously adopted mitigation measures to the Project, which were incorporated by reference; and

WHEREAS, on November 4, 2025, the City Council of the City of Ontario conducted a hearing to consider the Project, and concluded said hearing on that date; and

WHEREAS, all legal prerequisites to the adoption of this Resolution have occurred.

NOW, THEREFORE, IT IS HEREBY FOUND, DETERMINED, AND RESOLVED by the City Council of the City of Ontario, as follows:

SECTION 1: ***Housing Element Compliance.*** Pursuant to the requirements of California Government Code Chapter 3, Article 10.6, commencing with Section 65580, as the decision-making body for the Project, the City Council finds that based upon the facts and information contained in the Application and supporting documentation, at the time of Project implementation, the project is consistent with the Housing Element of the Policy Plan (General Plan) component of The Ontario Plan, as the project site is not one of the properties in the Housing Element Sites Inventory contained in Tables B-1 and B-2 of the Housing Element Technical Report.

SECTION 2: ***Airport Land Use Compatibility Plan ("ALUCP") Compliance.*** The California State Aeronautics Act (Public Utilities Code Section 21670 et seq.) requires that an Airport Land Use Compatibility Plan be prepared for all public use airports in the State; and requires that local land use plans and individual development proposals must be consistent with the policies set forth in the adopted Airport Land Use Compatibility Plan.

(1) On April 19, 2011, the City Council of the City of Ontario approved and adopted the Ontario International Airport Land use Compatibility Plan, establishing the Airport Influence Area for Ontario International Airport, which encompasses lands within parts of San Bernardino, Riverside, and Los Angeles Counties, and limits future land uses and development within the Airport Influence Area, as they relate to noise, safety, airspace protection, and overflight impacts of current and future airport activity. As the decision-making body for the Project, the City Council has reviewed and considered the facts and information contained in the Application and supporting documentation against the ONT ALUCP compatibility factors, including [1] Safety Criteria (ONT ALUCP Table 2-2) and Safety Zones (ONT ALUCP Map 2-2), [2] Noise Criteria (ONT ALUCP Table 2-3) and Noise Impact Zones (ONT ALUCP Map 2-3), [3] Airspace protection Zones (ONT ALUCP Map 2-4), and [4] Overflight Notification Zones (ONT ALUCP Map 2-5). As a result, the City Council, therefore, finds and determines that the Project, when implemented in conjunction with the conditions of approval, will be consistent with the policies and criteria set forth within the ONT ALUCP; and

SECTION 3: ***Concluding Facts and Reasons.*** Based upon the substantial evidence presented to the City Council during the above-referenced hearing, and upon the specific findings set forth in Sections 1 and 2, above, the City Council hereby concludes as follows:

(1) The proposed General Plan Amendment is consistent with the goals and policies of TOP 2050 as follows:

Policy Plan (General Plan)

Land Use Element:

- LU-1.1 Strategic Growth. We concentrate growth in strategic locations that help create place and identity, maximize available and planned infrastructure, foster the development of transit, and support the expansion of the active and multimodal transportation networks throughout the City.

- LU-1.6 Complete Community. We incorporate a variety of land uses and building types in our land use planning efforts that result in a complete community where residents at all stages of life, employers, workers, and visitors have a wide spectrum of choices of where they can live, work, shop and recreate within Ontario.

- Goal LU-2 Compatibility: Compatibility between a wide range of uses and a resultant urban patterns and forms.

Community Economics Element:

- Goal CE-1 Complete Community: A complete community that provides for all incomes and stages of life.

- Goal CE-2 Placemaking: A City of distinctive neighborhoods, districts, corridors, and centers where people choose to be; and

(2) The proposed General Plan Amendment would not be detrimental to the public interest, health, safety, convenience, or general welfare of the City; and

(3) The Land Use Element is a mandatory element allowed four general plan amendments per calendar year and this general plan amendment is the first amendment to the Land Use Element of the 2025 calendar year consistent with Government Code Section 65358; and

(4) The proposed General Plan Amendment action modifying land use designations for 10.2 acres from Public School to Medium-Density Residential, located south of Chatham Street, west of Clifton Avenue, east of Amherst Avenue, and north of Eucalyptus Avenue is consistent with the Housing Element of the Policy Plan (general plan) component of TOP 2050, as the Project site is not one of the properties in the Housing Element Sites contained in Tables B-1 and B-2 (Housing Element Sites Inventory) of the Housing Element Technical Report.; and

(5) The proposed General Plan Amendment would not be detrimental to the public interest, health, safety, convenience, or general welfare of the City; and

(6) The Land Use Element is a mandatory element allowed four general plan amendments per calendar year and this general plan amendment is the first amendment to the Land Use Element of the 2025 calendar year consistent with Government Code Section 65358; and

(7) During the amendment of the general plan, opportunities for the involvement of citizens, California Native American Indian tribes (Government Code Section 65352.3.), public agencies, public utility companies, and civic, education, and other community groups, through public hearings or other means were implemented consistent with Government Code Section 65351.

SECTION 4: ***City Council Action.*** Based upon the findings and conclusions set forth in Sections 1 through 3, above, the City Council hereby APPROVES the herein described General Plan Amendment, attached hereto as "Attachment A," and incorporated herein by this reference.

SECTION 5: ***Indemnification.*** The Applicant shall agree to defend, indemnify and hold harmless, the City of Ontario or its agents, officers, and employees from any claim, action or proceeding against the City of Ontario or its agents, officers or employees to attack, set aside, void, or annul this approval. The City of Ontario shall promptly notify the applicant of any such claim, action, or proceeding, and the City of Ontario shall cooperate fully in the defense.

SECTION 6: ***Custodian of Records.*** The documents and materials that constitute the record of proceedings on which these findings have been based are located at the City of Ontario City Hall, 303 East "B" Street, Ontario, California 91764. The custodian for these records is the City Clerk of the City of Ontario.

PASSED, APPROVED, AND ADOPTED this 4th day of November 2025.

_____
PAUL S. LEON, MAYOR

ATTEST:

_____
SHEILA MAUTZ, CITY CLERK

APPROVED AS TO FORM:

_____
BEST BEST & KRIEGER LLP
CITY ATTORNEY

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

I, SHEILA MAUTZ, City Clerk of the City of Ontario, DO HEREBY CERTIFY that foregoing Resolution No. 2025- was duly passed and adopted by the City Council of the City of Ontario at their regular meeting held November 4, 2025, by the following roll call vote, to wit:

AYES: COUNCIL MEMBERS:

NOES: COUNCIL MEMBERS:

ABSENT: COUNCIL MEMBERS:

_____
SHEILA MAUTZ, CITY CLERK

(SEAL)

The foregoing is the original of Resolution No. 2025- duly passed and adopted by the Ontario City Council at their regular meeting held November 4, 2025.

_____
SHEILA MAUTZ, CITY CLERK

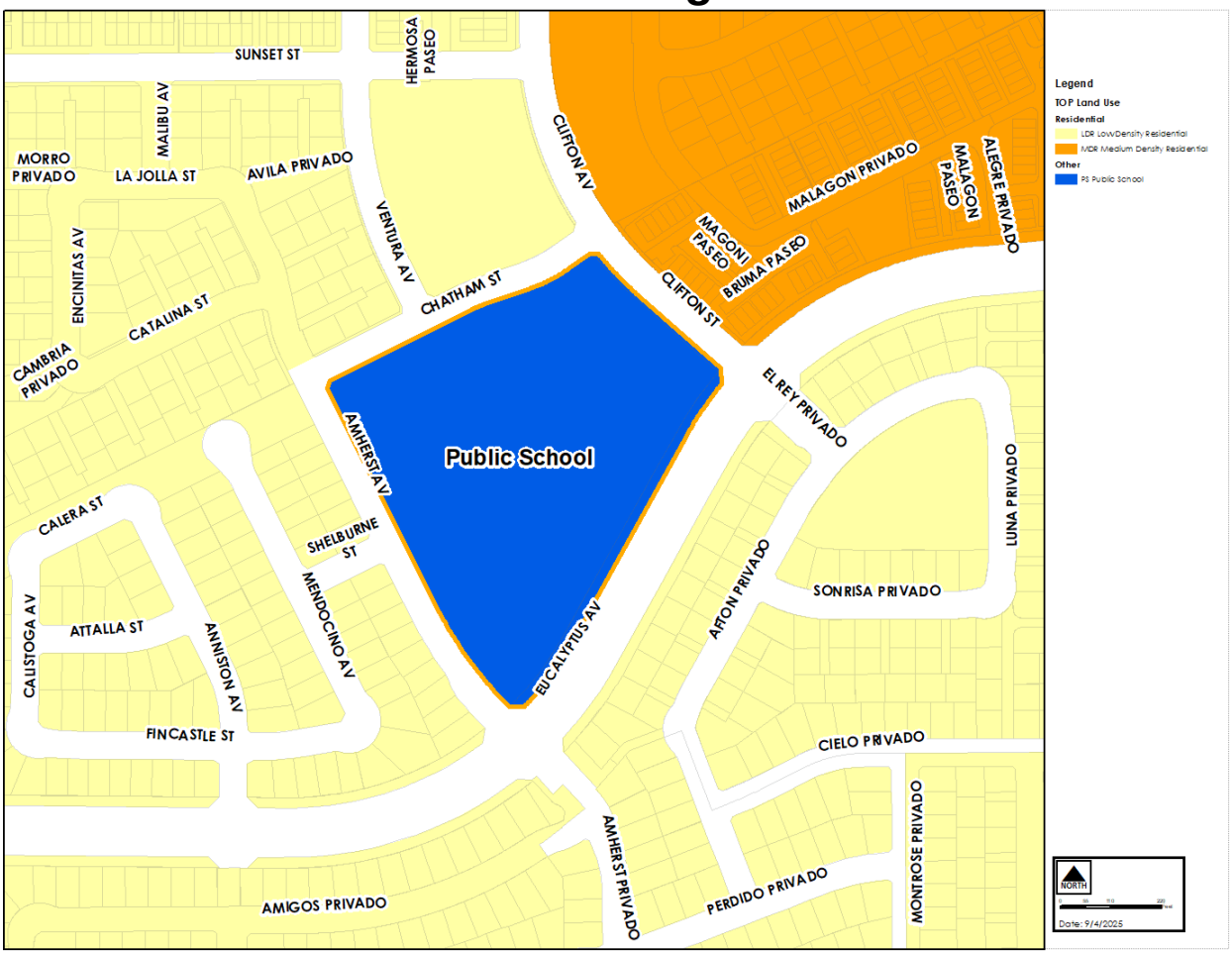
(SEAL)

<u>ATTACHMENT 1</u>:

Policy Plan Land Use Plan (Exhibit LU-01) Revision

(Document Follows This Page)

Existing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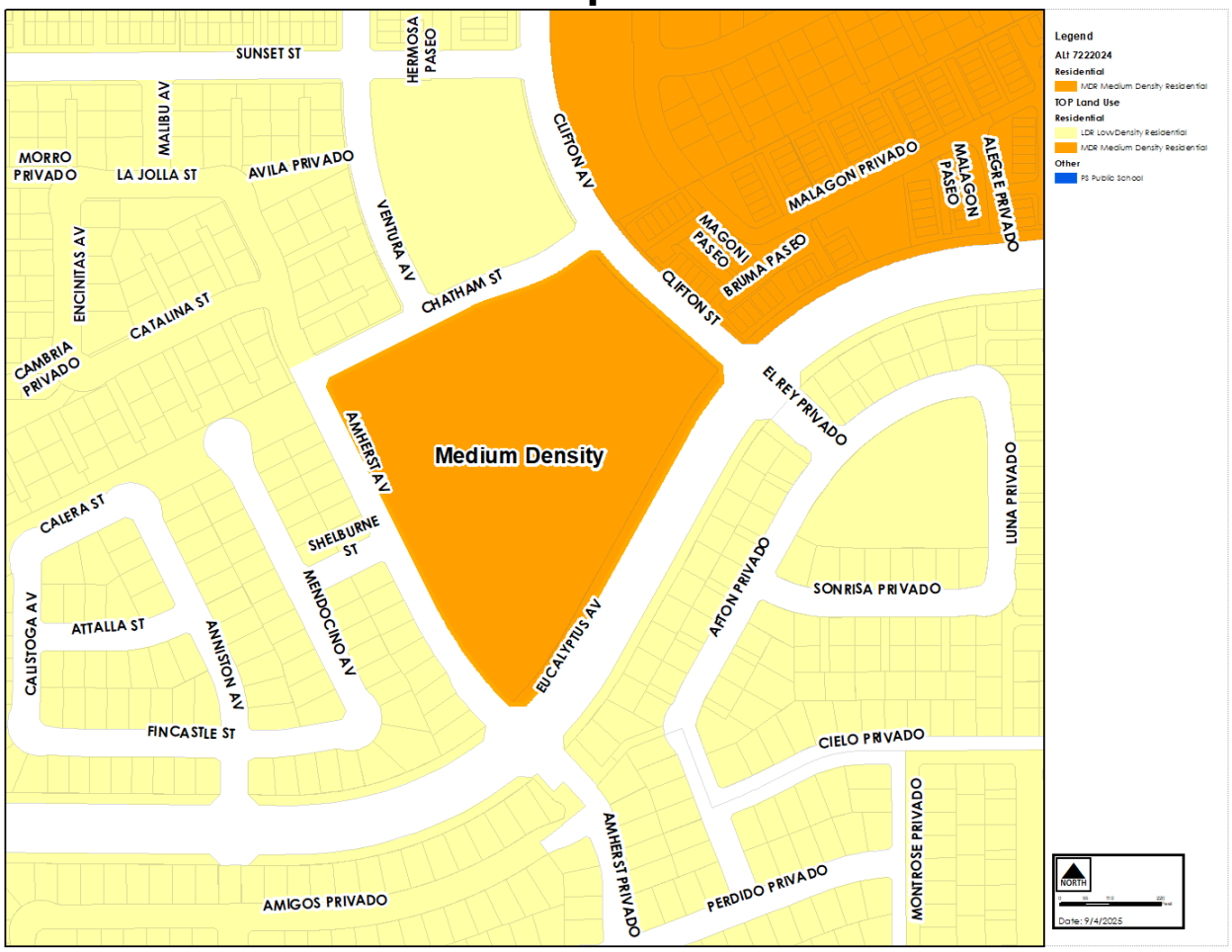
LA JOLLA ST
AVILA PRIVADO
VENTURA AV
CLIFTON AV
MALAGON PRIVADO
MALAGON PASEO
ALEGRE PRIVADO
MAGONI PASEO
BRUMA PASEO
ENCINITAS AV
CATALINA ST
CHATHAM ST
CLIFTON ST
CAMBRIA PRIVADO
EL REY PRIVADO
AMHERST AV
Public School
LUNA PRIVADO
CALERA ST
SHELBURNE ST
SONRISA PRIVADO
ATTALLA ST
MENDOCINO AV
EUCALYPTUS AV
AFTON PRIVADO
CALISTOGA AV
ANNISION AV
FINCASTLE ST
CIELO PRIVADO
AMHERST PRIVADO
MONTROSE PRIVADO
AMIGOS PRIVADO
PERDIDO PRIVADO
Legend
TOP Land Use
Residential
LDR Low/Density Residential
MDR Medium Density Residential
Other
PS Public School
NORTH
Date: 9/4/2025

Proposed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ALEGRE PRIVADO
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CAMBRIA PRIVADO
EL REY PRIVADO
Medium Density
AMHERST AV
CALERA ST
SHELBURNE ST
LUNA PRIVADO
AFTON PRIVADO
SONRISA PRIVADO
CALISTOGA AV
ATTALLA ST
ANNISON AV
MENDOCINO AV
EUCALYPTUS AV
FINCASTLE ST
CIELO PRIVADO
AMHERST PRIVADO
MONTROSE PRIVADO
AMIGOS PRIVADO
PERDIDO PRIVADO
Legend
Alt 7222024
Residential
MDR Medium Density Residential
TOP Land Use
Residential
LDR Low Density Residential
MDR Medium Density Residential
Other
PS Public School
NORTH
Date: 9/4/2025

ATTACHMENT 2:

Future Buildout Table (Exhibit LU-03) Revision

(Document Follows This Page)

LU-03 Future Buildout Table

Land Use	Acres[2]	Assumed Density/Intensity[3]	Units	Pop[4]	Non-Residential Square Feet	Jobs[5]
Residential						
Rural	529	2.0 du/ac	1,057	3,863	-	-
Low Density[6,7]	6,274	5.9 du/ac (north of Riverside Dr) 4.5 du/ac (south of Riverside Dr)[7]	34,842	127,304	-	-
Low-Medium Density[6]	889	8.5 du/ac	7,197	26,363	-	-
Medium Density[7]	2,301 ~~2,291~~	18.0 du/ac (north of Riverside Dr) 22.0 du/ac (south of Riverside Dr)[8]	~~46,926~~ 47,150	~~152,030~~ 152,757	-	-
High Density	198	25.0 du/ac (north of Riverside Dr) 35.0 du/ac (south of Riverside Dr)	5,089	13,038	-	-
Subtotal	~~**101,180**~~ **101,190**		~~**95,433**~~ **95,657**	~~**322,710**~~ **323,437**	**-**	**-**
Mixed Use						
• Downtown	132	• 60% of the area at 35 du/ac • 40% of the area at 0.80 FAR for office and retail	2,758	7,068	1,830,863	4,092
• East Holt Boulevard[8]	75	• 75% of the area at 30 du/ac • 25% of area at 0.80 FAR retail	1,693	4,336	655,222	546
• West Holt Boulevard[8]	1	• 75% of the area at 30 du/ac • 25% of area at 0.80 FAR retail	33	84	12,678	11
• Meredith	91	• 50% of the area at 40 du/ac • 50% at 0.35 FAR for retail uses	1,815	4,651	691,939	577
• Multimodal Transit Center	73	• 15% of the area at 60 du/ac • 60% of the area at 1.0 FAR office and retail • 25% of the area at 0.70 FAR Lodging	653	1,673	2,449,557	5,993
• Inland Empire Corridor	37	• 82% of the area at 10 du/ac • 18% of area t 0.35 FAR retail	300	769	100,455	84
• Guasti	86	• 30% of the area at 30 du/ac • 15% of area at 1.0 FAR retail • 30% of area at 0.70 FAR office • 25% of area at 0.70 FAR Lodging	777	1,991	2,012,077	3,848
• Ontario Center[8] *(South of Concours, East of Haven Avenue, West of Milliken, North of Interstate 10 Fwy)*	186	• 50% of area at 40 du/ac • 20% of area at 1.0 FAR office • 30% of area at 0.70 FAR retail	3,729	9,553	3,329,507	7,327

LU-03 Future Buildout Table

Land Use	Acres[2]	Assumed Density/Intensity[3]	Units	Pop[4]	Non-Residential Square Feet	Jobs[5]
• Ontario Center Arena[8] *((North of Concours, West of Milliken, East of Center Avenue, South of 4th Street*	169	• 75% of area at 40 du/ac • 10% of area at 1.00 FAR office • 15% of area at 0.80 FAR retail	5,076	13,006	1,621,435	3,417
• Ontario Mills	249	• 40% of area at 40 du/ac • 5% of area at 0.75 FAR office • 55% of area at 0.50 FAR retail	3,990	10,223	3,394,666	3,971
• Rich-Haven[2]	154	• 86% of area at 18 du/ac • 2% of area at 0.35 FAR office • 12% of area at 0.30 FAR retail	2,389	6,122	289,088	373
• Parkside	3	• 50% of the area at 35 du/ac • 50% of area at 0.80 FAR retail	52	132	51,440	129
• Eucalyptus/ Chino Airport[2]	105	• 40% of the area at 35 du/ac • 10% of area at 0.80 FAR retail • 20% of area at 1.00 FAR office • 30% of area at 0.60 FAR business park (industrial)	1,471	3,769	2,059,760	4,008
• Grove[2]	36	• 65% of the area at 35 du/ac • 25% of area at 0.80 FAR retail • 10% of area at 0.70 FAR Office	821	2,104	385,285	630
• Great Park[2]	~~305~~ 300	• 70% of area at 35 du/ac • 10% of area at 0.70 FAR for office • 20% of area at 0.30 FAR for retail uses	~~7,470~~ 7,340	~~19,141~~ 18,808	~~2,789,181~~ 2,740,699	~~4,930~~ 4,845
• Neighborhood Activity Hub[8] *(Mountain Village)*	8	• 50% of the area at 35 du/ac • 50% of area at 0.80 FAR retail	137	350	136,070	340
• Neighborhood Activity Hub[8] *(Mountain & Fourth)*	7	• 70% of the area at 50 du/ac • 30% of area at 0.80 FAR retail	251	643	75,008	188
• Neighborhood Activity Hub[8] *(Euclid & Francis)*	13	• 50% of the area at 30 du/ac • 50% of area at 0.80 FAR retail	190	487	220,912	552
• Neighborhood Activity Hub[8] *(Euclid & Walnut)*	16	• 75% of the area at 30 du/ac • 25% of area at 0.80 FAR retail	369	945	142,840	357
• Neighborhood Activity Hub[2,8] *(Euclid & Riverside)*	15	• 75% of the area at 35 du/ac • 25% of area at 0.80 FAR retail	394	1,009	130,662	327
Subtotal	~~1,762~~ 1,756	-	~~34,367~~ 34,238	~~88,058~~ 87,725	~~22,478,644~~ 22,330,162	~~41,698~~ 41,612

LU-03 Future Buildout Table

Land Use	Acres[2]	Assumed Density/Intensity[3]	Units	Pop[4]	Non-Residential Square Feet	Jobs[5]
Retail/Service						
Neighborhood Commercial[6]	248	0.30 FAR	-	-	3,238,367	8,832
General Commercial	385	0.30 FAR	-	-	5,033,395	5,605
Office/ Commercial	310	0.75 FAR	-	-	10,101,733	28,239
Hospitality	194	1.00 FAR	-	-	8,458,978	11,412
Subtotal	**1,136**		**-**	**-**	**26,832,472**	**54,088**
Employment						
Business Park	~~1,139~~ 1,145	0.50 FAR	-	-	~~24,816,271~~ 24,931,704	~~42,835~~ 42,987
Industrial	7,664	0.55 FAR	-	-	183,596,786	148,483
Subtotal	~~**8,802**~~ **8,808**		-	-	~~**208,413,056**~~ **208,528,490**	~~**191,318**~~ **191,470**
Other						
Open Space–Non-Recreation	1,200	Not applicable	-	-	-	-
Open Space–Parkland[6]	1,047	Not applicable	-	-	-	-
Open Space-Water	17	Not applicable	-	-	-	-
Public Facility	90	Not applicable	-	-	-	-
Public School	~~614~~ 604	Not applicable	-	-	-	-
Ontario International Airport	1,423	Not applicable	-	-	-	-
Landfill	137	Not applicable	-	-	-	-
Railroad	250	Not applicable	-	-	-	-
Roadways	5,364	Not applicable	-	-	-	-
Subtotal	~~***10,142***~~ ***10,131***	-	-	-	-	-
Total	***32,022***	-	~~***129,800***~~ ***129,895***	~~***410,768***~~ ***411,162***	~~***264,057,928***~~ ***261,709,056***	~~***299, 324***~~ ***296,028***

RESOLUTION NO. _____

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF ONTARIO, CALIFORNIA, APPROVING FILE NO. PSPA24-004, AN AMENDMENT TO THE ESPERANZA SPECIFIC PLAN TO REVISE THE SPECIFIC PLAN FOR CONSISTENCY WITH THE ONTARIO PLAN POLICY PLAN (GENERAL PLAN) LAND USE MAP. THE AMENDMENT INCLUDES [I] REVISING THE ALLOWED USES WITHIN PLANNING AREA 11 FROM SCHOOL TO RD-7/ROW TOWNHOMES; AND [II] MODIFYING THE SPECIFIC PLAN LAND USE MAP, DEVELOPMENT STANDARDS, EXHIBITS, AND TEXT TO REFLECT THE PROPOSED LAND USE CHANGES, AND MAKING FINDINGS IN SUPPORT THEREOF—APN: 1073-101-050.

WHEREAS, GDC Investments 13, LP (hereinafter referred to as Applicant) has filed an Application for the approval of a Specific Plan Amendment, File No. PSPA24-004, as described in the title of this Resolution (hereinafter referred to as Application or Project); and

WHEREAS, the Application applies to approximately 10.02 acres of land generally located south of Chatham Street, west of Clifton Avenue, east of Amherst Avenue, and north of Eucalyptus Avenue, within Planning Area 11 (RD-7 / Row Townhomes) of the Esperanza Specific Plan, identified as Assessor's Parcel Number 1073-101-050, and presently vacant; and

WHEREAS, the property to the north of the Project site is within the Esperanza Specific Plan, designated Park, and developed with residential uses; the property to the east is within the Esperanza Specific Plan, designated PA-4 (RD-6 / 6-Pack Courtyard), and developed with residential uses; the property to the south is within the Esperanza Specific Plan, designated PA-7 (RD-1 / SFD 50' wide lots), and developed with residential uses; and the property to the west is within the Esperanza Specific Plan, designated PA-10 (RD-3 / SFD 2-Pack), and developed with residential uses; and

WHEREAS, on February 6, 2007, the City Council adopted Ordinance No. 2852, approving the Esperanza Specific Plan (File No. PSP05-002), establishing a master plan for the development of 223 acres of land, inclusive of the Project site; and

WHEREAS, the Application was submitted to amend the land use designation and development standards of Planning Area 11 of the Esperanza Specific Plan; and

WHEREAS, the Application was submitted to increase the number of units allowed within Planning Area 11 from 0 dwelling units to 161 dwelling units; and

WHEREAS, The Ontario Plan (TOP) 2050 Supplemental Environmental Impact Report (SEIR) (State Clearinghouse No. 2021070364), certified by the Ontario City Council on August 16, 2022, in conjunction with File No. PGPA20-002 (hereinafter referred to as Certified SEIR), in which development and use of the Project site was discussed; and

WHEREAS, the Planning Director of the City of Ontario prepared and approved for attachment to the certified Supplemental Environmental Impact Report, an Addendum to the Certified EIR (hereinafter referred to as "EIR Addendum") in accordance with the requirements of the California Environmental Quality Act of 1970, together with State and local guidelines implementing said Act, all as amended to date (collectively referred to as "CEQA"); and

WHEREAS, the environmental impacts of this project were thoroughly analyzed in the EIR Addendum, which concluded that implementation of the Project could result in a number of significant effects on the environment that were previously analyzed in the Certified EIR, and that the Certified EIR identified mitigation measures that would reduce each of those significant effects to a less-than-significant level; and

WHEREAS, the City's "Local Guidelines for the Implementation of the California Environmental Quality Act (CEQA)" provide for the use of a single environmental assessment in situations where the impacts of subsequent projects are adequately analyzed; and

WHEREAS, the Application is a project pursuant to the California Environmental Quality Act — Public Resources Code Section 21000 et seq. — (hereinafter referred to as "CEQA") and an SEIR Addendum has been prepared to determine possible environmental impacts; and

WHEREAS, Ontario Development Code Table 2.02-1 (Review Matrix) grants the City Council the responsibility and authority to review and act on the subject Application; and

WHEREAS, the Project has been reviewed for consistency with the Housing Element of the Policy Plan component of The Ontario Plan, as State Housing Element law (as prescribed in Government Code Sections 65580 through 65589.8) requires that development projects must be consistent with the Housing Element, if upon consideration of all its aspects, it is found to further the purposes, principals, goals, and policies of the Housing Element; and

WHEREAS, the Project is located within the Airport Influence Area of Ontario International Airport, which encompasses lands within parts of San Bernardino, Riverside, and Los Angeles Counties, and is subject to, and must be consistent with, the policies and criteria set forth in the Ontario International Airport Land Use Compatibility Plan (hereinafter referred to as "ALUCP"), which applies only to jurisdictions within San Bernardino County, and addresses the noise, safety, airspace protection, and overflight impacts of current and future airport activity; and

WHEREAS, City of Ontario Development Code Division 2.03 (Public Hearings) prescribes the manner in which public notification shall be provided and hearing procedures to be followed, and all such notifications and procedures have been completed; and

WHEREAS, on September 23, 2025, the Planning Commission of the City of Ontario conducted a hearing to consider the SEIR Addendum and the Project, and concluded said hearing on that date, voting to issue Resolution No. PC25-047, recommending the City Council adopt the SEIR Addendum, and voting to issue Resolution No. . PC25-049, recommending the City Council approve the Application; and

WHEREAS, as the first action on the Project, on November 4, 2025, the City Council issued a Resolution adopting the SEIR Addendum, finding that the proposed Project introduces no new significant environmental impacts and applying all previously adopted mitigation measures to the Project, which were incorporated by reference; and

WHEREAS, on November 4, 2025, the City Council of the City of Ontario conducted a hearing to consider the Project, and concluded said hearing on that date; and

WHEREAS, all legal prerequisites to the adoption of this Resolution have occurred.

NOW, THEREFORE, IT IS HEREBY FOUND, DETERMINED, AND RESOLVED by the City Council of the City of Ontario, as follows:

SECTION 1: ***Housing Element Compliance.*** Pursuant to the requirements of California Government Code Chapter 3, Article 10.6, commencing with Section 65580, as the decision-making body for the Project, the City Council finds that based upon the facts and information contained in the Application and supporting documentation, at the time of Project implementation, the project is consistent with the Housing Element of the Policy Plan (General Plan) component of The Ontario Plan, as the project site is not one of the properties in the Housing Element Sites Inventory contained in Tables B-1 and B-2 of the Housing Element Technical Report.

SECTION 2: ***Airport Land Use Compatibility Plan ("ALUCP") Compliance.*** The California State Aeronautics Act (Public Utilities Code Section 21670 et seq.) requires that an Airport Land Use Compatibility Plan be prepared for all public use airports in the State; and requires that local land use plans and individual development proposals must be consistent with the policies set forth in the adopted Airport Land Use Compatibility Plan.

(1) On April 19, 2011, the City Council of the City of Ontario approved and adopted the Ontario International Airport Land use Compatibility Plan, establishing the Airport Influence Area for Ontario International Airport, which encompasses lands within parts of San Bernardino, Riverside, and Los Angeles Counties, and limits future land uses and development within the Airport Influence Area, as they relate to noise, safety, airspace protection, and overflight impacts of current and future airport activity. As the decision-making body for the Project, the City Council has reviewed and considered the facts and information contained in the Application and supporting documentation against the ONT ALUCP compatibility factors, including [1] Safety Criteria (ONT ALUCP Table 2-2) and Safety Zones (ONT ALUCP Map 2-2), [2] Noise Criteria (ONT ALUCP Table 2-3) and Noise Impact Zones (ONT ALUCP Map 2-3), [3] Airspace protection Zones (ONT ALUCP Map 2-4), and [4] Overflight Notification Zones (ONT ALUCP Map 2-5). As a result, the City Council, therefore, finds and determines that the Project, when implemented in conjunction with the conditions of approval, will be consistent with the policies and criteria set forth within the ONT ALUCP; and

SECTION 3: ***Concluding Facts and Reasons.*** Based upon the substantial evidence presented to the City Council during the above-referenced hearing, and upon the specific findings set forth in Sections 1 and 2, above, the City Council hereby concludes as follows:

(1) ***The proposed Specific Plan, or amendment thereto, is consistent with the goals, policies, plans and exhibits of the Vision, Policy Plan (General Plan), and City Council Priorities components of The Ontario Plan.*** The proposed Specific Plan Amendment is consistent with the Vision, Policy Plan (General Plan), and City Council Priorities components of TOP 2050, in that the Specific Plan Amendment contributes towards the legislative framework for the implementation of TOP components, guiding growth and development within the Project area to achieve optimum results from the City's physical, economic, environmental, and human resources.

(2) ***The proposed Specific Plan, or amendment thereto, would not be detrimental to the public interest, health, safety, convenience, or general welfare of the City.*** The development standards and guidelines established by the proposed Specific Plan Amendment have been created with the intent to safeguard and further the public interest, health, safety, convenience, and/or general welfare, and to ensure that the purposes of TOP 2050 and the proposed Specific Plan Amendment are maintained.

(3) ***In the case of an application affecting specific property(ies), the proposed Specific Plan, or amendment thereto, will not adversely affect the harmonious relationship with adjacent properties and land uses.*** The location of the proposed Specific Plan Amendment, and the proposed conditions under which future developments will be constructed and maintained, is consistent with the Policy Plan component of TOP 2050 and the City's Development Plan, and, therefore, will not adversely affect the harmonious relationship with adjacent properties and land uses.

(4) ***In the case of an application affecting specific property(ies), the subject site is physically suitable, including, but not limited to, parcel size, shape, access, and availability of utilities, for the request and anticipated development.*** The proposed Specific Plan Amendment has been reviewed by all City departments, which have established that the project site is physically suitable for the anticipated development in terms of parcel size, shape, and availability of utilities.

SECTION 4: ***City Council Action.*** Based upon the findings and conclusions set forth in Sections 1 through 3, above, the City Council hereby APPROVES the herein described Application, subject to each and every condition set forth in the Department reports attached hereto as "Attachment A," and incorporated herein by this reference.

SECTION 5: ***Indemnification.*** The Applicant shall agree to defend, indemnify and hold harmless, the City of Ontario or its agents, officers, and employees from any claim, action or proceeding against the City of Ontario or its agents, officers or employees to attack, set aside, void, or annul this approval. The City of Ontario shall promptly notify the applicant of any such claim, action, or proceeding, and the City of Ontario shall cooperate fully in the defense.

SECTION 6: ***Custodian of Records.*** The documents and materials that constitute the record of proceedings on which these findings have been based are located at the City of Ontario City Hall, 303 East "B" Street, Ontario, California 91764. The custodian for these records is the City Clerk of the City of Ontario.

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

PASSED, APPROVED, AND ADOPTED this 4th day of November 2025.

_____
PAUL S. LEON, MAYOR

ATTEST:

_____
SHEILA MAUTZ, CITY CLERK

APPROVED AS TO FORM:

_____
BEST BEST & KRIEGER LLP
CITY ATTORNEY

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

I, SHEILA MAUTZ, City Clerk of the City of Ontario, DO HEREBY CERTIFY that foregoing Resolution No. 2025- was duly passed and adopted by the City Council of the City of Ontario at their regular meeting held November 4, 2025, by the following roll call vote, to wit:

AYES: COUNCIL MEMBERS:

NOES: COUNCIL MEMBERS:

ABSENT: COUNCIL MEMBERS:

_____
SHEILA MAUTZ, CITY CLERK

(SEAL)

The foregoing is the original of Resolution No. 2025- duly passed and adopted by the Ontario City Council at their regular meeting held November 4, 2025.

_____
SHEILA MAUTZ, CITY CLERK

(SEAL)

ATTACHMENT A:

File No. PSPA24-004
Esperanza Specific Plan Amendment

(Specific Plan Amendment document to follow this page)

CITY OF ONTARIO *Agenda Report* **November 4, 2025**	**SECTION:** **PUBLIC HEARINGS**
Department: Financial Services Prepared By: Cruz Torres Department: Prepared By: Stephanie Castro Staff Member Presenting: Armen Harkalyan, Executive Director of Finance Reviewed By: Claudia Hernandez, Matthew Hernandez Approved By:	Submitted To: Council/OHA Approved: _____ Continued To: _____ Denied: _____ Item No: 14

SUBJECT: **A PUBLIC HEARING TO CONSIDER A RESOLUTION REGARDING THE FORMATION OF THE CITY OF ONTARIO COMMUNITY FACILITIES DISTRICT NO. 76 (COMPASS POINTE); ADOPTION OF A RESOLUTION DEEMING IT NECESSARY TO INCUR BONDED INDEBTEDNESS; AND INTRODUCTION OF AN ORDINANCE LEVYING SPECIAL TAXES.**

RECOMMENDATION: That the City Council consider and:

A. Adopt a Resolution of Formation of Community Facilities District No. 76 (Compass Pointe), proposing that the community facilities district be authorized to levy a special tax and proposing that an appropriations limit of the community facilities district be established;
B. Adopt a Resolution deeming it necessary for the district to incur bonded indebtedness within Community Facilities District No. 76 (Compass Pointe);
C. Adopt a Resolution calling a special election for City of Ontario Community Facilities District No. 76 (Compass Pointe);
D. Adopt a Resolution declaring the results of the special election and directing the recording of a Notice of Special Tax Lien;
E. Introduce and waive further reading of an Ordinance levying special taxes within City of Ontario Community Facilities District No. 76 (Compass Pointe);
F. Adopt a Resolution authorizing the execution and delivery of an acquisition and funding agreement with KB Home Cal Management Services LLC; and
G. Adopt a Resolution making a declaration of official intent to reimburse facilities expenditures with bond proceeds and related actions.

THE FOLLOWING COUNCIL GOALS ARE BEING ACHIEVED:
Operate in a Businesslike Manner
Focus Resources in Ontario's Commercial and Residential Neighborhoods
Invest in the City's Infrastructure (Water, Streets, Sewers, Parks, Storm Drains and Public

Facilities)

Ensure the Development of a Well Planned, Balanced, and Self-Sustaining Community in Ontario Ranch

FISCAL IMPACT: The use of Mello-Roos financing in the Compass Pointe residential development is projected to generate approximately $462,518 per year, at buildout, to fund administrative fees and municipal services; and approximately $14.9 million in bond proceeds to be used to fund a portion of the public infrastructure improvements needed to serve the project. Mello-Roos bonds are not a direct obligation of the City and are paid from special taxes levied on each taxable parcel in the district; therefore, there is no fiscal impact to the General Fund from the issuance of Mello-Roos bonds. City Council approval will be required to process annual special tax levies in future years.

BACKGROUND & ANALYSIS: The Mello-Roos Community Facilities Act of 1982 provides local government, with the consent from the qualified electors, the authority to establish community facilities districts for the purpose of levying special taxes to finance various kinds of public infrastructure facilities and municipal services. Under the Mello-Roos Act the initial steps in the formation of a community facilities district to finance public improvements and municipal services include, among other things, adopting resolutions declaring the intention to establish a community facilities district, authorize the levy of special taxes, and determining the necessity to issue bonds for the financing of public improvements. Accordingly, on September 16, 2025, the City Council approved Resolution No. 2025-138, a Resolution of Intention to establish City of Ontario Community Facilities District No. 76 (Compass Pointe) and authorize the levy of special taxes; and Resolution No. 2025-139 declaring the necessity to issue bonds for the district. The Resolution of Intention set the public hearing date for the regularly scheduled City Council meeting on November 4, 2025, to consider formation matters. The City Council is now being asked to take the final steps in the formation process.

In the First Amended and Restated Agreement for the Financing and Construction of Limited Infrastructure Improvements to Serve an Easterly Portion of the New Model Colony ("First Amended and Restated Construction Agreement") between the City of Ontario and NMC Builders, LLC, the City agreed to cooperate with the members of NMC Builders, LLC, in the formation of community facilities districts to assist in the financing of the public improvements included in the agreement. The Compass Pointe project is approximately 51.1 gross acres located south of Eucalyptus Avenue, north of Parkview Street, west of Haven Avenue, and east of Archibald Avenue. At build-out, the project is expected to include 350 residential units consisting of 67 single-family units and 283 attached units.

Included, as part of the Resolution of Formation is the proposed Rate and Method of Apportionment of Special Tax for the District. Under the proposed Rate and Method of Apportionment, the portion of the maximum annual special tax rates which will be used to fund debt service payments on the bonds is fixed and will not increase over time. As proposed, the amount of bonds authorized for the district ($60 million) is set intentionally higher than the current estimated bond amount ($14.9 million) in order to allow future City Council the option, without increasing the amount of the annual special taxes, to issue additional bonds to replace and/or construct new public infrastructure improvements in the future, or to fund municipal services. The

term and structure of the Rate and Method of Apportionment of Special Tax for the Compass Pointe project is consistent with those of previously adopted Rates and Methods of Apportionment for Ontario Ranch community facilities districts. This ensures that the special tax rates levied on all residential property owners in community facilities districts in Ontario Ranch are developed in a consistent and equivalent manner. In addition, under the provisions of the Mello-Roos Act, to ensure that home buyers are making an informed decision, all residential builders in the Ontario Ranch districts are required to disclose the maximum annual special tax amount to each homeowner before entering into a sales contract.

Attached are six Resolutions and an Ordinance. The first attached Resolution establishes the community facilities district, with the rate and method of apportionment of special taxes and authorizes the levy of special taxes within the district. The second attached Resolution deeming it necessary to incur bonded indebtedness for the district. The third attached Resolution calls for a special landowner election to be held on November 4, 2025. The fourth attached Resolution declares the results of the election, including a statement from the City Clerk as to the canvass of ballots, and directs the recording of the Notice of Special Tax Lien. The fifth attached Resolution authorizes the execution and delivery of an acquisition and funding agreement. The sixth attached Resolution declares the intent to reimburse facilities expenditures with bond proceeds and related actions. Lastly, the attached Ordinance authorizes the levying of special taxes.

RESOLUTION NO. _____

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF ONTARIO, CALIFORNIA, OF FORMATION OF CITY OF ONTARIO COMMUNITY FACILITIES DISTRICT NO. 76 (COMPASS POINTE), PROPOSING THAT THE COMMUNITY FACILITIES DISTRICT BE AUTHORIZED TO LEVY A SPECIAL TAX AND PROPOSING THAT AN APPROPRIATIONS LIMIT OF THE COMMUNITY FACILITIES DISTRICT BE ESTABLISHED.

WHEREAS, on September 16, 2025, the City Council (the "City Council") of the City of Ontario (the "City"), pursuant to the Mello-Roos Community Facilities Act of 1982 (the "Act"), adopted a resolution entitled "A Resolution of the City Council of the City of Ontario, California, of Intention to Establish a Community Facilities District Proposed to be Named City of Ontario Community Facilities District No. 76 (Compass Pointe) and to Authorize the Levy of a Special Tax Therein" (the "Resolution of Intention"), stating its intention to establish City of Ontario Community Facilities District No. 76 (Compass Pointe) (the "Community Facilities District"), to authorize the Community Facilities District to levy a special tax within the Community Facilities District for the purpose of financing certain public facilities and services and setting the date for a public hearing to be held on the establishment of the Community Facilities District; and

WHEREAS, pursuant to the Resolution of Intention, notice of said public hearing was published in the *Inland Valley Daily Bulletin*, a newspaper of general circulation published in the area of the Community Facilities District, in accordance with the Act; and

WHEREAS, on this date, the City Council opened, conducted and closed said public hearing; and

WHEREAS, pursuant to the Resolution of Intention, each officer of the City who is or will be responsible for providing one or more of the proposed types of public facilities or services to be financed by the Community Facilities District was directed to study, or cause to be studied, the proposed Community Facilities District and, at or before said public hearing, file a report with the City Council containing a brief description of the public facilities and services by type that will in his or her opinion be required to adequately meet the needs of the Community Facilities District, and his or her estimate of the cost of providing such public facilities and services; such officers were also directed to estimate the fair and reasonable cost of the public facilities proposed to be purchased as completed public facilities and of the incidental expenses proposed to be paid; and

WHEREAS, said report was so filed with the City Council and made a part of the record of said public hearing; and

WHEREAS, at the hearing, the testimony of all persons for or against the establishment of the Community Facilities District, the extent of the Community Facilities District and the furnishing of the specified types of public facilities and services was heard; and

WHEREAS, written protests against the establishment of the Community Facilities District, the furnishing of any specified type or types of facilities and services within the Community Facilities District or the levying of a specified special tax were not made or filed at or before said hearing by 50% or more of the registered voters, or six registered voters, whichever is more, residing within the territory proposed to be included in the Community Facilities District, or the owners of one-half or more of the area of land in the territory proposed to be included in the Community Facilities District and not exempt from the special tax; and

WHEREAS, there has been filed with the City Clerk of the City a letter from the Registrar of Voters of the County of San Bernardino indicating that no persons were registered to vote within the territory of the proposed Community Facilities District as of October 23, 2025, which demonstrates that 12 or more persons have not been registered to vote within the territory of the proposed Community Facilities District for each of the 90 days preceding the close of said public hearing; and

WHEREAS, Section 53314.9 of the Act provides that, at any time either before or after the formation of a community facilities district, the legislative body may accept advances of funds from any source, including, but not limited to, private persons or private entities and may provide, by resolution, for the use of those funds for any authorized purpose, including, but not limited to, paying any cost incurred by the local agency in creating a community facilities district; and

WHEREAS, Section 53314.9 of the Act further provides that the legislative body may enter into an agreement, by resolution, with the person or entity advancing the funds, to repay all or a portion of the funds advanced, as determined by the legislative body, with or without interest, under all the following conditions: (a) the proposal to repay the funds is included in both the resolution of intention to establish a community facilities district adopted pursuant to Section 53321 of the Act and in the resolution of formation to establish a community facilities district pursuant to Section 53325.1 of the Act, (b) any proposed special tax is approved by the qualified electors of the community facilities district pursuant to the Act, and (c) any agreement shall specify that if the qualified electors of the community facilities district do not approve the proposed special tax, the local agency shall return any funds which have not been committed for any authorized purpose by the time of the election to the person or entity advancing the funds; and

WHEREAS, the City and KB HOME Cal Management Services LLC (the "Landowner"), have entered into the Deposit and Reimbursement Agreement, dated as of April 1, 2025 (the "Deposit Agreement"), that provides for the advancement of funds by the Landowner to be used to pay costs incurred in creating the Community Facilities District and the incurrence of bonded indebtedness thereby, and provides for the repayment to the Landowner of such funds advanced, without interest, from the proceeds of any such bonded indebtedness incurred by the Community Facilities District; and

WHEREAS, the City desires to include in this Resolution, in accordance with Section 53314.9 of the Act, the proposal to repay funds pursuant to the Deposit Agreement.

NOW, THEREFORE, BE IT RESOLVED by the City Council of the City of Ontario as follows:

SECTION 1. The foregoing recitals are true and correct, and the City Council so finds and determines.

SECTION 2. The Community Facilities District is hereby established.

SECTION 3. The name for the Community Facilities District is "City of Ontario Community Facilities District No. 76 (Compass Pointe)."

SECTION 4. The public facilities (the "Facilities") proposed to be financed by the Community Facilities District pursuant to the Act are described under the caption "Facilities" on Exhibit A hereto, which is by this reference incorporated herein. Those Facilities proposed to be purchased as completed public facilities are identified under the caption "Facilities to be Purchased" on Exhibit A hereto. The services (the "Services") proposed to be financed by the Community Facilities District pursuant to the Act are described under the caption "Services" on Exhibit A hereto. The incidental expenses proposed to be incurred are identified under the caption "Incidental Expenses" on Exhibit A hereto. All or any portion of the Facilities may be financed through a financing plan, including, but not limited to, a lease, lease-purchase or installment-purchase arrangement.

SECTION 5. The proposed special tax to be levied within the Community Facilities District has not been precluded by majority protest pursuant to Section 53324 of the Act.

SECTION 6. The City Council proposes that, except where funds are otherwise available, the Community Facilities District be authorized to annually levy within the Community Facilities District a special tax (the "Special Tax") sufficient to pay for all Facilities and Services, secured by recordation of a continuing lien against all nonexempt real property in the Community Facilities District. The rate, method of apportionment and manner of collection of the Special Tax in sufficient detail to allow each landowner or resident within the proposed Community Facilities District to estimate the maximum amount that he or she will have to pay, is specified in the Rate and Method of Apportionment of Special Tax (the "Rate and Method") attached hereto as Exhibit B, which is by this reference incorporated herein. The conditions under which the obligation to pay the Special Tax to be levied to pay for Facilities may be prepaid and permanently satisfied are specified in the Rate and Method. The Special Tax will be collected in the same manner as ordinary *ad valorem* property taxes or in such other manner as the City Council shall determine, including direct billing of the affected property owners.

SECTION 7. The Special Tax may only finance the Services to the extent that they are in addition to those provided in the territory of the Community Facilities District before the date the Community Facilities District is created. The Services may not supplant services already available within that territory when the Community Facilities District is created. Bonds of the Community Facilities District may not be issued to fund any of the Services.

SECTION 8. The tax year after which no further Special Tax to pay for Facilities shall be levied against any parcel used for private residential purposes is specified in the Rate and Method. Under no circumstances shall the Special Tax to pay for Facilities in any fiscal year against any parcel used for private residential purposes be increased as a consequence of delinquency or default by the owner or owners of any other parcel or parcels within the Community Facilities District by more than 10% above the amount that would have been levied in that fiscal year had there never been any such delinquencies or defaults. For purposes of this paragraph, a parcel shall be considered "used for private residential purposes" not later than the date on which an occupancy permit for private residential use is issued. The Special Tax to pay for Services will be levied in perpetuity, as provided in the Rate and Method.

SECTION 9. Pursuant to Section 53344.1 of the Act, the City Council hereby reserves to itself the right and authority to allow any interested owner of property within the Community Facilities District, subject to the provisions of said Section 53344.1 and to those conditions as it may impose, and any applicable prepayment penalties as prescribed in the bond indenture or comparable instrument or document, to tender to the Community Facilities District treasurer in full payment or part payment of any installment of the Special Tax or the interest or penalties thereon that may be due or delinquent, but for which a bill has been received, any bond or other obligation secured thereby, the bond or other obligation to be taken at par and credit to be given for the accrued interest shown thereby computed to the date of tender.

SECTION 10. The name, address and telephone number of the office, department or bureau that will be responsible for preparing annually a current roll of Special Tax levy obligations by assessor's parcel number and that will be responsible for estimating further Special Tax levies pursuant to Section 53340.2 of the Act are as follows: City of Ontario, Financial Services Agency, 303 East B Street, Ontario, California 91764, (909) 395-2015 or email CFD@ontarioca.gov.

SECTION 11. Upon recordation of a notice of special tax lien pursuant to Section 3114.5 of the California Streets and Highways Code, a continuing lien to secure each levy of the Special Tax shall attach to all nonexempt real property in the Community Facilities District and this lien shall continue in force and effect until the Special Tax obligation is prepaid, permanently satisfied and canceled in accordance with law or until the Special Tax ceases to be levied and a notice of cessation of the Special Tax is recorded in accordance with Section 53330.5 of the Act.

SECTION 12. The boundary map of the Community Facilities District has been recorded in San Bernardino County in Book 92 at Page 61 of Maps of Assessments and Community Facilities Districts in the San Bernardino County Recorder's Office (Document No. 2025-0225272).

SECTION 13. The City Council proposes that the annual appropriations limit, as defined by subdivision (h) of Section 8 of Article XIII B of the California Constitution, of the Community Facilities District be established at $60,000,000.

SECTION 14. Pursuant to the provisions of the Act, the propositions to authorize the Community Facilities District to levy the Special Tax and to establish the appropriations limit of the Community Facilities District specified above shall be subject to the approval of the qualified electors of the Community Facilities District at a special election. The City Council hereby finds and determines that no persons were registered to vote within the territory of the proposed Community Facilities District as of October 23, 2025, and that 12 or more persons have not been registered to vote within the territory of the Community Facilities District for each of the 90 days preceding the close of the public hearing held by the City Council on the establishment of the Community Facilities District. Accordingly, pursuant to Section 53326 of the Act, the vote shall be by the landowners of the Community Facilities District and each person who is the owner of land as of the close of said public hearing, or the authorized representative thereof, shall have one vote for each acre or portion of an acre that he or she owns within the Community Facilities District not exempt from the Special Tax. The voting procedure shall be by mailed or hand-delivered ballot.

SECTION 15. The Landowner has heretofore advanced certain funds, and may advance additional funds, that have been or may be used to pay costs incurred in creating the Community Facilities District and the incurrence of bonded indebtedness thereby. The City Council has previously approved the acceptance of such funds for the purpose of paying costs incurred in creating the Community Facilities District and the incurrence of bonded indebtedness thereby. The City Council proposes to repay the Landowner all or a portion of such funds so advanced, without interest, solely from the proceeds of any such bonded indebtedness incurred by the Community Facilities District, pursuant to the Deposit Agreement. The Deposit Agreement is hereby incorporated herein as though set forth in full herein.

SECTION 16. The City Council hereby finds and determines that all proceedings, up to and including the adoption of this Resolution, were valid and in conformity with the requirements of the Act. In accordance with Section 53325.1 of the Act, such finding shall be final and conclusive.

SECTION 17. All actions heretofore taken by the officers, employees and agents of the City with respect to the establishment of the Community Facilities District, or in connection with or related to any of the matters referred to herein, are hereby approved, confirmed and ratified.

SECTION 18. The officers, employees and agents of the City are hereby authorized and directed to take all actions and do all things that they, or any of them, may deem necessary or desirable to accomplish the purposes of this Resolution and not inconsistent with the provisions hereof.

SECTION 19. This Resolution shall take effect immediately upon its adoption.

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

PASSED, APPROVED AND ADOPTED this 4th day of November, 2025.

PAUL S. LEON, MAYOR

ATTEST:

SHEILA MAUTZ, CITY CLERK

APPROVED AS TO FORM:

BEST BEST & KRIEGER LLP
CITY ATTORNEY

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

I, SHEILA MAUTZ, City Clerk of the City of Ontario, DO HEREBY CERTIFY that foregoing Resolution No. 2025- was duly passed and adopted by the City Council of the City of Ontario at their regular meeting held November 4, 2025 by the following roll call vote, to wit:

AYES: COUNCIL MEMBERS:

NOES: COUNCIL MEMBERS:

ABSENT: COUNCIL MEMBERS:

_____
SHEILA MAUTZ, CITY CLERK

(SEAL)

The foregoing is the original of Resolution No. 2025- duly passed and adopted by the Ontario City Council at their regular meeting held November 4, 2025.

_____
SHEILA MAUTZ, CITY CLERK

(SEAL)

EXHIBIT A

FACILITIES, SERVICES AND INCIDENTAL EXPENSES

Facilities

The types of public facilities to be financed by the Community Facilities District are street and bridge improvements, including grading, paving, curbs and gutters, sidewalks, street signalization and signage, street lights and parkway and landscaping related thereto, domestic and recycled water distribution facilities, sewer collection facilities, solid waste facilities, storm drainage facilities, park and recreation facilities and equipment, aquatic facilities and equipment, fire facilities and equipment, police facilities and equipment, library facilities and equipment, fiber optic telecommunication, wireless communication and public safety camera facilities and equipment, general governmental office, administrative and meeting facilities, and land, rights-of-way and easements necessary for any of such facilities.

Facilities to be Purchased

The types of public facilities to be purchased as completed facilities are street and bridge improvements, including grading, paving, curbs and gutters, sidewalks, street signalization and signage, street lights and parkway and landscaping related thereto, domestic and recycled water distribution facilities, sewer collection facilities, solid waste facilities, storm drainage facilities, and land, rights-of-way and easements necessary for any of such facilities.

Services

The types of City services to be financed by the Community Facilities District are police protection services, fire protection and suppression services, ambulance and paramedic services, maintenance and lighting of parks, parkways, streets, roads and open space, flood and storm protection services, maintenance and operation of fiber optic telecommunication, wireless communication and public safety camera systems and maintenance and operation of any real property or other tangible property with an estimated useful life of five or more years that is owned by the City.

Incidental Expenses

The incidental expenses proposed to be incurred include the following:

(a) the cost of planning and designing public facilities to be financed, including the cost of environmental evaluations of those facilities;

(b) the costs associated with the creation of the Community Facilities District, issuance of bonds, determination of the amount of taxes, collection of taxes, payment of taxes, or costs otherwise incurred in order to carry out the authorized purposes of the Community Facilities District; and

(c) any other expenses incidental to the construction, completion, and inspection of the authorized work.

EXHIBIT B

RATE AND METHOD OF APPORTIONMENT OF SPECIAL TAX

CITY OF ONTARIO
COMMUNITY FACILITIES DISTRICT NO. 76
(COMPASS POINTE)

RATE AND METHOD OF APPORTIONMENT OF SPECIAL TAX

Special Taxes shall be levied on all Assessor's Parcels in the City of Ontario Community Facilities District No. 76 (Compass Pointe) ("CFD No. 76") and collected each Fiscal Year, commencing in Fiscal Year 2026-27, in an amount determined by the City Council of the City of Ontario through the application of the Rate and Method of Apportionment, as described below. All of the real property in CFD No. 76, unless exempted by law or by the provisions hereof, shall be taxed for the purposes, to the extent, and in the manner herein provided.

A. DEFINITIONS

The terms hereinafter set forth have the following meanings:

"Acre" or **"Acreage"** means the land area of an Assessor's Parcel as shown on an Assessor's Parcel Map, or if the land area is not shown on an Assessor's Parcel Map, the land area shown on the applicable Final Subdivision Map, parcel map, condominium plan, or other recorded County map.

"Act" means the Mello-Roos Community Facilities Act of 1982, as amended, being Chapter 2.5 of Part 1 of Division 2 of Title 5 of the California Government Code.

"Administrative Expenses" means the following actual or reasonably estimated costs directly related to the administration of CFD No. 76: the costs of computing the Special Taxes and preparing the annual Special Tax collection schedules (whether by the City or CFD No. 76 or both); the costs of collecting the Special Taxes (whether by the County or otherwise); the costs of remitting the Special Taxes to the Trustee; the costs of the Trustee (including its legal counsel) in the discharge of the duties required of it under the Indenture; the costs to the City or CFD No. 76 of complying with arbitrage rebate requirements; the costs to the City or CFD No. 76 of complying with City, CFD No. 76, or obligated persons disclosure requirements associated with applicable federal and state securities laws and of the Act; the costs associated with preparing Special Tax disclosure statements and responding to public inquiries regarding the Special Taxes; the costs of the City or CFD No. 76 related to the analysis and reduction, if any, of the Special Tax A on Single Family Property in accordance with Section C.1 herein; the costs of the City or CFD No. 76 related to an appeal of the Special Tax; the costs associated with the release of funds from any escrow account; the City's administration fees and third party expenses; the costs of City staff time and reasonable overhead relating to CFD No. 76; and amounts estimated or advanced by the City or CFD No. 76 for any other administrative purposes of the CFD, including attorney's fees and other costs related to commencing and pursuing to completion any foreclosure of delinquent Special Taxes.

"Assessor's Parcel" means a lot or parcel shown in an Assessor's Parcel Map with an assigned Assessor's Parcel Number.

"Assessor's Parcel Map" means an official map of the Assessor of the County designating parcels by Assessor's Parcel Number.

"Assessor's Parcel Number" means, with respect to an Assessor's Parcel, that number assigned to such Assessor's Parcel by the County for purposes of identification.

"Assigned Special Tax A" means the Special Tax A for each Land Use Class of Developed Property, as determined in accordance with Section C.1.a.2 below.

"Backup Special Tax A" means the Special Tax A for each Land Use Class of Developed Property, as determined in accordance with Section C.1.a.3 below.

"Bonds" means any bonds or other debt (as defined in Section 53317(d) of the Act) issued by CFD No. 76 under the Act and payable from Special Tax A.

"Buildable Lot" means an individual lot, within a Final Subdivision Map or an area expected by CFD No. 76 to become Final Mapped Property, such as the area within a Tentative Tract Map, for which a building permit may be issued without further subdivision of such lot.

"CFD Administrator" means an official of the City responsible for determining the Special Tax A Requirement and Special Tax B Requirement, providing for the levy and collection of the Special Taxes, and performing the other duties provided for herein.

"CFD No. 76" means City of Ontario Community Facilities District No. 76 (Compass Pointe).

"City" means the City of Ontario, California.

"City Council" means the City Council of the City, acting as the legislative body of CFD No. 76.

"Contractual Impositions" means (a) a voluntary contractual assessment established and levied on an Assessor's Parcel pursuant to Chapter 29 of Part 3 of Division 7 of the California Streets and Highways Code (commencing with Section 5898.10 *et seq.*), as amended from time to time, (b) a special tax established and levied on an Assessor's Parcel pursuant to Section 53328.1 of the California Government Code and related provisions of the Act, as amended from time to time, and (c) any other fee, charge, tax, or assessment established and levied on an individual Assessor's Parcel pursuant to a contractual agreement or other voluntary consent by the owner thereof (e.g., property owner association assessments).

"County" means the County of San Bernardino.

"Designated Buildable Lot" means a Buildable Lot for which a building permit has not been issued by the City as of the date of calculation of the Backup Special Tax A.

"Developed Property" means for each Fiscal Year, all Taxable Property, exclusive of Final Mapped Property, Taxable Property Owner Association Property, and Taxable Public Property, for which a building permit or other applicable permit for new construction was issued after January 1, 2025, and before May 1 of the prior Fiscal Year.

"Expected Residential Lot Count" means 154 Buildable Lots or Units of Single Family Attached Property and 196 Buildable Lots of Single Family Detached Property, or, as determined by the CFD Administrator, the number of Buildable Lots or Units of Single Family Property based on the most recent Tentative Tract Map(s) or most recently recorded Final Subdivision Map(s) or modified Final Subdivision Map(s).

"Facilities" means the public facilities authorized to be financed, in whole or in part, by CFD No. 76.

"Final Mapped Property" means, for each Fiscal Year, all Taxable Property, exclusive of Developed Property, Taxable Property Owner Association Property, and Taxable Public Property, which as of January 1 of the previous Fiscal Year was located within a Final Subdivision Map. The term Final Mapped Property shall include any parcel map or Final Subdivision Map, or portion thereof, that creates individual lots for which a building permit may be issued, including Parcels that are designated as a remainder Parcel (i.e., one where the size, location, etc., precludes any further subdivision or taxable use).

"Final Subdivision Map" means a final tract map, parcel map, or lot line adjustment approved by the City pursuant to the Subdivision Map Act (California Government Code Section 66410 et seq.) or a condominium plan recorded pursuant to California Civil Code Section 4285 that, in either case, creates individual lots for which building permits may be issued without further subdivision.

"Fiscal Year" means the period starting July 1 and ending on the following June 30.

"Gated Community Attached Dwelling Unit" means, with respect to Special Tax B, a Unit within any residential building containing two or more dwelling units (including attached condominiums, townhouses, duplexes, triplexes, and apartments) within a gated community that, within such community, is primarily served by private interior streets.

"Indenture" means the indenture, fiscal agent agreement, resolution, or other instrument pursuant to which Bonds are issued, as modified, amended, and/or supplemented from time to time.

"Land Use Class" means any of the classes listed in Tables 1 and 2 below.

"Lower Income Household Welfare Exemption Property" means, for each Fiscal Year, an Assessor's Parcel within the boundaries of CFD No. 76 that is subject to a welfare exemption under subdivision (g) of Section 214 of the California Revenue and

Taxation Code (or any successor statute), as indicated in the most recent County assessor's roll finalized prior to such Fiscal Year.

"Maximum Special Tax A" means, with respect to an Assessor's Parcel of Taxable Property, the Maximum Special Tax A determined in accordance with Section C.1 below that can be levied in any Fiscal Year on such Assessor's Parcel of Taxable Property.

"Maximum Special Tax B" means, with respect to an Assessor's Parcel of Taxable Property, the Maximum Special Tax B determined in accordance with Section C.2 below that can be levied in any Fiscal Year on such Assessor's Parcel of Taxable Property.

"Minimum Sale Price" means the minimum price at which Units of a given Land Use Class have sold or are expected to be sold in a normal marketing environment and shall not include prices for such Units that are sold at a discount to expected sales prices for the purpose of stimulating the initial sales activity with respect to such Land Use Class.

"Multiple Family Dwelling Unit" means, with respect to Special Tax B, a Unit within any residential building containing two or more dwelling units, including attached condominiums, townhomes, duplexes, triplexes, and apartments, but excluding Gated Community Attached Dwelling Units.

"Non-Residential Property" means all Assessor's Parcels of Developed Property for which a building permit was issued by the City permitting the construction of one or more non-residential structures or facilities.

"Other Residential Property" means, with respect to Special Tax A, all Assessor's Parcels of Developed Property for which a building permit was issued by the City for purposes of constructing Units, excluding Single Family Attached Property and Single Family Detached Property.

"Outstanding Bonds" means all Bonds which are outstanding under and in accordance with the provisions of the Indenture.

"Price Point Consultant" means any consultant or firm of such consultants selected by CFD No. 76 that (a) has substantial experience in performing price point studies for residential units within community facilities districts established under the Act or otherwise estimating or confirming pricing for residential units in such community facilities districts, (b) has recognized expertise in analyzing economic and real estate data that relates to the pricing of residential units in such community facilities districts, (c) is in fact independent and not under the control of CFD No. 76 or the City, (d) does not have any substantial interest, direct or indirect, with or in (i) CFD No. 76, (ii) the City, (iii) any owner of real property in CFD No. 76, or (iv) any real property in CFD No. 76, and (e) is not connected with CFD No. 76 or the City as an officer or employee thereof, but who may be regularly retained to make reports to CFD No. 76 or the City.

"Price Point Study" means a price point study or a letter updating a previous price point study prepared by the Price Point Consultant pursuant to Section C herein.

"Property Owner Association Property" means, for each Fiscal Year, any property within the boundaries of CFD No. 76 that was owned by a property owner association, including any master or sub-association, as of January 1 of the prior Fiscal Year.

"Proportionately" means (a) for Developed Property in the first step of Section D.1 below, that the ratio of the actual Special Tax A levy to the Maximum Special Tax A is equal for all Assessor's Parcels of Developed Property; however, for Developed Property in the fourth step of Section D.1 below, Proportionately means that the amount of the increase above the Assigned Special Tax A, if necessary, is equal for all Assessor's Parcels of Developed Property, except that if the Backup Special Tax A limits the increase on any Assessor's Parcel(s), then the amount of the increase shall be equal for the remaining Assessor's Parcels; (b) with respect to Special Tax B, that the ratio of the actual Special Tax B levy to the Maximum Special Tax B is equal for all Assessor's Parcels of Developed Property; (c) for Final Mapped Property, that the ratio of the actual Special Tax A levy to the Maximum Special Tax A is equal for all Assessor's Parcels of Final Mapped Property; (d) for Undeveloped Property, that the ratio of the actual Special Tax A levy to the Maximum Special Tax A is equal for all Assessor's Parcels of Undeveloped Property; (e) for Taxable Property Owner Association Property, that the ratio of the actual Special Tax A levy to the Maximum Special Tax A is equal for all Assessor's Parcels of Taxable Property Owner Association Property; and (f) for Taxable Public Property, that the ratio of the actual Special Tax A levy to the Maximum Special Tax A is equal for all Assessor's Parcels of Taxable Public Property.

"Public Property" means, for each Fiscal Year, property within the boundaries of CFD No. 76 that is (a) owned by, irrevocably offered to, or dedicated to the federal government, the State, the County, the City, or any local government or other public agency or (b) encumbered by an easement for purposes of public or utility right-of-way that makes impractical its use for any purpose other than that set forth in such easement; provided that any property leased by a public agency to a private entity and subject to taxation under Section 53340.1 of the Act shall be taxed and classified according to its use.

"Rate and Method of Apportionment" means this Rate and Method of Apportionment of Special Tax.

"Residential Floor Area" means all of the Square Footage of living area within the perimeter of a Unit, not including any carport, walkway, garage, overhang, patio, enclosed patio, or similar area. The determination of Residential Floor Area shall be as set forth in the building permit(s) issued for such Assessor's Parcel, or as set forth in other official records maintained by the City's Building Department or other appropriate means selected by CFD No. 76. The actual Square Footage shall be rounded up to the next whole square foot. Once such determination has been made for an Assessor's Parcel, it shall remain fixed in all future Fiscal Years unless an appeal pursuant to Section F below is approved that results in a change in the actual Square Footage.

"Residential Property" means, for each Fiscal Year, an Assessor's Parcel for which a building permit for new construction of one or more Units was issued after January 1, 2025, and before May 1 of the prior Fiscal Year.

"Services" means the services authorized to be financed, in whole or in part, by CFD No. 76.

"Single Family Attached Property" means all Assessor's Parcels of Developed Property for which a building permit or use permit was issued for construction of a residential structure consisting of two or more Units that share common walls, have separate Assessor's Parcel Numbers assigned to them (except for a duplex unit, which may share an Assessor's Parcel with another duplex unit), and may be purchased by individual homebuyers (which shall still be the case even if the Units are purchased and subsequently offered for rent by the owner of the Unit), including such residential structures within a condominium project as defined in Civil Code Section 4125.

"Single Family Detached Dwelling Unit" means, with respect to Special Tax B, a Unit of Single Family Detached Property.

"Single Family Detached Property" means all Assessor's Parcels of Developed Property for which a building permit was issued for construction of a Unit, on one legal lot, that does not share a common wall with another Unit.

"Single Family Property" means all Assessor's Parcels of Single Family Attached Property and Single Family Detached Property.

"Special Taxes" means, collectively, Special Tax A and Special Tax B.

"Special Tax A" means the special tax authorized by the qualified electors of CFD No. 76 to be levied within the boundaries of CFD No. 76 to pay for Facilities and Services.

"Special Tax A Requirement" means for any Fiscal Year that amount required, after taking into account available amounts held in the funds and accounts established under the Indenture, for CFD No. 76 to: (i) pay debt service on all Outstanding Bonds which is due in the calendar year that commences in such Fiscal Year; (ii) pay periodic costs on the Bonds, including, but not limited to, credit enhancement and rebate payments on the Bonds; (iii) pay a pro rata share of Administrative Expenses; (iv) provide any amounts required to establish or replenish any reserve fund for the Bonds; (v) pay directly for acquisition or construction of Facilities, or the cost of Services, to the extent that the inclusion of such amounts does not increase the Special Tax A levy on Final Mapped Property or Undeveloped Property; and (vi) provide an amount equal to Special Tax A delinquencies based on the historical delinquency rate for Special Tax A as determined by the CFD Administrator.

"Special Tax B" means the special tax authorized by the qualified electors of CFD No. 76 to be levied within the boundaries of CFD No. 76 to pay for Services.

"Special Tax B Requirement" means for any Fiscal Year that amount required, after taking into account available amounts in any funds and accounts established to pay for Services, to pay the cost of Services, a pro rata share of Administrative Expenses, and an

amount equal to Special Tax B delinquencies based on the historical delinquency rate for Special Tax B as determined by the CFD Administrator.

"Square Footage" or **"Sq. Ft."** means the floor area square footage reflected on the original construction building permit, or as set forth in other official records maintained by the City's Building Department or other appropriate means selected by CFD No. 76, issued for construction of Residential Property or Non-Residential Property, plus any square footage subsequently added to a building of Non-Residential Property after issuance of a building permit for expansion or renovation of such building.

"State" means the State of California.

"Taxable Property" means, for each Fiscal Year, all of the Assessor's Parcels within the boundaries of CFD No. 76 that are not exempt from the Special Taxes pursuant to law or Section E below.

"Taxable Property Owner Association Property" means, for each Fiscal Year, all Assessor's Parcels of Property Owner Association Property that are not exempt from the Special Taxes pursuant to Section E below.

"Taxable Public Property" means, for each Fiscal Year, all Assessor's Parcels of Public Property that are not exempt from the Special Taxes pursuant to law or Section E below.

"Tentative Tract Map" means a map: (i) showing a proposed subdivision of an Assessor's Parcel(s) and the conditions pertaining thereto; (ii) that may or may not be based on a detailed survey; and (iii) that is not recorded by the County to create legal lots.

"Total Tax Burden" means, for a Unit within a Land Use Class, for the Fiscal Year in which the Total Tax Burden is being calculated, the sum of (a) the Assigned Special Tax A for such Land Use Class for such Fiscal Year, plus (b) the Special Tax B for such Land Use Class for such Fiscal Year, plus (c) the *ad valorem* property taxes, special assessments, special taxes for any overlapping community facilities districts, and any other governmental fees, charges (other than fees or charges for services such as sewer and trash), taxes, and assessments (which do not include Contractual Impositions) collected by the County on *ad valorem* tax bills, plus (d) property owner association assessments (but excluding the refuse collection portion of such assessments), and that the CFD Administrator estimates would be levied or imposed on such Unit in such Fiscal Year if the residential dwelling unit thereon or therein had been completed and sold, and was subject to such fees, charges, taxes, and assessments in such Fiscal Year.

"Trustee" means the trustee or fiscal agent under the Indenture.

"TTM 20472" means Tentative Tract Map No. 20472, the area of which is located within CFD No. 76.

"Undeveloped Property" means, for each Fiscal Year, all Taxable Property not classified as Developed Property, Final Mapped Property, Taxable Public Property, or Taxable Property Owner Association Property.

"Unit" means an individual single-family detached or attached home, townhome, condominium, apartment, or other residential dwelling unit, including each separate living area within a half-plex, duplex, triplex, fourplex, or other residential structure.

B. ASSIGNMENT TO LAND USE CATEGORIES

Each Fiscal Year, beginning with Fiscal Year 2026-27, all Taxable Property within CFD No. 76 shall be classified as Developed Property, Final Mapped Property, Taxable Public Property, Taxable Property Owner Association Property, or Undeveloped Property, and shall be subject to Special Taxes in accordance with the Rate and Method of Apportionment as determined pursuant to Sections C and D below.

Assessor's Parcels of Developed Property shall be further classified as: Single Family Property (and further classified as Single Family Attached Property or Single Family Detached Property, as needed) or Other Residential Property (for Special Tax A); Single Family Detached Dwelling Unit, Multiple Family Dwelling Unit, or Gated Community Attached Dwelling Unit (for Special Tax B); or Non-Residential Property. For Special Tax A, Assessor's Parcels of Single Family Attached Property shall be assigned to Land Use Classes 1 through 6, and Single Family Detached Property shall be assigned to Land Use Classes 7 through 13, as listed in Table 1 below based on the Residential Floor Area of the Units on such Assessor's Parcels. Also for Special Tax A, Other Residential Property and Non-Residential Property shall be assigned to Land Use Classes 14 and 15, respectively.

C. MAXIMUM SPECIAL TAX

1. Special Tax A

At least 30 days prior to the issuance of Bonds, the Assigned Special Tax A on Developed Property (set forth in Table 1 below) shall be analyzed in accordance with and subject to the conditions set forth in this Section C. At such time, CFD No. 76 shall select and engage a Price Point Consultant and the CFD Administrator shall request the Price Point Consultant to prepare a Price Point Study setting forth the Minimum Sale Price of Units within each Land Use Class.

If based upon such Price Point Study the CFD Administrator calculates that the Total Tax Burden applicable to Units within one or more Land Use Classes of Single Family Attached Property to be constructed within CFD No. 76 exceeds 2.55% of the Minimum Sale Price of Units of Single Family Attached Property, the Assigned Special Tax A shall be reduced to the extent necessary to cause the Total Tax Burden that shall apply to Units within such Land Use Class(es) not to exceed 2.55% of the Minimum Sale Price of such Units.

In addition, if based upon such Price Point Study the CFD Administrator calculates that the Total Tax Burden applicable to Units within one or more Land Use Classes of Single Family Detached Property to be constructed within CFD No. 76 exceeds 2.15% of the Minimum Sale Price of Units of Single Family Detached Property, the Assigned Special Tax A shall be reduced to the extent necessary to cause the Total Tax Burden that shall apply to Units within such Land Use Class(es) not to exceed 2.15% of the Minimum Sale Price of such Units.

Finally, if based upon such Price Point Study the CFD Administrator calculates that the Total Tax Burden, excluding property owner association assessments, applicable to Units within one or more Land Use Classes of Single Family Property to be constructed within CFD No. 76 exceeds 1.95% of the Minimum Sale Price of such Units, the Assigned Special Tax A shall be reduced to the extent necessary to cause the Total Tax Burden, excluding property owner association assessments, that shall apply to Units within such Land Use Class(es) not to exceed 1.95% of the Minimum Sale Price of such Units.

Each Assigned Special Tax A reduction for a Land Use Class shall be calculated by the CFD Administrator separately, and it shall not be required that such reduction be proportionate among Land Use Classes. In connection with any reduction in the Assigned Special Tax A, the Backup Special Tax A shall also be reduced by the CFD Administrator based on the percentage reduction in Maximum Special Tax A revenues within the Tentative Tract Map area(s) where the Assigned Special Tax A reductions occurred. Upon determining the reductions, if any, in the Assigned Special Tax A and Backup Special Tax A required pursuant to this Section C, the CFD Administrator shall complete the Certificate of Modification of Special Tax substantially in the form attached hereto as Exhibit A (the "Certificate of Modification"), shall execute such completed Certificate of Modification, and shall deliver such executed Certificate of Modification to CFD No. 76. Upon receipt thereof, if in satisfactory form, CFD No. 76 shall execute such Certificate of Modification. The reduced Assigned Special Tax A and Backup Special Tax A specified in such Certificate of Modification shall become effective upon the execution of such Certificate of Modification by CFD No. 76.

The Special Tax A reductions required pursuant to this section shall be reflected in an amended notice of Special Tax lien, which CFD No. 76 shall cause to be recorded with the County Recorder as soon as practicable after execution of the Certificate of Modification by CFD No. 76. The reductions in this section apply to Single Family Property, but not to Other Residential Property or Non-Residential Property.

a. Developed Property

1) *Maximum Special Tax A*

The Maximum Special Tax A that may be levied in any Fiscal Year for each Assessor's Parcel classified as Developed Property shall be the greater of (i) the amount derived by application of the Assigned Special Tax A or (ii) the amount derived by application of the Backup Special Tax A. The Maximum Special Tax A shall not increase in future years, other than as calculated pursuant to Section C.1.a.3 below.

2) *Assigned Special Tax A*

The Assigned Special Tax A that may be levied in any Fiscal Year for each Land Use Class is shown below in Table 1.

TABLE 1
ASSIGNED SPECIAL TAX A – DEVELOPED PROPERTY

Land Use Class	Description	Residential Floor Area (Square Footage)	Assigned Special Tax A
1	Single Family Attached Property	< 1,301	$1,194 per Unit
2	Single Family Attached Property	1,301 – 1,400	$1,623 per Unit
3	Single Family Attached Property	1,401 – 1,500	$1,841 per Unit
4	Single Family Attached Property	1,501 – 1,600	$2,001 per Unit
5	Single Family Attached Property	1,601 – 1,700	$2,379 per Unit
6	Single Family Attached Property	> 1,700	$2,807 per Unit
7	Single Family Detached Property	< 1,951	$3,954 per Unit
8	Single Family Detached Property	1,951 – 2,150	$4,326 per Unit
9	Single Family Detached Property	2,151 – 2,350	$4,916 per Unit
10	Single Family Detached Property	2,351 – 2,550	$5,355 per Unit
11	Single Family Detached Property	2,551 – 2,750	$5,840 per Unit
12	Single Family Detached Property	2,751 – 2,950	$5,981 per Unit
13	Single Family Detached Property	> 2,950	$6,407 per Unit
14	Other Residential Property		$57,987 per Acre
15	Non-Residential Property		$57,987 per Acre

3) Backup Special Tax A

The Backup Special Tax A shall be $2,058 per Unit of Single Family Attached Property and $5,181 per Unit of Single Family

Detached Property. However, if the Expected Residential Lot Count for Single Family Attached Property does not equal 154 and for Single Family Detached Property does not equal 196, and the City has not issued Bonds, then the Backup Special Tax A for Designated Buildable Lots of Single Family Attached Property and Single Family Detached Property shall be calculated according to the following formulas:

Attached	=	$316,904 ÷ Expected Residential Lot Count for Single Family Attached Property
Detached	=	$1,015,455 ÷ Expected Residential Lot Count for Single Family Detached Property

If any portion of a Final Subdivision Map, or any area expected by CFD No. 76 to become Final Mapped Property – such as the area within TTM 20472, or any other Tentative Tract Map – changes any time after the City has issued Bonds, causing an adjustment to the number of Designated Buildable Lots, then the Backup Special Tax A for all Designated Buildable Lots of Single Family Property subject to the change shall be calculated according to the following steps:

Step 1: Determine the total Backup Special Tax A that could have been collected from Designated Buildable Lots of Single Family Attached Property or Single Family Detached Property prior to the Final Subdivision Map or expected Final Mapped Property change.

Step 2: Divide the amount determined in Step 1 by the number of Designated Buildable Lots of Single Family Attached Property or Single Family Detached Property that exists after the Final Subdivision Map or expected Final Mapped Property change.

Step 3: Apply the amount determined in Step 2 as the Backup Special Tax A per Unit for Single Family Attached Property or Single Family Detached Property.

The Backup Special Tax A for an Assessor's Parcel shall not change once an Assessor's Parcel is classified as Developed Property.

b. Final Mapped Property, Taxable Public Property, Taxable Property Owner Association Property, and Undeveloped Property

The Maximum Special Tax A for Final Mapped Property, Taxable Public Property, Taxable Property Owner Association Property, and Undeveloped Property shall be $57,987 per Acre, and shall not be subject to increase or reduction and, therefore, shall remain the same in every Fiscal Year.

2. Special Tax B

The Maximum Special Tax B for each Assessor's Parcel classified as Developed Property shall be determined by reference to Table 2 below.

TABLE 2
MAXIMUM SPECIAL TAX B – DEVELOPED PROPERTY

Land Use Class	Maximum Special Tax B Fiscal Year 2026-27
Residential Property	
Single Family Detached Dwelling Unit	$1,426.38 per Unit
Multiple Family Dwelling Unit	$1,236.46 per Unit
Gated Community Attached Dwelling Unit	$1,036.38 per Unit
Non-Residential Property	$0.260110 per Sq. Ft.

On January 1 of each Fiscal Year, commencing January 1, 2027, the Maximum Special Tax B to be applied in the next Fiscal Year shall be subject to an automatic increase at a rate equal to 4.0% of the amount in effect for the prior Fiscal Year.

3. Multiple Land Use Classes on an Assessor's Parcel

In some instances an Assessor's Parcel of Developed Property may contain more than one Land Use Class. The Maximum Special Tax A levied on such Assessor's Parcel shall be the sum of the Maximum Special Tax A for all Units of Single Family Property and Acres of Other Residential Property and Non-Residential Property (based on the pro rata share of Square Footage between Other Residential Property and Non-Residential Property, according to the applicable building permits, Final Subdivision Map, parcel map, condominium plan, or other recorded County map) located on that Assessor's Parcel. The Maximum Special Tax B levied on such Assessor's Parcel shall be the sum of the Maximum Special Tax B for all Units of Residential Property and all Square

Footage of Non-Residential Property (based on the applicable building permits, Final Subdivision Map, parcel map, condominium plan, or other recorded County map) located on that Assessor's Parcel.

4. Developed Property Special Tax Obligation

Once an Assessor's Parcel has been taxed in any Fiscal Year as Developed Property, the Assessor's Parcel shall continue to be taxed as Developed Property regardless of changes to or expiration of the original building permit, and regardless of revisions to or destruction of the structure that was, or was expected to be, constructed pursuant to the original building permit.

D. METHOD OF APPORTIONMENT OF THE SPECIAL TAX

1. Special Tax A

Each Fiscal Year, beginning with Fiscal Year 2026-27, the CFD Administrator shall determine the Special Tax A Requirement for such Fiscal Year. The Special Tax A shall then be levied as follows:

First: If needed to satisfy the Special Tax A Requirement, Special Tax A shall be levied Proportionately on each Assessor's Parcel of Developed Property up to 100% of the applicable Assigned Special Tax A;

Second: If additional monies are needed to satisfy the Special Tax A Requirement after the first step has been completed, then Special Tax A shall be levied Proportionately on each Assessor's Parcel of Final Mapped Property up to 100% of the Maximum Special Tax A for Final Mapped Property;

Third: If additional monies are needed to satisfy the Special Tax A Requirement after the first two steps have been completed, then Special Tax A shall be levied Proportionately on each Assessor's Parcel of Undeveloped Property up to 100% of the Maximum Special Tax A for Undeveloped Property;

Fourth: If additional monies are needed to satisfy the Special Tax A Requirement after the first three steps have been completed, then the levy of Special Tax A on each Assessor's Parcel of Developed Property whose Maximum Special Tax A is determined through the application of the Backup Special Tax A shall be increased Proportionately from the Assigned Special Tax A up to the Maximum Special Tax A for each such Assessor's Parcel;

Fifth: If additional monies are needed to satisfy the Special Tax A Requirement after the first four steps have been completed, then Special Tax A shall be levied Proportionately on each Assessor's Parcel of Taxable Property Owner Association Property up to the Maximum Special Tax A for Taxable Property Owner Association Property;

Sixth: If additional monies are needed to satisfy the Special Tax A Requirement after the first five steps have been completed, then Special Tax A shall be levied Proportionately

on each Assessor's Parcel of Taxable Public Property up to the Maximum Special Tax A for Taxable Public Property.

Notwithstanding the above, under no circumstances shall Special Tax A levied in any Fiscal Year on any Assessor's Parcel of Single Family Property or Other Residential Property for which an occupancy permit for private residential use has been issued be increased as a result of delinquency or default by the owner or owners of any other Assessor's Parcel or Assessor's Parcels within CFD No. 76 by more than ten percent above the amount that would have been levied in that Fiscal Year had there never been any such delinquencies or defaults.

2. Special Tax B

Each Fiscal Year, beginning with Fiscal Year 2026-27, the CFD Administrator shall determine the Special Tax B Requirement. The Special Tax B shall then be levied Proportionately on each Assessor's Parcel of Developed Property up to 100% of the applicable Maximum Special Tax B for such Assessor's Parcel, until the Special Tax B Requirement is satisfied. However, the Special Tax B levied in any Fiscal Year shall not increase by more than 4.0% of the amount of the Special Tax B levied in the prior Fiscal Year.

E. EXEMPTIONS

No Special Tax shall be levied on up to 10.97 Acres of Public Property and up to 14.55 Acres of Property Owner Association Property. Tax-exempt status will be assigned by the CFD Administrator in the chronological order in which property becomes Public Property or Property Owner Association Property.

Property Owner Association Property or Public Property that is not exempt from the Special Tax A under this section shall be subject to the levy of Special Tax A and shall be taxed Proportionately as part of the fifth or sixth step, respectively, in Section D above, up to 100% of the applicable Maximum Special Tax A for Taxable Property Owner Association Property and Taxable Public Property. No Special Tax A shall be levied in any Fiscal Year on Assessor's Parcels that have fully prepaid the Special Tax A obligation pursuant to the formula set forth in Section H.

No Special Tax shall be levied on Lower Income Household Welfare Exemption Property; provided, however, that if, in any Fiscal Year, applicable law does not require that Lower Income Household Welfare Exemption Property be exempt from some portion, or all, of the Special Tax, such portion, or all, of the Special Tax shall be levied on such property in accordance with this Rate and Method of Apportionment based on the Land Use Class to which the Assessor's Parcel is assigned.

F. APPEALS

Any property owner may file a written appeal of the Special Tax with CFD No. 76 claiming that the amount or application of the Special Tax is not correct. The appeal must be filed not later than one calendar year after having paid the Special Tax that is

disputed, and the appellant must be current in all payments of Special Taxes. In addition, during the term of the appeal process, all Special Taxes levied must be paid on or before the payment date established when the levy was made.

The appeal must specify the reasons why the appellant claims the Special Tax is in error. The CFD Administrator shall review the appeal, meet with the appellant if the CFD Administrator deems necessary, and advise the appellant of its determination.

If the property owner disagrees with the CFD Administrator's decision relative to the appeal, the owner may then file a written appeal with the City Council whose subsequent decision shall be final and binding on all interested parties. If the decision of the CFD Administrator or subsequent decision by the City Council requires the Special Tax to be modified or changed in favor of the property owner, then the CFD Administrator shall determine if sufficient Special Tax revenue is available to make a cash refund. If a cash refund cannot be made, then an adjustment shall be made to credit future Special Tax levy(ies).

This procedure shall be exclusive and its exhaustion by any property owner shall be a condition precedent to filing any legal action by such owner.

G. MANNER OF COLLECTION

The Special Taxes shall be collected in the same manner and at the same time as ordinary *ad valorem* property taxes; provided, however, that the Special Taxes may be collected in such other manner as the City Council shall determine, including direct billing of affected property owners.

H. PREPAYMENT OF SPECIAL TAX A

The following definitions apply to this Section H:

"CFD Public Facilities" means $16,638,000 for each Prepayment Period, or such lower number as determined by the City Council to be sufficient to fund the Facilities and Services to be provided by CFD No. 76.

"Expenditures Fund" means funds or accounts, regardless of their names, that are established to hold moneys that are available to acquire or construct Facilities and to fund Services.

"Future Facilities Costs" means the CFD Public Facilities minus (i) Facilities and Services costs previously paid from the Expenditures Fund during the Prepayment Period in which the prepayment is being made, (ii) moneys currently on deposit in the Expenditures Fund from deposits made during the Prepayment Period in which the prepayment is being made, and (iii) moneys currently on deposit in an escrow fund that are expected to be available to finance Facilities costs. In no event shall the amount of Future Facilities Costs be less than zero.

"Prepayment Period" means one of three periods of time during which a Special Tax prepayment may be made.

"Prepayment Period 1" means July 1, 2026, through June 30, 2060.

"Prepayment Period 2" means July 1, 2060, through June 30, 2093.

"Prepayment Period 3" means July 1, 2093, through June 30, 2127.

Only Special Tax A may be prepaid; Special Tax B shall continue to be levied on an annual basis on all Developed Property in CFD No. 76.

1. Prepayment in Full

The obligation of an Assessor's Parcel to pay the Special Tax A may be prepaid as described herein, provided that a prepayment may be made only for Assessor's Parcels for which a building permit for new construction was issued after January 1, 2025, and only if there are no delinquent Special Taxes with respect to such Assessor's Parcel at the time of prepayment. An owner of an Assessor's Parcel intending to prepay the Special Tax A obligation shall provide the CFD Administrator with written notice of intent to prepay. Within 30 days of receipt of such written notice, the CFD Administrator shall notify such owner of the prepayment amount for such Assessor's Parcel. The CFD Administrator may charge a fee for providing this service. Prepayment in any six month period must be made not less than 45 days prior to the next occurring date that notice of redemption of Bonds from the proceeds of such prepayment may be given to the Trustee pursuant to the Indenture.

The Special Tax A Prepayment Amount (defined below) shall be calculated as summarized below (capitalized terms as defined below):

Bond Redemption Amount	
plus	Redemption Premium
plus	Future Facilities Amount
plus	Defeasance Amount
plus	Administrative Fees and Expenses
less	Reserve Fund Credit
Total	Prepayment Amount

As of the proposed date of prepayment, the Special Tax A Prepayment Amount (defined below) shall be calculated by the CFD Administrator as follows:

Paragraph No.

1. Confirm that no Special Tax delinquencies apply to such Assessor's Parcel, and determine the Prepayment Period for the proposed prepayment.

2. Compute the Assigned Special Tax A and Backup Special Tax A for the Assessor's Parcel to be prepaid based on the Developed Property Special Tax A which is, or could be, charged in the current Fiscal Year. For Assessor's Parcels of Final Mapped Property (for which a building permit has been issued but which is not yet classified as Developed Property) to be prepaid, compute the Assigned Special Tax A and Backup Special Tax A for that Assessor's Parcel as though it was already designated as Developed Property, based upon the building permit which has already been issued for that Assessor's Parcel.

3. (a) Divide the Assigned Special Tax A computed pursuant to Paragraph 2 by the total estimated Assigned Special Tax A for CFD No. 76 based on the Developed Property Special Tax A which could be charged in the current Fiscal Year on all expected development through buildout of CFD No. 76, excluding any Assessor's Parcels which have been prepaid, and

   (b) Divide the Backup Special Tax A computed pursuant to Paragraph 2 by the estimated total Backup Special Tax A at buildout of CFD No. 76, excluding any Assessor's Parcels which have been prepaid.

4. Multiply the larger quotient computed pursuant to Paragraph 3(a) or 3(b) by the Outstanding Bonds to compute the amount of Outstanding Bonds to be retired and prepaid (the "Bond Redemption Amount").

5. Multiply the Bond Redemption Amount computed pursuant to Paragraph 4 by the applicable redemption premium (e.g., the redemption price minus 100%), if any, on the Outstanding Bonds to be redeemed (the "Redemption Premium").

6. Compute the Future Facilities Costs for the applicable Prepayment Period.

7. Multiply the larger quotient computed pursuant to Paragraph 3(a) or 3(b) by the amount determined pursuant to Paragraph 6 to compute the amount of Future Facilities Costs to be prepaid (the "Future Facilities Amount").

8. Compute the amount needed to pay interest on the Bond Redemption Amount from the first bond interest and/or principal payment date following the current Fiscal Year until the earliest redemption date for the Outstanding Bonds.

9. Determine the Special Tax A levied on the Assessor's Parcel in the current Fiscal Year which has not yet been paid.

10. Add the amounts computed pursuant to Paragraphs 8 and 9 to determine the "Defeasance Amount".

11. Verify the administrative fees and expenses of CFD No. 76, including the costs to compute the prepayment, the costs to invest the prepayment proceeds, the costs to redeem Bonds, and the costs to record any notices to evidence the prepayment and the redemption (the "Administrative Fees and Expenses").

12. If reserve funds for the Outstanding Bonds, if any, are at or above 100% of the reserve requirement (as defined in the Indenture) on the prepayment date, a reserve fund credit shall be calculated as a reduction in the applicable reserve fund for the Outstanding Bonds to be redeemed pursuant to the prepayment (the "Reserve Fund Credit"). No Reserve Fund Credit shall be granted if reserve funds are below 100% of the reserve requirement on the prepayment date or the redemption date.

13. The Special Tax A prepayment is equal to the sum of the amounts computed pursuant to Paragraphs 4, 5, 7, 10, and 11, less the amount computed pursuant to Paragraph 12 (the "Prepayment Amount").

14. From the Prepayment Amount, the amounts computed pursuant to Paragraphs 4, 5, 10, and 12 shall be deposited into the appropriate fund as established under the Indenture and be used to retire Outstanding Bonds or make debt service payments. The amount computed pursuant to Paragraph 7 shall be deposited into the Expenditures Fund. The amount computed pursuant to Paragraph 11 shall be retained by CFD No. 76.

The Special Tax A Prepayment Amount may be sufficient to redeem other than a $5,000 increment of Bonds. In such cases, the increment above $5,000, or integral multiple thereof, will be retained in the appropriate fund established under the Indenture to be used with the next prepayment of Bonds or to make debt service payments.

As a result of the payment of the current Fiscal Year's Special Tax A levy as determined under Paragraph 9 (above), the CFD Administrator shall remove the current Fiscal Year's Special Tax A levy for such Assessor's Parcel from the County tax rolls. With respect to any Assessor's Parcel that is prepaid during Prepayment Period 3, the CFD Administrator shall cause a suitable notice to be recorded in compliance with the Act to indicate that Special Tax A has been prepaid and that the obligation of such Assessor's Parcel to pay Special Tax A shall cease.

With respect to Special Tax A for any Assessor's Parcel that is prepaid during Prepayment Period 1 or Prepayment Period 2, the obligation of such Assessor's Parcel to pay Special Tax A shall be tolled, or suspended, through the end of such Prepayment Period, but shall resume in the first Fiscal Year of the subsequent Prepayment Period. The CFD Administrator shall cause a suitable notice to be recorded in compliance with the Act to indicate that Special Tax A has been satisfied for the remainder of the applicable Prepayment Period but has not been permanently satisfied and the obligation to pay Special Tax A will resume in the first Fiscal Year of the Prepayment Period following the Prepayment Period in which the prepayment was made. Once the obligation of an Assessor's Parcel to pay Special Tax A resumes, Special Tax A for the then applicable Prepayment Period may be prepaid.

Notwithstanding the foregoing, no Special Tax A prepayment shall be allowed unless the amount of Maximum Special Tax A that may be levied on Taxable Property within CFD No. 76 (after excluding 10.97 Acres of Public Property and 14.55 Acres of Property Owner Association Property) both prior to and after the proposed prepayment is at least 1.1 times the maximum annual debt service on all Outstanding Bonds.

2. Prepayment in Part

The Special Tax A on an Assessor's Parcel for which a building permit for new construction was issued after January 1, 2025, may be partially prepaid. The amount of the prepayment shall be calculated as in Section H.1, except that a partial prepayment shall be calculated by the CFD Administrator according to the following formula:

$$PP = (PF - AE) \times \% + AE.$$

The terms above have the following meaning:

PP = the partial prepayment
PF = the Prepayment Amount (full prepayment) for Special Tax A calculated according to Section H.1
AE = the Administrative Fees and Expenses determined pursuant to paragraph 11 above
% = the percentage by which the owner of the Assessor's Parcel(s) is partially prepaying Special Tax A

The Special Tax A partial prepayment amount must be sufficient to redeem at least a $5,000 increment of Bonds.

The owner of any Assessor's Parcel who desires such prepayment shall notify the CFD Administrator of such owner's intent to partially prepay Special Tax A and the percentage by which Special Tax A shall be prepaid. The CFD Administrator shall provide the owner with a statement of the amount required for the partial prepayment of Special Tax A for an Assessor's Parcel within thirty (30) days of the request and may charge a fee for providing this service. With respect to any Assessor's Parcel that is partially prepaid, the CFD Administrator shall (i) distribute the remitted prepayment funds according to Section H.1, and (ii) indicate in the records of CFD No. 76 that there has been a partial prepayment of Special Tax A and that a portion of Special Tax A with respect to such Assessor's Parcel, equal to the outstanding percentage (100% - "%", as defined above) of the Maximum Special Tax A, shall continue to be levied on such Assessor's Parcel pursuant to Section D during the Prepayment Period in which the partial prepayment is made.

For partial prepayments made during Prepayment Period 1 or Prepayment Period 2, the full amount of Special Tax A shall resume in the first Fiscal Year of the Prepayment Period following the Prepayment Period in which the partial prepayment was made. Once the obligation of an Assessor's Parcel to pay Special Tax A resumes, Special Tax A for the then applicable Prepayment Period may be prepaid.

I. TERM OF SPECIAL TAX

The Fiscal Year after which no further Special Tax A shall be levied or collected is Fiscal Year 2126-2127, except that Special Tax A that was lawfully levied in or before such Fiscal Year and that remains delinquent may be collected in subsequent years. Special Tax B shall continue to be levied indefinitely on an annual basis on all Developed Property in CFD No. 76.

EXHIBIT A

CERTIFICATE OF MODIFICATION OF SPECIAL TAX A
(PAGE 1 OF 3)

CITY OF ONTARIO AND CFD NO. 76 CERTIFICATE

1. Pursuant to Section C.1 of the Rate and Method of Apportionment of Special Tax (the "Rate and Method") for City of Ontario Community Facilities District No. 76 (Compass Pointe) ("CFD No. 76"), the Assigned Special Tax A and the Backup Special Tax A for Developed Property within CFD No. 76 has been modified.

    a. The information in Table 1 below relating to Assigned Special Tax A for Developed Property within CFD No. 76, as stated in Section C.1.a.2 of the Rate and Method of Apportionment, has been modified as follows:

TABLE 1
ASSIGNED SPECIAL TAX A – DEVELOPED PROPERTY

Land Use Class	Description	Residential Floor Area (Square Footage)	Assigned Special Tax A
1	Single Family Attached Property	< 1,301	$[ ] per Unit
2	Single Family Attached Property	1,301 – 1,400	$[ ] per Unit
3	Single Family Attached Property	1,401 – 1,500	$[ ] per Unit
4	Single Family Attached Property	1,501 – 1,600	$[ ] per Unit
5	Single Family Attached Property	1,601 – 1,700	$[ ] per Unit
6	Single Family Attached Property	> 1,700	$[ ] per Unit
7	Single Family Detached Property	< 1,951	$[ ] per Unit
8	Single Family Detached Property	1,951 – 2,150	$[ ] per Unit
9	Single Family Detached Property	2,151 – 2,350	$[ ] per Unit
10	Single Family Detached Property	2,351 – 2,550	$[ ] per Unit
11	Single Family Detached Property	2,551 – 2,750	$[ ] per Unit
12	Single Family Detached Property	2,751 – 2,950	$[ ] per Unit
13	Single Family Detached Property	> 2,950	$[ ] per Unit
14	Other Residential Property		$[ ] per Acre
15	Non-Residential Property		$[ ] per Acre

EXHIBIT A

CERTIFICATE OF MODIFICATION OF SPECIAL TAX A
(PAGE 2 OF 3)

b. The Backup Special Tax for Developed Property, as stated in Section C.1.a.3, shall be modified as follows:

The Backup Special Tax A shall be $[ ] per Unit of Single Family Attached Property and $[ ] per Unit of Single Family Detached Property. However, if the Expected Residential Lot Count for Single Family Attached Property does not equal 154 and for Single Family Detached Property does not equal 196, and the City has not issued Bonds, then the Backup Special Tax A for Designated Buildable Lots of Single Family Attached Property and Single Family Detached Property shall be calculated according to the following formulas:

Attached = $[ ] ÷ Expected Residential Lot Count for Single Family Attached Property

Detached = $[ ] ÷ Expected Residential Lot Count for Single Family Detached Property

2. The Special Tax A for Developed Property may only be modified prior to the first issuance of CFD No. 76 Bonds.

3. Upon execution of this certificate by CFD No. 76, CFD No. 76 shall cause an amended notice of Special Tax lien for CFD No. 76 to be recorded reflecting the modifications set forth herein.

EXHIBIT A

CERTIFICATE OF MODIFICATION OF SPECIAL TAX A
(PAGE 3 OF 3)

Capitalized undefined terms used herein have the meanings ascribed thereto in the Rate and Method. The modifications set forth in this Certificate have been calculated by the CFD Administrator in accordance with the Rate and Method.

GOODWIN CONSULTING GROUP, INC.
CFD ADMINISTRATOR

By:_____ Date:_____

The undersigned acknowledges receipt of this Certificate and of the modification of the Assigned Special Tax A and Backup Special Tax A for Developed Property as set forth in this Certificate.

CITY OF ONTARIO
COMMUNITY FACILITIES DISTRICT NO. 76
(COMPASS POINTE)

By:_____ Date:_____

RESOLUTION NO. _____

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF ONTARIO, CALIFORNIA, DEEMING IT NECESSARY FOR CITY OF ONTARIO COMMUNITY FACILITIES DISTRICT NO. 76 (COMPASS POINTE) TO INCUR BONDED INDEBTEDNESS.

WHEREAS, on September 16, 2025, the City Council (the "City Council") of the City of Ontario (the "City"), pursuant to the Mello-Roos Community Facilities Act of 1982 (the "Act"), adopted a resolution entitled "A Resolution of the City Council of the City of Ontario, California, of Intention to Establish a Community Facilities District Proposed to be Named City of Ontario Community Facilities District No. 76 (Compass Pointe) and to Authorize the Levy of a Special Tax Therein," stating its intention to establish City of Ontario Community Facilities District No. 76 (Compass Pointe) (the "Community Facilities District") and to authorize the Community Facilities District to levy a special tax (the "Special Tax") within the Community Facilities District for the purpose of financing certain public facilities (the "Facilities") and services; and

WHEREAS, on September 16, 2025, the City Council also adopted a resolution entitled "A Resolution of the City Council of the City of Ontario, California, Declaring it Necessary for City of Ontario Community Facilities District No. 76 (Compass Pointe) to Incur Bonded Indebtedness" (the "Resolution Declaring Necessity"), declaring it necessary for the Community Facilities District to incur bonded indebtedness and setting the date for a public hearing to be held on the proposed debt authorization; and

WHEREAS, pursuant to the Resolution Declaring Necessity, notice of said public hearing was published in the Inland Valley Daily Bulletin, a newspaper of general circulation published in the area of the Community Facilities District, in accordance with the Act; and

WHEREAS, on this date, the City Council opened, conducted and closed said public hearing; and

WHEREAS, at said public hearing, any person interested, including persons owning property within the area and desiring to appear and present any matters material to the questions set forth in the Resolution Declaring Necessity appeared and presented such matters; and

WHEREAS, oral or written protests against the proposed debt issue were not made or filed at or before said public hearing by 50% or more of the registered voters, or six registered voters, whichever is more, residing within the territory proposed to be included in the Community Facilities District, or the owners of one-half or more of the area of land in the territory proposed to be included in the Community Facilities District and not exempt from the Special Tax; and

WHEREAS, the City Council deems it necessary for the Community Facilities District to incur bonded indebtedness; and

WHEREAS, on this date, the City Council adopted a resolution entitled "A Resolution of the City Council of the City of Ontario, California, of Formation of City of Ontario Community Facilities District No. 76 (Compass Pointe), Proposing that the Community Facilities District Be Authorized to Levy a Special Tax and Proposing that an Appropriations Limit of the Community Facilities District Be Established;" and

WHEREAS, the City Clerk of the City (the "City Clerk") is the election official that will conduct the special election on the proposition to authorize the Community Facilities District to incur bonded indebtedness; and

WHEREAS, there has been filed with the City Clerk a letter from the Registrar of Voters of the County of San Bernardino indicating that no persons were registered to vote within the territory of the Community Facilities District as of October 23, 2025, which demonstrates that 12 or more persons have not been registered to vote within the territory of the Community Facilities District for each of the 90 days preceding the close of said public hearing; and

WHEREAS, there has been filed with the City Clerk consents and waivers of all of the landowners of record in the Community Facilities District consenting to the waiver of, and waiving, any time limit specified by Section 53326 of the Act and any requirement pertaining to the conduct of said special election, including any time limit or requirement applicable to an election pursuant to Article 5 of the Act (commencing with Section 53345 of the Act), consenting to the holding of said special election on November 4, 2025, and consenting to the waiver of, and waiving, any impartial analysis, arguments or rebuttals, as set forth in Sections 53326 and 53327 of the Act; and

WHEREAS, the City Clerk has concurred in said waivers and has concurred in holding said special election on November 4, 2025.

NOW, THEREFORE, BE IT RESOLVED by the City Council of the City of Ontario as follows:

SECTION 1. The foregoing recitals are true and correct, and the City Council so finds and determines.

SECTION 2. The City Council deems it necessary for the Community Facilities District to incur the bonded indebtedness.

SECTION 3. The bonded indebtedness will be incurred for the purpose of financing the costs of the Facilities, including all costs and estimated costs incidental to, or connected with, the accomplishment of said purpose, including, but not limited to, such costs and estimated costs as are described in Section 53345.3 of the Act.

SECTION 4. In accordance with the previous determination of the City Council, the whole of the Community Facilities District will pay for the bonded indebtedness.

SECTION 5. The maximum amount of debt to be incurred is $60,000,000.

SECTION 6. The maximum term the bonds to be issued shall run before maturity is 40 years.

SECTION 7. The maximum annual rate of interest to be paid shall not exceed the maximum interest rate permitted by applicable law at the time of sale of the bonds, payable semiannually or at such times as the City Council or its designee shall determine, the actual rate or rates and times of payment of such interest to be determined by the City Council or its designee at the time or times of sale of the bonds.

SECTION 8. The proposition to authorize the Community Facilities District to incur the bonded indebtedness shall be submitted to the qualified electors of the Community Facilities District.

SECTION 9. The City Council hereby finds and determines that no persons were registered to vote within the territory of the Community Facilities District as of October 23, 2025, and that 12 or more persons have not been registered to vote within the territory of the Community Facilities District for each of the 90 days preceding the close of the public hearing held by the City Council on the proposed debt issue for the Community Facilities District. Accordingly, pursuant to Section 53326 of the Act, the vote shall be by the landowners of the Community Facilities District and each person who is the owner of land as of the close of said public hearing, or the authorized representative thereof, shall have one vote for each acre or portion of an acre that he or she owns within the Community Facilities District not exempt from the Special Tax.

SECTION 10. The City Council hereby finds and determines that the qualified electors of the Community Facilities District have (a) unanimously consented to the waiver of, and have waived, any time limit specified by Section 53326 of the Act and any requirement pertaining to the conduct of said election, including any time limit or requirement applicable to an election pursuant to Article 5 of the Act (commencing with Section 53345 of the Act), (b) unanimously consented to the holding of said election on November 4, 2025, and (c) unanimously consented to the waiver of, and have waived, any impartial analysis, arguments or rebuttals, as set forth in Sections 53326 and 53327 of the Act. The City Council hereby finds and determines that the City Clerk has concurred in said waivers and has concurred in holding said election on November 4, 2025.

SECTION 11. The date of the special community facilities district election (which shall be consolidated with the special district election to authorize the Community Facilities District to levy the Special Tax) at which time the proposition to authorize the Community Facilities District to incur the bonded indebtedness shall be submitted to the voters is November 4, 2025.

SECTION 12. As authorized by Section 53353.5 of the Act, the propositions to authorize the Community Facilities District to incur such bonded indebtedness, to authorize the Community Facilities to levy the Special Tax and to establish an appropriations limit of the Community Facilities District shall be combined into one ballot proposition.

SECTION 13. Pursuant to Section 53326 of the Act, the election shall be conducted by mail or hand-delivered ballot. The voted ballots are required to be received in the office of the City Clerk no later than 7:30 p.m. on November 4, 2025; provided, however, that if all of the qualified electors have voted prior to such time, the election may be closed with the concurrence of the City Clerk.

SECTION 14. All actions heretofore taken by the officers, employees and agents of the City with respect to the incurrence of bonded indebtedness by the Community Facilities District, or in connection with or related to any of the matters referred to herein, are hereby approved, confirmed and ratified.

SECTION 15. The officers, employees and agents of the City are hereby authorized and directed to take all actions and do all things that they, or any of them, may deem necessary or desirable to accomplish the purposes of this Resolution and not inconsistent with the provisions hereof.

SECTION 16. This Resolution shall take effect immediately upon its adoption.

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

PASSED, APPROVED, AND ADOPTED this 4th day of November 2025.

_____
PAUL S. LEON, MAYOR

ATTEST:

_____
SHEILA MAUTZ, CITY CLERK

APPROVED AS TO FORM:

_____
BEST BEST & KRIEGER LLP
CITY ATTORNEY

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

I, SHEILA MAUTZ, City Clerk of the City of Ontario, DO HEREBY CERTIFY that foregoing Resolution No. 2025- was duly passed and adopted by the City Council of the City of Ontario at their regular meeting held November 4, 2025 by the following roll call vote, to wit:

AYES: COUNCIL MEMBERS:

NOES: COUNCIL MEMBERS:

ABSENT: COUNCIL MEMBERS:

_____
SHEILA MAUTZ, CITY CLERK

(SEAL)

The foregoing is the original of Resolution No. 2025- duly passed and adopted by the Ontario City Council at their regular meeting held November 4, 2025.

_____
SHEILA MAUTZ, CITY CLERK

(SEAL)

RESOLUTION NO. _____

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF ONTARIO, CALIFORNIA, CALLING SPECIAL ELECTION FOR CITY OF ONTARIO COMMUNITY FACILITIES DISTRICT NO. 76 (COMPASS POINTE).

WHEREAS, on this date, the City Council (the "City Council") of the City of Ontario (the "City"), pursuant to the Mello-Roos Community Facilities Act of 1982 (the "Act"), adopted a resolution entitled "A Resolution of the City Council of the City of Ontario, California, of Formation of City of Ontario Community Facilities District No. 76 (Compass Pointe), Proposing that the Community Facilities District be Authorized to Levy a Special Tax and Proposing that an Appropriations Limit of the Community Facilities District Be Established" (the "Resolution of Formation"), establishing City of Ontario Community Facilities District No. 76 (Compass Pointe) (the "Community Facilities District"), proposing that the Community Facilities District be authorized to levy a special tax (the "Special Tax") within the Community Facilities District for the purpose of financing certain public facilities (the "Facilities") and services and proposing that an appropriations limit of the Community Facilities District be established at $60,000,000; and

WHEREAS, on this date, the City Council also adopted a resolution entitled "A Resolution of the City Council of the City of Ontario, California, Deeming it Necessary for City of Ontario Community Facilities District No. 76 (Compass Pointe) to Incur Bonded Indebtedness" (the "Resolution Deeming Necessity"), deeming it necessary for the Community Facilities District to incur bonded indebtedness in a maximum amount of $60,000,000; and

WHEREAS, pursuant to the provisions of the Act and said resolutions, the propositions to authorize the Community Facilities District to incur such bonded indebtedness, to authorize the Community Facilities District to levy the Special Tax and to establish such appropriations limit of the Community Facilities District are to be submitted to the qualified electors of the Community Facilities District at a special election; and

WHEREAS, the City Council desires to designate the City Clerk of the City (the "City Clerk") as the election official for such special election; and

WHEREAS, there has been filed with the City Clerk a letter from the Registrar of Voters of the County of San Bernardino indicating that no persons were registered to vote within the territory of the Community Facilities District as of October 23, 2025, which demonstrates that 12 or more persons have not been registered to vote within the territory of the Community Facilities District for each of the 90 days preceding the close of the public hearings on the establishment of the Community Facilities District and the proposed debt issue for the Community Facilities District; and

WHEREAS, there has been filed with the City Clerk consents and waivers of all of the landowners of record in the Community Facilities District consenting to the waiver of, and waiving, any time limit specified by Section 53326 of the Act and any requirement pertaining to the conduct of said special election, including any time limit or requirement

applicable to an election pursuant to Article 5 of the Act (commencing with Section 53345 of the Act), consenting to the holding of said special election on November 4, 2025 and consenting to the waiver of, and waiving, any impartial analysis, arguments or rebuttals, as set forth in Sections 53326 and 53327 of the Act; and

WHEREAS, the City Clerk has concurred in said waivers and has concurred in holding said special election on November 4, 2025.

NOW, THEREFORE, BE IT RESOLVED by the City Council of the City of Ontario as follows:

SECTION 1. The foregoing recitals are true and correct, and the City Council so finds and determines.

SECTION 2. Pursuant to Sections 53351, 53326 and 53325.7 of the Act, the propositions to authorize the Community Facilities District to incur bonded indebtedness, to authorize the Community Facilities District to levy the Special Tax and to establish the appropriations limit of the Community Facilities District shall be submitted to the qualified electors of the Community Facilities District at an election called therefor as provided below.

SECTION 3. The City Clerk is hereby designated as the official to conduct said election.

SECTION 4. As authorized by Section 53353.5 of the Act, the propositions to authorize the Community Facilities District to incur such bonded indebtedness, to authorize the Community Facilities District to levy the Special Tax and to establish such appropriations limit of the Community Facilities District shall be combined into one ballot proposition.

SECTION 5. The City Council hereby finds and determines that no persons were registered to vote within the territory of the Community Facilities District as of October 23, 2025, and that 12 or more persons have not been registered to vote within the territory of the Community Facilities District for each of the 90 days preceding the close of the public hearings heretofore held by the City Council on the establishment of the Community Facilities District and the proposed debt issue for the Community Facilities District. Accordingly, pursuant to Section 53326 of the Act, the vote shall be by the landowners of the Community Facilities District and each person who is the owner of land as of the close of said public hearings, or the authorized representative thereof, shall have one vote for each acre or portion of an acre that he or she owns within the Community Facilities District not exempt from the Special Tax.

SECTION 6. The City Council hereby finds and determines that the qualified electors of the Community Facilities District have (a) unanimously consented to the waiver of, and have waived, any time limit specified by Section 53326 of the Act and any requirement pertaining to the conduct of said election, including any time limit or requirement applicable to an election pursuant to Article 5 of the Act (commencing with Section 53345 of the Act), (b) unanimously consented to the holding of said election on November 4, 2025, and (c) unanimously consented to the waiver of, and have waived,

any impartial analysis, arguments or rebuttals, as set forth in Sections 53326 and 53327 of the Act. The City Council hereby finds and determines that the City Clerk has concurred in said waivers and has concurred in holding said election on November 4, 2025.

SECTION 7. The City Council hereby calls a special election to submit to the qualified electors of the Community Facilities District the combined ballot proposition to authorize the Community Facilities District to incur bonded indebtedness in a maximum amount of $60,000,000, to authorize the Community Facilities to levy the Special Tax and to establish the appropriations limit of the Community Facilities District at $60,000,000, which election shall be held at 303 East B Street, Ontario, California, on November 4, 2025. The City Council has caused to be provided to the City Clerk, as the official to conduct the election, the Resolution of Formation, the Resolution Deeming Necessity, a certified map of sufficient scale and clarity to show the boundaries of the Community Facilities District and a sufficient description to allow the City Clerk to determine the boundaries of the Community Facilities District.

The voted ballots shall be returned to the City Clerk not later than 7:30 p.m. on November 4, 2025; provided, however, that if all of the qualified electors have voted prior to such time, the election may be closed with the concurrence of the City Clerk.

SECTION 8. Pursuant to Section 53326 of the Act, the election shall be conducted by mail or hand-delivered ballot pursuant to Section 4000 *et. seq.* of the California Elections Code. Except as otherwise provided in the Act, the provisions of law regulating elections of the City, insofar as they may be applicable, shall govern the election.

SECTION 9. The form of the ballot for the election, which sets forth the measure to be submitted to the voters, is attached hereto as Exhibit A and by this reference incorporated herein, and such form of ballot is hereby approved. The City Clerk shall cause to be delivered to each of the qualified electors of the Community Facilities District a ballot in said form, together with all supplies and written instructions necessary for the use and return of the ballot. The number of votes to be voted by a particular landowner shall be specified on the ballot provided to that landowner.

The identification envelope for return of a ballot shall be enclosed with such ballot, shall have the return postage prepaid, and shall contain: (a) the name and address of the landowner, (b) a declaration, under penalty of perjury, stating that the voter is the owner of record or the authorized representative of the landowner entitled to vote and is the person whose name appears on the identification envelope, (c) the printed name and signature of the voter, (d) the date of signing and place of execution of the declaration described in clause (b) above, and (e) a notice that the envelope contains an official ballot and is to be opened only by the canvassing board.

Analysis and arguments with respect to the measure submitted to the voters are hereby waived, as provided in Section 53327 of the Act.

SECTION 10. The City Clerk shall accept the ballots of the qualified electors in the office of the City Clerk at 303 East B Street, Ontario, California, to and including 7:30 p.m. on November 4, 2025, whether said ballots be personally delivered or received by mail. The City Clerk shall have available ballots that may be marked at said location on the election day by said qualified electors.

SECTION 11. The City Council hereby determines that the facilities and services financed by the Community Facilities District are necessary to meet increased demands placed upon local agencies as a result of development occurring in the Community Facilities District.

SECTION 12. The specific purpose of the bonded indebtedness that the Community Facilities District is proposed to be authorized to incur is the financing of the Facilities, including all costs and estimated costs incidental to, or connected with, the accomplishment of such purpose, and the proceeds of such bonded indebtedness shall be applied only to such specific purpose.

Upon approval of the proposition to authorize the Community Facilities District to incur bonded indebtedness, and the sale of any bonds evidencing such indebtedness, the City Council shall take such action as may be necessary to cause to be established an account for deposit of the proceeds of sale of the bonds. For so long as any proceeds of the bonds remain unexpended, the Executive Director of Finance of the City shall cause to be filed with the City Council, no later than January 1 of each year, a report stating (a) the amount of bond proceeds received and expended during the preceding year, and (b) the status of any project funded or to be funded from bond proceeds. Said report may relate to the calendar year, fiscal year, or other appropriate annual period, as the Executive Director of Finance of the City shall determine, and may be incorporated into the annual budget, audit, or other appropriate routine report to the City Council.

SECTION 13. All actions heretofore taken by the officers, employees and agents of the City with respect to the special election called pursuant hereto, or in connection with or related to any of the matters referred to herein, are hereby approved, confirmed and ratified.

SECTION 14. The officers, employees and agents of the City are hereby authorized and directed to take all actions and do all things that they, or any of them, may deem necessary or desirable to accomplish the purposes of this Resolution and not inconsistent with the provisions hereof.

SECTION 15. This Resolution shall take effect immediately upon its adoption.

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

PASSED, APPROVED, AND ADOPTED this 4th day of November 2025.

_____
PAUL S. LEON, MAYOR

ATTEST:

_____
SHEILA MAUTZ, CITY CLERK

APPROVED AS TO FORM:

_____
BEST BEST & KRIEGER LLP
CITY ATTORNEY

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

I, SHEILA MAUTZ, City Clerk of the City of Ontario, DO HEREBY CERTIFY that foregoing Resolution No. 2025- was duly passed and adopted by the City Council of the City of Ontario at their regular meeting held November 4, 2025 by the following roll call vote, to wit:

AYES: COUNCIL MEMBERS:

NOES: COUNCIL MEMBERS:

ABSENT: COUNCIL MEMBERS:

_____
SHEILA MAUTZ, CITY CLERK

(SEAL)

The foregoing is the original of Resolution No. 2025- duly passed and adopted by the Ontario City Council at their regular meeting held November 4, 2025.

_____
SHEILA MAUTZ, CITY CLERK

(SEAL)

EXHIBIT A

OFFICIAL BALLOT

CITY OF ONTARIO
November 4, 2025

SPECIAL ELECTION

This ballot is for a special, landowner election. The number of votes to be voted pursuant to this ballot is ____.

INSTRUCTIONS TO VOTERS:

To vote on the measure, mark a cross (+ or X) in the voting square after the word "YES" or after the word "NO". All distinguishing marks or erasures are forbidden and make the ballot void. If you wrongly mark, tear or deface this ballot, return it to the City Clerk of the City of Ontario and obtain another.

CITY OF ONTARIO
COMMUNITY FACILITIES DISTRICT NO. 76
(COMPASS POINTE)

MEASURE: Shall the measure to authorize City of Ontario Community Facilities District No. 76 (Compass Pointe) (the "Community Facilities District") to incur bonded indebtedness in a maximum amount of $60,000,000, to authorize the Community Facilities District to levy a special tax in order to finance certain facilities and services and to establish the annual appropriations limit of the Community Facilities District at $60,000,000, as specified in the resolutions adopted by the City Council of the City of Ontario on November 4, 2025 entitled "A Resolution of the City Council of the City of Ontario, California, of Formation of City of Ontario Community Facilities District No. 76 (Compass Pointe), Proposing that the Community Facilities District Be Authorized to Levy a Special Tax and Proposing that an Appropriations Limit of the Community Facilities District Be Established" and "A Resolution of the City Council of the City of Ontario, California, Deeming it Necessary for City of Ontario Community Facilities District No. 76 (Compass Pointe) to Incur Bonded Indebtedness," be adopted?

Yes: ☐

No: ☐

RESOLUTION NO. _____

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF ONTARIO, CALIFORNIA, DECLARING RESULTS OF SPECIAL ELECTION AND DIRECTING RECORDING OF NOTICE OF SPECIAL TAX LIEN.

WHEREAS, on November 4, 2025, the City Council (the "City Council") of the City of Ontario (the "City"), pursuant to the Mello-Roos Community Facilities Act of 1982 (the "Act"), adopted a resolution entitled "A Resolution of the City Council of the City of Ontario, California, Calling Special Election for City of Ontario Community Facilities District No. 76 (Compass Pointe)" (the "Resolution Calling Election"), calling a special election to submit to the qualified electors of City of Ontario Community Facilities District No. 76 (Compass Pointe) (the "Community Facilities District") the combined ballot proposition to authorize the Community Facilities District to incur bonded indebtedness, to authorize the Community Facilities District to levy a special tax and to establish the appropriations limit of the Community Facilities District; and

WHEREAS, pursuant to the terms of the Resolution Calling Election and the provisions of the Act, the special election was held on November 4, 2025; and

WHEREAS, the City Clerk of the City (the "City Clerk") has certified the canvass of the returns of the election and has filed a Canvass and Statement of Results of Election (the "Canvass"), a copy of which is attached hereto as Exhibit A;

NOW, THEREFORE, BE IT RESOLVED by the City Council of the City of Ontario as follows:

SECTION 1. The foregoing recitals are true and correct, and the City Council so finds and determines.

SECTION 2. The City Council has received, reviewed and hereby accepts the Canvass.

SECTION 3. The City Council hereby finds and declares that the ballot proposition submitted to the qualified electors of the Community Facilities District pursuant to the Resolution Calling Election has been passed and approved by such electors in accordance with Section 53355, Section 53328 and Section 53325.7 of the Act.

SECTION 4. The City Clerk is hereby directed to execute and cause to be recorded in the office of the County Recorder of the County of San Bernardino a notice of special tax lien in the form required by the Act, said recording to occur no later than 15 days following adoption by the City Council of this Resolution.

SECTION 5. All actions heretofore taken by the officers, employees and agents of the City with respect to the special election, or in connection with or related to any of the matters referred to herein, are hereby approved, confirmed and ratified.

SECTION 6. The officers, employees and agents of the City are hereby authorized and directed to take all actions and do all things that they, or any of them, may deem necessary or desirable to accomplish the purposes of this Resolution and not inconsistent with the provisions hereof.

SECTION 7. This Resolution shall take effect immediately upon its adoption.

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

PASSED, APPROVED, AND ADOPTED this 4th day of November 2025.

_____
PAUL S. LEON, MAYOR

ATTEST:

_____
SHEILA MAUTZ, CITY CLERK

APPROVED AS TO FORM:

_____
BEST BEST & KRIEGER LLP
CITY ATTORNEY

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

I, SHEILA MAUTZ, City Clerk of the City of Ontario, DO HEREBY CERTIFY that foregoing Resolution No. 2025- was duly passed and adopted by the City Council of the City of Ontario at their regular meeting held November 4, 2025 by the following roll call vote, to wit:

AYES: COUNCIL MEMBERS:

NOES: COUNCIL MEMBERS:

ABSENT: COUNCIL MEMBERS:

_____
SHEILA MAUTZ, CITY CLERK

(SEAL)

The foregoing is the original of Resolution No. 2025- duly passed and adopted by the Ontario City Council at their regular meeting held November 4, 2025.

_____
SHEILA MAUTZ, CITY CLERK

(SEAL)

EXHIBIT A

CITY OF ONTARIO
COMMUNITY FACILITIES DISTRICT NO. 76
(COMPASS POINTE)

CANVASS AND STATEMENT OF RESULTS OF ELECTION

I hereby certify that on November 4, 2025, I canvassed the returns of the special election for City of Ontario Community Facilities District No. 76 (Compass Pointe) held on November 4, 2025, that the total number of ballots cast in said Community Facilities District and the total number of votes cast for and against the combined ballot proposition submitted to the qualified electors of the Community Facilities District are as follows and that the totals as shown for and against such proposition are true and correct:

	Qualified Landowner Votes	Votes Cast	YES	NO
City of Ontario Community Facilities District No. 76 (Compass Pointe) Special Election, November 4, 2025	52	___	___	___

MEASURE: Shall the measure to authorize City of Ontario Community Facilities District No. 76 (Compass Pointe) (the "Community Facilities District") to incur bonded indebtedness in a maximum amount of $60,000,000, to authorize the Community Facilities District to levy a special tax in order to finance certain facilities and services and to establish the annual appropriations limit of the Community Facilities District at $60,000,000, as specified in the resolutions adopted by the City Council of the City of Ontario on November 4, 2025 entitled "A Resolution of the City Council of the City of Ontario, California, of Formation of City of Ontario Community Facilities District No. 76 (Compass Pointe), Proposing that the Community Facilities District Be Authorized to Levy a Special Tax and Proposing that an Appropriations Limit of the Community Facilities District Be Established" and "A Resolution of the City Council of the City of Ontario, California, Deeming it Necessary for City of Ontario Community Facilities District No. 76 (Compass Pointe) to Incur Bonded Indebtedness," be adopted?

IN WITNESS WHEREOF, I HAVE HEREUNTO SET MY HAND this 4th day of November, 2025.

BY: _____
SHEILA MAUTZ, CITY CLERK

ORDINANCE NO. _____

AN ORDINANCE OF THE CITY COUNCIL OF THE CITY OF ONTARIO, CALIFORNIA, LEVYING A SPECIAL TAX WITHIN CITY OF ONTARIO COMMUNITY FACILITIES DISTRICT NO. 76 (COMPASS POINTE).

WHEREAS, on September 16, 2025, the City Council (the "City Council") of the City of Ontario (the "City"), pursuant to the Mello-Roos Community Facilities Act of 1982 (the "Act"), adopted a resolution entitled "A Resolution of the City Council of the City of Ontario, California, of Intention to Establish a Community Facilities District Proposed to be Named City of Ontario Community Facilities District No. 76 (Compass Pointe) and to Authorize the Levy of a Special Tax Therein," stating its intention to establish City of Ontario Community Facilities District No. 76 (Compass Pointe) (the "Community Facilities District") and to authorize the Community Facilities District to levy a special tax (the "Special Tax") within the Community Facilities District for the purpose of financing certain public facilities (the "Facilities") and services (the "Services"); and

WHEREAS, on November 4, 2025, the City Council held a noticed public hearing on the establishment of the Community Facilities District, as required by the Act; and

WHEREAS, subsequent to the close of said hearing, the City Council adopted resolutions entitled "A Resolution of the City Council of the City of Ontario, California, of Formation of City of Ontario Community Facilities District No. 76 (Compass Pointe), Proposing that the Community Facilities District be Authorized to Levy a Special Tax and Proposing that an Appropriations Limit of the Community Facilities District be Established" (the "Resolution of Formation"), "A Resolution of the City Council of the City of Ontario, California, Deeming it Necessary for City of Ontario Community Facilities District No. 76 (Compass Pointe) to Incur Bonded Indebtedness" and "A Resolution of the City Council of the City of Ontario, California, Calling Special Election for City of Ontario Community Facilities District No. 76 (Compass Pointe)," which resolutions established the Community Facilities District, proposed that the Community Facilities District be authorized to levy the Special Tax within the Community Facilities District, proposed that an appropriations limit of the Community Facilities District be established and called a special election to submit to the qualified electors of the Community Facilities District the combined ballot proposition to authorize the Community Facilities District to incur bonded indebtedness, to authorize the Community Facilities District to levy the Special Tax and to establish the appropriations limit of the Community Facilities District; and

WHEREAS, on November 4, 2025, an election was held in which the qualified electors of the Community Facilities District approved said proposition by more than the two-thirds vote required by the Act; and

WHEREAS, the City Council is the legislative body of the Community Facilities District.

THE CITY COUNCIL OF THE CITY OF ONTARIO DOES ORDAIN AS FOLLOWS:

SECTION 1. The City Council hereby authorizes and levies the Special Tax within the Community Facilities District pursuant to Sections 53328 and 53340 of the Act, at the rate and in accordance with the method of apportionment set forth in Exhibit B to the Resolution of Formation (the "Rate and Method"). The Special Tax is hereby levied commencing in fiscal year 2026-27 and in each fiscal year thereafter until the last fiscal year in which the Special Tax is authorized to be levied pursuant to the Rate and Method.

SECTION 2. The City Council may, pursuant to subdivision (b) of Section 53340 of the Act, provide, by resolution, for the levy of the Special Tax in the current tax year or in future tax years at the same rate or at a lower rate than the rate provided by this Ordinance. In no event shall the Special Tax be levied on any parcel within the Community Facilities District in excess of the maximum tax specified therefor in the Rate and Method.

SECTION 3. The Special Tax shall be levied on all of the parcels in the Community Facilities District, unless exempted by law or by the Rate and Method.

SECTION 4. The proceeds of the Special Tax shall only be used to pay, in whole or in part, the cost of providing the Facilities and Services and incidental expenses pursuant to the Act.

SECTION 5. The Special Tax shall be collected in the same manner as ordinary *ad valorem* property taxes are collected and shall be subject to the same penalties and the same procedure, sale and lien priority in the case of delinquency as is provided for *ad valorem* taxes or in such other manner as the City Council shall determine, including direct billing of the affected property owners.

SECTION 6. If for any reason any portion of this Ordinance is found to be invalid, or if the Special Tax is found inapplicable to any particular parcel within the Community Facilities District by a court of competent jurisdiction, the balance of this Ordinance and the application of the Special Tax to the remaining parcels within the Community Facilities District shall not be affected.

SECTION 7. The Mayor shall sign this Ordinance and the City Clerk shall certify as to the adoption and shall cause a summary thereof to be published at least once, in a newspaper of general circulation in the City of Ontario, California within fifteen (15) days of the adoption. The City Clerk shall post a certified copy of this ordinance, including the vote for and against the same, in the Office of the City Clerk, in accordance with Government Code Section 36933.

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

PASSED, APPROVED, AND ADOPTED this _____ day of _____ 2025.

_____
PAUL S. LEON, MAYOR

ATTEST:

_____
SHEILA MAUTZ, CITY CLERK

APPROVED AS TO FORM:

_____
BEST BEST & KRIEGER LLP
CITY ATTORNEY

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

I, SHEILA MAUTZ, City Clerk of the City of Ontario, DO HEREBY CERTIFY that foregoing Ordinance No. _____ was duly introduced at a regular meeting of the City Council of the City of Ontario held November 4, 2025 and adopted at the regular meeting held _____, 2025 by the following roll call vote, to wit:

AYES: COUNCIL MEMBERS:

NOES: COUNCIL MEMBERS:

ABSENT: COUNCIL MEMBERS:

_____
SHEILA MAUTZ, CITY CLERK

(SEAL)

I hereby certify that the foregoing is the original of Ordinance No. _____ duly passed and adopted by the Ontario City Council at their regular meeting held _____ and that Summaries of the Ordinance were published on _____ and _____, in the Inland Valley Daily Bulletin newspaper.

_____
SHEILA MAUTZ, CITY CLERK

(SEAL)

RESOLUTION NO. _____

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF ONTARIO, CALIFORNIA, AUTHORIZING THE EXECUTION AND DELIVERY OF AN ACQUISITION AND FUNDING AGREEMENT WITH KB HOME CAL MANAGEMENT SERVICES LLC.

WHEREAS, certain real property within the boundaries of the City of Ontario (the "City") located generally south of State Route 60 is commonly referred to as Ontario Ranch; and

WHEREAS, the City has approved a General Plan Amendment for the New Model Colony (the name by which Ontario Ranch was formerly known), which has been supplemented by certain water, recycled water and sewer master plans (as so supplemented, the "General Plan Amendment") and has certified an Environmental Impact Report and adopted a Mitigated Negative Declaration in connection with the General Plan Amendment (together, the "Environmental Impact Report"); and

WHEREAS, the City has specified in the General Plan Amendment and the Environmental Impact Report the major backbone transportation, water, sewer, storm drainage, parks, public safety infrastructure and fiber optic systems required to serve Ontario Ranch; and

WHEREAS, KB HOME Cal Management Services LLC ("KB HOME"), is developing certain of the property within Ontario Ranch (the "Property"); and

WHEREAS, certain of such major backbone infrastructure is required to serve the Property; and

WHEREAS, in order to provide a mechanism to fund, in a timely manner, the costs of certain of such major backbone infrastructure required to serve Ontario Ranch (the "Facilities") so that such development may occur, the City has, pursuant to the provisions of the Mello-Roos Community Facilities Act of 1982 (the "Act"), established City of Ontario Community Facilities District No. 76 (Compass Pointe) (the "Community Facilities District"), the boundaries of which include the Property; and

WHEREAS, pursuant to the Act, the proceedings of the City Council of the City and an election held within the Community Facilities District, the Community Facilities District is authorized to levy a special tax (the "Special Tax") within the Community Facilities District and issue special tax bonds (the "Bonds") secured by the Special Tax in order to finance certain of the Facilities; and

WHEREAS, it is anticipated that the Special Tax will be levied by the Community Facilities District and that, from time to time, Bonds will be issued by the Community Facilities District; and

WHEREAS, KB HOME proposes to construct, or cause to be constructed, certain of the Facilities proposed to be financed by the Community Facilities District pursuant to the Act, and the City proposes to purchase such Facilities from KB HOME pursuant to an Acquisition and Funding Agreement by and between the City and KB HOME (such Acquisition and Funding Agreement, in the form presented to this meeting, with such changes, insertions and omissions as are made pursuant to this Resolution, being referred to herein as the "Acquisition Agreement"); and

WHEREAS, the City Council is the legislative body of the Community Facilities District.

NOW, THEREFORE, BE IT RESOLVED by the City Council of the City of Ontario as follows:

SECTION 1. The Acquisition Agreement, in substantially the form submitted to this meeting and made a part hereof as though set forth herein, be and the same is hereby approved. Each of the Mayor of the City, and such other member of the City Council as the Mayor may designate, the City Manager of the City and the Executive Director of Finance of the City, and such other officer or employee of the City as the City Manager may designate (the "Authorized Officers") is hereby authorized, and any one of the Authorized Officers is hereby directed, for and in the name of the City, to execute and deliver the Acquisition Agreement in the form submitted to this meeting, with such changes, insertions and omissions as the Authorized Officer executing the same may require or approve, such requirement or approval to be conclusively evidenced by the execution of the Acquisition Agreement by such Authorized Officer.

SECTION 2. All actions heretofore taken by the officers, employees and agents of the City with respect to the Acquisition Agreement, or in connection with or related to any of the matters referred to herein, are hereby approved, confirmed and ratified.

SECTION 3. The officers, employees and agents of the City are hereby authorized and directed to take all actions and do all things that they, or any of them, may deem necessary or desirable to accomplish the purposes of this Resolution and not inconsistent with the provisions hereof.

SECTION 4. This Resolution shall take effect immediately upon its adoption.

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

PASSED, APPROVED, AND ADOPTED this 4th day of November 2025.

_____

PAUL S. LEON, MAYOR

ATTEST:

_____
SHEILA MAUTZ, CITY CLERK

APPROVED AS TO FORM:

_____
BEST BEST & KRIEGER LLP
CITY ATTORNEY

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

I, SHEILA MAUTZ, City Clerk of the City of Ontario, DO HEREBY CERTIFY that foregoing Resolution No. 2025- was duly passed and adopted by the City Council of the City of Ontario at their regular meeting held November 4, 2025 by the following roll call vote, to wit:

AYES: COUNCIL MEMBERS:

NOES: COUNCIL MEMBERS:

ABSENT: COUNCIL MEMBERS:

_____
SHEILA MAUTZ, CITY CLERK

(SEAL)

The foregoing is the original of Resolution No. 2025- duly passed and adopted by the Ontario City Council at their regular meeting held November 4, 2025.

_____
SHEILA MAUTZ, CITY CLERK

(SEAL)

RESOLUTION NO. _____

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF ONTARIO, CALIFORNIA, MAKING A DECLARATION OF OFFICIAL INTENT TO REIMBURSE EXPENDITURES FOR COSTS OF FACILITIES WITH BOND PROCEEDS AND RELATED ACTIONS.

WHEREAS, the City Council (the "City Council") of the City of Ontario (the "City") has formed City of Ontario Community Facilities District No. 76 (Compass Pointe) (the "Community Facilities District") under the provisions of the Mello-Roos Community Facilities Act of 1982 (the "Act"); and

WHEREAS, the Community Facilities District is authorized under the Act to levy a special tax (the "Special Tax") to pay for the costs of certain public facilities (the "Facilities") and to issue bonds payable from the Special Tax; and

WHEREAS, in order to provide funds to finance certain of the Facilities, the Community Facilities District proposes to issue its City of Ontario Community Facilities District No. 76 (Compass Pointe) Special Tax Bonds (the "Bonds"); and

WHEREAS, pursuant to the Act (a) the Community Facilities District is a legally constituted governmental entity established pursuant to the Act for the sole purpose of financing facilities and services, and (b) the City Council is the legislative body of the Community Facilities District; and

WHEREAS, the Community Facilities District and the City are related entities; and

WHEREAS, beginning on the 60-day period prior to the date hereof, the City has paid or incurred, or expects to pay or incur prior to the issuance of the Bonds, certain costs of the Facilities; and

WHEREAS, the City has also paid or incurred certain "preliminary expenditures" with respect to the Facilities and may pay or incur certain additional "preliminary expenditures" with respect to the Facilities; the term "preliminary expenditures" includes architectural, engineering, surveying, soil testing, bond issuance, and similar costs that are incurred prior to commencement of acquisition, construction, or rehabilitation of a project, other than land acquisition, site preparation, and similar costs incident to commencement of construction and such preliminary expenditures constitute costs of the Facilities; and

WHEREAS, in order to reimburse the City for the payment of costs of the Facilities, the Community Facilities District anticipates it will issue Bonds in an amount not expected to exceed $60,000,000 for the purpose of financing costs of the Facilities; and

WHEREAS, proceeds of the Bonds will be allocated to reimbursement of prior expenditures no later than 18 months after the later of (a) the date the cost is paid, or (b) the date the Facilities are, or each component thereof is, placed in service or abandoned (but in no event more than three years after the cost is paid); and

WHEREAS, Section 1.150-2 of the Treasury Regulations requires the Community Facilities District to declare its reasonable official intent to reimburse prior expenditures for costs of the Facilities with proceeds of indebtedness; and

WHEREAS, the Community Facilities District desires to declare its official intent to use proceeds of indebtedness, including the Bonds, to reimburse expenditures for costs of the Facilities paid before such indebtedness is incurred and to finance the costs of the Facilities on a long-term basis with the proceeds of such indebtedness;

NOW, THEREFORE, BE IT RESOLVED by the City Council of the City of Ontario as follows:

SECTION 1. The foregoing recitals are true and correct, and the City Council so finds and determines.

SECTION 2. This Resolution is adopted by the City Council, as the legislative body of the Community Facilities District, solely for purposes of establishing compliance with the requirements of Section 1.150-2 of the Treasury Regulations. Capitalized undefined terms used herein shall have the meanings ascribed thereto in the Internal Revenue Code of 1986 and in Section 1.150-2 of the Treasury Regulations. This Resolution does not bind the Community Facilities District or the City to make any expenditure, incur any indebtedness, or proceed with construction of the Facilities.

SECTION 3. All actions heretofore taken by the officers, employees and agents of the City with respect to the actions set forth above are hereby approved, confirmed and ratified.

SECTION 4. The officers, employees and agents of the City are, and each of them is, hereby authorized and directed, for and in the name of the Community Facilities District to take all actions and do any and all things and to execute and deliver any and all agreements, documents, certificates or instruments that they, or any of them, may deem necessary or advisable in order to consummate the transactions contemplated by this Resolution and otherwise to carry out, give effect to and comply with the terms and intent of this Resolution not inconsistent with the provisions hereof.

SECTION 5. This Resolution shall take effect immediately upon its adoption.

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

PASSED, APPROVED, AND ADOPTED this 4th day of November 2025.

_____
PAUL S. LEON, MAYOR

ATTEST:

_____
SHEILA MAUTZ, CITY CLERK

APPROVED AS TO FORM:

_____
BEST BEST & KRIEGER LLP
CITY ATTORNEY

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

I, SHEILA MAUTZ, City Clerk of the City of Ontario, DO HEREBY CERTIFY that foregoing Resolution No. 2025- was duly passed and adopted by the City Council of the City of Ontario at their regular meeting held November 4, 2025 by the following roll call vote, to wit:

AYES: COUNCIL MEMBERS:

NOES: COUNCIL MEMBERS:

ABSENT: COUNCIL MEMBERS:

_____
SHEILA MAUTZ, CITY CLERK

(SEAL)

The foregoing is the original of Resolution No. 2025- duly passed and adopted by the Ontario City Council at their regular meeting held November 4, 2025.

_____
SHEILA MAUTZ, CITY CLERK

(SEAL)

ACQUISITION AND FUNDING AGREEMENT

by and between

CITY OF ONTARIO

and

KB HOME CAL MANAGEMENT SERVICES LLC

Dated as of November 1, 2025

City of Ontario
Community Facilities District No. 76
(Compass Pointe)

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ACQUISITION AND FUNDING AGREEMENT

THIS ACQUISITION AND FUNDING AGREEMENT (this "Acquisition Agreement"), dated as of November 1, 2025, is by and between the CITY OF ONTARIO, a general law city organized and existing under the laws of the State of California (the "City"), and KB HOME CAL MANAGEMENT SERVICES LLC, a limited liability company organized and existing under the laws of the State of Delaware (the "Developer").

W I T N E S S E T H:

WHEREAS, certain real property within the boundaries of the City located generally south of State Route 60 is commonly referred to as Ontario Ranch;

WHEREAS, such real property was previously known as the New Model Colony;

WHEREAS, the City has approved a General Plan Amendment for the New Model Colony, which has been supplemented by certain water, recycled water and sewer master plans (as so supplemented, the "General Plan Amendment") and has certified an Environmental Impact Report and adopted a Mitigated Negative Declaration in connection with the General Plan Amendment (together, the "Environmental Impact Report");

WHEREAS, the City has specified in the General Plan Amendment and the Environmental Impact Report the major backbone transportation, water, sewer, storm drainage, parks, public safety infrastructure and fiber optic systems required to serve Ontario Ranch;

WHEREAS, the Developer is developing certain of the property within Ontario Ranch (the "Property");

WHEREAS, certain of such major backbone infrastructure is required to serve the Property;

WHEREAS, in order to provide a mechanism to fund, in a timely manner, the costs of certain of such major backbone infrastructure required to serve Ontario Ranch (the "Facilities") so that such development may occur;

WHEREAS, in order to provide such a mechanism, the City has, pursuant to the provisions of the Mello-Roos Community Facilities Act of 1982 (the "Act"), established City of Ontario Community Facilities District No. 76 (Compass Pointe) (the "Community Facilities District"), the boundaries of which include the Property;

WHEREAS, pursuant to the Act, the proceedings of the City Council of the City and an election held within the Community Facilities District, the Community Facilities District is authorized to levy a special tax (the "Special Tax") within the Community Facilities District and issue special tax bonds (the "Bonds") secured by the Special Tax in order to finance certain of the Facilities;

WHEREAS, it is anticipated that the Special Tax will be levied by the Community Facilities District and that, from time to time, Bonds will be issued by the Community Facilities District;

WHEREAS, it is anticipated that, in accordance with the terms set forth in this Acquisition Agreement, the Developer will construct or cause to be constructed certain of the Facilities, that, upon satisfaction of the conditions specified herein, the City will acquire such Facilities and take title thereto and that the Developer will be paid the purchase price thereof, determined as set forth herein, from certain proceeds of the Special Tax, if any, and certain proceeds of the Bonds;

WHEREAS, Section 53313.5 of the Act provides that a community facilities district may only finance the purchase of facilities whose construction has been completed, as determined by the legislative body, before the resolution of formation to establish the community facilities district is adopted pursuant to Section 53325.1 of the Act, except that a community facilities district may finance the purchase of facilities completed after the adoption of the resolution of formation if the facility was constructed as if it had been constructed under the direction and supervision, or under the authority of, the local agency; and

WHEREAS, the Facilities are to be acquired by the City pursuant to this Acquisition Agreement pursuant to the Act and, specifically, pursuant to the provisions of Sections 53313.5 thereof;

NOW, THEREFORE, for and in consideration of the mutual promises and covenants contained herein, the parties hereto agree as follows:

ARTICLE I

DEFINITIONS

Section 1.1. Definitions. Unless the context otherwise requires (a) the terms defined in this Section shall, for all purposes of this Acquisition Agreement, have the meanings herein ascribed thereto, and (b) capitalized undefined terms used herein that are defined in the Indenture shall have the respective meanings ascribed thereto in the Indenture.

"Acceptable Title" means title to land, or an easement therein, delivered free and clear of all liens, taxes, assessments, leases, easements and encumbrances, whether any such item is recorded or unrecorded, except those non-monetary items that are reasonably determined by the City not to interfere with the intended use of such land or easement and therefore are not required to be cleared from title.

"Acceptance Date" means (a) with respect to a Segment, the date on which such Segment is accepted by the City pursuant to Section 2.2(e) hereof, and (b) with respect to a Component, the date on which the last Segment that is part of such Component is accepted by the City pursuant to Section 2.2(e) hereof.

"Acquisition Agreement" means this Acquisition and Funding Agreement, dated as of November 1, 2025, by and between the City and the Developer, as originally executed or as the same may be amended, supplemented or otherwise modified from time to time in accordance with its terms.

"Act" means the Mello-Roos Community Facilities Act of 1982, constituting Section 53311 *et seq.* of the California Government Code.

"Actual Cost" means, with respect to a Segment, as the description thereof is reflected in the then current Plans therefor, an amount equal to the sum of (a) the Developer's actual, reasonable cost of constructing such Segment (including grading for such construction), including labor, material and equipment costs and professional services directly related to materials testing, (b) the Developer's actual, reasonable cost of designing and preparing the Plans for such Segment, including engineering services provided in connection with designing and preparing such Plans, (c) the Developer's actual, reasonable cost of any performance and maintenance bonds and insurance, including title insurance, required hereby for such Segment, (d) the Developer's actual, reasonable cost of any real property or interest therein, other than any such real property or interest therein to be conveyed with a Circulation System Segment, which real property or interest therein is either necessary for the construction of such Segment (*e.g.*, temporary construction easements, haul roads, etc.) or is required to be conveyed with such Segment in order to convey Acceptable Title thereto to the City or its designee, (e) the Developer's actual, reasonable cost of environmental evaluations required in the City's reasonable determination specifically for such Segment, (f) the amount of any fees actually paid by the Developer to governmental agencies in order to obtain permits, licenses or other necessary governmental approvals and reviews for such Segment, including City plan check, processing and inspection fees for such Segment, (g) the Developer's actual, reasonable cost for construction management services for such Segment, which cost shall not exceed 5% of the cost

of constructing such Segment, as determined pursuant to clause (a) of this definition, and (h) the Developer's actual, reasonable cost for professional services directly related to the construction of such Segment, including engineering, inspection, construction staking and similar professional services, all as specified in a Payment Request that has been reviewed and approved by the City Engineer; provided, however, that (i) no item of cost relating to a Segment shall be included in more than one category of cost specified in clauses (a) through (h) of this definition, (ii) except with respect to items of cost for construction management services specified in clause (g) that are provided by the Developer or an Affiliate thereof rather than a third party, each item of cost shall include only amounts actually paid by the Developer to third parties, other than Affiliates of the Developer, and shall not include overhead or other internal expenses of the Developer, and (iii) the aggregate cost of items specified in clauses (e) through (h) shall not exceed 30% of the cost of constructing such Segment, as determined pursuant to clause (a) of this definition.

"Affiliate" of another Person means (a) each Person that, directly or indirectly, owns or controls, whether beneficially or as trustee, guardian, or other fiduciary, 50% or more of any class of equity securities of such other Person, and (b) each Person that controls, is controlled by or is under common control with or by such Person or any Affiliate of such Person. For the purpose of this definition, "control" of a Person shall mean the possession, directly or indirectly, of the power to direct or cause the direction of its management or policies, whether through the ownership of voting securities, by contract or otherwise.

"Bonds" means bonds, notes or other obligations of the Community Facilities District payable from the Special Tax and issued under the Indenture.

"Circulation System Segments" means Segment Nos. ST-1 through ST-8 inclusive.

"City" means the City of Ontario, a general law city organized and existing under the laws of the State, and its successors.

"City Council" means the City Council of the City.

"City Engineer" means the City Engineer of the City.

"City Event of Default" means any event or circumstance specified in Section 5.3 hereof.

"Community Facilities District" means City of Ontario Community Facilities District No. 76 (Compass Pointe), a community facilities district organized and existing under the laws of the State, and its successors.

"Complete" means, with respect to a Segment, that the construction of such Segment (including all ancillary, non-essential items included in such Segment) by the Developer is, in the reasonable judgment of the City Engineer, in all respects complete.

"Components" means the related groups of Segments identified as such and described in Exhibit A hereto; each Component is comprised of the Segments listed thereunder in Exhibit A.

"Conditions of Approval" means, with respect to any portion of the Property, the conditions of approval of all land use entitlements approved by the City for such portion of the Property and the conditions of any Development Agreement, subdivision improvement agreement or other agreement between the Developer and the City relating to such portion of the Property, which conditions the Developer must satisfy or cause to be satisfied in order to develop such portion of the Property.

"Construction Agreement" means the First Amended and Restated Agreement for Financing and Construction of Limited Infrastructure Improvements to Serve an Easterly Portion of the New Model Colony, made as of August 21, 2012, by and between the City and NMC Builders, as originally executed and as it may be amended, supplemented or otherwise modified from time to time in accordance with its terms.

"Developer" means KB HOME Cal Management Services LLC, a limited liability company organized and existing under the laws of the State of Delaware, and its successors and assigns.

"Developer Acquisition Account" means (a) prior to the initial issuance of Bonds, the fund or account established for the Community Facilities District by the City, howsoever denominated, into which the Net Proceeds of the Special Tax are to be deposited, and (b) from and after the initial issuance of Bonds, the account by that name within the Improvement Fund established and held by the Trustee pursuant to the Indenture, into which the Net Proceeds of Bonds available to pay the Purchase Prices of the Segments purchased by the City pursuant hereto are to be deposited.

"Developer Event of Default" means any event or circumstance specified in Section 5.1 hereof.

"Developer Representative" means the person or persons designated as such in a certificate signed by the Developer and delivered to the City, which certificate shall contain an original or specimen signature of each person so designated.

"Development Agreement" means a statutory development agreement between the City and the Developer, entered into pursuant to California Government Code Section 65864 *et seq.*, relating to the development of a portion of the Property.

"DIF Program Costs" has the meaning ascribed thereto in the definition of "Program Costs" or "DIF Program Costs" in the Construction Agreement.

"Effective Date" means November 4, 2025.

"Facilities" means the facilities described in Exhibit A hereto.

"General Prevailing Wage Rates" means those rates as determined by the Director of the Department of Industrial Relations of the State of California.

"Hazardous Material" means any hazardous or toxic substance, material or waste that is regulated by any local governmental authority, the State or the United States Government,

including any material or substance that is (a) designated as a "hazardous substance" pursuant to Section 311 of the Federal Water Pollution Control Act, 33 U.S.C. § 1251 *et seq.* (33 U.S.C. § 1321), (b) defined as a "hazardous waste" pursuant to Section 1004 of the Federal Resource Conservation and Recovery Act, 42 U.S.C. § 6901 *et seq.* (42 U.S.C. § 6903), (c) defined as a "hazardous substance" pursuant to Section 101 of the Comprehensive Environmental Response, Compensation and Liability Act of 1980, as amended, 42 U.S.C. § 9601 *et seq.*, (d) petroleum, or (e) asbestos.

"Improvement Fund" means the fund or account established under the Indenture, howsoever denominated, into the accounts established within which the Net Proceeds of Bonds are to be deposited.

"Indenture" means the indenture, trust agreement, fiscal agent agreement or similar instrument, howsoever denominated, pursuant to which Bonds of the Community Facilities District are issued, as originally executed and as it may be amended, supplemented or otherwise modified from time to time in accordance with its terms.

"Member" means a member of NMC Builders.

"Memorandum of Agreement" means the Amended and Restated Memorandum of Agreement, dated as of November 1, 2022, by and between the City and NMC Builders, as originally executed and as it may be amended, supplemented or otherwise modified from time to time in accordance with its terms.

"Net Proceeds" means (a) the proceeds, if any, of the Special Tax received prior to the initial issuance of Bonds and remaining after the payment or setting aside of, or provision for, administrative expenses of the Community Facilities District, and (b) the proceeds of Bonds remaining after the payment or setting aside of, or provision for (i) the underwriter's discount for such Bonds, (ii) the costs of issuance of such Bonds, including the costs of formation of the Community Facilities District, (iii) any required reserve fund deposit for such Bonds, (iv) capitalized interest on such Bonds, and (v) pre-funded administrative expenses of the Community Facilities District.

"NMC Acquisition Account" means the account by that name within the Improvement Fund established and held by the Trustee pursuant to the Indenture.

"NMC Builders" means NMC Builders, LLC, a limited liability company organized and existing under the laws of the State of California, and its successors and assigns.

"Payment Request" means the document to be provided by the Developer to substantiate the Purchase Price of one or more Segments, which shall be substantially in the form of Exhibit B attached hereto.

"Person" means an individual, a corporation, a partnership, an association, a limited liability company, a joint stock company, a trust, any unincorporated organization or a government or political subdivision thereof.

"Plans" means the plans and specifications for the Facilities prepared or to be prepared by or on behalf of the Developer pursuant to Section 3.1 hereof.

"Property" means the real property located within the boundaries of the Community Facilities District.

"Purchase Price" means, with respect to a Segment, subject to the provisions of Section 2.3 hereof, the Actual Cost of such Segment.

"Rate and Method" means the rate and method of apportionment of the Special Tax approved by the qualified electors of the Community Facilities District.

"Related Property" means, with respect to a Segment, the property on, in or over which such Segment is located, which property, or an easement thereon or other interest therein, is dedicated or otherwise conveyed to the City as provided in Section 2.2(d) hereof.

"Segments" means the discrete portions of the Components identified as such and described in Exhibit A hereto as Segments; provided, however, that each such Segment described therein shall constitute a Segment for purposes of this Acquisition Agreement only if such Segment was constructed by or on behalf of the Developer singly and not jointly or in conjunction with another Member or NMC Builders.

"Special Tax" means the special tax approved by the qualified electors of the Community Facilities District to be levied therein.

"State" means the State of California.

"Substantially Complete" means, with respect to a Circulation System Segment, that the construction of such Circulation System Segment by the Developer has, in the reasonable judgment of the City Engineer, reached a stage of completion sufficient to allow such Circulation System Segment to be utilized for the purpose for which it is intended and that only the construction of ancillary, non-essential items remains incomplete; provided, however, that a Circulation System Segment shall not be deemed to be Substantially Complete if, in the reasonable judgment of the City Engineer, the cost to complete the construction of such ancillary, non-essential items would exceed 15% of the Purchase Price of such Circulation System Segment.

"Trustee" means the commercial bank or trust company initially designated as trustee under the Indenture, and any successor thereto thereunder substituted in its place as provided therein.

Section 1.2. Rules of Construction. (a) The terms defined herein expressed in the singular shall, unless the context otherwise indicates, include the plural and vice versa.

(b) The use herein of the masculine, feminine or neuter gender is for convenience only and shall be deemed and construed to include correlative words of the masculine, feminine or neuter gender, as appropriate.

(c) References herein to a document shall include all amendments, supplements or other modifications to such document, and any replacements, substitutions or novation of, that document.

(d) Any term defined herein by reference to another document shall continue to have the meaning ascribed thereto whether or not such other document remains in effect.

(e) The use herein of the words "including" and "includes," and words of similar import, shall be deemed to be followed by the phrase "without limitation."

(f) Headings of Articles and Sections herein and the table of contents hereof are solely for convenience of reference, do not constitute a part hereof and shall not affect the meaning, construction or effect hereof.

(g) All references herein to designated "Articles," "Sections," "Exhibits," "subsections," "paragraphs," "clauses," and other subdivisions are to the designated Articles, Sections, Exhibits, subsections, paragraphs, clauses, and other subdivisions of this Acquisition Agreement.

(h) The words "hereof" (except when preceded by a specific Section or Article reference) "herein," "hereby," "hereunder," "hereinabove," "hereinafter," and other equivalent words and phrases used herein refer to this Acquisition Agreement and not solely to the particular portion hereof in which any such word is used.

(i) Any reference to a Person, or a Person in a specified capacity, shall be construed to include such Person's successors or such Person's successors in such capacity, as the case may be.

ARTICLE II

ACQUISITION OF FACILITIES

Section 2.1. Acquisition of Facilities; Limited Source of Payments. (a) Subject to the terms and conditions hereof, the Developer hereby agrees to sell to the City, and the City hereby agrees to purchase from the Developer, each Segment for the Purchase Price thereof.

(b) The Purchase Prices of Segments are to be paid from Net Proceeds of the Special Tax, if any, and Net Proceeds of Bonds deposited in the Developer Acquisition Account. Notwithstanding anything to the contrary contained herein, the City shall not be obligated to pay the Purchase Price of any Segment except from the Net Proceeds of the Special Tax and the Net Proceeds of the Bonds so deposited in the Developer Acquisition Account. The City makes no warranty, either express or implied, that the Community Facilities District will be able to issue and sell any Bonds or that the Net Proceeds of the Special Tax and the Net Proceeds of the Bonds so deposited in the Developer Acquisition Account and available for the payment of the Purchase Price of the Segments will be sufficient for such purpose.

(c) The Net Proceeds of the Special Tax and the Net Proceeds of the Bonds shall be applied to the uses in the priorities set forth in the Memorandum of Agreement. If amounts remain in the Developer Acquisition Account after the Purchase Price of each of the Segments has been paid, such remaining amounts shall be applied in accordance with the priorities set forth in the Memorandum of Agreement.

Section 2.2. Segment Review; Payment Requests. (a) When the Developer has concluded that the construction of a Segment by the Developer is in all respects complete, the Developer shall deliver to the City Engineer (i) a Payment Request for such Segment, together with all attachments and exhibits to be included therewith, (ii) a copy of the documents conveying, or that previously conveyed, to the City Acceptable Title to the Related Property of such Segment, as described in subsection (d) of this Section, and (iii) a copy of the Notice of Completion of such Segment that will be filed in accordance with Section 3093 of the California Civil Code, if applicable; provided, however, that, if, during the process of designing a Segment, obtaining bids for construction of a Segment or during construction of a Segment, the Developer determines that, because of changed conditions or circumstances, the actual cost of constructing such Segment may materially exceed the Developer's originally estimated cost thereof, the Developer shall, in order to facilitate and expedite the City Engineer's review and verification with respect to such Segment pursuant to subsection (b) of this Section, as soon as practicable, deliver to the City Engineer a written statement describing (i) such changed conditions or circumstances, (ii) the Developer's original estimated cost of constructing such Segment, (iii) the anticipated effect of such changed conditions or circumstances on the Actual Cost of such Segment, and (iv) an explanation as to why including the increased cost resulting from such changed conditions or circumstances would result in the Actual Cost of such Segment being no greater than the actual, reasonable cost thereof, determined in accordance with the provisions of the definition of Actual Cost set forth herein.

(b) Upon receipt of a completed Payment Request (and accompanying documentation) for a Segment, the City Engineer shall conduct a review in order to confirm that

such Segment is Complete and was constructed in accordance with the Plans therefor and to verify and approve the Actual Cost of such Segment specified in such Payment Request. As a reference in determining the reasonable cost of constructing such Segment, the City Engineer may use the most recently updated DIF Program Costs of such Segment, which reflect the City Engineer's determination, as of the date of such update, of the reasonable cost of constructing such Segment, recognizing that, depending on the date of such most recent update, such DIF Program Costs may not reflect the reasonable cost of constructing such Segment at the time it was constructed. The Developer agrees to cooperate with the City Engineer in conducting each such review and to provide the City Engineer with such additional information and documentation as is reasonably necessary for the City Engineer to conclude each such review. The City agrees to cause the City Engineer to conduct such review without unreasonable delay. If the City Engineer determines that the Actual Cost specified in such Payment Request as initially submitted exceeds the Developer's actual, reasonable cost of constructing such Segment, the Developer shall resubmit such Payment Request, with the Actual Cost specified therein modified so as to take into account such determination by the City Engineer. Upon confirmation that such Segment is Complete and has been constructed in accordance with the Plans therefor, and verification and approval of the Actual Cost of such Segment, the City Engineer shall sign the Payment Request, indicating thereon that such Segment is Complete and that the full amount of the Purchase Price of such Segment is eligible for payment, and forward the same to the City.

(c) With respect to a Circulation System Segment, if, as a result of the review described in subsection (b) of this Section, the City Engineer (i) determines that such Circulation System Segment, while not Complete, is Substantially Complete, (ii) confirms that such Circulation System Segment has been constructed in accordance with the Plans therefor, and (iii) verifies and approves the Actual Cost of such Circulation System Segment, the City Engineer shall sign the Payment Request, indicating thereon that such Circulation System Segment is Substantially Complete and that an amount equal to 85% of the Actual Cost of such Circulation System Segment is eligible for payment, and forward the same to the City.

When the Developer completes or causes to be completed all work with respect to such Circulation System Segment and concludes that such Circulation System Segment is Complete, the Developer shall deliver to the City Engineer (i) if as-built drawings or similar plans and specifications for such Circulation System Segment have not previously been submitted to the City Engineer, such drawings or plans and specifications, together with a certification of the Developer that such drawings or plans and specifications are true, correct and complete, and (ii) such information and documentation as is reasonably required by the City Engineer in order for the City Engineer to determine whether such Circulation System Segment is Complete. Upon receipt of such information and documentation, the City Engineer shall conduct a review in order to confirm that such Circulation System Segment is Complete. If, as a result of such review, the City Engineer determines that such Circulation System Segment is Complete, the City Engineer shall sign a copy of the original Payment Request therefor, indicating thereon that such Circulation System Segment is Complete and that the full amount of the Purchase Price of such Segment is eligible for payment, and forward the same to the City.

(d) Acceptable Title to all property on, in or over which each Segment will be located shall be conveyed to the City by way of grant deed, quitclaim, or dedication of such property, or easement thereon, if such easement is approved by the City as being a sufficient interest therein

to permit the City to properly own, operate and maintain such Segment located therein, thereon or thereover, and to permit the Developer to perform its obligations as set forth in this Acquisition Agreement.

Upon the request of the City, the Developer shall furnish to the City a title report for such property not previously dedicated or otherwise conveyed to the City or its designee, for review and approval at least 20 calendar days prior to the transfer of Acceptable Title to a Segment to the City or its designee. The City shall approve the title report unless it reveals a matter that, in the reasonable judgment of the City, could materially affect the City's or its designee's use and enjoyment of any part of the property or easement covered by the title report. In the event the City does not approve the title report, the City shall not be obligated to accept title to such Segment until such objections to title have been cured to the reasonable satisfaction of the City.

(e) Upon (i) the execution by the City Engineer of a Payment Request for a Segment indicating that such Segment is Complete, and (ii) the City's determination that Acceptable Title to the property on, in or over which each Segment is located has been or is being conveyed to the City, such Segment shall be accepted by the City. The Developer shall transfer to the City, by appropriate instrument in accordance with the Conditions of Approval, title to each Segment accepted by the City pursuant hereto; provided, however, that notwithstanding such transfer, as provided in Section 3.6 hereof, the Developer shall be responsible for the maintenance of such Segment until the Acceptance Date of the Component of which such Segment is a part.

Section 2.3. Payment of Purchase Price. (a) Upon receipt of a reviewed and fully signed Payment Request pursuant to Section 2.2(b) hereof indicating that a Segment is Complete and that the Purchase Price of such Segment is eligible for payment, the City shall, within five business days of the approval and confirmation thereof by the City Engineer, by written request, direct the Trustee to pay from the Developer Acquisition Account such Purchase Price. If the Payment Request for a Segment requests that the Purchase Price requested to be paid pursuant thereto be paid to the Person or Persons, in the amounts, set forth in the completed Purchase Price Payment Instructions attached thereto as Attachment B, the City shall direct the Trustee to pay from the Developer Acquisition Account such Purchase Price or portion thereof to such Person or Persons.

(b) Upon receipt of a reviewed and fully signed Payment Request pursuant to Section 2.2(c) hereof indicating that a Circulation System Segment is Substantially Complete and that an amount equal to 85% of the Purchase Price of such Circulation System Segment is eligible for payment, the City shall, within five business days of the approval and confirmation thereof by the City Engineer, by written request, direct the Trustee to pay from the Developer Acquisition Account 85% of the Purchase Price of such Circulation System Segment. If the Payment Request for a Circulation System Segment requests that the 85% of the Purchase Price of such Circulation System Segment requested to be paid pursuant thereto be paid to the Person or Persons, in the amounts, set forth in the completed Purchase Price Payment Instructions attached thereto as Attachment B, the City shall direct the Trustee to pay from the Developer Acquisition Account such 85% of such Purchase Price or portion thereof to such Person or Persons.

ARTICLE III

CONSTRUCTION OF FACILITIES

Section 3.1. Preparation and Approval of Plans and Specifications. The Developer shall cause Plans to be prepared for the Facilities to be acquired pursuant hereto in accordance with the Conditions of Approval. The Developer shall obtain the written approval of the Plans from all appropriate departments of the City or from any other public agency or public utility from which such approval must be obtained. The Developer shall provide copies of all such Plans to the City Engineer. The Plans for a Segment shall be updated from time to time to reflect changed conditions or circumstances with respect thereto, the Developer shall obtain the written approval of such updated Plans from all appropriate departments of the City and the Developer shall provide copies of all such updated Plans to the City Engineer.

Section 3.2. Duty of the Developer to Construct. The Developer shall construct or cause to be constructed the Segments in accordance with the Conditions of Approval and the approved Plans. The Developer shall perform all of its obligations hereunder and shall conduct or cause to be conducted all operations with respect to the construction of the Segments in a good, workmanlike and commercially reasonable manner, with the standard of diligence and care normally employed by duly qualified Persons utilizing commercially reasonable efforts in the performance of comparable work and in accordance with generally accepted practices appropriate to the activities undertaken. Notwithstanding the foregoing, the Developer shall not be required to construct any Facilities or cause such Facilities to be constructed other than at the time required by, and in accordance with, the Conditions of Approval or to perform any work requiring a contractor's license, nor shall the Developer be deemed to be performing construction services pursuant to this Acquisition Agreement.

Section 3.3. Public Works Requirements. (a) In order to ensure that the Segments that are acquired by the City pursuant to this Acquisition Agreement are constructed as if they had been constructed under the direction and supervision, or under the authority of, the City, so that they may be acquired pursuant to California Government Code Section 53313.5, the Developer shall comply with or cause to be complied with all of the requirements of this Section for each Segment for which the Developer submits a Payment Request.

(b) Notice inviting sealed bids for the construction of each Segment shall be given as required for public works projects in conformance with the California Public Contracts Code.

(c) The contract for the construction of each Segment shall be awarded to the responsible bidder submitting the lowest responsive bid for the construction of such Segment.

(d) The Developer shall require, and the specifications and bid and contract documents shall require, all contractors, subcontractors, vendors, equipment operators and owner operators, in each such case to the extent such Persons are engaged to perform work on a Segment, to pay at least General Prevailing Wage Rates to all workers employed in the execution of the contract, to post a copy of the General Prevailing Wage Rates at the job-site in a conspicuous place available to all employees and applicants for employment, and to otherwise

comply with applicable provisions of the California Labor Code, the California Government Code and the California Public Contracts Code relating to public works projects of cities.

The Developer shall require, and the specifications and bid and contract documents shall require, for all contracts involving in excess of $30,000 or 20 working days, all contractors, subcontractors, vendors, equipment operators and owner operators, in each such case to the extent such Persons are engaged to perform work on a Segment, to comply with the provisions of Section 1777.5 of the California Labor Code with respect to all apprenticeable occupations upon the project.

(e) In performing its obligations under this Acquisition Agreement, the Developer shall comply with, or cause to be complied with, the applicable nondiscrimination and affirmative action provisions of the laws of the United States of America, the State and the City. In performing its obligations under this Acquisition Agreement, the Developer shall not discriminate in its employment practices against any employee, or applicant for employment, because of such person's race, religion, national origin, ancestry, sex, sexual orientation, age, physical handicap, marital status or medical condition. The Developer shall require that any contract for the construction of any Segment subject the contractor thereunder to the provisions of this subsection.

(f) The Developer shall require that each contractor, subcontractor, vendor, equipment operator and owner operator, in each such case to the extent such Person is engaged to perform work on a Segment, provide proof of insurance coverage satisfying the requirements of Section 3.7 hereof throughout the term of the construction of such Segment; provided, however, that, rather than requiring such contractors, subcontractors, vendors, equipment operators and owner operators to provide such insurance, the Developer may provide the same for the benefit of such contractors, subcontractors, vendors, equipment operators and owner operators.

(g) The Developer shall comply, and shall cause each contractor, subcontractor, vendor, equipment operator and owner operator, in each such case to the extent such Person is engaged to perform work on a Segment, to comply, with such other requirements relating to the construction of the Segments as the City may impose by written notification delivered to the Developer, to the extent legally required as a result of changes in applicable federal, State or City laws.

(h) The Developer shall require, and the specifications and bid and contract documents shall require, all contractors, subcontractors, vendors, equipment operators and owner operators, in each such case to the extent such Persons are engaged to perform work on a Segment, to submit certified weekly payroll records to the Developer for inspection by the City, and to furnish certified payroll records to the City promptly upon request.

The Developer shall provide proof to the City, at such intervals and in such form as the City may reasonably require, that the foregoing requirements have been satisfied as to all of the Segments for which a Payment Request is submitted pursuant hereto.

Section 3.4. Bonding Requirements. Prior to the commencement of construction of a Segment, the Developer shall secure, or shall cause each contractor, subcontractor, vendor, equipment operator and owner operator, in each such case to the extent such Person is engaged to perform work on such Segment to secure, appropriate bonds for the construction and completion of construction of such Segment, a faithful performance bond and a bond for the security of laborers and materialmen, each in an amount that is equal to 100% of the contract price for such Segment. If any such bonds for a Segment are provided by such a contractor, subcontractor, vendor, equipment operator or owner operator, the City shall be named as an additional insured on such bonds. Each issuer of any such bond shall be duly authorized to issue such bond in the State. Each such bond shall comply with the provisions of California Government Code Sections 66499.1 and 66499.2.

Section 3.5. Inspection; Completion of Construction. The City shall have primary responsibility for providing inspection of the work of construction of the Segments to ensure that the work of construction is accomplished in accordance with the Plans. The City's personnel shall have access to the site of the work of construction at all reasonable times for the purpose of accomplishing such inspection. Upon the completion of the construction of a Segment to the satisfaction of the City's inspectors, the Developer shall notify the City and the City Engineer in writing that the construction of such Segment has been completed in accordance with the Plans.

No later than ten days after receiving notification pursuant to Section 2.2(b) or Section 2.2(c) hereof that a Segment was constructed in accordance with the Plans therefor, the Developer shall forthwith file with the San Bernardino County Recorder a Notice of Completion, in form acceptable to the City Engineer, pursuant to the provisions of Section 3093 of the California Civil Code, if applicable. The Developer shall furnish to the City a duplicate copy of each such Notice of Completion showing thereon the date of filing with said County Recorder.

Section 3.6. Maintenance of Facilities; Warranties. The Developer shall maintain each Segment in good and safe condition until the Acceptance Date of the Component of which such Segment is a part. Prior to the Acceptance Date of the Component of which such Segment is a part, the Developer shall be responsible for maintaining such Segment in proper operating condition, and shall perform such maintenance on such Segment as the City Engineer reasonably determines to be necessary. As of the Acceptance Date of the Component of which a Segment is a part, the Developer shall assign to the City all of the Developer's rights in any warranties, guarantees, maintenance obligations or other evidence of contingent obligations of third Persons with respect to such Segment. The Developer shall warrant each Segment to be free from construction defects (and shall correct or cause to be corrected any such defects) for a period of one year from the Acceptance Date of the Component of which such Segment is a part, or alternatively, shall provide a bond reasonably acceptable in form and substance to the City and the Developer for such period and such purpose to ensure that such defects that appear within said period will be repaired, replaced or corrected by the Developer, at its own cost and expense, to the reasonable satisfaction of the City. The Developer shall continue to repair, replace or correct any such defects within 30 Days after written notice thereof by the City to the Developer, and shall complete such repairs, replacement or correction as soon as practicable.

Section 3.7. Insurance Requirements. The Developer shall, at all times prior to the final Acceptance Date of all Segments, maintain, deliver to the City and keep in full force and

effect, the following insurance policies or, pursuant to Section 3.3(f) hereof, cause each contractor, subcontractor, vendor, equipment operator and owner operator, in each such case to the extent such Person is engaged to perform work on a Segment, to so maintain, deliver and keep the same in full force and effect:

(a) a protective liability policy providing for not less than the following amounts:

Bodily Injury	$1,000,000 each person $2,000,000 each occurrence $1,000,000 each accident for products and completed operations
Property Damage	$1,000,000 each accident
Workers' Compensation	Statutory, with a waiver of subrogation in favor of the City

(b) Automobile Liability Insurance to include all owned, non-owned or non-hired vehicles, including loading and unloading thereof:

Automobile Bodily Injury	$1,000,000 each person $2,000,000 each occurrence
Automobile Property Damage	$1,000,000 each accident

Each liability insurance policy shall bear an endorsement or shall have attached a rider whereby it is provided that, in the event of expiration or proposed cancellation of such policy for any reason whatsoever, the City shall be notified by registered mail, return receipt requested, giving a sufficient time before the date thereof to comply with any applicable law or statute, but in no event less than 30 days before expiration or cancellation is effective.

The following statement shall be included on the insurance certificate:

Additional Insured: The insurer agrees that the City, its City Council, and/or all City Council appointed groups, committees, boards and any other City Council appointed body, and/or elective and appointive officers, servants, agents or employees of the City, when acting as such, are additional insureds hereunder, for the acts of the insured, and such insurance shall be primary to any insurance of the City.

The Developer may effect such coverage under blanket insurance policies; provided, however, that (a) such policies are written on a per occurrence basis, (b) such policies comply in all other respects with the provisions of this Section, and (c) the protection afforded the City under any such policy shall be no less than that which would be available under a separate policy relating only to the Segments. All policies of insurance shall be with companies licensed or approved by the California Commissioner of Insurance and rated A-VII or better in the most recent edition of Best's Insurance Guide and shall be issued and delivered in accordance with State law and regulations.

If the Developer fails to maintain or cause to be maintained any insurance required hereby, the City may, but shall not be obligated to, procure such insurance and recover the amount of the premiums therefor from the Developer or retain such amount from any monies due to the Developer under this Acquisition Agreement. The failure of the City to procure any such insurance shall in no way relieve the Developer of any of its obligations under this Acquisition Agreement.

Section 3.8. Ownership of Facilities. Notwithstanding the fact that some or all of the Facilities may be constructed in dedicated street rights-of-way or on property that has been or will be dedicated to the City, the Facilities shall be and remain the property of the Developer until title thereto is conveyed to and accepted by the City as provided herein and in the Conditions of Approval. Such ownership by the Developer shall likewise not be affected by any agreement that the Developer may have entered into or may enter into with the City pursuant to the provisions of the Subdivision Map Act, Section 66410 *et seq.* of the California Government Code, and the provisions of this Section and the Conditions of Approval shall control.

ARTICLE IV

REPRESENTATIONS, WARRANTIES AND COVENANTS; INDEMNIFICATION

Section 4.1. Representations and Warranties of the Developer. The Developer makes the following representations and warranties for the benefit of the City:

(a) *Organization.* The Developer represents and warrants that the Developer is a limited liability company duly organized, validly existing and in good standing under the laws of the State of Delaware, is authorized to conduct business and is in good standing under the laws of the State, and has the power and authority to own its properties and assets and to carry on its business as now being conducted and as now contemplated.

(b) *Authority*. The Developer represents and warrants that the Developer has the power and authority to enter into this Acquisition Agreement, and has taken all action necessary to cause this Acquisition Agreement to be executed and delivered, and this Acquisition Agreement has been duly and validly executed and delivered on behalf of the Developer.

(c) *Binding Obligation*. The Developer represents and warrants that this Acquisition Agreement is a valid and binding obligation of the Developer and is enforceable against the Developer in accordance with its terms, subject to bankruptcy, insolvency, reorganization or other similar laws affecting the enforcement of creditors' rights in general and by general equity principles.

(d) *Environmental Matters Relating to Segments*. The Developer represents and warrants that none of the Developer, any Affiliate of the Developer, or any subcontractor, agent or employee of the Developer or an Affiliate thereof, has used, generated, manufactured, procured, stored, released, discharged or disposed of (whether accidentally or intentionally) any Hazardous Material on, under or in any Segment or the Related Property of such Segment, or transported (whether accidentally or intentionally) any Hazardous Material to or from such Segment or such Related Property, in violation of any federal, state or local law, ordinance, regulation, rule or decision regulating Hazardous Material.

The Developer represents and warrants that, as of the Acceptance Date of each Segment, there will not be present on, under or in such Segment or the Related Property of such Segment, or any portion thereof, any Hazardous Materials, except for (i) any types or amounts that do not require remediation or mitigation under federal, state or local laws, ordinances, regulations, rules or decisions, (ii) those that have been remediated or mitigated in full compliance with applicable federal, state or local laws, ordinances, regulations, rules or decisions, or (iii) those with respect to which ongoing remediation or mitigation is being performed in full compliance with applicable federal, state or local laws, ordinances, regulations, rules or decisions.

The Developer represents and warrants that neither the Developer nor any Affiliate thereof has received notice of, and, to the best of the Developer's knowledge, there is not, any proceeding or formal inquiry by any governmental authority, body or agency with respect to the presence of Hazardous Materials on, under or in any Segment or the Related Property of such Segment, or any portion thereof, or any structure, fixtures, equipment or other objects thereon, or the migration thereof from or to other property.

Section 4.2. Covenants of the Developer. The Developer makes the following covenants for the benefit of the City:

(a) *Completion of Segments*. The Developer covenants that it will use its reasonable and diligent efforts to do all things that may be lawfully required of it in order to cause the Segments to be completed in accordance with this Acquisition Agreement and the Conditions of Approval.

(b) *Compliance with Laws*. The Developer covenants that, while any of the Facilities are owned by the Developer or required pursuant to this Acquisition Agreement to be maintained by the Developer, it will not commit, suffer or permit any of its agents, employees or contractors to commit any act to be done in, upon or to such Facilities in violation in any material respect of any law, ordinance, rule, regulation or order of any governmental authority or any covenant, condition or restriction now or hereafter affecting such Facilities or the Property on, in or over which such Facilities are located.

(c) *Payment Requests*. The Developer covenants that (i) it will not request payment pursuant to this Acquisition Agreement for the acquisition of any improvements that are not part of a Segment, and (ii) it will diligently follow all procedures set forth in this Acquisition Agreement with respect to Payment Requests.

(d) *Financial Records*. Until the Acceptance Date of the last Segment accepted by the City pursuant hereto, the Developer covenants to maintain proper books of record and account for the Facilities and all costs related thereto. The Developer covenants that such accounting books will be maintained in accordance with generally accepted accounting principles and will be available for inspection by the City within a reasonable time after the City submits a written request to the Developer requesting that such books be made available for inspection.

(e) *Environmental Matters Relating to Segments*. The Developer covenants that none of the Developer, any Affiliate of the Developer or any subcontractor, agent or employee thereof, will use, generate, manufacture, procure, store, release, discharge or dispose of (whether accidentally or intentionally) at any time on or prior to the Acceptance Date of each Segment any Hazardous Material on, under or in such Segment or the Related Property of such Segment, or transport (whether accidentally or intentionally) any Hazardous Material to or from such Segment or such Related Property, in violation of any federal, state or local law, ordinance, regulation, rule or decision regulating Hazardous Material in effect at the time of such use, generation, manufacturing, procurement, storage, release, discharge, disposal or transportation.

(f) *Permits*. The Developer covenants that it will obtain all governmental or other permits required to proceed with the construction of the Facilities, and that it will pay all fees relating thereto that are required to be paid, in accordance with the Conditions of Approval.

Section 4.3. Covenants of the City. The City makes the following covenants for the benefit of the Developer:

(a) *Completion of Segments*. The City covenants that it will use its reasonable and diligent efforts to take all actions that may be lawfully required of it in issuing permits, processing and approving Plans and inspecting the Segments in accordance with this Acquisition Agreement.

(b) *Payment Requests*. The City covenants that it will diligently follow all procedures set forth in this Acquisition Agreement with respect to Payment Requests.

(c) *Developer Acquisition Account*. The City covenants (i) that, if the Special Tax is to be levied and collected prior to the issuance of Bonds, the City will, at or prior to the first receipt of proceeds of the Special Tax, establish the Developer Acquisition Account, (ii) that the City will deposit the Net Proceeds received prior to the issuance of Bonds in the Developer Acquisition Account, and (iii) that upon the issuance of Bonds, the City will transfer or cause to be transferred any Net Proceeds remaining in the Developer Acquisition Account to the Trustee for deposit in the Developer Acquisition Account established under the Indenture.

(d) *Accounting*. The City covenants to provide the Developer, within 30 days following the Developer's written request, an accounting of the Developer Acquisition Account, showing the current balance therein and all deposits thereto and disbursements therefrom since the last such accounting. The Developer shall not make more than two such written requests in any calendar year.

Section 4.4. Indemnification. The Developer agrees to protect, indemnify, defend and hold the City and the Community Facilities District, and its respective officers, employees and agents (the "Indemnified Parties"), and each of them, harmless from and against any and all claims, losses, expenses, suits, actions, decrees, judgments, awards, attorney's fees and court costs that any Indemnified Party may suffer or that may be sought against or recovered or obtained from any Indemnified Party as a result of or by reason of or arising out of or in consequence of (a) the acquisition, construction, installation or financing of the Facilities, (b) the untruth or inaccuracy of any representation or warranty made by the Developer in this Acquisition Agreement or in any certifications delivered by the Developer pursuant hereto or in connection with the issuance of any Bonds, (c) the release, threatened release, storage, treatment, transportation or disposal (as such terms are defined in applicable law) of any Hazardous Materials on, under, in, from or to any portion of the Property while such portion of the Property is owned by the Developer or an Affiliate thereof, and (d) any act or omission of the Developer, any Affiliate of the Developer or any of their subcontractors, or their respective officers, employees or agents, in connection with the Facilities, including noncompliance with any covenants made by the Developer in this Acquisition Agreement. If the Developer fails to do so,

the Indemnified Party shall have the right, but not the obligation, to defend the same and charge all of the direct or incidental costs of such defense, including any fees or costs, to and recover the same from the Developer.

Upon receipt by an Indemnified Party of notice of any claim, loss, expense, suit, action, decree, judgment or award for which the Developer is obligated to protect, indemnify, defend and hold such Indemnified Party harmless pursuant to this Section, such Indemnified Party shall promptly notify the Developer in writing of such claim, loss, expense, suit, action, decree, judgment or award. Neither the Developer nor an Indemnified Party shall, without the other's written consent, settle, compromise or consent to the entry of judgment with respect to any claim, suit or action for which the Developer is obligated to protect, indemnify, defend and hold such Indemnified Party harmless pursuant to this Section.

No indemnification is required to be paid by the Developer for any claim, loss or expense (a) arising from the willful misconduct or negligence of an Indemnified Party, or (b) arising from the use or operation of a Segment after the Acceptance Date of the Component of which such Segment is a part, unless such claim, loss or expense results from the defective or improper design, construction or installation of such Segment.

The provisions of this Section shall survive the termination of this Acquisition Agreement.

ARTICLE V

EVENTS OF DEFAULT AND REMEDIES; FORCE MAJEURE

Section 5.1. Developer Events of Default. The following shall be Developer Events of Default:

(a) the Developer shall voluntarily file for reorganization or other relief under any Federal or state bankruptcy or insolvency law;

(b) the Developer shall have any involuntary bankruptcy or insolvency action filed against it, or shall suffer a trustee in bankruptcy or insolvency or receiver to take possession of the assets of the Developer, or shall suffer an attachment or levy of execution to be made against its property unless, in any of such cases, such action, possession, attachment or levy shall have been terminated or released within 60 days after the commencement thereof;

(c) except to the extent that the Developer's obligation to construct or cause to be constructed the Facilities is excused pursuant to Section 5.5 hereof, the Developer shall abandon construction of the Facilities that, as of the time of such abandonment, the Developer is required to construct or cause to be constructed in accordance with the Conditions of Approval (failure for a period of three consecutive months or failure for two periods of two consecutive months to undertake substantial work related to the construction of the Facilities shall constitute a non-exclusive example of such abandonment);

(d) the Developer shall breach any covenant or default in the performance of any obligation under this Acquisition Agreement and such breach or default shall have continued for a period of 60 days after written notice thereof, specifying such breach or default and requiring the same to be remedied, shall have been given to the Developer by the City; provided, however, that, if in the reasonable opinion of the City such breach or default can be corrected, but not within such 60 day period, such breach or default shall not constitute a Developer Event of Default if corrective action is instituted by the Developer within such 60 day period and the Developer thereafter diligently and in good faith cures such breach or default in a period of time reasonably determined by the City to be appropriate under the circumstances;

(e) any representation or warranty of the Developer set forth herein or in any certifications delivered by the Developer hereunder shall prove to have been false or misleading in any material respect when made or deemed made;

(f) the Developer shall transfer any of its rights or obligations under this Acquisition Agreement, without the prior written consent of the City, as provided in Section 6.3 hereof;

(g) the Developer shall have made any material misrepresentation or material omission in any written materials furnished in connection with any preliminary official

statement, official statement or bond purchase contract that has not been corrected and is used in connection with the sale of any Bonds;

(h) the Developer, any Affiliate thereof or any permitted assign or successor-in-interest under this Acquisition Agreement shall at any time bring any action, suit, proceeding, inquiry or investigation at law or in equity, before any court, regulatory agency, public board or body that in any way seeks to challenge or overturn the Community Facilities District, the levy of the Special Tax in accordance with the Rate and Method or the validity of the Bonds or the proceedings leading up to their issuance; provided, however, that the Developer, any Affiliate thereof or any permitted assign or successor-in-interest under this Acquisition Agreement that owns any of the Property may bring an action or suit contending that the Special Tax has not been levied in accordance with the methodology contained in the Rate and Method;

(i) the Developer shall materially fail to complete the Facilities as contemplated by this Acquisition Agreement and the Conditions of Approval and such failure shall have continued for a period of 60 days after written notice thereof, specifying such failure and requiring the same to be remedied, shall have been given to the Developer by the City; provided, however, that, if in the reasonable opinion of the City such failure can be corrected, but not within such 60 day period, such failure shall not constitute a Developer Event of Default if corrective action is instituted by the Developer within such 60 day period and the Developer thereafter diligently and in good faith cures such breach or default in a period of time reasonably determined by the City to be appropriate under the circumstances; or

(j) the Developer, any Affiliate thereof or any permitted assign or successor-in-interest under this Acquisition Agreement that owns any of the Property on which the Special Tax has been levied shall fail to pay such Special Tax as and when due and such failure shall have continued for a period of 60 days after written notice thereof, specifying such failure and requiring the same to be remedied, shall have been given to the Developer by the City.

Section 5.2. Remedies for Developer Events of Default. (a) If a Developer Event of Default described in subsection (a), (b) or (h) of Section 5.1 hereof occurs, this Acquisition Agreement shall automatically terminate.

(b) If a Developer Event of Default described in subsection (c), (d), (e), (f), (g), (i) or (j) of Section 5.1 hereof occurs and is continuing, the City may terminate this Acquisition Agreement by delivering a written notice of such termination to the Developer.

(c) If a Developer Event of Default occurs and is continuing, the City may pursue any other remedy at law or equity available with respect thereto.

(d) If this Acquisition Agreement is terminated pursuant to this Section, the City may, but shall not be obligated to, complete the acquisition, construction and installation of any Segment not theretofore acquired from the Developer pursuant hereto, and the City may use all or any portion of the monies in the Developer Acquisition Account to pay for such acquisition,

construction and installation. In the event of such termination, the Developer shall have no claim or right to any further payment of the Purchase Price of any Segment.

Section 5.3. City Events of Default. The following shall be City Events of Default:

(a) the City shall voluntarily file for reorganization or other relief under any Federal or state bankruptcy or insolvency law;

(b) the City shall have any involuntary bankruptcy or insolvency action filed against it, or shall suffer a trustee in bankruptcy or insolvency or receiver to take possession of the assets of the City, or shall suffer an attachment or levy of execution to be made against its property, in any of such cases, such action, possession, attachment or levy shall have been terminated or released within 60 days after the commencement thereof;

(c) the City shall breach any covenant or default in the performance of any obligation under this Acquisition Agreement and such breach or default shall have continued for a period of 60 days after written notice thereof, specifying such breach or default and requiring the same to be remedied, shall have been given to the City by the Developer; provided, however, that, if in the reasonable opinion of the Developer such breach or default can be corrected, but not within such 60 day period, such breach or default shall not constitute a City Event of Default if corrective action is instituted by the City within such 60 day period and the City thereafter diligently and in good faith cures such breach or default in a period of time reasonably determined by the Developer to be appropriate under the circumstances;

(d) any representation or warranty of the City set forth herein shall prove to have been false or misleading in any material respect when made; and

(e) the City shall transfer any of its respective rights or obligations under this Acquisition Agreement, without the prior written consent of the Developer, as provided in Section 6.3 hereof.

Section 5.4. Remedies for City Events of Default. (a) If a City Event of Default occurs and is continuing, the Developer may terminate this Acquisition Agreement by delivering a written notice of such termination to the City.

(b) If a City Event of Default occurs and is continuing, the Developer may pursue any other remedy at law or equity available with respect thereto; provided, however, that the City shall not be liable in damages to the Developer. In light of the foregoing, the Developer covenants not to sue for or claim any damages for any alleged breach of, or dispute that arises out of, this Acquisition Agreement.

(c) The Developer understands and acknowledges that the City would not have entered into this Acquisition Agreement if it were to be liable in damages under or with respect to this Acquisition Agreement. Any and all obligations of the City hereunder shall be payable only from amounts on deposit in the Developer Acquisition Account. The City shall have no

pecuniary liability under this Acquisition Agreement for any act or omission of the City, except as set forth in this Section.

Section 5.5. Force Majeure. (a) Except as may be specifically provided in this Acquisition Agreement, the performance by the City or the Developer of its respective obligations hereunder shall be excused during, and the period of time for performance of its respective obligations hereunder shall be extended for a period of time equal to, any period of delay caused by reason of (i) acts of God or civil commotion, (ii) riots, strikes, picketing or other labor disputes, (iii) shortages of materials or supplies, (iv) damage to work in progress by reason of fire, floods, earthquakes or other casualty, (v) enactment of laws that prevent or preclude compliance by the City or the Developer with a material provision of this Acquisition Agreement, (vi) administrative proceedings challenging the Community Facilities District, any Bonds, this Acquisition Agreement or a Payment Request brought by Persons other than the City or the Developer, or any Affiliate thereof, (vii) litigation, including the pendency thereof, brought by Persons other than the City or the Developer, or any Affiliate thereof, including litigation challenging the Community Facilities District, the development of the Property, any Bonds, this Acquisition Agreement or a Payment Request, (viii) pendency of initiatives or referenda affecting the Community Facilities District, the development of the Property, the Bonds, this Acquisition Agreement or a Payment Request, or (ix) any other cause beyond the reasonable control of the City or the Developer, respectively; provided, however that, as to any party (A) the financial inability of such party itself to perform under this Acquisition Agreement, and (B) the negligence or willful misconduct of such party shall not constitute a permitted delay for purposes of this Section and, provided, further, that any action, omission, or failure to approve a Payment Request, or the imposition of additional requirements or restrictions in connection therewith by the City, caused by the Developer's actual failure to comply with applicable laws or regulations or the provisions of this Acquisition Agreement (other than an actual failure to comply that results from the enactment of laws that prevent or preclude compliance by a party with a material provision of this Acquisition Agreement, administrative proceedings challenging the Community Facilities District, any Bonds, this Acquisition Agreement, a Payment Request, litigation brought by Persons other than a party hereto, or an Affiliate of a party hereto, including litigation challenging the Community Facilities District, the development of the Property, any Bonds, this Acquisition Agreement, a Payment Request, or initiative or referenda affecting the Community Facilities District, the development of the Property, any Bonds, this Acquisition Agreement, a Payment Request), shall not constitute a permitted delay for the Developer for purposes of this Section.

(b) If the City or the Developer shall claim that performance of its respective obligations hereunder is excused by a permitted delay pursuant to this Section, such party shall give the other party hereto written notice of the commencement of such permitted delay within 30 days after first gaining knowledge of such permitted delay.

(c) If the City or the Developer shall claim that performance of its respective obligations hereunder is excused by a permitted delay pursuant to this Section, such party's performance shall only be excused during, and the period of time for performance of its obligations hereunder shall only be extended for a period of time equal to, the period of time for which the cause of such permitted delay is in effect and is actually causing a delay in performance by such party of its obligations hereunder.

(d) The City and the Developer shall act diligently and in good faith to avoid foreseeable delays in performance and to remove the cause of any permitted delay under this Section or develop a reasonable alternative means of performance of its respective obligations hereunder.

ARTICLE VI

MISCELLANEOUS

Section 6.1. Developer as Independent Contractor. Each of the City and the Developer hereby acknowledges and agrees that the Developer, in performing its obligations under this Acquisition Agreement, is acting as an independent contractor and not as an agent of the City. The City shall not have any responsibility for payment to any contractor, subcontractor or supplier of the Developer.

Section 6.2. Other Agreements. Nothing contained herein shall be construed as affecting the City's or the Developer's respective duty to perform its respective obligations under other agreements, land use regulations or subdivision requirements relating to the development of the Property, which obligations are and shall remain independent of the Developer's rights and obligations, and the City's rights and obligations, under this Acquisition Agreement; provided, however, that the Developer shall use its reasonable and diligent efforts to perform each and every covenant to be performed by it under any lien or encumbrance, instrument, declaration, covenant, condition, restriction, license, order or other agreement, the nonperformance of which could reasonably be expected to materially and adversely affect the acquisition, construction and installation of the Segments.

Section 6.3. Binding on Successors and Assigns. Neither this Acquisition Agreement nor the duties and obligations of the Developer hereunder may be assigned to any Person without the written consent of the City, which consent shall not be unreasonably withheld, conditioned or delayed. Neither this Acquisition Agreement nor the duties and obligations of the City hereunder may be assigned to any Person, without the written consent of the Developer, which consent shall not be unreasonably withheld, conditioned or delayed. The agreements and covenants included herein shall be binding on and inure to the benefit of any partners, permitted assigns, and successors-in-interest of the parties hereto.

Section 6.4. Amendments. This Acquisition Agreement may be amended, supplemented or otherwise modified only by an instrument in writing executed and delivered by the City and the Developer.

Section 6.5. Waivers. No waiver of, or consent with respect to, any provision of this Acquisition Agreement by a party hereto shall in any event be effective unless the same shall be in writing and signed by such party, and then such waiver or consent shall be effective only in the specific instance and for the specific purpose for which it was given.

Section 6.6. Third-Party Beneficiaries. The Community Facilities District shall be a third-party beneficiary hereof. No other Person shall be deemed to be a third-party beneficiary hereof, and nothing in this Acquisition Agreement, either express or implied, is intended to confer upon any Person, other than the City, the Developer and the Community Facilities District and their respective successors and assigns, any rights, remedies, obligations or liabilities under or by reason of this Acquisition Agreement.

Section 6.7. Notices. Any written notice, statement, demand, consent, approval, authorization, offer, designation, request or other communication to be given hereunder shall be given to the party entitled thereto at its address set forth below, or at such other address as such party may provide to the other party in writing from time to time, namely:

City:	City of Ontario 303 East "B" Street Ontario, California 91764 Attention: Executive Director of Finance
Developer:	KB HOME Cal Management Services LLC 36310 Inland Valley Drive, Suite 300 Wildomar, California 92595 Attention: Scott Hansen, Vice President, Forward Planning

Each such notice, statement, demand, consent, approval, authorization, offer, designation, request or other communication hereunder shall be deemed delivered to the party to whom it is addressed (a) if given by courier or delivery service or if personally served or delivered, upon delivery, (b) if given by registered or certified mail, return receipt requested, deposited with the United States mail postage prepaid, 72 hours after such notice is deposited with the United States mail, (c) if given by electronic mail, on the date sent, but only if confirmation of the receipt of such electronic mail is received or if notice is concurrently sent by another means specified herein, and (d) if given by any other means, upon delivery at the address specified in this Section.

Section 6.8. Attorneys' Fees. If any action is instituted to interpret or enforce any of the provisions of this Acquisition Agreement, the party prevailing in such action shall be entitled to recover from the other party thereto reasonable attorney's fees and costs of such suit (including both prejudgment and postjudgment fees and costs) as determined by the court as part of the judgment.

Section 6.9. Severability. If any term or provision of this Acquisition Agreement, or the application of the term or provision to any Person or circumstance is, to any extent, held to be invalid or unenforceable in any jurisdiction, but the extent of such invalidity or unenforceability does not destroy the basis of the bargain between the parties as contained herein, the remainder of this Acquisition Agreement, or the application of the term or provision to Persons or circumstances other than those as to which the term or provision is held invalid or unenforceable, shall not be affected by such invalidity or unenforceability, and each remaining term or provision of this Assignment Agreement shall be valid and will be enforced to the fullest extent permitted by law.

Section 6.10. Governing Law. This Acquisition Agreement and any dispute arising hereunder shall be governed by and interpreted in accordance with the laws of the State.

Section 6.11. Jurisdiction and Venue. Each of the City and the Developer (a) agrees that any suit, action or other legal proceeding arising out of or relating to this Acquisition Agreement shall be brought in a state or local court in the County of San Bernardino or in the

Courts of the United States of America in the district in which said county is located, (b) consents to the jurisdiction of each such court in any such suit, action or proceeding, and (c) waives any objection that it may have to the laying of venue of any suit, action or proceeding in any of such courts and any claim that any such suit, action or proceeding has been brought in an inconvenient forum. Each of the City and the Developer agrees that a final and non-appealable judgment in any such action or proceeding shall be conclusive and may be enforced in other jurisdictions by suit on the judgment or in any other manner provided by law.

Section 6.12. Electronic Signature. Each of the parties hereto agrees that the transaction consisting of this Acquisition Agreement may be conducted by electronic means. Each party agrees, and acknowledges that it is such party's intent, that if such party signs this Acquisition Agreement using an electronic signature, it is signing, adopting and accepting this Acquisition Agreement and that signing this Acquisition Agreement using an electronic signature is the legal equivalent of having placed its handwritten signature on this Acquisition Agreement on paper. Each party acknowledges that it is being provided with an electronic or paper copy of this Acquisition Agreement in a usable format.

Section 6.13. Counterparts. This Acquisition Agreement may be executed in any number of counterparts and each of such counterparts shall for all purposes be deemed to be an original, and all such counterparts shall together constitute but one and the same instrument.

Section 6.14. Effective Date. This Acquisition Agreement has been dated for convenience purposes only. Notwithstanding the stated date of this Acquisition Agreement, this Acquisition Agreement shall be effective on the Effective Date.

IN WITNESS WHEREOF, the parties hereto have executed this Acquisition Agreement as of the day and year first hereinabove written.

CITY OF ONTARIO

By: _____
Scott Ochoa,
City Manager

KB HOME CAL MANAGEMENT SERVICES LLC,
a Delaware limited liability company

By: _____
Scott Hansen,
Vice President, Forward Planning

EXHIBIT A

FACILITIES

The Facilities consist of the following Components and Segments; provided, however, that each such Segment described below shall constitute a Segment for purposes of this Acquisition Agreement only if such Segment was constructed by or on behalf of the Developer singly and not jointly or in conjunction with another Member or NMC Builders:

Streets and Traffic Circulation System Facilities			
No.	**DIF Program Project No.**	**Component**	**Segment**
ST-1	ST-024	Ontario Ranch Traffic Control System	Signalized intersection improvements at Haven Avenue and Eucalyptus Avenue
ST-2	ST-014	Haven Avenue from Riverside Drive to Bellegrave (Merrill) Avenue	Construction of approximately 1,300 linear feet of full half width street improvements on the west side of Haven Avenue beyond the curb adjacent lanes along tract frontage from Eucalyptus Avenue to Parkview Street
ST-3	ST-011	Eucalyptus Avenue from Euclid Avenue to Milliken Avenue	Construction of approximately 1,340 linear feet of full half width street improvements on the south side of Eucalyptus Avenue beyond the curb adjacent lanes along tract frontage to Haven Avenue
ST-4	Last Lane	Last Lane	Construction of approximately 1,300 linear feet of curb adjacent last lane street, curb, gutter, sidewalk, and street lighting improvements on the west side of Haven Avenue along tract frontage from Eucalyptus Avenue to Parkview Street
ST-5	Last Lane	Last Lane	Construction of approximately 1,340 linear feet of curb adjacent last lane street, curb, gutter, sidewalk, and street lighting improvements on the south side of Eucalyptus Avenue along tract frontage to Haven Avenue

Streets and Traffic Circulation System Facilities			
ST-6	Parkway	Parkway	Construction of approximately 1,300 linear feet of neighborhood edge, landscaping, and public improvements in the right-of-way on the west side of Haven Avenue along tract frontage from Eucalyptus Avenue to Parkview Street
ST-7	Parkway	Parkway	Construction of approximately 1,205 linear feet of raised landscaped median in Haven Avenue from Eucalyptus Avenue to Parkview Street
ST-8	Parkway	Parkway	Construction of approximately 1,340 linear feet of neighborhood edge, landscaping, and public improvements in the right-of-way on the south side of Eucalyptus Avenue along tract frontage to Haven Avenue

Water and Recycled Water System Facilities			
No.	**DIF Program Project No.**	**Component**	**Segment**
W-1	WT-016	Recycled Water Systems	Approximately 1,193 linear feet of 8-inch of recycled water improvements in Haven Avenue along tract frontage
W-2	WT-016	Recycled Water Systems	Approximately 1,391 linear feet of 16-inch of recycled water improvements in Eucalyptus Avenue along tract frontage

Fiber Optic System Facilities			
No.	**DIF Program Project No.**	**Component**	**Segment**
F-1	FO-004	Distribution Network - Major Streets Conduit System	Approximately 1,391 linear feet of fiber optic conduit in Haven Avenue from Eucalyptus Avenue to the southerly boundary of TM 20472 (Parkview Street)

EXHIBIT B

FORM OF PAYMENT REQUEST

City of Ontario
Community Facilities District No. 76
(Compass Pointe)

The City of Ontario (the "City") and KB HOME Cal Management Services LLC (the "Developer"), are parties to the Acquisition and Funding Agreement, dated as of November 1, 2025 (the "Acquisition Agreement"). Capitalized undefined terms use herein shall have the meanings ascribed thereto in the Acquisition Agreement. Pursuant to the Acquisition Agreement, the Developer hereby requests confirmation that the Segment described in Attachment A attached hereto (the "Segment") is [Complete] [Substantially Complete] and hereby further requests approval of the Purchase Price of the Segment. In connection with this Payment Request, the Developer hereby represents and warrants to the City as follows:

(a) The person executing this Payment Request on behalf of the Developer is a Developer Representative, qualified to execute this Payment Request on behalf of the Developer and knowledgeable as to the matters set forth herein.

(b) The Developer has submitted or submits herewith to the City Engineer as-built drawings or similar plans and specifications for the Segments for which payment is requested, and such drawings or plans and specifications, as applicable, are true, correct and complete; provided, however, that if such Segment is a Circulation System Segment, and certification is being requested that such Segment is Substantially Complete but not Complete, such drawings or plans and specifications need not be submitted to the City Engineer until certification is being requested that such Segment is Complete.

(c) Each of the Segments described in Attachment A has been constructed in accordance with the Plans therefor, and in accordance with all applicable City standards and the requirements of the Acquisition Agreement, and the as-built drawings or similar Plans and specifications referenced in paragraph (b) above.

(d) The true and correct Actual Cost of each Segment is set forth in Attachment A.

(e) The Developer has submitted or submits herewith to the City Engineer invoices, receipts, worksheets and other evidence of costs that are in sufficient detail to allow the City Engineer to verify the Actual Cost of each Segment for which payment is requested.

(f) There are no liens, rights to lien or attachment upon, or claims affecting the right to receive the payment requested herein that has not been released or will not be released simultaneously with the payment of such obligation, other than materialmen's or mechanics' liens accruing by operation of law. Copies of lien releases for all work for which payment is requested hereunder are attached hereto.

(g) No Developer Event of Default has occurred and is continuing.

(h) The representations and warranties of the Developer set forth in Section 4.1 of the Acquisition Agreement are true and correct on and as of the date hereof with the same force and effect as if made on and as of the date hereof (except that no certification is made with respect to the representations and warranties contained in subsection (d) of said Section 4.1).

(i) As of the date hereof, there is not present on, under or in the Segment or the Related Property of the Segment, or any portion thereof, any Hazardous Materials, except for (i) any types or amounts that do not require remediation or mitigation under federal, state or local laws, ordinances, regulations, rules or decisions, (ii) those that have been remediated or mitigated in full compliance with applicable federal, state or local laws, ordinances, regulations, rules or decisions, (iii) those with respect to which ongoing remediation or mitigation is being performed in full compliance with applicable federal, state or local laws, ordinances, regulations, rules or decisions, or (iv) any types or amounts that do not present a human health risk or hazard to the public.

(j) Each of the Segments described in Attachment A was constructed by or on behalf of the Developer singly and not jointly or in conjunction with another Member or NMC Builders.

The Developer hereby declares under penalty of perjury that the above representations and warranties are true and correct.

The Developer hereby requests that the Purchase Price be paid to the Person or Persons, in the amounts, set forth in Attachment B hereto.

Date: _____

KB HOME CAL MANAGEMENT SERVICES LLC, a Delaware limited liability company

By: _____
Name: _____
Title: _____

CONFIRMATION AND APPROVAL BY THE CITY ENGINEER

[The City Engineer has (a) confirmed that the Segment described in Attachment A is Complete and was constructed in accordance with the Plans therefor, and (b) reviewed, verified and approved the Actual Cost of such Segment described in Attachment A. Such Segment is Complete and the Purchase Price therefor described in Attachment A is eligible for payment to the Developer pursuant to the Acquisition Agreement.]

[The City Engineer has (a) confirmed that the Segment described in Attachment A, which is a Circulation System Segment, is Substantially Complete and was constructed in accordance with the Plans therefor, and (b) reviewed, verified and approved the Actual Cost of such Segment described in Attachment A. Such Segment is Substantially Complete and $_____, an amount equal to 85% of the Purchase Price therefor described in Attachment A, is eligible for payment to the Developer pursuant to the Acquisition Agreement.]

[The City Engineer previously confirmed that the Segment described in Attachment A was Substantially Complete, and previously indicated that $_____, an amount equal to 85% of the Purchase Price therefor described in Attachment A, was eligible for payment to the Developer pursuant to the Acquisition Agreement. The City Engineer has (a) now confirmed that such Segment is Complete and was constructed in accordance with the Plans therefor, and (b) reviewed, verified and approved the Actual Cost of such Segment described in Attachment A. Such Segment is Complete and $_____, an amount equal to the remaining 15% of the Purchase Price therefor described in Attachment A is eligible for payment to the Developer pursuant to the Acquisition Agreement.]

Date: _____

CITY ENGINEER OF THE CITY OF ONTARIO

By: _____

ATTACHMENT A

Segment	Purchase Price

ATTACHMENT B

PURCHASE PRICE PAYMENT INSTRUCTIONS

The Developer hereby requests that the Purchase Price be paid to the Person or Persons, in the amounts, set forth below:

Payee No. 1: Pay $_____/__% of the Purchase Price to _____ by wire transfer in accordance with the following instructions:

[Insert wire transfer instructions]

Date:

KB HOME CAL MANAGEMENT SERVICES LLC, a Delaware limited liability company

By: _____
Name: _____
Title: _____

[Note: If Exhibit A to the Acquisition Agreement indicates that the Segment being acquired includes design costs that have been paid by NMC Builders, the Payment Instructions must

include an instruction to pay NMC Builders the portion of the Purchase Price allocable to such design costs.]

CITY OF ONTARIO *Agenda Report* **November 4, 2025**	**SECTION:** **PUBLIC HEARINGS**
Department: Planning Prepared By: Edmelynne V Hutter Staff Member Presenting: Rudy Zeledon, Executive Director Community Development Approved By:	Submitted To: Council/OHA Approved: _____ Continued To: _____ Denied: _____ Item No: 15

SUBJECT: A GENERAL PLAN AMENDMENT (FILE NO. PGPA23-003) PROPOSING TO AMEND THE ONTARIO PLAN 2050 POLICY PLAN (GENERAL PLAN) LAND USE MAP

RECOMMENDATION: That the City Council consider and adopt a Resolution approving File No. PGPA23-003, a General Plan Amendment to amend The Ontario Plan 2050 Policy Plan (General Plan) Land Use Map to change the land use designation of approximately 5.3 acres of land located on Euclid Avenue from Mixed Use to Business Park.

THE FOLLOWING COUNCIL GOALS ARE BEING ACHIEVED:
Invest in the Growth and Evolution of the City's Economy
Operate in a Businesslike Manner
Ensure the Development of a Well Planned, Balanced, and Self-Sustaining Community in Ontario Ranch

FISCAL IMPACT: There is not a direct fiscal impact associated with this action.

BACKGROUND & ANALYSIS: On August 16, 2022, City Council certified The Ontario Plan 2050 Policy Plan (File No. PGPA20-002) update and certified Supplemental Environmental Impact Report (SEIR) in conjunction with The Ontario Plan 2050 Update (TOP 2050; File No. PGPA20-002). On October 26, 2023, the Applicant applied for a General Plan Amendment, requesting to modify the TOP 2050 Land Use Plan for 5.3-acre Project site from Mixed Use to Business Park.
The Project site is located within the Euclid Mixed Use Specific Plan (File No. PSP22-001), which was approved by the City Council on September 3, 2024, establishing land use designations consistent with The Ontario Plan 2050 (TOP 2050). The associated Euclid Mixed Use Specific Plan Environmental Impact Report (State Clearing House No. 2023020281) was certified by the City Council on August 20, 2024.

The proposed General Plan Amendment will establish the following:

- Convert 5.3 acres of Mixed Use – Great Park (MU-Great Park) to Business Park (BP) located on Euclid Avenue, approximately 300 feet north of Edison Avenue.
- Maintain 128 residential unit capacity to comply with Senate Bill 330.
- Remove the Affordable Housing overlay on 5.3 acres Project site resulting in the reduction of 128 residential units.

In compliance with Senate Bill 330, in order to maintain 128 residential unit capacity, the City is moving forward with a General Plan Amendment application (File No. PGPA24-003), which proposes amending 10 acres of land within the Esperanza Specific Plan, from Public School to Medium Density Residential, resulting in an overall residential increase of 224 dwelling units, which results in a net gain of 96 units.

The Project site is identified in the Housing Element Sites Inventory, and its removal requires adjustments to maintain Housing Element and Regional Housing Needs Assessment (RHNA) compliance. The Affordable Housing Overlay identifies the buildout of 128 residential units, which includes 64 Lower-Income units, 32 Moderate-Income units, and 32 Above-Moderate-Income units.

HOUSING ELEMENT COMPLIANCE

The 5.3-acre Project site is listed in the Housing Elements Sites contained in Tables B-1 and B-2 (Housing Element Sites Inventory) of the Housing Element Technical Report. With this amendment request, the RHNA obligations for each income category will continue to be adequately accommodated by the City's RHNA obligation. The City retains sufficient capacity to meet the Lower Income and Moderate-Income RHNA obligations as stated above. The Housing Element Sites Inventory provides an excess capacity of 209 units for Lower Income and an excess capacity of 491 units for Moderate Income, both of which can accommodate the respective reductions resulting from the proposed removal of the Affordable Housing Overlay on the subject site.

PLANNING COMMISSION

On September 23, 2025, the Planning Commission held a public hearing on the proposed General Plan Amendment. During public comment period, concerns were expressed about the removal of affordable housing. Staff clarified that with the proposed removal of the affordable units the City is still in compliance with the affordable housing requirements for Lower and Moderate-Income units due to the City's excess capacity of 209 units for Lower Income and an excess capacity of 491 units for Moderate Income. After considering public comments, the Planning Commission voted 6-0, recommending City Council approval.

ENVIRONMENTAL REVIEW

The environmental impacts of this Project were previously reviewed in conjunction with the Euclid Mixed Use Specific Plan (File No. PSP22-001), for which the Euclid Mixed Use Specific Plan Environmental Impact Report (State Clearinghouse #2023020281) (EMUSP EIR) was adopted by the City Council on August 20, 2024. The EMUSP EIR analyzed the project site with a potential 122,898 square feet of business park uses and 30,225 square feet of commercial uses. This Application introduces no new significant environmental impacts. All previously adopted mitigation measures of the EMUSP EIR are a condition of Project approval and are incorporated herein by this reference.

CITY OF ONTARIO PLANNING DEPARTMENT

ZONING ADMINISTRATOR DECISION: ADMINISTRATIVE HOUSING ELEMENT SITES INVENTORY AMENDMENT

September 16, 2025

303 East B Street, Ontario, California 91764 Phone: 909.395.2036 / Email: PlanningDirector@OntarioCA.gov

DECISION NO.: **ZA25-034**

FILE NO.: PADV25-003

DESCRIPTION: An Administrative Housing Element Sites Inventory Amendment request to remove a total of 128 units from the housing inventory for 5.3 acres of land located on Euclid Avenue, about 300 feet north of Edison Avenue, from Mixed Use to Business Park. **Submitted by RDDC Inc. (APN: 1053-281-08)**

RELATES FILES: PGPA23-003

Part I — BACKGROUND & ANALYSIS

RCCD Inc. (herein after referred to as "Applicant") has filed an application requesting approval of an Administrative Housing Element Sites Inventory Amendment for File No. PADV25-003, as described in the subject of this Decision (herein after referred to as "Application" or "Project").

(1) **Project Setting:** The Project site for the requested removal of 128 units from the Housing Element Sites Inventory is comprised of 5.3 acres of and located on Euclid Avenue, 300 feet north of Edison Avenue, depicted in Exhibit *A: Project Location Map* and *Exhibit B: Zoning*, attached. Existing land uses, General Plan, and zoning designations on and surrounding the Project site are as follows:

	Existing Land Use	***Policy Plan Designation***	***Zoning Designation***	***Specific Plan Land Use***
Site	Vacant	Mixed Use – Great Park (MU-Great Park); Affordable Housing Overlay; Chino Airport Influence Area Overlay	Euclid Mixed Use Specific Plan; Affordable Housing Overlay; CNO Overlay	Mixed Use
North	Vacant, Utility Easement	Open Space – Non-Recreational (OS-NR); Chino Airport Influence Area Overlay	Euclid Mixed Use Specific Plan; CNO Overlay	Open Space – Non-Recreational
South	Residential, Vacant, RV storage	Mixed Use – Great Park (MU-Great Park); Chino Airport Influence Area Overlay	Euclid Mixed Use Specific Plan; CNO Overlay	Mixed Use
East	Agriculture	Mixed Use – Great Park (MU-Great Park); Chino Airport Influence Area Overlay	Euclid Mixed Use Specific Plan; CNO Overlay	Mixed Use

	Existing Land Use	***Policy Plan Designation***	***Zoning Designation***	***Specific Plan Land Use***
West	Commercial (City of Chino)	Commercial General (City of Chino)	East Chino Specific Plan (City of Chino)	Office Commercial (City of Chino)

(2) **Project Analysis:** The proposed Administrative Housing Element Sites Inventory Amendment is depicted in *Exhibit C: Proposed Amendment to the Housing Element Sites Inventory*. The requested changes are analyzed below:

(a) Background — The Housing Element is one of the 7 mandated elements of the General Plan, which each city and county in the State is required to adopt and periodically update. The City adopted the current Housing Element per File No. PGPA21-004 on March 1, 2022, and revised on August 16, 2022, which covers the planning period from October 15, 2021, through October 15, 2029. The Housing Element is required to identify sites that can accommodate housing units for all income categories allocated to Ontario through the Regional Housing Needs Assessment ("RHNA"). The Sites Inventory is included in Appendix B-1 and B-2 to the Housing Element and identifies specific parcels with density ranges, assumed densities, and minimum number of units that are counted towards the City's RHNA obligation. File No. PGPA16-003, approved by City Council on June 21, 2016, allows administrative changes to the Housing Element to periodically update the inventory to:

- Remove sites that are found to be no longer suitable for the intensity assumed; and
- Adjust the assumed density and/or number of units on a site on the inventory to reflect the intensity that can feasibly be achieved; and
- Add sites which are now vacant or underutilized to the inventory that were not available at the time the Housing Element was adopted.

As shown in Exhibit A: Project Location Map and Exhibit B: Zoning, the Project site is located on Euclid Avenue, approximately 300 feet north of Edison Avenue, within the Euclid Mixed Use Specific Plan. The site consists of 5.3 gross acres and is currently vacant. Under the TOP 2050 Land Use Plan, the site is designated Mixed Use – Great Park with an Affordable Housing Overlay, which assumes a buildout of 128 dwelling units (including 64 Lower-Income units, 32 Moderate-Income units, and 32 Above Moderate-Income units), along with 34,630 square feet of office and 46,173 square feet of retail. The applicant proposes a General Plan Amendment to redesignate the site from Mixed Use – Great Park to Business Park, and to remove the Affordable Housing Overlay. The Project site is identified in the Housing Element Sites Inventory, and its removal requires adjustments to maintain Housing Element and RHNA compliance, as analyzed in Exhibit C: Housing Element Compliance.

(b) Proposed Change — As shown in Exhibit C, one parcel (APN: 1053-281-08) is listed as Map ID No. 2-84, which has a total RHNA obligation of 128 units (including 64 units in the Lower Income category, 32 units in the Moderate-Income category, and 32 units in the Above Moderate-Income category). The City's total RHNA capacity is shown in Table 1: City Housing Element Sites Inventory Capacity. The City's RHNA Lower Income housing needs inventory provides capacity for 9,135 units, exceeding the RHNA allocation of 8,926 units, with an excess capacity of 209 units. The Moderate-Income category provides capacity for 3,820 units, exceeding the RHNA allocation of 3,329 units, with an excess capacity of 491 units. The Above Moderate-Income category provides capacity for 8,990 units, exceeding the RHNA allocation of 8,599 units, with an excess capacity of 391 units. The current inventory provides an overall excess housing capacity buffer of 1,091 units.

Table 1: City Housing Element Sites Inventory Capacity

Housing Element Available Land Inventory	***Lower Income***	***Moderate-Income***	***Above Moderate-Income***	***Total Capacity***
Existing Land Inventory	**9,135**	**3,820**	**8,990**	**21,945**
RHNA Allocation	**8,926**	**3,329**	**8,599**	**20,854**
Land Inventory in excess of RHNA	209	491	391	1,091

The proposed removal of 128 units from the Housing Element Sites Inventory (64 units from the Lower Income category, 32 units from the Moderate-Income category, and 32 units from the above-moderate income category) will not create a deficiency in either category (as shown in Table 2). No additional sites are required to be added to the inventory, as there is an excess capacity buffer for the Lower Income and Moderate-Income category.

Table 2: Revised City Housing Element Sites Inventory Capacity

Housing Element Available Land Inventory	***Lower Income***	***Moderate-Income***	***Above Moderate-Income***	***Total Capacity***
Existing Land Inventory	9,135	3,820	8,990	21,945
Proposed Land Inventory Reduction	(64)	(32)	(32)	(128)
Proposed Land Inventory Increase	0	0	0	0
Proposed Land Inventory	9,071	3,788	8,958	21,817
RHNA Allocation	**8,926**	**3,329**	**8,599**	**20,854**
Land Inventory in excess of RHNA	145	459	359	963

The revised Housing Element Sites Inventory provides capacity for 9,071 units in the Lower Income category, exceeding the RHNA allocation of 8,926 units, with an excess capacity of 145 units. The Moderate-Income category provides capacity for 3,788 units, exceeding the RHNA allocation of 3,329 units, with an excess capacity of 459 units. The Above Moderate-Income category provides capacity for 8,958 units, exceeding the RHNA allocation of 8,599 units, with an excess capacity of 359 units. The identified inventory unit count provides a revised overall total excess housing capacity buffer of 963 units.

(a) Recommendation —The removal of 128 units (64 Lower Income, 32 Moderate-Income, and 32 Above Moderate-Income) from the Housing Element Sites Inventory will not create a deficiency in any income category. Adequate sites remain to meet the City's RHNA obligations of 8,926 Lower Income units, 3,329 Moderate-Income units, and 8,599 Above Moderate-Income units. No additional sites are required to be added to the Housing Element Sites Inventory, as the City continues to maintain excess capacity in all income categories. Therefore, staff recommends approval of the proposed amendment to remove the 128 units from the Housing Element Sites Inventory.

Part II — RECITALS

WHEREAS, the City of Ontario has received a request for an Administrative Housing Element Sites Inventory Amendment approval as described in Part I, above; and

WHEREAS, all legal prerequisites to the adoption of this Decision have occurred.

Part III — THE DECISION

NOW, THEREFORE, it is hereby found, determined and resolved by the Zoning Administrator of the City of Ontario as follows:

(1) All facts set forth in this Zoning Administrator Report and Decision are true and correct.

(2) Based upon the evidence presented to the Zoning Administrator, the Zoning Administrator hereby makes the following Housing Element Sites Inventory Amendment findings:

(a) *The proposed amendment to the Housing Element Sites Inventory is consistent with the goals, policies, plans, and exhibits of the Vision, Policy Plan (General Plan) including the Housing Element, and City Council Priorities components of The Ontario Plan.* The revised Housing Element Sites Inventory provides 9,071 units in the Lower Income category, a RHNA allocation of 8,926 units, and an excess capacity of 145 units. The Moderate-Income category provides an inventory of 3,788 units, a RHNA allocation of 3,329 units, and an excess inventory of 459 units. The Above Moderate-Income category provides an inventory of 8,958 units, a RHNA allocation of 8,599 units, and an excess of 359 units. These identified inventory unit counts establish a revised excess housing capacity buffer of 963 units; and

(b) *The remaining sites identified in the Housing Element are adequate to meet the requirements of the State of California Government Code Section 65583.2 and to accommodate the City's share of the regional housing need (RHNA) pursuant to Section 65584.* With this amendment request, the RHNA obligations for each income category will continue to be adequately accommodated by the City's RHNA obligation and the City retains sufficient capacity to meet the Lower Income and Moderate-Income RHNA obligations as follows:

Table 3: Revised Housing Element Sites Inventory Capacity

Housing Element Available Land Inventory	***Lower Income***	***Moderate-Income***	***Above Moderate-Income***	***Total Capacity***
Existing Land Inventory	9,135	3,820	8,990	21,945
Proposed Land Inventory Reduction	(64)	(32)	(32)	(128)
Proposed Land Inventory Increase	0	0	0	0
Proposed Land Inventory	9,071	3,788	8,958	21,817
RHNA Allocation	**8,926**	**3,329**	**8,599**	**20,854**
Land Inventory in excess of RHNA	145	459	359	963

(c) *The proposed amendment to the Housing Element Sites Inventory is compatible with adjoining sites, any physical constraint identified on the subject site, and the characteristics of the area in which the site is located.* The proposed amendment to the Housing Element Sites Inventory will adjust the City's housing sites inventory to reflect the removal of units from the subject parcel. The amendment will not create a deficiency in the City's ability to meet its RHNA obligations, as adequate capacity remains in all income categories. The revision will not constrain future residential development opportunities elsewhere in the City nor alter the residential character of surrounding neighborhoods, since the reduction is offset by surplus capacity identified in the Housing Element; and

(d) *The strict enforcement of the Housing Element Sites Inventory obligations would result in practical difficulty or unnecessary physical hardship inconsistent with the objectives of the development regulations contained in the City of Ontario Development Code.* The revised Housing Element Sites Inventory provides an inventory of 9,071 units in the Lower Income category, a RHNA allocation of 8,926 units, and an excess capacity of 145 units. The Moderate-Income category provides an inventory of 3,788 units, a RHNA allocation of 3,329 units, and an excess inventory of 459 units. The Above Moderate-Income category provides an inventory of 8,958 units, a RHNA allocation of 8,599 units, and an excess inventory of 359 units. These identified inventory unit counts establish a revised excess housing capacity buffer of 963 units, confirming that the proposed amendment will not negatively impact the City's ability to meet its RHNA obligations; and

(e) *The strict enforcement of the Housing Element Sites Inventory obligations would deprive the applicant of privileges enjoyed by the owners of other properties in the same zoning district.* Because the City maintains an excess inventory of 145 units within the Lower Income category and 459 units within the Moderate-Income category, the removal of the units identified in Exhibit C as Map ID No. 2-84 is warranted. This amendment will not negatively impact the City's ability to meet its RHNA obligations, and the site should be removed from the Housing Element Sites Inventory List; and

(f) *The granting of the Housing Element Sites Inventory Amendment will not be detrimental to the public health, safety or welfare, or be materially injurious to properties or improvements in the vicinity.* The development of the related applications and the amendment to the Housing Element Sites Inventory will be within the existing density range of both the General Plan and zoning designations and will not be detrimental to the public health, safety, and welfare and will be compatible with the surrounding area.

(3) The Zoning Administrator hereby finds and determines that the potential environmental impacts of the project identified in this Decision were previously reviewed in conjunction with The Ontario Plan (File No. PGPA20-002) Supplemental Environmental Impact Report (SEIR) (SCH# 2021070364) certified by City Council on August 16, 2022. This Application introduces no new significant environmental impacts not previously analyzed in the SEIR. All previously adopted mitigation measures are a condition of project approval and are incorporated herein by reference.

Part IV — ZONING ADMINISTRATOR ACTION

Based upon the findings and conclusions set forth in Parts I through III, above, the Zoning Administrator hereby approves File No. PADV25-003.

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APPROVED AND ADOPTED this 24th day of September 2025.

Henry K. Noh
Zoning Administrator

Exhibit A: PROJECT LOCATION MAP

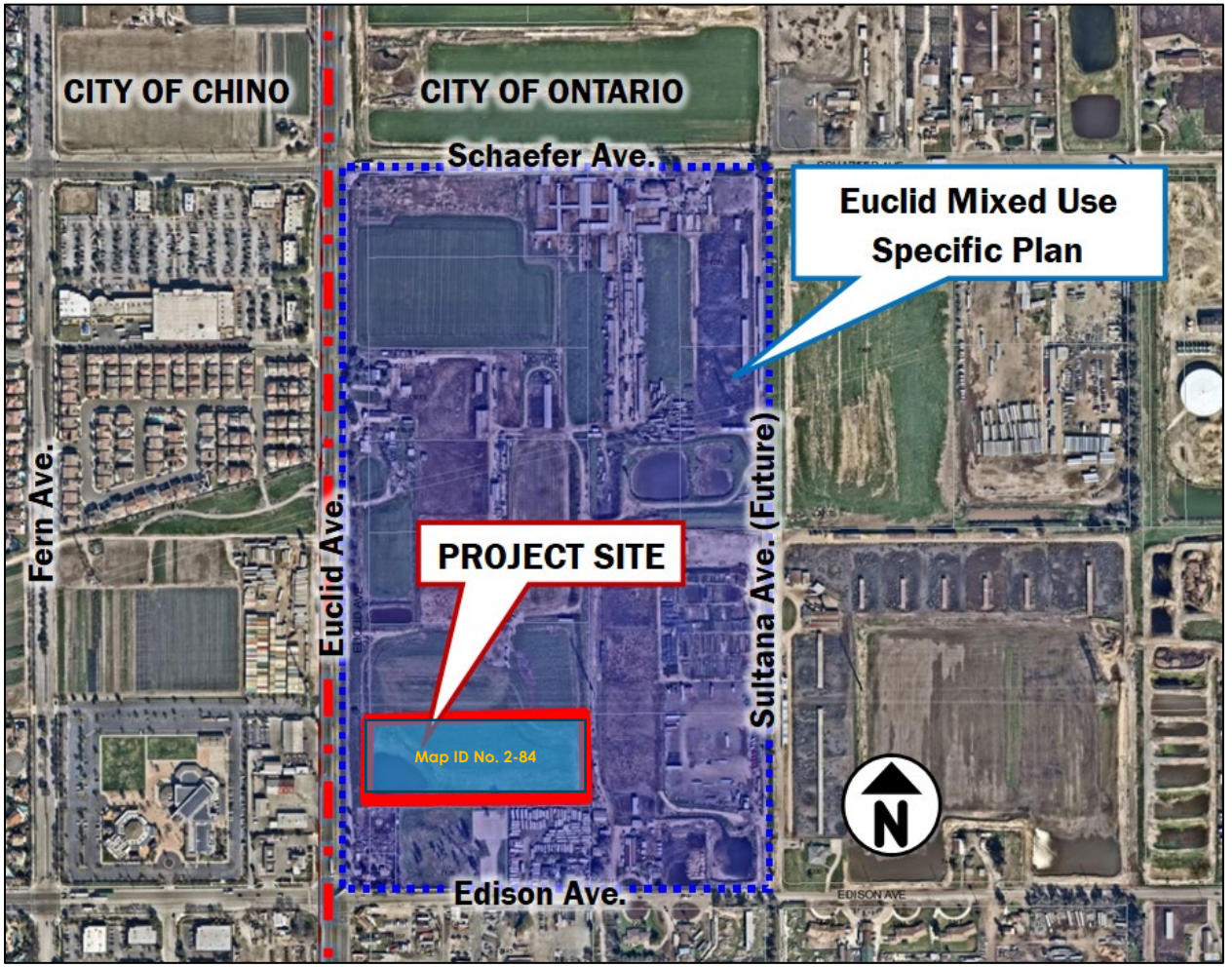

Exhibit B: Zoning – SP (Euclid Mixed Use)

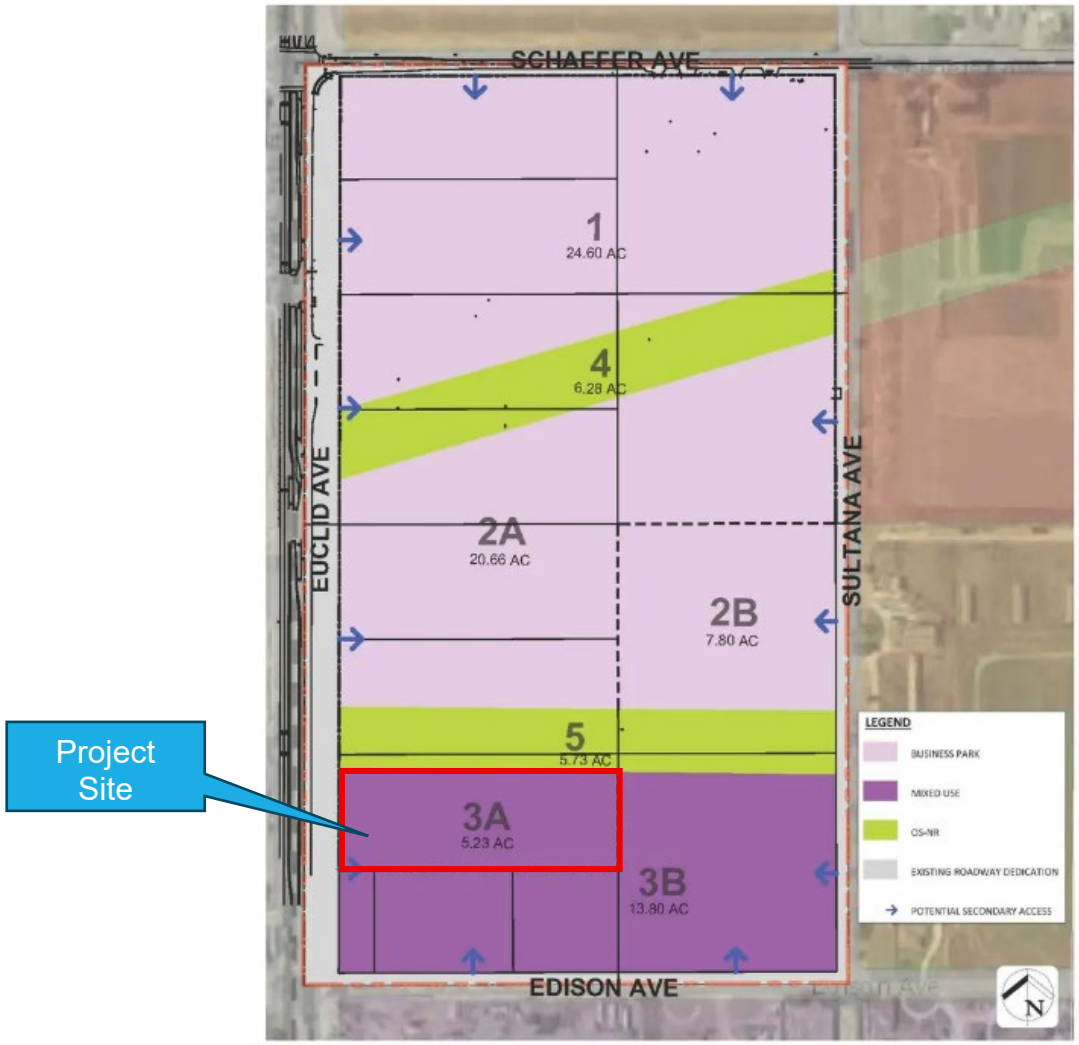

FIGURE 3.1 LAND USE PLAN

Exhibit C: Proposed Amendment to the Housing Element Sites Inventory

(Proposed changes to Housing Element Sites Inventory follow this page)

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2-122
Housing Element
Site Inventory
Housing Element Parcels
Great Park Corridor (Page 1)
Grove Corridor (Page 1)
Euclid Corridor (Page 1)
Vineyard/Armstrong Ranch Specific Plan (Page 1)
Downtown (Page 2)
West Holt (Page 2)
East Holt (Page 2)
Old Cardenas Market (Page 2)
Ontario Center Specific Plan (Page 2)
Ontario Mills Specific Plan (Page 2)
Ontario City Boundary
MapID# See Tables B-1 & B-2 for details
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2,200
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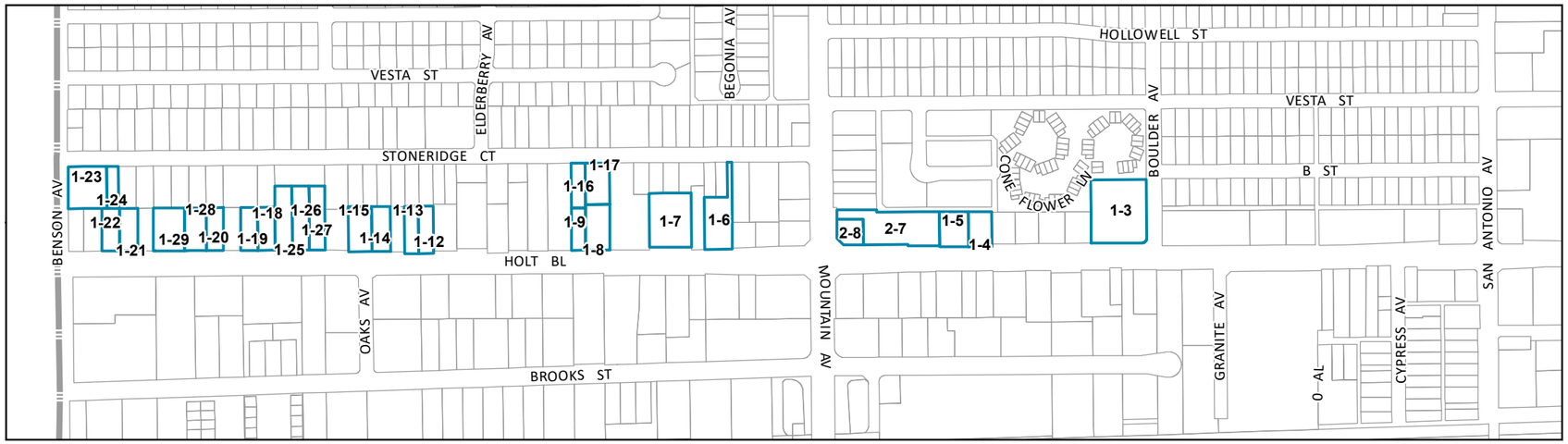
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STONERIDGE CT
BOULDER AV
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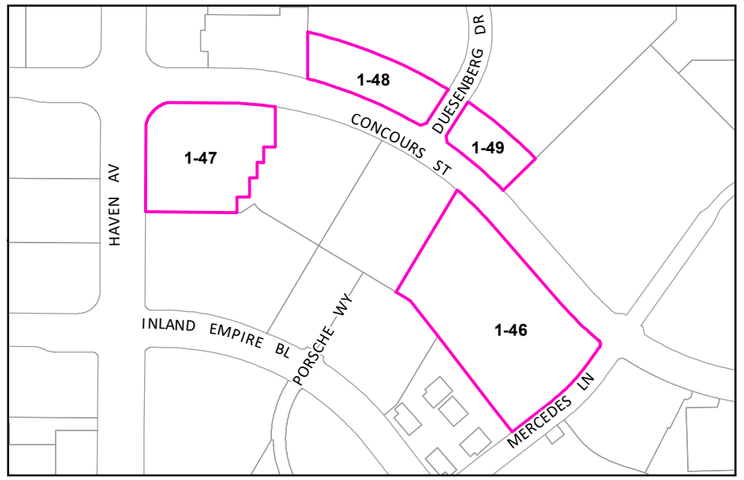
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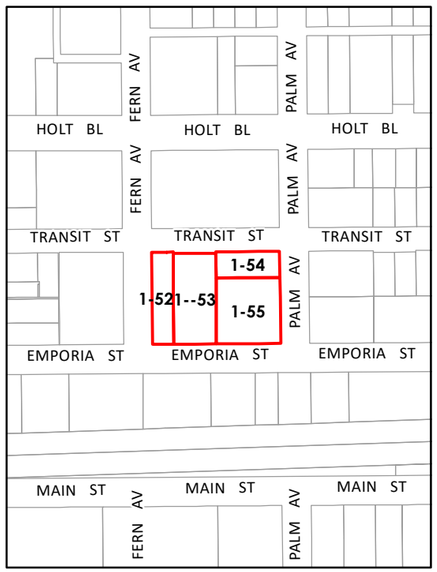
MERCEDES LN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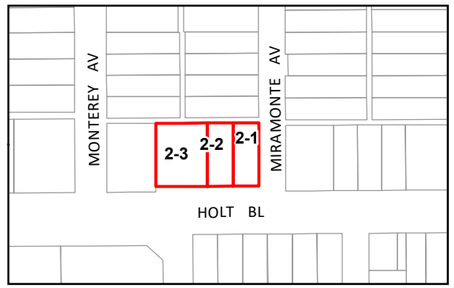
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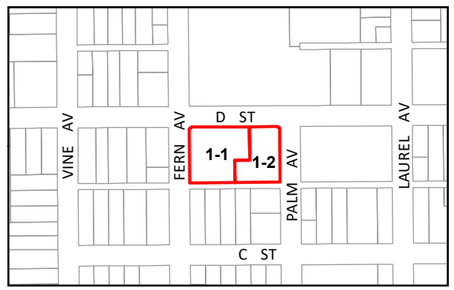
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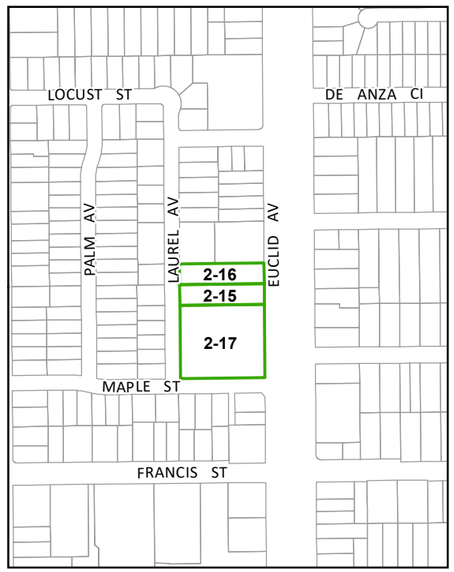
PALM AV
LAUREL AV
C ST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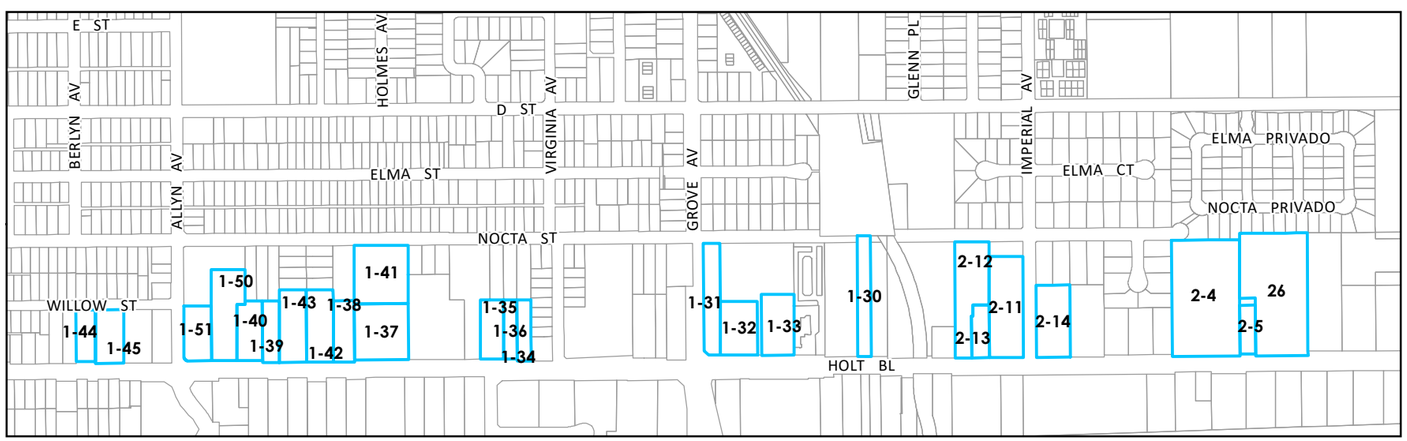
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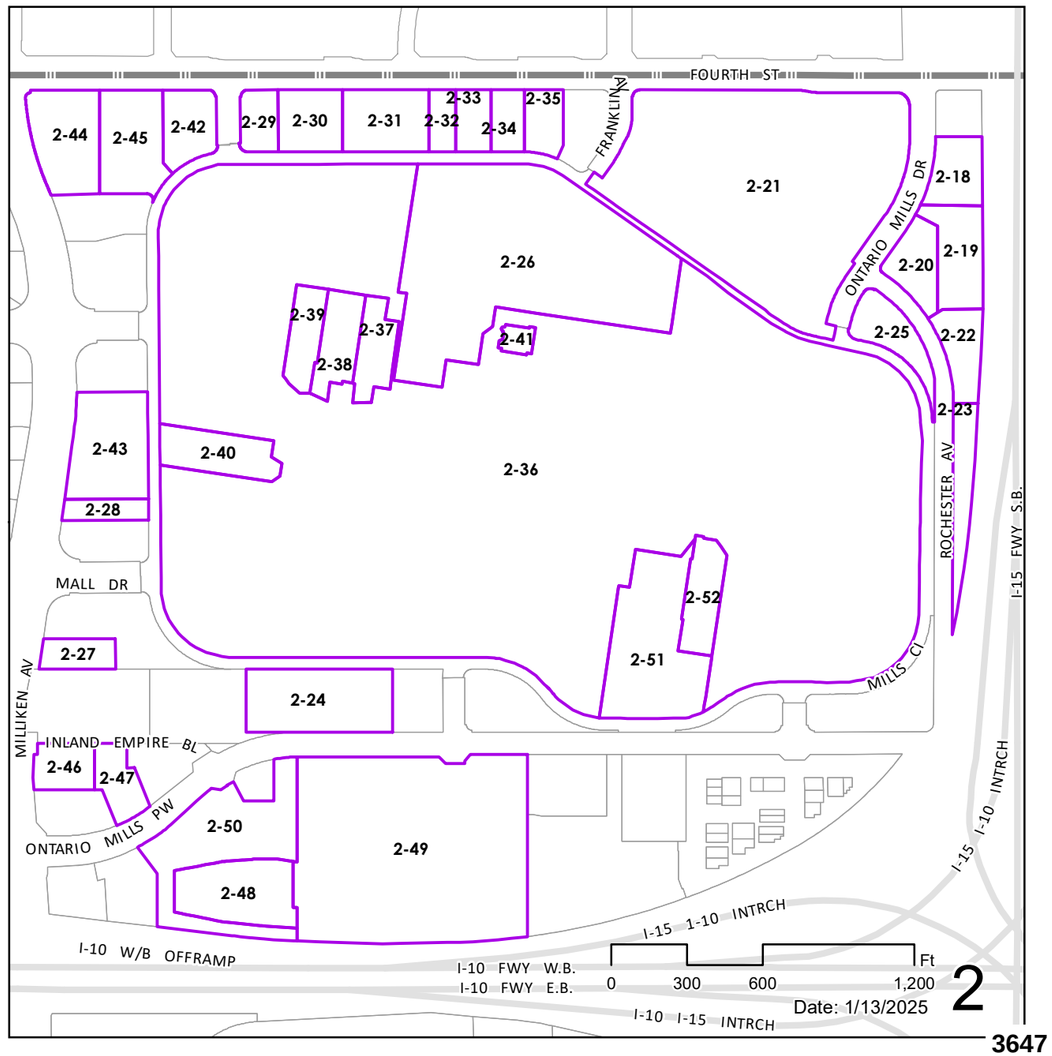
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MILLIKEN AV
MILLS CI
INLAND EMPIRE BL
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2-47
ONTARIO MILLS PW
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2-49
2-48
I-15 FWY S.B.
I-15 I-10 INTRCH
I-10 W/B OFFRAMP
I-15 1-10 INTRCH
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ID	Opp Area	Site Address/Intersection	Zip Code	APN	Consolidated Sites	Current GP	Current Zone	Min Density (du/ac)	Max Density (du/ac)	Parcel Size (Acres)	Existing Use/ Vacancy	Infrast Available	Publicly-Owned	Site Status	Lower	Mod	Above Mod	Total Units	Notes
Table B-1																			
1-01	Downtown	315 W D ST	91762	104857601		HDR	HDR-45	25	45	0.7	Parking lot	Yes	NO	Available	9	9	0	18	
1-02	Downtown	325 N PALM AVE	91762	104857602		HDR	HDR-45	25	45	0.47	Parking lot	Yes	NO	Available	6	6	0	12	
1-03	West Holt	900 W HOLT BLVD	91762	101050176		HDR	HDR-45	25	45	1.48	Auto sales	Yes	NO	Available	18	18	0	37	
1-04	West Holt	1034 W HOLT BLVD	91762	101050206	J	HDR	HDR-45	25	45	0.34	Auto sales	Yes	NO	Available	4	4	0	9	
1-05	West Holt	1020 W HOLT BLVD	91761	101050207	J	HDR	HDR-45	25	45	0.43	Auto sales	Yes	NO	Available	5	5	0	11	
1-06	West Holt	1134 W HOLT BLVD	91761	101052206		HDR	HDR-45	25	45	0.67	Strip retail	Yes	NO	Available	8	8	0	17	
1-07	West Holt	1156 W HOLT BLVD	91762	101052217		HDR	HDR-45	25	45	0.95	Auto sales	Yes	NO	Available	12	12	0	24	
1-08	West Holt	1206 W HOLT BLVD	91762	101054302	C	HDR	HDR-45	25	45	0.47	Parking lot	Yes	NO	Available	6	6	0	12	
1-09	West Holt	W OF 1206 W HOLT BLVD	91764	101054303		HDR	HDR-45	25	45	0.25	Parking Lot	Yes	NO	Available	3	3	0	6	
1-12	West Holt	1328 W HOLT BLVD	91761	101054310	E	HDR	HDR-45	25	45	0.3	Auto sales	Yes	NO	Available	4	4	0	7	
1-13	West Holt	1328 W HOLT BLVD	91761	101054311	E	HDR	HDR-45	25	45	0.28	Auto sales	Yes	NO	Available	3	3	0	7	
1-14	West Holt	1350 W HOLT BLVD	91762	101054313	F	HDR	HDR-45	25	45	0.35	Building supply	Yes	NO	Available	4	4	0	9	
1-15	West Holt	1360 W HOLT BLVD	91762	101054314	F	HDR	HDR-45	25	45	0.44	Building supply	Yes	NO	Available	6	6	0	11	
1-16	West Holt	W OF SWC STONERIDGE CT & MOUNTAINAVE	91762	101054326	C	HDR	HDR-45	25	45	0.26	Parking lot	Yes	NO	Available	3	3	0	7	
1-17	West Holt	1203 W STONERIDGE CT	91762	101054327	C	HDR	HDR-45	25	45	0.42	Parking lot	Yes	NO	Available	5	5	0	11	
1-18	West Holt	1424 W HOLT BLVD	91761	101055204	G	HDR	HDR-45	25	45	0.31	Automotive	Yes	NO	Available	4	4	0	8	
1-19	West Holt	1426 W HOLT BLVD	91761	101055205	G	HDR	HDR-45	25	45	0.31	Automotive	Yes	NO	Available	4	4	0	8	
1-20	West Holt	1448 W HOLT BLVD	91761	101055207	H	HDR	HDR-45	25	45	0.31	Auto sales	Yes	NO	Available	4	4	0	8	
1-21	West Holt	1528 HOLT BLVD	91762	101055212	I	HDR	HDR-45	25	45	0.32	Retail	Yes	NO	Available	4	4	0	8	
1-22	West Holt	1538 HOLT BLVD	91762	101055213	I	HDR	HDR-45	25	45	0.32	Retail	Yes	NO	Available	4	4	0	8	
1-23	West Holt	120 N BENSON AVE	91762	101055216	D	HDR	HDR-45	25	45	0.68	Retail	Yes	NO	Available	8	8	0	17	
1-24	West Holt	1535 W STONERIDGE CT	91762	101055217	D	HDR	HDR-45	25	45	0.21	Retail	Yes	NO	Available	3	3	0	5	
1-25	West Holt	1420 W HOLT BLVD	91762	101055232	A	HDR	HDR-45	25	45	0.46	Parking lot	Yes	NO	Available	6	6	0	12	
1-26	West Holt	1414 W HOLT BLVD	91761	101055233	A	HDR	HDR-45	25	45	0.46	Building supply	Yes	NO	Available	6	6	0	12	
1-27	West Holt	1414 W HOLT BLVD	91762	101055234	A	HDR	HDR-45	25	45	0.42	Building supply	Yes	NO	Available	5	5	0	11	
1-28	West Holt	1502 W HOLT BLVD	91762	101055237	H	HDR	HDR-45	25	45	0.39	Auto sales	Yes	NO	Available	5	5	0	10	
1-29	West Holt	1512 W HOLT BLVD	91761	101055238		HDR	HDR-45	25	45	0.56	Auto sales	Yes	NO	Available	7	7	0	14	
1-30	East Holt	1323 E HOLT BLVD	91764	11006104		MU-HE	MU-2	14	40	0.99	Vacant	Yes	NO	Available	11	11	0	22	
1-31	East Holt	1207 E HOLT BLVD	91764	11006110		MU-HE	MU-2	14	40	1.11	Vacant	Yes	NO	Available	13	13	0	25	
1-32	East Holt	1217 E HOLT BLVD	91764	11006121		MU-HE	MU-2	14	40	1.19	Hotel	Yes	NO	Available	13	13	0	27	
1-33	East Holt	1241 E HOLT BLVD	91764	11006125		MU-HE	MU-2	14	40	1.2	Hotel	Yes	NO	Available	14	14	0	27	
1-34	East Holt	1111 E HOLT BLVD	91761	104847115		MU-HE	MU-2	14	40	0.52	Automotive / Open Storage	Yes	NO	Available	6	6	0	12	
1-35	East Holt	1101 E HOLT BLVD	91764	104847122	B	MU-HE	MU-2	14	40	0.83	Parking Lot	Yes	NO	Available	9	9	0	19	
1-36	East Holt	1101 E HOLT BLVD	91764	104847123	B	MU-HE	MU-2	14	40	0.48	Vacant Church	Yes	NO	Available	5	5	0	11	
1-37	East Holt	1031 E HOLT BLVD	91764	104848102		MU-HE	MU-2	14	40	1.83	Automotive repair	Yes	NO	Available	21	21	0	41	
1-38	East Holt	1015 E HOLT BLVD	91764	104848103		MU-HE	MU-2	14	40	0.78	Auto parts store	Yes	NO	Available	9	9	0	17	
1-39	East Holt	E OF NEC HOLT BLVD & ALLYN AVE	91764	104848106		MU-HE	MU-2	14	40	0.63	Vacant	Yes	NO	Available	7	7	0	14	
1-40	East Holt	935 E HOLT BLVD	91764	104848107		MU-HE	MU-2	14	40	0.9	Independent Convenience Store	Yes	NO	Available	10	10	0	20	
1-41	East Holt	1025 E HOLT BLVD	91764	104848122		MU-HE	MU-2	14	40	1.9	Automotive repair	Yes	NO	Available	21	21	0	43	
1-42	East Holt	957 E HOLT BLVD	91786	104848128		MU-HE	MU-2	14	40	1.18	Vacant	Yes	NO	Available	13	13	0	27	
1-43	East Holt	957 E HOLT BLVD	91786	104848129		MU-HE	MU-2	14	40	1.18	Vacant	Yes	NO	Available	13	13	0	26	
1-44	East Holt	803 E HOLT AVE	91761	104851212		MU-HE	MU-2	14	40	0.61	Car Sales	Yes	NO	Available	7	7	0	14	
1-45	East Holt	813 E HOLT BLVD	91764	104851213		MU-HE	MU-2	14	40	0.91	Laundromat / Automotive	Yes	NO	Available	10	10	0	21	
1-46	Ontario Center	SWC CONCOURS ST & MERCEDES LN	91762	21020404		MU-OC	SP	See Notes	See Notes	8.44	Vacant	Yes	NO	Available	63	63	0	126	Note 1
1-47	Ontario Center	888 HAVEN AVE	91764	21020407		MU-OC	SP	See Notes	See Notes	4.47	Vacant	Yes	NO	Available	33	33	0	67	Note 1
1-48	Ontario Center	NWC CONCOURS ST & DUESENBERG DR	91764	21053115		MU-OC	SP	See Notes	See Notes	2.28	Vacant	Yes	NO	Available	0	0	51	51	Note 2
1-49	Ontario Center	NEC CONCOURS ST & DUESENBERG DR	91764	21053116		MU-OC	SP	See Notes	See Notes	1.36	Vacant	Yes	NO	Available	0	0	33	33	Note 2
1-50	East Holt*	907 E HOLT BLVD	91761	104848127	K	MU-HE	MU-6	14	40	0.91	Commercial	Yes	Yes	Available	10	10	0	20	
1-51	East Holt*	905 E HOLT BLVD	91761	104848108	K	MU-HE	MU-6	14	40	1.51	Vacant	Yes	Yes	Available	18	18	0	36	
1-52	Downtown*	201 S FERN AVE	169	104905406	L	MU-DT	MU-1	25	75	0.24	Vacant	Yes	Yes	Available	4	4	0	8	
1-53	Downtown*	325 W TRANSIT ST	91762	104905402	L	MU-DT	MU-1	25	75	0.46	Vacant	Yes	Yes	Available	8	8	0	16	
1-54	Downtown*	301 W TRANSIT ST	91762	104905403	L	MU-DT	MU-1	25	75	0.21	Vacant	Yes	Yes	Available	4	4	0	8	
1-55	Downtown*	310 W EMPORIA ST	91762	104905404	L	MU-DT	MU-1	25	75	0.50	Vacant	Yes	Yes	Available	9	9	0	18	
2-01	Downtown	111 N MIRAMONTE AVE	91764	104852414		MU-DT	MU-1	25	75	0.1	Nonvacant	Yes	NO	Available	1	1	0	3	0
2-02	Downtown	617 E HOLT BLVD	91764	104852415		MU-DT	MU-1	25	75	0.1	Nonvacant	Yes	NO	Available	1	1	0	3	0
2-03	Downtown	609 E HOLT BLVD	91764	104852416		MU-DT	MU-1	25	75	0.3	Nonvacant	Yes	NO	Available	3	3	0	6	
2-04	East Holt*	1555 E HOLT AVE	91761	11007225		MU-HE	MU-6	20	40	4.8	Nonvacant	Yes	NO	Available	13	13	80	106	
2-05	East Holt*	1619 E HOLT AVE	91761	11008106		MU-HE	MU-6	20	40	0.5	Nonvacant	Yes	NO	Available	1	1	9	12	
2-06	East Holt*	0 E HOLT BLVD	91761	11008107		MU-HE	MU-6	20	40	4.5	Vacant	Yes	NO	Available	13	14	76	103	
2-07	West Holt	1050 W HOLT BLVD	91762	101050208		MU-HW	MU-6-AH	20	40	1.2	Nonvacant	Yes	NO	Available	13	13	0	27	Note1
2-08	West Holt	1050 W HOLT BLVD	91762	101050209		MU-HW	MU-6-AH	20	40	0.3	Nonvacant	Yes	NO	Available	3	3	0	6	Note 1
2-11	East Holt	NWC HOLT BLVD & IMPERIAL AVE	91761	11007102		MU-HE	MU-6-AH	20	40	2.1	Vacant	Yes	NO	Available	3	0	0	3	
2-12	East Holt	1381 E HOLT BLVD	91764	11007106		MU-HE	MU-6-AH	20	40	1.8	Vacant	Yes	NO	Available	21	21	0	41	
2-13	East Holt	1387 E HOLT BLVD	91764	11007107		MU-HE	MU-6-AH	20	40	0.6	Vacant	Yes	NO	Available	6	6	0	12	
2-14	East Holt	1405 E HOLT BLVD	91764	11007210		MU-HE	MU-6-AH	20	40	1.5	Vacant	Yes	NO	Available	17	17	0	33	
2-15	Old Cardenas Market	N OF NEC MAPLE ST & EUCLID AVE	91762	105027201		HDR	HDR-45	25	45	0.6	Vacant	Yes	NO	Available	8	8	0	16	
2-16	Old Cardenas Market	1652 EUCLID AVE	91761	105027220		HDR	HDR-45	25	45	0.6	Vacant	Yes	NO	Available	8	8	0	16	
2-17	Old Cardenas Market	1714 S EUCLID AVE	91762	105028401		MU-EF	MU*	20	30	2.2	Nonvacant	Yes	NO	Available	17	17	0	33	
2-53	Great Park Corridor	E OF NEC EDISON AVE & GROVE AVE	91710	21631101		MU-GP	SP-AG-AH	20	65	3.7	Agriculture	Yes	NO	Available	45	23	23	90	
2-54	Great Park Corridor	14049 GROVE AVE	91761	21631102		MU-GP	SP-AG-AH	20	65	3.7	Agriculture	Yes	NO	Available	46	23	23	91	
2-55	Great Park Corridor	8270 EDISON AVE	91762	21631109		MDR	SP-AG-AH	20	30	7.3	Agriculture	Yes	NO	Available	79	40	40	159	
2-56	Great Park Corridor	NWC EDISON AVE & WALKER AVE	91762	21631208		MDR	SP-AG-AH	20	30	7.1	Agriculture	Yes	NO	Available	78	39	39	156	
2-57	Great Park Corridor	8314 EDISON AVE	91761	21631209		MDR	SP-AG-AH	20	30	3.4	Agriculture	Yes	NO	Available	36	19	19	74	
2-58	Great Park Corridor	8354 EDISON AVE	91761	21631210		MDR	SP-AG-AH	20	30	3.8	Agriculture	Yes	NO	Available	41	21	21	83	
2-59	Great Park Corridor	NEC EDISON AVE & WALKER AVE	91761	21631301		MDR	SP-AG-AH	20	30	7.0	Vacant	Yes	NO	Available	77	38	38	153	
2-60	Great Park Corridor	NWC EDISON AVE & BAKER AVE	91762	21631309		MDR	SP-AG-AH	20	30	6.9	Agriculture	Yes	NO	Available	76	38	38	153	
2-61	Great Park Corridor	NEC EDISON AVE & BAKER AVE	91762	21631401		MDR	SP-AG-AH	20	30	6.8	Agriculture	Yes	NO	Available	75	37	37	150	
2-62	Great Park Corridor	N OF NWC EDISON AVE & VINEYARDAVE	91762	21631408		MDR	SP-AG-AH	20	30	1.1	Agriculture	Yes	NO	Available	12	6	6	23	
2-63	Great Park Corridor	NWC EDISON AVE & VINEYARD AVE	91762	21631409		MDR	SP-AG-AH	20	30	9.0	Agriculture	Yes	NO	Available	99	50	50	199	
2-64	Great Park Corridor	14474 GROVE AVE	91762	21632101		MU-BC	SP-AG-AH	25	45	8.8	Agriculture	Yes	NO	Available	60	31	31	122	
2-65	Great Park Corridor	14361 GROVE AVE	91762	21632102		MU-BC	SP-AG-AH	25	45	7.5	Agriculture	Yes	NO	Available	51	26	26	104	
2-66	Great Park Corridor	8185 EDISON AVE	91762	21632103		MU-GP	SP-AG-AH	20	65	15.7	Agriculture	Yes	NO	Available	190	96	96	382	
2-67	Great Park Corridor	N OF NWC EUCALYPTUS AVE & PARCOAVE	91762	21632106		MU-BC	SP-AG-AH	25	45	5.7	Agriculture	Yes	NO	Available	40	20	20	80	
2-68	Great Park Corridor	NWC EUCALYPTUS AVE & PARCO AVE	91761	21632107		MU-BC	SP-AG-AH	25	45	9.1	Agriculture	Yes	NO	Available	64	32	32	128	
2-69	Great Park Corridor	8311 EDISON AVE	91762	21632108		MDR	SP-AG-AH	20	30	15.5	Agriculture	Yes	NO	Available	168	85	85	338	
2-70	Great Park Corridor	NEC EUCALYPTUS AVE & PARCO AVE	91762	21632201		MU-BC	SP-AG-AH	25	45	9.1	Agriculture	Yes	NO	Available	64	32	32	127	
2-71	Great Park Corridor	N OF NEC EUCALYPTUS AVE & PARCOAVE	91762	21632202		MU-BC	SP-AG-AH	25	45	3.1	Agriculture	Yes	NO	Available	21	11	11	43	
2-72	Great Park Corridor	S OF SEC EDISON AVE & PARCO AVE	91762	21632203		MDR	SP-AG-AH	20	30	2.9	Agriculture	Yes	NO	Available	32	16	16	63	
2-73	Great Park Corridor	8335 EDISON AVE	91761	21632204		MDR	SP-AG-AH	20	30	9.1	Agriculture	Yes	NO	Available	99	50	50	199	
2-74	Great Park Corridor	S OF SEC EDISON AVE & WALKER AVE	91762	21632303		MDR	SP-AG-AH	20	30	3.0	Agriculture	Yes	NO	Available	33	17	17	67	
2-75	Great Park Corridor	8535 EDISON 0	91710	21632304		MDR	SP-AG-AH	20	30	8.9	Agriculture	Yes	NO	Available	98	49	49	195	
2-76	Great Park Corridor	NEC EDISON AVE & VINEYARD AVE	91762	21818101		MDR	SP-AG-AH	20	30	9.0	Agriculture	Yes	NO	Available	99	50	50	199	
2-77	Great Park Corridor	N OF NEC EDISON AVE & VINEYARDAVE	91762	21818102		MDR	SP-AG-AH	20	30	4.0	Agriculture	Yes	NO	Available	45	22	22	89	
	Great Park Corridor	9064 EDISON AVE	91762	21818111		MDR	SP-AG-AH	20	30	5.3	Agriculture	Yes	NO	Available	58	29	29	117	
	Great Park Corridor	9060 EDISON AVE	91762	21818112		MDR	SP-AG-AH	20	30	7.3	Agriculture	Yes	NO	Available	79	40	40	159	
	Great Park Corridor	7330 EDISON AVE	91710	105320101		MDR	SP-AG-AH	20	30	23.5	Agriculture	Yes	NO	Available	239	138	138	515	
	Great Park Corridor	7244 EDISON AVE	91761	105328101		MU-GP	SP-AG-AH	20	65	8.4	Agriculture	Yes	NO	Available	103	51	51	205	
	Great Park Corridor	7218 EDISON AVE	91761	105328102		MU-GP	SP-AG-AH	20	65	2.1	Open storage	Yes	NO	Available	25	13	13	50	

Table B-1: Housing Element Sites Inventory - Sites Already Suitably Zoned

ID	Opp Area	Site Address/Intersection	Zip Code	APN	Consolidated Sites	Current GP	Current Zone	Min Density (du/ac)	Max Density (du/ac)	Parcel Size (Acres)	Existing Use/ Vacancy	Infrast Available	Publicly-Owned	Site Status	Lower	Mod	Above Mod	Total Units	Notes
2-83	Great Park Corridor	NWC EDISON AVE & EUCLID AVE	91762	105328103		MU-GP	SP-AG-AH	20	65	2.7	Vacant w/concrete pad &fence	Yes	NO	Available	33	17	17	67	
~~2-84~~	~~Great Park Corridor~~	~~N OF NWC EDISON AVE & EUCLID AVE~~	~~91762~~	~~105328108~~		~~MU-GP~~	~~SP-AG-AH~~	~~20~~	~~65~~	~~5.2~~	~~Agriculture~~	~~Yes~~	~~NO~~	~~Available~~	~~44~~	~~32~~	~~33~~	~~108~~	
2-85	Great Park Corridor	NWC EDISON AVE & BON VIEW AVE	91762	105330101		MDR	SP-AG-AH	20	30	7.9	Agriculture	Yes	NO	Available	87	43	43	173	
2-86	Great Park Corridor	NWC EDISON AVE & CAMPUS AVE	91761	105330102		MDR	SP-AG-AH	20	30	8.0	Agriculture	Yes	NO	Available	88	44	44	177	
2-87	Great Park Corridor	NWC EDISON AVE & CUCAMONGA AVE	91761	105331101		MDR	SP-AG-AH	20	30	7.8	Agriculture	Yes	NO	Available	86	43	43	171	
2-88	Great Park Corridor	13905 BON VIEW AVE	91710	105331102		MDR	SP-AG-AH	20	30	7.8	Agriculture	Yes	NO	Available	86	43	43	171	
2-89	Great Park Corridor	14050 GROVE AVE	91761	105332101		MU-GP	SP-AG-AH	20	65	7.1	Open storage	Yes	NO	Available	87	44	44	175	
2-90	Great Park Corridor	7914 EDISON AVE	91761	105332102		MDR	SP-AG-AH	20	30	4.4	Agriculture	Yes	NO	Available	48	24	24	96	
2-91	Great Park Corridor	N OF NEC EDISON AVE & CUCAMONGAAVE	91761	105332103		MDR	SP-AG-AH	20	30	3.3	Agriculture	Yes	NO	Available	37	18	18	74	
2-92	Great Park Corridor	SEC EDISON AVE & CUCAMONGA AVE	91761	105333101		MDR	SP-AG-AH	20	30	7.6	Agriculture	Yes	NO	Available	84	42	42	168	
2-93	Great Park Corridor	E OF NEC EDISON AVE & CUCAMONGAAVE	91761	105333103		MDR	SP-AG-AH	20	30	1.1	Agriculture	Yes	NO	Available	12	6	6	25	
2-94	Great Park Corridor	8061 EDISON AVE	91710	105333104		MU-GP	SP-AG-AH	20	65	8.5	Agriculture	Yes	NO	Available	104	52	52	208	
2-95	Great Park Corridor	S OF SEC EDISON AVE & CUCAMONGAAVE	91761	105334101		MDR	SP-AG-AH	20	30	3.3	Agriculture	Yes	NO	Available	37	18	18	74	
2-96	Great Park Corridor	S OF SWC EDISON AVE & GROVE AVE	91761	105334102		MU-GP	SP-AG-AH	20	65	5.6	Agriculture	Yes	NO	Available	69	34	34	138	
2-97	Great Park Corridor	14213 BON VIEW AVE	91761	105335101		MDR	SP-AG-AH	20	30	3.0	Agriculture	Yes	NO	Available	31	16	16	63	
2-98	Great Park Corridor	S OF SWC EDISON AVE & CUCAMONGAAVE	91761	105335102		MDR	SP-AG-AH	20	30	3.1	Agriculture	Yes	NO	Available	34	17	17	67	
2-99	Great Park Corridor	7721 EDISON AVE	91761	105336101		MDR	SP-AG-AH	20	30	9.0	Agriculture	Yes	NO	Available	98	50	50	197	
2-100	Great Park Corridor	SWC EDISON AVE & CUCAMONGA AVE	91761	105336102		MDR	SP-AG-AH	20	30	9.0	Agriculture	Yes	NO	Available	98	49	49	197	
2-101	Great Park Corridor	7587 EDISON AVE	91710	105337101		MDR	SP-AG-AH	20	30	23.6	Agriculture	Yes	NO	Available	258	130	130	517	
2-102	Great Park Corridor	7325 EDISON AVE	91761	105339101		MU-GP	SP-AG-AH	20	65	36.5	Agriculture	Yes	NO	Available	446	223	223	892	
2-103	Great Park Corridor	7225 EDISON AVE	91761	105341101		MU-GP	SP-AG-AH	20	65	18.3	Agriculture	Yes	NO	Available	225	112	112	450	
2-104	Great Park Corridor	14251 EUCLID AVE	91761	105342101		MU-GP	SP-AG-AH	20	65	6.4	Agriculture	Yes	NO	Available	79	39	39	158	
2-105	Great Park Corridor	14211 S EUCLID 0	91761	105342102		MU-GP	SP-AG-AH	20	65	5.4	Open storage	Yes	NO	Available	66	33	33	133	
2-106	Great Park Corridor	14187 EUCLID AVE	91761	105342104		MU-GP	SP-AG-AH	20	65	5.7	Agriculture	Yes	NO	Available	70	35	35	140	
2-107	Great Park Corridor	S OF SEC EDISON AVE & EUCLID AVE	91761	105342107		MU-GP	SP-AG-AH	20	65	0.6	Open storage	Yes	NO	Available	7	4	4	15	
2-108	Great Park Corridor	14107 EUCLID AVE	91761	105342108		MU-GP	SP-AG-AH	20	65	1.2	Truck rental /open storage	Yes	NO	Available	14	7	7	29	
2-109	Great Park Corridor	7145 EDISON AVE	91761	105342109		MU-GP	SP-AG-AH	20	65	3.5	Open storage	Yes	NO	Available	43	22	22	87	
2-110	Great Park Corridor	14393 S EUCLID AVE	91761	105351101		MU-GP	SP-AG-AH	20	65	5.9	Truck wash	Yes	NO	Available	73	36	36	145	
2-111	Great Park Corridor	N OF NEC EUCALYPTUS AVE & EDISONAVE	91762	105351105		MU-GP	SP-AG-AH	20	65	5.8	Agriculture	Yes	NO	Available	72	36	36	143	
2-112	Great Park Corridor	N OF NWC EUCALYPTUS AVE &SULTANA AVE	91762	105351106		MU-GP	SP-AG-AH	20	65	9.5	Agriculture	Yes	NO	Available	116	58	58	233	
2-113	Great Park Corridor	14389 SULTANA AVE	91710	105352101		MU-GP	SP-AG-AH	20	65	9.5	Agriculture	Yes	NO	Available	115	58	58	232	
2-114	Great Park Corridor	N OF NWC EUCALYPTUS AVE &CAMPUS AVE	91762	105352102		MU-GP	SP-AG-AH	20	65	9.4	Agriculture	Yes	NO	Available	115	57	57	229	
2-115	Great Park Corridor	N OF NEC EUCALYPTUS AVE & CAMPUSAVE	91762	105353101		MDR	SP-AG-AH	20	30	3.0	Agriculture	Yes	NO	Available	33	17	17	66	
2-116	Great Park Corridor	14366 BON VIEW AVE	91710	105353104		MDR	SP-AG-AH	20	30	2.9	Agriculture	Yes	NO	Available	32	16	16	64	
2-117	Great Park Corridor	14450 BON VIEW AVE	91710	105354101		MDR	SP-AG-AH	20	30	5.5	Agriculture	Yes	NO	Available	61	30	30	121	
2-118	Great Park Corridor	14400 S GROVE AVE	91762	105355101		MU-BC	SP-AG-AH	25	45	26.7	Agriculture	Yes	NO	Available	187	93	93	373	
2-119	Great Park Corridor	14451 BON VIEW AVE	91761	105357101		MDR	SP-AG-AH	20	30	9.1	Agriculture	Yes	NO	Available	99	50	50	199	
2-120	Great Park Corridor	NEC EUCALYPTUS AVE & BON VIEWAVE	91710	105357102		MDR	SP-AG-AH	20	30	9.1	Agriculture	Yes	NO	Available	100	50	50	200	
2-121	Great Park Corridor	7556 EUCALYPTUS AVE	91710	105358103		MDR	SP-AG-AH	20	30	9.1	Agriculture	Yes	NO	Available	100	50	50	201	
2-122	Great Park Corridor	14330 BON VIEW 0	91761	105358104		MDR	SP-AG-AH	20	30	9.0	Agriculture	Yes	NO	Available	98	50	50	198	
2-123	Great Park Corridor	7511 EUCALYPTUS AVE	91762	105359101		MU-GP	SP-AG-AH	20	65	9.2	Agriculture	Yes	NO	Available	110	56	56	223	
2-124	Great Park Corridor	7388 EUCALYPTUS AVE	91710	105359102		MU-GP	SP-AG-AH	20	65	9.0	Agriculture	Yes	NO	Available	109	55	55	220	
2-125	Great Park Corridor	7280 EUCALYPTUS 0	91761	105360101		MU-GP	SP-AG-AH	20	65	9.0	Agriculture	Yes	NO	Available	111	55	55	221	
2-126	Great Park Corridor	NEC EUCALYPTUS AVE & EDISON AVE	91761	105360102		MU-GP	SP-AG-AH	20	65	5.6	Agriculture	Yes	NO	Available	68	34	34	137	
2-127	Great Park Corridor	14437 EUCLID AVE	91761	105360103		MU-GP	SP-AG-AH	20	65	2.8	Agriculture	Yes	NO	Available	35	17	17	69	
2-128	Great Park Corridor	14411 EUCLID AVE	91761	105360104		MU-GP	SP-AG-AH	20	65	3.3	Truck wash	Yes	NO	Available	41	20	20	82	
2-129	Great Park Corridor	14350 WALKER AVE	91761	21632210a		MDR	SP-AG-AH	20	30	11.8	Agriculture	Yes	NO	Available	129	65	65	259	
2-130	Great Park Corridor	14350 WALKER AVE	91761	21632210b		MU-BC	SP-AG-AH	25	45	11.8	Agriculture	Yes	NO	Available	83	41	41	165	
2-131	Grove Corridor	8146 CHINO AVE	91710	21617101		MU-GR	SP-AG-AH	20	65	9.1	Agriculture	Yes	NO	Available	51	0	155	206	
2-132	Grove Corridor	N OF NEC CHINO AVE & GROVE AVE	91761	21617102		MDR	SP-AG-AH	20	30	4.8	Agriculture	Yes	NO	Available	26	0	79	105	
2-133	Grove Corridor	S OF SEC RIVERSIDE DR & GROVE AVE	91761	21617103		MDR	SP-AG-AH	20	30	9.5	Agriculture	Yes	NO	Available	52	0	157	209	
2-134	Grove Corridor	SWC RIVERSIDE DR & PARCO AVE	91761	21617105		MDR	SP-AG-AH	20	30	9.2	Agriculture	Yes	NO	Available	50	0	151	202	
2-135	Grove Corridor	0 COMET AVE	91761	21617106		MDR	SP-AG-AH	20	30	9.6	Agriculture	Yes	NO	Available	53	0	159	212	
2-136	Grove Corridor	N OF NEC CHINO AVE & GROVE AVE	91761	21617111		MDR	SP-AG-AH	20	30	4.8	Agriculture	Yes	NO	Available	26	0	79	105	
2-137	Grove Corridor	13605 GROVE AVE	91761	21621101		MDR	SP-AG-AH	20	30	8.9	Open storage	Yes	NO	Available	48	0	147	195	
2-138	Grove Corridor	13403 GROVE AVE	91761	21621104		MDR	SP-AG-AH	20	30	9.5	Agriculture	Yes	NO	Available	52	0	157	209	
2-139	Grove Corridor	8113 CHINO AVE	91761	21621105		MU-GR	SP-AG-AH	20	65	9.0	Agriculture	Yes	NO	Available	51	0	153	204	
2-140	Grove Corridor	13519 S GROVE AVE	91761	21621124		MDR	SP-AG-AH	20	30	6.8	Open storage	Yes	NO	Available	37	0	112	149	
2-141	Grove Corridor	N OF NEC EDISON AVE & GROVE AVE	91761	21631103		MDR	SP-AG-AH	20	30	8.6	Agriculture	Yes	NO	Available	76	0	114	190	
2-142	Grove Corridor	13817 GROVE AVE	91761	21631104		MDR	SP-AG-AH	20	30	9.5	Agriculture	Yes	NO	Available	84	0	126	209	
2-143	Grove Corridor	13715 GROVE AVE	91761	21631105		MDR	SP-AG-AH	20	30	9.1	Agriculture	Yes	NO	Available	80	0	120	199	
2-144	Grove Corridor	N OF NWC CHINO AVE & GROVE AVE	91761	105217102		MDR	SP-AG-AH	20	30	9.5	Agriculture	Yes	NO	Available	52	0	157	209	
2-145	Grove Corridor	8074 CHINO AVE	91761	105218101		MU-GR	SP-AG-AH	20	65	8.9	Agriculture	Yes	NO	Available	50	0	153	202	
2-146	Grove Corridor	8089 CHINO AVE	91761	105246103		MU-GR	SP-AG-AH	20	65	9.0	Agriculture	Yes	NO	Available	50	0	153	204	
2-147	Grove Corridor	S OF SEC CHINO AVE & GROVE AVE	91761	105247102		MDR	SP-AG-AH	20	30	9.5	Vacant	Yes	NO	Available	52	0	157	209	
2-148	Grove Corridor	13524 S GROVE AVE	91762	105248102		MDR	SP-AG-AH	20	30	6.9	Agriculture &open storage	Yes	NO	Available	38	0	114	153	
2-149	Grove Corridor	13608 GROVE AVE	91762	105249105		MDR	SP-AG-AH	20	30	4.4	Open storage	Yes	NO	Available	23	0	73	96	
2-150	Grove Corridor	8010 SCHAEFER AVE	91761	105249106		MDR	SP-AG-AH	20	30	4.2	Open storage	Yes	NO	Available	22	0	70	92	
2-151	Grove Corridor	8025 E SCHAEFER AVE	91710	105315104		MDR	SP-AG-AH	20	30	4.6	Open storage	Yes	NO	Available	41	0	61	102	
2-152	Grove Corridor	8087 E SCHAEFER AVE	91710	105315105		MDR	SP-AG-AH	20	30	3.9	Open storage	Yes	NO	Available	35	0	52	86	
2-153	Grove Corridor	13814 GROVE AVE	91710	105316102		MDR	SP-AG-AH	20	30	9.5	Building supply	Yes	NO	Available	84	0	125	209	
2-154	Grove Corridor	13908 GROVE AVE	91710	105317103		MDR	SP-AG-AH	20	30	4.3	Open storage	Yes	NO	Available	38	0	56	94	
2-155	Grove Corridor	13960 GROVE AVE	91762	105317105		MDR	SP-AG-AH	20	30	3.6	Agriculture	Yes	NO	Available	32	0	48	79	
2-156	Euclid Corridor	7247 RIVERSIDE DR	91761	105207105		MDR	SP-AG-AH	20	30	1.9	Agriculture	Yes	NO	Available	8	0	31	40	
2-157	Euclid Corridor	SEC RIVERSIDE DR & EUCLIDE AVE	91761	105207107		MU-ER	SP-AG-AH	20	75	15.0	Agriculture	Yes	NO	Available	98	0	295	393	
2-158	Euclid Corridor	E OF SEC RIVERSIDE DR & EUCLIDE AVE	91761	105207108		MDR	SP-AG-AH	20	30	7.3	Agriculture	Yes	NO	Available	40	0	121	161	
2-159	Euclid Corridor	E OF SEC RIVERSIDE DR & EUCLIDE AVE	91761	105207109		MDR	SP-AG-AH	20	30	4.6	Agriculture	Yes	NO	Available	25	0	76	101	
2-160	Euclid Corridor	7297 RIVERSIDE DR	91761	105207110		MDR	SP-AG-AH	20	30	2.3	Agriculture	Yes	NO	Available	11	0	38	49	
2-161	Euclid Corridor	S OF SWC RIVERSIDE DR & SULTANAAVE	91761	105208104		MDR	SP-AG-AH	20	30	9.5	Agriculture	Yes	NO	Available	52	0	157	209	
2-162	Euclid Corridor	7325 RIVERSIDE DR	91761	105210101		MDR	SP-AG-AH	20	30	8.8	Parking, vacant field w/ unused ag bldg.	Yes	NO	Available	43	0	145	189	
2-163	Euclid Corridor	7192 CHINO AVE	91762	105226101		MDR	SP-AG-AH	20	30	5.1	Agriculture	Yes	NO	Available	28	0	84	112	
2-164	Euclid Corridor	N OF NEC CHINO AVE & EUCLID AVE	91762	105226102		MDR	SP-AG-AH	20	30	5.8	Agriculture	Yes	NO	Available	32	0	96	128	
2-165	Euclid Corridor	13165 EUCLID AVE	91762	105226106		MDR	SP-AG-AH	20	30	11.6	Agriculture	Yes	NO	Available	64	0	192	256	
2-166	Euclid Corridor	13647 EUCLID AVE	91762	105238101		MDR	SP-AG-AH	20	30	15.7	Agriculture	Yes	NO	Available	86	0	258	344	
2-167	Euclid Corridor	N OF NEC SCHAEFER	91762	105238102		MDR	SP-AG-AH	20	30	1.0	Agriculture	Yes	NO	Available	4	0	16	20	
2-168	Euclid Corridor	13583 EUCLID AVE	91762	105238104		MDR	SP-AG-AH	20	30	4.0	Vacant	Yes	NO	Available	22	0	66	87	
2-169	Euclid Corridor	13573 EUCLID AVE	91762	105238105		MDR	SP-AG-AH	20	30	0.6	Agriculture	Yes	NO	Available	4	0	11	14	
2-170	Euclid Corridor	13555 EUCLID AVE	91762	105238106		MDR	SP-AG-AH	20	30	0.7	Agriculture	Yes	NO	Available	3	0	12	15	
2-171	Euclid Corridor	13545 EUCLID AVE	91762	105238108		MDR	SP-AG-AH	20	30	0.8	Building supply	Yes	NO	Available	4	0	13	18	
2-172	Euclid Corridor	7220 CHINO AVE	91761	105238110		MDR	SP-AG-AH	20	30	14.8	Agriculture	Yes	NO	Available	81	0	244	325	
2-173	Euclid Corridor	N OF NWC SCHAEFER	91762	105238111		MDR	SP-AG-AH	20	30	6.3	Vacant	Yes	NO	Available	35	0	105	140	
2-174	Euclid Corridor	N OF NWC SCHAEFER	91762	105238112		MDR	SP-AG-AH	20	30	2.8	Agriculture	Yes	NO	Available	16	0	47	62	
2-175	Euclid Corridor	13525 S EUCLID AVE	91762	105238113		MDR	SP-AG-AH	20	30	1.4	Veterinarian	Yes	NO	Available	7	0	22	30	
2-176	Euclid Corridor	7110 CHINO AVE	91762	105238114		MDR	SP-AG-AH	20	30	11.3	Agriculture	Yes	NO	Available	61	0	186	247	
2-177	Euclid Corridor	13529 EUCLID AVE	91762	105238116		MDR	SP-AG-AH	20	30	0.9	Auto rentals	Yes	NO	Available	5	0	15	20	
	Vineyard / Armstrong Ranch Specific Plan	S OF SWC RIVERSIDE DR & VINEYARDAVE	91761	21617406		MDR	SP-AG-AH	20	30	9.5	Agriculture	Yes	NO	Available	52	0	157	209	
	Vineyard / Armstrong Ranch Specific Plan	N OF NWC CHINO AVE & VINEYARDAVE	91761	21617407		MDR	SP-AG-AH	20	30	9.5	Agriculture	Yes	NO	Available	52	0	157	209	
	Vineyard / Armstrong Ranch Specific Plan	NWC CHINO AVE & VINEYARD AVE	91761	21617408		MDR	SP-AG-AH	20	30	9.1	Agriculture	Yes	NO	Available	50	0	151	201	

Table B-1: Housing Element Sites Inventory - Sites Already Suitably Zoned

ID	Opp Area	Site Address/Intersection	Zip Code	APN	Consolidated Sites	Current GP	Current Zone	Min Density (du/ac)	Max Density (du/ac)	Parcel Size (Acres)	Existing Use/ Vacancy	Infrast Available	Publicly-Owned	Site Status	Lower	Mod	Above Mod	Total Units	Notes
2-181	Vineyard / Armstrong Ranch Specific Plan*	SWC SCHAEFER & VINEYARD AVE	91761	21818115		MDR	SP-AG-AH	20	30	16.3	Agriculture	Yes	NO	Available	179	89	89	358	
2-182	Vineyard / Armstrong Ranch Specific Plan*	S OF SWC SCHAEFER & VINEYARD AVE	91761	21818102		MDR	SP-AG-AH	20	30	3.0	Agriculture	Yes	NO	Available	33	16	16	66	

Map ID	Opportunity Area	Site Address/Intersection	5 Digit	APN	Very Low	Low	Moderate	Above Moderate	Parcel Size	Current GP	Current Zone	Proposed	Proposed Zoning	Density	Density4	Total	Vacant/	Description of	Notes
2-18	Ontario Mills Specific Plan	1050 N ONTARIO MILLS DR	91764	23801402	6	4	5	5	1.3	MU-OM	SP	MU-OM	SP - City to ammend California Commerce Center North Specific Plan (The Mills)	25	85	20.5	Nonvacant	Automotive	small outparcel: Car Wash
2-19	Ontario Mills Specific Plan	990 N ONTARIO MILLS DR	91764	23801403	9	5	7	7	1.8	MU-OM	SP	MU-OM	SP - City to ammend California Commerce Center North Specific Plan (The Mills)	25	85	28.9	Nonvacant	Restaurant	small outparcel: Jamba Juice, Mantra Indian
2-20	Ontario Mills Specific Plan	960 N ONTARIO MILLS DR	91764	23801404	6	4	5	5	1.3	MU-OM	SP	MU-OM	SP - City to ammend California Commerce Center North Specific Plan (The Mills)	25	85	20.5	Nonvacant	Restaurant	small outparcel: Starbucks, Noodle World Jr, Donut Shop
2-21	Ontario Mills Specific Plan	4900 E FOURTH ST	91764	23801405	94	55	74	74	18.6	MU-OM	SP	MU-OM	SP - City to ammend California Commerce Center North Specific Plan (The Mills)	25	85	297.9	Nonvacant	Movie theater	large outparcel: Regal Edwards
2-22	Ontario Mills Specific Plan	980 N ONTARIO MILLS DR	91764	23801406	6	4	5	5	1.2	MU-OM	SP	MU-OM	SP - City to ammend California Commerce Center North Specific Plan (The Mills)	25	85	19.9	Nonvacant	Restaurant	small outparcel: Rubio's, Fishbone, Corner Deli
2-23	Ontario Mills Specific Plan	880 N ROCHESTER AVE	91764	23801407	7	4	5	5	1.3	MU-OM	SP	MU-OM	SP - City to ammend California Commerce Center North Specific Plan (The Mills)	25	85	20.7	Nonvacant	Retail	small outparcel: Car stereo store
2-24	Ontario Mills Specific Plan	4421 ONTARIO MILLS PKWY	91764	23801410	17	10	13	13	3.3	MU-OM	SP	MU-OM	SP - City to ammend California Commerce Center North Specific Plan (The Mills)	25	85	53.3	Nonvacant	Retail	small outparcel: The Love Store (adult entertainment)
2-25	Ontario Mills Specific Plan	950 N ONTARIO MILLS DR	91764	23801418	7	4	5	5	1.4	MU-OM	SP	MU-OM	SP - City to ammend California Commerce Center North Specific Plan (The Mills)	25	85	21.9	Nonvacant	Restaurant	small outparcel: Heroes Restaurant and Brewhouse
2-26	Ontario Mills Specific Plan	4549 MILLS CIR	91764	23801419	74	43	59	59	14.7	MU-OM	SP	MU-OM	SP - City to ammend California Commerce Center North Specific Plan (The Mills)	25	85	234.7	Nonvacant	Movie theater & mall parking lot	AMC Ontario Mills 30
2-27	Ontario Mills Specific Plan	4364 E MILLS CIR	91764	23801420	4	2	3	3	0.8	MU-OM	SP	MU-OM	SP - City to ammend California Commerce Center North Specific Plan (The Mills)	25	85	13.0	Nonvacant	Retail	small outparcel: La-Z Boy
2-28	Ontario Mills Specific Plan	4340 MILLS CIRCLE DR	91764	23801423	3	2	3	3	0.7	MU-OM	SP	MU-OM	SP - City to ammend California Commerce Center North Specific Plan (The Mills)	25	85	10.4	Nonvacant	Restaurant	small outparcel: Del Taco
2-29	Ontario Mills Specific Plan	4453 MILLS CIRCLE CIR	91764	23801428	4	2	3	3	0.8	MU-OM	SP	MU-OM	SP - City to ammend California Commerce Center North Specific Plan (The Mills)	25	85	13.4	Nonvacant	Restaurant	small outparcel: Carls Jr
2-30	Ontario Mills Specific Plan	4485 MILLS CIRCLE DR	91764	23801429	7	4	6	6	1.4	MU-OM	SP	MU-OM	SP - City to ammend California Commerce Center North Specific Plan (The Mills)	25	85	23.0	Nonvacant	Restaurant	small outparcel: Krispy Kreme
2-31	Ontario Mills Specific Plan	4551 EAST MILLS CIRCLE 0	91764	23801430	10	6	8	8	1.9	MU-OM	SP	MU-OM	SP - City to ammend California Commerce Center North Specific Plan (The Mills)	25	85	30.7	Nonvacant	Restaurant	small outparcel: Chevy's (vacant?)
2-32	Ontario Mills Specific Plan	4567 MILLS CIR	91764	23801431	3	2	2	2	0.6	MU-OM	SP	MU-OM	SP - City to ammend California Commerce Center North Specific Plan (The Mills)	25	85	9.6	Nonvacant	Automotive	small outparcel: Jiffy Lube
2-33	Ontario Mills Specific Plan	4583 MILLS CIR	91764	23801432	4	2	3	3	0.8	MU-OM	SP	MU-OM	SP - City to ammend California Commerce Center North Specific Plan (The Mills)	25	85	12.6	Nonvacant	Automotive	small outparcel: Tire sales
2-34	Ontario Mills Specific Plan	4605 MILLS CIR	91764	23801433	4	2	3	3	0.7	MU-OM	SP	MU-OM	SP - City to ammend California Commerce Center North Specific Plan (The Mills)	25	85	11.9	Nonvacant	Restaurant	small outparcel: Wienerschnitzel
2-35	Ontario Mills Specific Plan	4649 ONTARIO MILLS DR	91764	23801434	5	3	4	4	0.9	MU-OM	SP	MU-OM	SP - City to ammend California Commerce Center North Specific Plan (The Mills)	25	85	14.3	Nonvacant	Restaurant	small outparcel: Burger King
2-36	Ontario Mills Specific Plan	1 E MILLS CIR	91764	23801436	486	285	385	385	96.3	MU-OM	SP	MU-OM	SP - City to ammend California Commerce Center North Specific Plan (The Mills)	25	85	1,541.4	Nonvacant	Ontario Mills Mall & parking lot	Mall
2-37	Ontario Mills Specific Plan	4534 MILLS CIR	91764	23801437	6	4	5	5	1.2	MU-OM	SP	MU-OM	SP - City to ammend California Commerce Center North Specific Plan (The Mills)	25	85	19.3	Nonvacant	Ontario Mills Mall & parking lot	The Children's Place
2-38	Ontario Mills Specific Plan	4449 MILLS CIR	91764	23801438	7	4	5	5	1.4	MU-OM	SP	MU-OM	SP - City to ammend California Commerce Center North Specific Plan (The Mills)	25	85	21.9	Nonvacant	Ontario Mills Mall & parking lot	Sketchers Factory Outlet
2-39	Ontario Mills Specific Plan	1 MILLS CIR	91764	23801439	6	3	5	5	1.1	MU-OM	SP	MU-OM	SP - City to ammend California Commerce Center North Specific Plan (The Mills)	25	85	18.4	Nonvacant	Ontario Mills Mall & parking lot	Mall
2-40	Ontario Mills Specific Plan	4380 MILLS CIR	91764	23801440	9	5	7	7	1.7	MU-OM	SP	MU-OM	SP - City to ammend California Commerce Center North Specific Plan (The Mills)	25	85	27.7	Nonvacant	Ontario Mills Mall & parking lot	Off Broadway Shoe Warehouse
2-41	Ontario Mills Specific Plan	4380 MILLS CIR	91764	23801441	2	1	1	1	0.3	MU-OM	SP	MU-OM	SP - City to ammend California Commerce Center North Specific Plan (The Mills)	25	85	4.9	Nonvacant	Ontario Mills Mall & parking lot	Off Broadway Shoe Warehouse
2-42	Ontario Mills Specific Plan	4423 EAST MILLS CIRCLE 0	91764	23801445	7	4	6	6	1.4	MU-OM	SP	MU-OM	SP - City to ammend California Commerce Center North Specific Plan (The Mills)	25	85	22.0	Nonvacant	Restaurant	small outparcel: Culichi Town Mexican Restaurant
2-43	Ontario Mills Specific Plan	4320 MILLS CIR	91764	23801446	15	9	12	12	2.9	MU-OM	SP	MU-OM	SP - City to ammend California Commerce Center North Specific Plan (The Mills)	25	85	47.0	Nonvacant	Retail	Insurance Svcs, Savage Café,
2-44	Ontario Mills Specific Plan	4403 E MILLS CIR	91764	23801454	12	7	10	10	2.4	MU-OM	SP	MU-OM	SP - City to ammend California Commerce Center North Specific Plan (The Mills)	25	85	39.1	Nonvacant	Restaurant	small outparcel: Olive Garden
2-45	Ontario Mills Specific Plan	4413 E MILLS CIR	91764	23801455	12	7	10	10	2.4	MU-OM	SP	MU-OM	SP - City to ammend California Commerce Center North Specific Plan (The Mills)	25	85	38.4	Nonvacant	Restaurant	small outparcel: Red Lobster
2-46	Ontario Mills Specific Plan	4351 ONTARIO MILLS PKWY	91761	23804113	5	3	4	4	1	MU-OM	SP	MU-OM	SP - City to ammend California Commerce Center North Specific Plan (The Mills)	25	85	16.1	Nonvacant	Restaurant	small outparcel: Jack in the Box
2-47	Ontario Mills Specific Plan	4371 ONTARIO MILLS PKWY	91761	23804127	5	3	4	4	1	MU-OM	SP	MU-OM	SP - City to ammend California Commerce Center North Specific Plan (The Mills)	25	85	16.4	Nonvacant	Restaurant	small outparcel: Taco Bell
2-48	Ontario Mills Specific Plan	4400 ONTARIO MILLS PKWY	91761	23804129	13	8	10	10	2.6	MU-OM	SP	MU-OM	SP - City to ammend California Commerce Center North Specific Plan (The Mills)	25	85	41.1	Nonvacant	Retail	large outparcel: Performance Bicylce, David's Bridal
2-49	Ontario Mills Specific Plan	4440 ONTARIO MILLS PKWY	91761	23804130	78	46	62	62	15.4	MU-OM	SP	MU-OM	SP - City to ammend California Commerce Center North Specific Plan (The Mills)	25	85	246.2	Nonvacant	Retail	Scandinavian Furniture Outlet
2-50	Ontario Mills Specific Plan	ONTARIO MILLS PKWY & INLANDEMPIRE BLVD (T-Int	91764	23804132	23	13	18	18	4.5	MU-OM	SP	MU-OM	SP - City to ammend California Commerce Center North Specific Plan (The Mills)	25	85	72.5	Nonvacant	Retail	large outparcel: Big Box Parking Lot
2-51	Ontario Mills Specific Plan	4750 MILLS CIR	91764	23826101	24	14	19	19	4.8	MU-OM	SP	MU-OM	SP - City to ammend California Commerce Center North Specific Plan (The Mills)	25	85	76.0	Nonvacant	Ontario Mills Mall & parking lot	Nordstrom Rack
2-52	Ontario Mills Specific Plan	4449 MILLS CIR	91764	23826102	7	4	6	6	1.4	MU-OM	SP	MU-OM	SP - City to ammend California Commerce Center North Specific Plan (The Mills)	25	85	22.7	Nonvacant	Ontario Mills Mall & parking lot	Sketchers Factory Outlet

CITY OF ONTARIO PLANNING DEPARTMENT

PLANNING COMMISSION AGENDA REPORT

September 23, 2025

303 East B Street, Ontario, California 91764 Phone: 909.395.2036 / Email: PlanningDirector@OntarioCA.gov

FILE NO: PGPA23-003

SUBJECT: A General Plan Amendment to amend The Ontario Plan 2050 Policy Plan (General Plan) Land Use Map to change the land use designation of approximately 5.3 acres of land located on Euclid Avenue, about 300 feet north of Edison Avenue, from Mixed Use to Business Park. **Submitted by RDDC Inc.**

PROPERTY OWNER: RCCD Inc.

RECOMMENDED ACTION: That the Planning Commission consider and adopt a Resolution recommending the City Council approve File No. PGPA23-003, pursuant to the facts and reasons contained in the staff report and attached Resolution, and subject to the conditions of approval appended to the attached Resolution as Attachment A.

BACKGROUND: On January 27, 2010, the Ontario City Council certified The Ontario Plan Environmental Impact Report in conjunction with File No. PGPA06-001 (City Council Resolution No. 2010-006), and on August 16, 2022, the Ontario City Council certified The Ontario Plan 2050 Update Supplemental Environmental Impact Report (SEIR) in conjunction with The Ontario Plan 2050 Update (TOP 2050; File No. PGPA20-002). TOP 2050 and the associated Environmental Impact Report analyzed the Project site and established guidelines for development, including but not limited to, general land use (Mixed Use – Great Park; 10 percent office, 20 percent retail, 70 percent residential), maximum FAR (1.5 Office FAR, 1.0 Commercial FAR), and 14.0 to 65.0 du/ac residential density range. The SEIR designated areas north of the Project site as Business Park (0.6 FAR) and Open Space – Non-Recreation.

The Project site is located within the Euclid Mixed Use Specific Plan (File No. PSP22-001), which was approved by the City Council on September 3, 2024, establishing land use designations consistent with The Ontario Plan 2050 (TOP 2050), development standards, and infrastructure requirements for future development of business park and mixed use developments. The associated Euclid Mixed Use Specific Plan Environmental Impact Report (State Clearing House No. 2023020281) was certified by the City Council on August 20, 2024.

The Project site is within Planning Area 3A of the Euclid Mixed Use Specific Plan and is currently vacant.

Case Planner:	Edmelynne V. Hutter, AICP
Planning Director Approval:	
Submittal Date:	10/26/2023

Hearing Body	*Date*	*Decision*	*Action*
DAB	N/A	N/A	N/A
PC	9/23/25	Approval	Recommend
CC	11/4/2025		Final

On October 26, 2023, the Applicant applied for a General Plan Amendment, requesting to modify the Project site designation in TOP 2050 Land Use Plan from Mixed Use to Business Park. The amendment request was submitted in anticipation of future requests for a minor specific plan amendment and development plan for a business park development.

PROJECT SETTING: The Project site consists of 5.3 acres of land located on Euclid Avenue approximately 300 feet north of Edison Avenue, within the Euclid Mixed Use Specific Plan, which is depicted in Exhibit A: Project Location Map. The site is currently vacant but was previously used for agriculture and dairy uses.

The Project site is generally surrounded by vacant land, trailer storage, residential, and commercial uses. The existing surrounding land uses, zoning, and Policy Plan (general plan) and specific plan land use designations are summarized in Table 1: Surrounding Zoning & Land Uses.

PROJECT ANALYSIS:

(1) General Plan Amendment (File No. PGPA23-003)

The Project would amend The Ontario Plan Policy Plan – Land Use Map and associated buildout tables to reflect the change in land use from Mixed Use – Great Park to Business Park (see Exhibit B). The proposed Project will establish the following:

- Convert 5.3 acres of Mixed Use – Great Park (MU-Great Park) to Business Park (BP) located on Euclid Avenue, approximately 300 feet north of Edison Avenue.

- Remove the Affordable Housing overlay on 5.3 acres of land located on Euclid Avenue, approximately 300 feet north of Edison Avenue.

Under the current land use, the Project site is anticipated to have a buildout capacity of 130 dwelling units, 34,630 square feet of office and 46,173 square feet of retail. The assumed buildout is based on 35 du/ac, 1.5 Floor-Area Ratio (FAR) office, and 1.0 FAR retail at the land area percentages established for Mixed Use – Great Park. The Project site is also designated as Affordable Housing Overlay in TOP 2050 Land Use Map, which means that the anticipated 130 dwelling units are included in the City's Regional Housing Needs Assessment (RHNA) analysis and calculations.

Changing the TOP 2050 land use designation would remove the anticipated residential, office and commercial developments, while increasing the Business Park buildout by approximately 138,520 square feet within Planning Area 3A of the Euclid Mixed Use Specific Plan. The proposed Project would have a removal and replacement effect regarding buildout and would have nominal changes in overall development intensity.

However, the reduction of 130 dwelling units impacts the City's RHNA obligation and the anticipated reduction in dwelling unit count in the Euclid Mixed Use Specific Plan will

have to be transferred to another location within the City to maintain the City's RHNA obligation and avoid a "net loss" in dwelling units.

The reduction in dwelling units will be offset by a proposed General Plan Amendment (File No. PGPA24-003) that will provide additional dwelling units within the Esperanza Specific Plan. The proposed PGPA24-003 would change the TOP 2050 land use designation of approximately 10 acres of land, located within the Esperanza Specific Plan area, from Public School to Medium Density Residential, which results in a net gain of 224 dwelling units. File No. PGPA24-003 will be considered by the Planning Commission during its public meeting on September 23, 2025. Additional analysis is provided in the Housing Element Compliance section below.

PUBLIC NOTIFICATION: The subject application was advertised as a public hearing in at least one newspaper of general circulation in the City of Ontario (the Inland Valley Daily Bulletin newspaper). In addition, the Project site was posted with one or more large public notification signs and notices were mailed to all owners of real property located within a minimum of 600 feet of the exterior boundaries of the property that is the subject of the hearing, as shown on the records of the County Assessor.

CORRESPONDENCE: As of the preparation of this Agenda Report, Planning Department staff has not received any written or verbal communications from the owners or occupants of properties surrounding the Project site or from the public in general, regarding the subject application.

AGENCY/DEPARTMENT REVIEWS: Each City agency/department has been provided the opportunity to review and comment on the subject application. Any applicable comments are reflected in the proposed amendment.

AIRPORT LAND USE COMPATIBILITY PLAN (ALUCP) COMPLIANCE: The California State Aeronautics Act (Public Utilities Code Section 21670 et seq.) requires that an Airport Land Use Compatibility Plan be prepared for all public use airports in the State; and requires that local land use plans and individual development proposals must be consistent with the policies set forth in the adopted Airport Land Use Compatibility Plan.

On April 19, 2011, the City Council of the City of Ontario approved and adopted the ONT ALUCP, establishing the Airport Influence Area for Ontario International Airport, which encompasses lands within parts of San Bernardino, Riverside, and Los Angeles Counties, and limits future land uses and development within the Airport Influence Area, as they relate to noise, safety, airspace protection, and overflight impacts of current and future airport activity. As the recommending authority for the Project, the Planning Commission has reviewed and considered the facts and information contained in the Application and supporting documentation against the ONT ALUCP compatibility factors, including [1] Safety Criteria (ONT ALUCP Table 2-2) and Safety Zones (ONT ALUCP Map 2-2), [2] Noise Criteria (ONT ALUCP Table 2-3) and Noise Impact Zones (ONT ALUCP Map 2-3), [3] Airspace protection Zones (ONT ALUCP Map 2-4), and [4] Overflight Notification Zones (ONT ALUCP Map 2-5). As a result, the Planning Commission finds and determines that the

Project, when implemented in conjunction with the conditions of approval, will be consistent with the policies and criteria set forth within the ONT ALUCP.

On August 2, 2022, the City Council of the City of Ontario approved and adopted a Development Code Amendment to establish the Chino Airport (CNO) Overlay Zoning District (OZD) and Reference I, Chino Airport Land Use Compatibility Plan (CNO ALUCP). The CNO OZD and CNO ALUCP established the Airport Influence Area for Chino Airport, solely within the City of Ontario, and limits future land uses and development within the Airport Influence Area, as they relate to safety, airspace protection, and overflight impacts of current and future airport activity. The CNO ALUCP is consistent with policies and criteria set forth within the Caltrans 2011 California Airport Land Use Planning Handbook. The proposed Project is located within the Airport Influence Area of Chino Airport and was evaluated and found to be consistent with the California Airport Land Use Planning Handbook and the CNO ALUCP. As the recommending body for the Project, the Planning Commission has reviewed and considered the facts and information contained in the Application and supporting documentation against the CNO ALUCP compatibility factors, including Safety, Airspace Protection, and Overflight. As a result, the Planning Commission finds and determines that the Project, when implemented in conjunction with the conditions of approval, will be consistent with the policies and criteria set forth within the California Airport Land Use Planning Handbook and the Chino ALUCP.

COMPLIANCE WITH THE ONTARIO PLAN: The proposed Project is consistent with the principles, goals and policies contained within the Vision, Governance, Policy Plan (General Plan), and City Council Priorities components of The Ontario Plan (TOP). More specifically, the goals and policies of TOP that are furthered by the proposed Project are as follows:

(1) City Council Goals

- Invest in the Growth and Evolution of the City's Economy
- Operate in a Businesslike Manner
- Ensure the Development of a Well Planned, Balanced, and Self-Sustaining Community in Ontario Ranch

(2) Governance

Decision Making

Goal G1: Sustained decision-making that consistently moves Ontario towards its Vision by using The Ontario Plan as a framework for assessing choices.

- G1-1 Consistency with Policies. We require that staff recommendations to the City Council be consistent with adopted City Council Priorities (Goals and Objectives) and The Policy Pan.

- G1-2 Long-term Benefit. We require decisions to demonstrate and document how they add value to the community and support the Ontario Vision.

(3) Policy Plan (General Plan)

Land Use Element

Goal LU-1: A community that has a spectrum of housing and price ranges that match the jobs in the City and that make it possible for people to live and work in Ontario and maintain a quality of life.

- LU-1.4 Jobs-Housing Balance. We coordinate land use, infrastructure, and transportation planning and analysis with regional, county, and other local agencies to further regional and subregional goals for jobs-housing balance.

- LU-1.6 Complete Community. We incorporate a variety of land uses and building types in our land use planning efforts that result in a complete community where residents at all stages of life, employers, workers, and visitors have a wide spectrum of choices of where they can live, work, shop and recreate within Ontario.

Goal LU-2: Compatibility between a wide range of uses and resultant urban patterns and forms.

- LU-2.1 Land Use Decisions. We minimize adverse impacts on adjacent properties when considering land use and zoning requests.

HOUSING ELEMENT COMPLIANCE: The proposed Project is not consistent with the Housing Element of the Policy Plan (general plan) component of The Ontario Plan. The site is one of the properties listed in the Housing Element Sites Inventory contained in Tables B-1 and B-2 (Housing Element Sites Inventory) of the Housing Element Technical Report, and the proposed Project is not consistent with the number of dwelling units or density specified. Therefore, a General Plan Amendment to remove the subject property from the Housing Element Sites Inventory is required. Removal of the subject property from the inventory will impact the City's Regional Housing Needs Assessment (RHNA) obligations, as there are not an adequate number of sites identified in the inventory to meet the RHNA obligation.

Consequently, the following site will be added to the Available Land Inventory:

APN: 1073-101-050

Parcel Size: 10.02 acres

	Housing Element Sites Inventory
Number of Units:	224
Assumed Density:	22.0 du/ac

Therefore, a separate General Plan Amendment application (File No. PGPA24-003; Esperanza GPA) proposes to allow additional dwelling units on the site noted above that was previously intended for a public school. The Esperanza GPA proposes to amend a Public School land use that allocated 0 dwelling units to a Medium Density Residential land use that will allow a maximum of 224 dwelling units. The reduction of 130 dwelling units resulting from the subject File No. PGPA23-003 will be transferred to the project site for the Esperanza GPA. The transfer of dwelling units will avoid a "net loss" with the City's RHNA obligations and result in a positive gain of approximately 94 dwelling units. The Esperanza GPA will be considered concurrently by the Planning Commission at the September 23, 2025 public meeting.

ENVIRONMENTAL REVIEW: The TOP 2050 established the 5.3-acre Project site with a Mixed Use Land Use designation, resulting in a potential buildout of 130 dwelling units, 34,630 square feet of office, and 46,173 square feet of commercial. The environmental impacts of the potential buildout were reviewed on a programmatic level under the Supplemental Environmental Impact Report (State Clearinghouse #2021070364), which was adopted by the City Council on August 16, 2022.

The environmental impacts of the proposed Land Use change were previously reviewed in conjunction with the Euclid Mixed Use Specific Plan (File No. PSP22-001), for which the Euclid Mixed Use Specific Plan Environmental Impact Report (State Clearinghouse #2023020281) (EMUSP EIR) was adopted by the City Council on August 20, 2024. The EMUSP EIR analyzed the project site with a potential 122,898 square feet of warehouse and 30,225 square feet of commercial uses. The adopted mitigation measures for the EMUSP EIR accounted for Business Park land use at the Project site.

This Application introduces no new significant environmental impacts. All previously adopted mitigation measures are a condition of Project approval and are incorporated herein by this reference.

TECHNICAL APPENDIX:

Table 1: Surrounding Zoning and Land Uses

	Existing Land Use	***Policy Plan Designation***	***Zoning Designation***	***Specific Plan Land Use***
Site	Vacant	Mixed Use – Great Park (MU-Great Park); Affordable Housing Overlay; Chino Airport Influence Area Overlay	Euclid Mixed Use Specific Plan; Affordable Housing Overlay; CNO Overlay	Mixed Use
North	Vacant, Utility Easement	Open Space – Non-Recreational (OS-NR); Chino Airport Influence Area Overlay	Euclid Mixed Use Specific Plan; CNO Overlay	Open Space – Non-Recreational
South	Residential, Vacant, RV storage	Mixed Use – Great Park (MU-Great Park); Chino Airport Influence Area Overlay	Euclid Mixed Use Specific Plan; CNO Overlay	Mixed Use
East	Agriculture	Mixed Use – Great Park (MU-Great Park); Chino Airport Influence Area Overlay	Euclid Mixed Use Specific Plan; CNO Overlay	Mixed Use
West	Commercial (City of Chino)	Commercial General (City of Chino)	East Chino Specific Plan (City of Chino)	Office Commercial (City of Chino)

Exhibit A: PROJECT LOCATION MAP

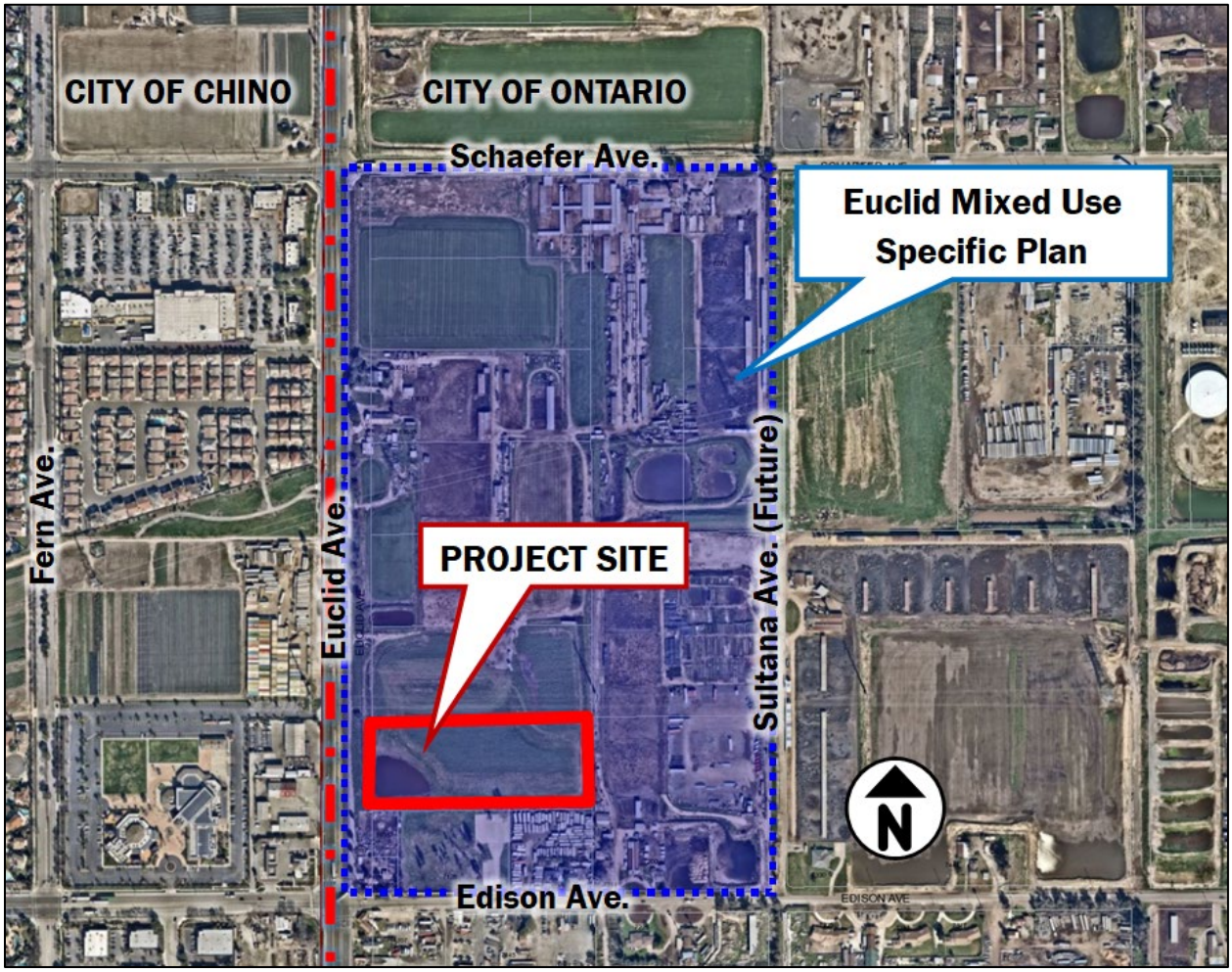
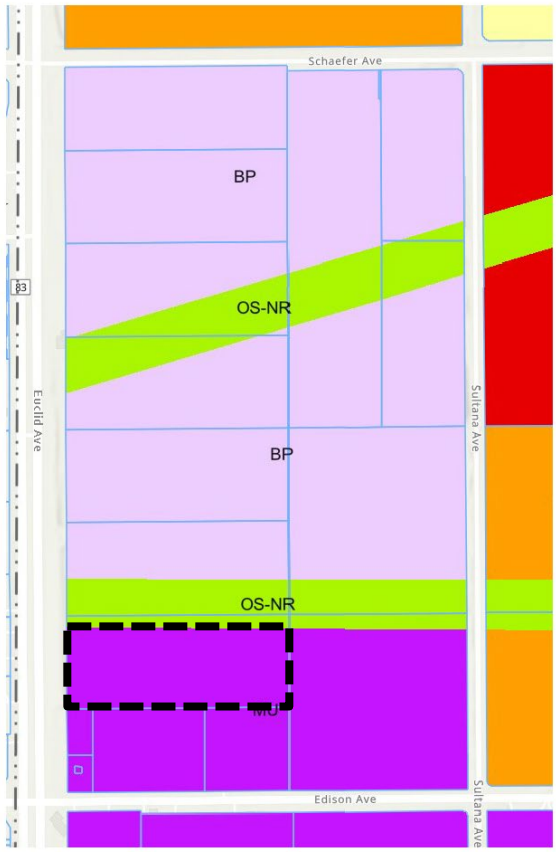
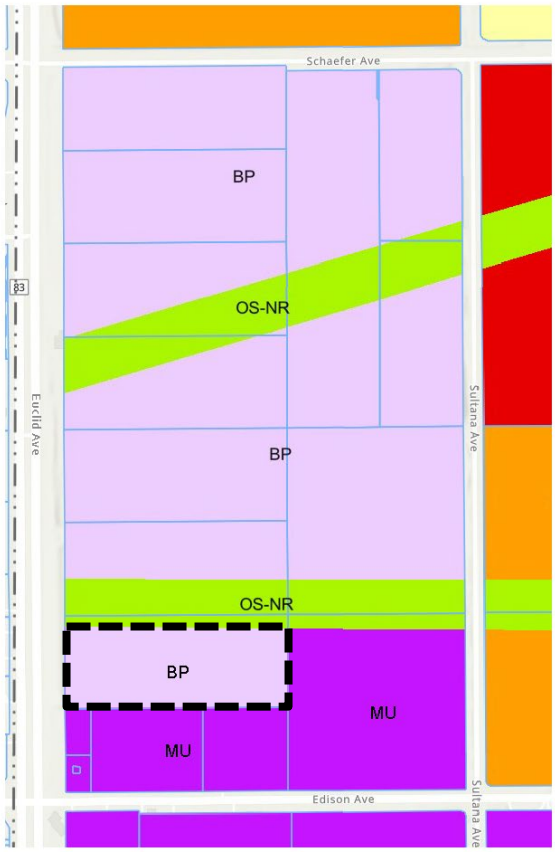


Exhibit B: EXISTING AND PROPOSED LAND USE PLAN



EXISTING GENERAL PLAN



PROPOSED GENERAL PLAN

N

Legend

- Business Park
- Mixed Use
- Open Space – Non Recreation
- Project Site

Exhibit C: Future Buildout Table (Exhibit LU-03) Revision

City of Ontario Policy Plan
Land Use Element

LU-03 Future Buildout Table

Land Use	Acres[2]	Assumed Density/Intensity[3]	Units	Pop[4]	Non-Residential Square Feet	Jobs[5]
Residential						
Rural	529	2.0 du/ac	1,057	3,863	-	-
Low Density[6,7]	6,274	5.9 du/ac (north of Riverside Dr) 4.5 du/ac (south of Riverside Dr)[7]	34,842	127,304	-	-
Low-Medium Density[6]	889	8.5 du/ac	7,197	26,363	-	-
Medium Density[7]	2,301 ~~2,291~~	18.0 du/ac (north of Riverside Dr) 22.0 du/ac (south of Riverside Dr)[8]	~~46,926~~ 47,150	~~152,030~~ 152,757	-	-
High Density	198	25.0 du/ac (north of Riverside Dr) 35.0 du/ac (south of Riverside Dr)	5,089	13,038	-	-
Subtotal	~~101,180~~ 101,190		~~95,433~~ 95,657	~~322,710~~ 323,437	-	-
Mixed Use						
• Downtown	132	• 60% of the area at 35 du/ac • 40% of the area at 0.80 FAR for office and retail	2,758	7,068	1,830,863	4,092
• East Holt Boulevard[8]	75	• 75% of the area at 30 du/ac • 25% of area at 0.80 FAR retail	1,693	4,336	655,222	546
• West Holt Boulevard[8]	1	• 75% of the area at 30 du/ac • 25% of area at 0.80 FAR retail	33	84	12,678	11
• Meredith	91	• 50% of the area at 40 du/ac • 50% at 0.35 FAR for retail uses	1,815	4,651	691,939	577
• Multimodal Transit Center	73	• 15% of the area at 60 du/ac • 60% of the area at 1.0 FAR office and retail • 25% of the area at 0.70 FAR Lodging	653	1,673	2,449,557	5,993
• Inland Empire Corridor	37	• 82% of the area at 10 du/ac • 18% of area t 0.35 FAR retail	300	769	100,455	84
• Guasti	86	• 30% of the area at 30 du/ac • 15% of area at 1.0 FAR retail • 30% of area at 0.70 FAR office • 25% of area at 0.70 FAR Lodging	777	1,991	2,012,077	3,848
• Ontario Center[8] *(South of Concours, East of Haven Avenue, West of Milliken, North of Interstate 10 Fwy)*	186	• 50% of area at 40 du/ac • 20% of area at 1.0 FAR office • 30% of area at 0.70 FAR retail	3,729	9,553	3,329,507	7,327

LU-03 Future Buildout Table

Land Use	Acres[2]	Assumed Density/Intensity[3]	Units	Pop[4]	Non-Residential Square Feet	Jobs[5]
• Ontario Center Arena[8] *((North of Concours, West of Milliken, East of Center Avenue, South of 4th Street*	169	• 75% of area at 40 du/ac • 10% of area at 1.00 FAR office • 15% of area at 0.80 FAR retail	5,076	13,006	1,621,435	3,417
• Ontario Mills	249	• 40% of area at 40 du/ac • 5% of area at 0.75 FAR office • 55% of area at 0.50 FAR retail	3,990	10,223	3,394,666	3,971
• Rich-Haven[2]	154	• 86% of area at 18 du/ac • 2% of area at 0.35 FAR office • 12% of area at 0.30 FAR retail	2,389	6,122	289,088	373
• Parkside	3	• 50% of the area at 35 du/ac • 50% of area at 0.80 FAR retail	52	132	51,440	129
• Eucalyptus/ Chino Airport[2]	105	• 40% of the area at 35 du/ac • 10% of area at 0.80 FAR retail • 20% of area at 1.00 FAR office • 30% of area at 0.60 FAR business park (industrial)	1,471	3,769	2,059,760	4,008
• Grove[2]	36	• 65% of the area at 35 du/ac • 25% of area at 0.80 FAR retail • 10% of area at 0.70 FAR Office	821	2,104	385,285	630
• Great Park[2]	~~305~~ 300	• 70% of area at 35 du/ac • 10% of area at 0.70 FAR for office • 20% of area at 0.30 FAR for retail uses	~~7,470~~ 7,340	~~19,141~~ 18,808	~~2,789,181~~ 2,740,699	~~4,930~~ 4,845
• Neighborhood Activity Hub[8] *(Mountain Village)*	8	• 50% of the area at 35 du/ac • 50% of area at 0.80 FAR retail	137	350	136,070	340
• Neighborhood Activity Hub[8] *(Mountain & Fourth)*	7	• 70% of the area at 50 du/ac • 30% of area at 0.80 FAR retail	251	643	75,008	188
• Neighborhood Activity Hub[8] *(Euclid & Francis)*	13	• 50% of the area at 30 du/ac • 50% of area at 0.80 FAR retail	190	487	220,912	552
• Neighborhood Activity Hub[8] *(Euclid & Walnut)*	16	• 75% of the area at 30 du/ac • 25% of area at 0.80 FAR retail	369	945	142,840	357
• Neighborhood Activity Hub[2,8] *(Euclid & Riverside)*	15	• 75% of the area at 35 du/ac • 25% of area at 0.80 FAR retail	394	1,009	130,662	327
Subtotal	~~1,762~~ 1,756	-	~~34,367~~ 34,238	~~88,058~~ 87,725	~~22,478,644~~ 22,330,162	~~41,698~~ 41,612

LU-03 Future Buildout Table

Land Use	Acres[2]	Assumed Density/Intensity[3]	Units	Pop[4]	Non-Residential Square Feet	Jobs[5]
Retail/Service						
Neighborhood Commercial[6]	248	0.30 FAR	-	-	3,238,367	8,832
General Commercial	385	0.30 FAR	-	-	5,033,395	5,605
Office/ Commercial	310	0.75 FAR	-	-	10,101,733	28,239
Hospitality	194	1.00 FAR	-	-	8,458,978	11,412
Subtotal	**1,136**		**-**	**-**	**26,832,472**	**54,088**
Employment						
Business Park	~~1,139~~ 1,145	0.50 FAR	-	-	~~24,816,271~~ 24,931,704	~~42,835~~ 42,987
Industrial	7,664	0.55 FAR	-	-	183,596,786	148,483
Subtotal	~~**8,802**~~ **8,808**		-	-	~~**208,413,056**~~ **208,528,490**	~~**191,318**~~ **191,470**
Other						
Open Space–Non-Recreation	1,200	Not applicable	-	-	-	-
Open Space–Parkland[6]	1,047	Not applicable	-	-	-	-
Open Space-Water	17	Not applicable	-	-	-	-
Public Facility	90	Not applicable	-	-	-	-
Public School	~~614~~ 604	Not applicable	-	-	-	-
Ontario International Airport	1,423	Not applicable	-	-	-	-
Landfill	137	Not applicable	-	-	-	-
Railroad	250	Not applicable	-	-	-	-
Roadways	5,364	Not applicable	-	-	-	-
Subtotal	~~***10,142***~~ ***10,131***	-	-	-	-	-
Total	***32,022***	-	~~***129,800***~~ ***129,895***	~~***410,768***~~ ***411,162***	~~***264,057,928***~~ ***261,709,056***	~~***299, 324***~~ ***296,028***

Attachment A:
Resolution for File No. PGPA23-003

(Document to follow this page)

RESOLUTION NO. PC25-045

A RESOLUTION OF THE PLANNING COMMISSION OF THE CITY OF ONTARIO, CALIFORNIA, RECOMMENDING THE CITY COUNCIL APPROVE FILE NO. PGPA23-003, AN AMENDMENT TO THE ONTARIO PLAN 2050 POLICY PLAN LAND USE MAP TO CHANGE THE LAND USE DESIGNATION OF APPROXIMATELY 5.3 ACRES OF LAND LOCATED ON EUCLID AVENUE FROM MIXED USE TO BUSINESS PARK, AND MAKING FINDINGS IN SUPPORT THEREOF—APN: 1053-281-08. (PART OF CYCLE 1 FOR THE 2025 CALENDAR YEAR)

WHEREAS, RCCD Inc. ("Applicant") has filed an Application for the approval of a General Plan Amendment, File No. PGPA23-003, as described in the title of this Resolution (hereinafter referred to as "Application" or "Project"); and

WHEREAS, the Application applies to 5.3 acres of land located on Euclid Avenue, approximately 300 feet north of Edison Avenue, within the Euclid Mixed Use Specific Plan district, and is presently vacant; and

WHEREAS, the property to the north of the Project site is within the Euclid Mixed Use Specific Plan district and is an SCE Easement corridor. The property to the east is within the Euclid Mixed Use Specific Plan district and is currently occupied by agriculture and dairy uses. The properties to the south are within the Euclid Mixed Use Specific Plan district and are used for recreational vehicle storage, residences, as well as vacant land. The properties to the west are within the City of Chino, within a commercial zone and are occupied by commercial and industrial uses; and

WHEREAS, the Land Use Element of the Policy Plan establishes the Project area as a Mixed Use – Great Park (MU-Great Park) land use designation. The proposed Project necessitates a modification in the existing land use designation to accommodate business park and light industrial uses. As part of this conversion, the proposed Project aims to:

- Convert 5.3 acres of Mixed Use – Great Park (MU-Great Park) to Business Park (BP) located on Euclid Avenue, approximately 300 feet north of Edison Avenue;

- Remove the Affordable Housing overlay on 5.3 acres of land located on Euclid Avenue, approximately 300 feet north of Edison Avenue; and

WHEREAS, the City of Ontario adopted the Policy Plan (General Plan) as part of The Ontario Plan in January 2010. Since the adoption of The Ontario Plan, the City has evaluated Exhibits LU-01 (Official Land Use Plan) and LU-03 (Future Buildout) further and is considering the requested modification; and

WHEREAS, Policy Plan Exhibit LU-03 (Future Buildout) specifies the expected buildout for the City of Ontario, incorporating the adopted land use designations. The proposed changes to Exhibit LU-01 (Official Land Use Plan) will require Exhibit LU-03 (Future Buildout) be modified to be consistent with Exhibit LU-01 (Official Land Use Plan) as depicted on Exhibit B, attached; and

WHEREAS, the Application is a project pursuant to the California Environmental Quality Act — Public Resources Code Section 21000 et seq. — (hereinafter referred to as "CEQA") and an initial study has been prepared to determine possible environmental impacts; and

WHEREAS, the environmental impacts of this Project were previously reviewed in conjunction with File No. PSP22-001, an application for the Euclid Mixed Use Specific Plan for which an Environmental Impact Report — State Clearinghouse No. 2023020281 — (hereinafter referred to as "Certified EIR") was adopted by the City Council on August 20, 2024, and this Application introduces no new significant environmental impacts; and

WHEREAS, the City's "Local Guidelines for the Implementation of the California Environmental Quality Act (CEQA)" provide for the use of a single environmental assessment in situations where the impacts of subsequent projects are adequately analyzed; and

WHEREAS, Ontario Development Code Table 2.02-1 (Review Matrix) grants the Planning Commission the responsibility and authority to review and make recommendation on the subject Application; and

WHEREAS, the Project has been reviewed for consistency with the Housing Element of the Policy Plan component of The Ontario Plan 2050, as State Housing Element law (as prescribed in Government Code Sections 65580 through 65589.8) requires that development projects must be consistent with the Housing Element, if upon consideration of all its aspects, it is found to further the purposes, principals, goals, and policies of the Housing Element; and

WHEREAS, the Project’s consistency with the Housing Element of the Policy Plan component of The Ontario Plan 2050 is achieved in association with File No. PGPA24-003, a General Plan Amendment to change approximately 10 acres of land from Public School to Medium Density Residential land use designation; and

WHEREAS, the Project is located within the Airport Influence Area of Ontario International Airport, which encompasses lands within parts of San Bernardino, Riverside, and Los Angeles Counties, and is subject to, and must be consistent with, the policies and criteria set forth in the Ontario International Airport Land Use Compatibility Plan (hereinafter referred to as "ALUCP"), which applies only to jurisdictions within San

Bernardino County, and addresses the noise, safety, airspace protection, and overflight impacts of current and future airport activity; and

WHEREAS, the proposed Project is located within the Airport Influence Area of Chino Airport, within the City of Ontario boundary, and is subject to, and must be consistent with, the policies criteria set forth in Reference I, Chino Airport Land Use Compatibility Plan (CNO ALUCP), which applies only to jurisdictions within City of Ontario, and addresses the safety, airspace protection, and overflight impacts of current and future airport activity; and

WHEREAS, City of Ontario Development Code Division 2.03 (Public Hearings) prescribes the manner in which public notification shall be provided and hearing procedures to be followed, and all such notifications and procedures have been completed; and

WHEREAS, on September 23, 2025, the Planning Commission of the City of Ontario conducted a hearing to consider the Project, and concluded said hearing on that date; and

WHEREAS, all legal prerequisites to the adoption of this Resolution have occurred.

NOW, THEREFORE, IT IS HEREBY FOUND, DETERMINED, AND RESOLVED by the Planning Commission of the City of Ontario, as follows:

SECTION 1: ***Environmental Determination and Findings.*** As the recommending authority for the Project, the Planning Commission has reviewed and considered the information contained in the previous Certified EIR and supporting documentation. Based upon the facts and information contained in the previous Certified EIR and supporting documentation, the Planning Commission finds as follows:

(1) The environmental impacts of this Project were previously reviewed in conjunction with File No. PSP22-001, the Euclid Mixed Use Specific Plan for which a Certified EIR was adopted by the City Council on August 20, 2024.

(2) The previous Certified EIR contains a complete and accurate reporting of the environmental impacts associated with the Project; and

(3) The previous Certified EIR was completed in compliance with CEQA and the Guidelines promulgated thereunder; and

(4) The previous Certified EIR reflects the independent judgment of the Planning Commission; and

(5) The proposed Project will introduce no new significant environmental impacts beyond those previously analyzed in the previous Certified EIR, and all mitigation measures previously adopted with the Certified EIR, are incorporated herein by this reference.

SECTION 2: ***Subsequent or Supplemental Environmental Review Not Required.*** Based on the information presented to the Planning Commission, and the specific findings set forth in Section 1, above, the Planning Commission finds that the preparation of a subsequent or supplemental Certified EIR is not required for the Project, as the Project:

(1) Does not constitute substantial changes to the Certified EIR that will require major revisions to the Certified EIR due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified significant effects; and

(2) Does not constitute substantial changes with respect to the circumstances under which the Certified EIR was prepared, that will require major revisions to the Certified EIR due to the involvement of new significant environmental effects or a substantial increase in the severity of the previously identified significant effects; and

(3) Does not contain new information of substantial importance that was not known and could not have been known with the exercise of reasonable diligence at the time the Certified EIR was certified/adopted, that shows any of the following:

(a) The Project will have one or more significant effects not discussed in the Certified EIR; or

(b) Significant effects previously examined will be substantially more severe than shown in the Certified EIR; or

(c) Mitigation measures or alternatives previously found not to be feasible would in fact be feasible and would substantially reduce one or more significant effects of the Project, but the City declined to adopt such measures; or

(d) Mitigation measures or alternatives considerably different from those analyzed in the Certified EIR would substantially reduce one or more significant effects on the environment, but which the City declined to adopt.

SECTION 3: ***Housing Element Compliance.*** Pursuant to the requirements of California Government Code Chapter 3, Article 10.6, commencing with Section 65580, as the recommending authority for the Project, the Planning Commission finds that based on the facts and information contained in the Application and supporting documentation, at the time of Project implementation, the proposed Project is not consistent with the

Housing Element of the Policy Plan (General Plan) component of The Ontario Plan 2050. The Project site is listed in the Housing Element Sites Inventory contained in Tables B-1 and B-2 of the Housing Element Technical Report, and the proposed Project is not consistent with the number of dwelling units or density specified in the Housing Element Sites Inventory; therefore, a General Plan Amendment to remove the subject property from the Housing Element Sites Inventory is required. Removal of the subject property from the inventory will impact the City's Regional Housing Needs Assessment ("RHNA") obligations, as there are not an adequate number of sites identified in the inventory to meet the RHNA obligation. Consequently, the following site will be added to the Housing Element Sites Inventory through a separate General Plan Amendment (PGPA24-003):

APN: 1073-101-050

Parcel Size: 10.02 acres

	Available Land Inventory
Number of Units:	221
Assumed Density:	22.0 du/ac

SECTION 4: ***Airport Land Use Compatibility Plan ("ALUCP") Compliance.*** The California State Aeronautics Act (Public Utilities Code Section 21670 et seq.) requires that an Airport Land Use Compatibility Plan be prepared for all public use airports in the State; and requires that local land use plans and individual development proposals must be consistent with the policies set forth in the adopted Airport Land Use Compatibility Plan.

(1) On April 19, 2011, the City Council of the City of Ontario approved and adopted the Ontario International Airport Land use Compatibility Plan, establishing the Airport Influence Area for Ontario International Airport, which encompasses lands within parts of San Bernardino, Riverside, and Los Angeles Counties, and limits future land uses and development within the Airport Influence Area, as they relate to noise, safety, airspace protection, and overflight impacts of current and future airport activity. As the recommending authority for the Project, the Planning Commission has reviewed and considered the facts and information contained in the Application and supporting documentation against the ONT ALUCP compatibility factors, including [1] Safety Criteria (ONT ALUCP Table 2-2) and Safety Zones (ONT ALUCP Map 2-2), [2] Noise Criteria (ONT ALUCP Table 2-3) and Noise Impact Zones (ONT ALUCP Map 2-3), [3] Airspace protection Zones (ONT ALUCP Map 2-4), and [4] Overflight Notification Zones (ONT ALUCP Map 2-5). As a result, the Planning Commission finds and determines that the Project, when implemented in conjunction with the conditions of approval, will be consistent with the policies and criteria set forth within the ONT ALUCP; and

(2) On August 2, 2022, the City Council of the City of Ontario approved and adopted a Development Code Amendment to establish the Chino Airport ("CNO") Overlay

Zoning District ("OZD") and Reference I, Chino Airport Land Use Compatibility Plan ("CNO ALUCP"). The CNO OZD and CNO ALUCP established the Airport Influence Area for Chino Airport, solely within the City of Ontario, and limits future land uses and development within the Airport Influence Area, as they relate to safety, airspace protection, and overflight impacts of current and future airport activity. The CNO ALUCP is consistent with policies and criteria set forth within the Caltrans 2011 California Airport Land Use Planning Handbook. The proposed Project is located within the Airport Influence Area of Chino Airport and was evaluated and found to be consistent with the California Airport Land Use Planning Handbook and the CNO ALUCP. As the recommending authority for the Project, the Planning Commission has reviewed and considered the facts and information contained in the Application and supporting documentation against the CNO ALUCP compatibility factors, including Safety, Airspace Protection, Overflight. As a result, the Planning Commission finds and determines that the Project, when implemented in conjunction with the conditions of approval, will be consistent with the policies and criteria set forth within the California Airport Land Use Planning Handbook and the Chino ALUCP.

SECTION 5: ***Concluding Facts and Reasons.*** Based upon the substantial evidence presented to the Planning Commission during the above-referenced hearing, and upon the specific findings set forth in the Sections above, the Planning Commission hereby concludes as follows:

(1) The proposed General Plan Amendment is consistent with the goals and policies of The Ontario Plan as follows:

Policy Plan (General Plan)

Land Use Element:

- LU-1.4 Jobs-Housing Balance. We coordinate land use, infrastructure, and transportation planning and analysis with regional, county, and other local agencies to further regional and subregional goals for jobs-housing balance.

- LU-1.6 Complete Community. We incorporate a variety of land uses and building types in our land use planning efforts that result in a complete community where residents at all stages of life, employers, workers, and visitors have a wide spectrum of choices of where they can live, work, shop and recreate within Ontario.

- LU-2.1 Land Use Decisions. We minimize adverse impacts on adjacent properties when considering land use and zoning requests; and

(2) The proposed General Plan Amendment would not be detrimental to the public interest, health, safety, convenience, or general welfare of the City; and

(3) The Land Use Element is a mandatory element allowed for general plan amendments per calendar year and this general plan amendment is part of the first amendment to the Land Use Element of the 2025 calendar year consistent with Government Code Section 65358; and

(4) The Project has been reviewed for consistency with the Housing Element of the Policy Plan component of The Ontario Plan, as State Housing Element law (as prescribed in Government Code Sections 65580 through 65589.8) requires that development projects must be consistent with the Housing Element, if upon consideration of all aspects, it is found to further the purposes, principals, goals, and policies of the Housing Element; and

(5) During the amendment of the general plan, opportunities for the involvement of citizens, California Native American Indian tribes (Government Code Section 65352.3), public agencies, public utility companies, and civic, education, and other community groups, through public hearings or other means were implemented consistent with Government Code Section 65351.

SECTION 6: ***Planning Commission Action.*** Based upon the findings and conclusions set forth in the Sections above, the Planning Commission hereby recommends the City Council APPROVES the herein described Application, subject to each and every condition set forth in the Department reports attached hereto as "Attachment A," and incorporated herein by this reference.

SECTION 7: ***Indemnification.*** The Applicant shall agree to defend, indemnify and hold harmless, the City of Ontario or its agents, officers, and employees from any claim, action or proceeding against the City of Ontario or its agents, officers or employees to attack, set aside, void, or annul this approval. The City of Ontario shall promptly notify the Applicant of any such claim, action, or proceeding, and the City of Ontario shall cooperate fully in the defense.

SECTION 8: ***Custodian of Records.*** The documents and materials that constitute the record of proceedings on which these findings have been based are located at the City of Ontario City Hall, 303 East "B" Street, Ontario, California 91764. The custodian for these records is the City Clerk of the City of Ontario.

SECTION 9: ***Certification to Adoption.*** The Secretary shall certify to the adoption of the Resolution.

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The Secretary Pro Tempore for the Planning Commission of the City of Ontario shall certify as to the adoption of this Resolution.

I hereby certify that the foregoing Resolution was duly and regularly introduced, passed and adopted by the Planning Commission of the City of Ontario at a regular meeting thereof held on the 23rd day of September 2025, and the foregoing is a full, true and correct copy of said Resolution, and has not been amended or repealed.

Nicola Ricci
Planning Commission Chairman

ATTEST:

Henry K. Noh
Planning Director and
Secretary to the Planning Commission

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

I, Gwen Berendsen, Secretary Pro Tempore of the Planning Commission of the City of Ontario, DO HEREBY CERTIFY that foregoing Resolution No. PC25-045, was duly passed and adopted by the Planning Commission of the City of Ontario at their regular meeting held on September 23, 2025, by the following roll call vote, to wit:

AYES: Anderson, DeDiemar, Gage, Lampkin, Marks, Ricci

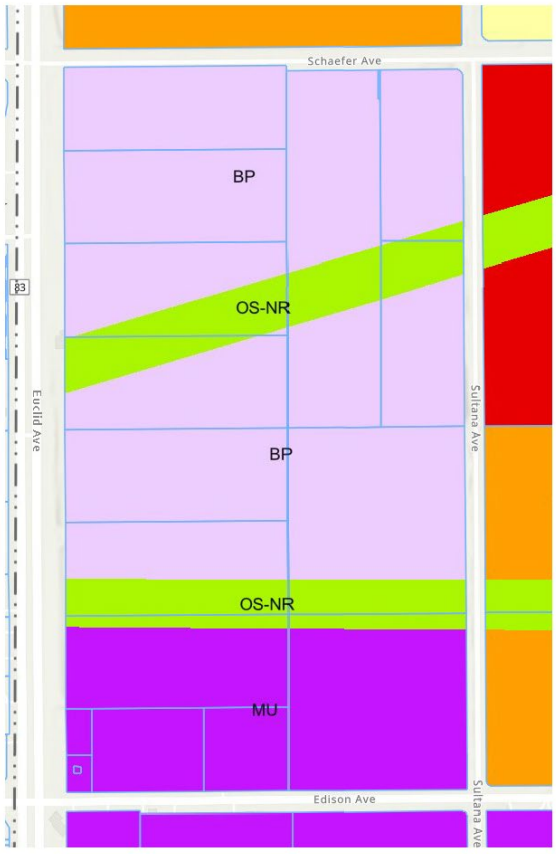
NOES: None

ABSENT: None

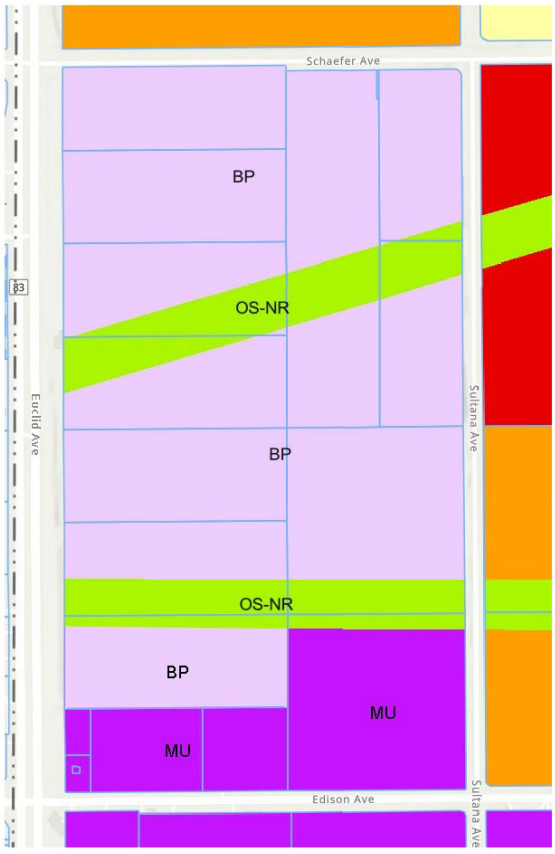
ABSTAIN: None

Gwen Berendsen
Secretary Pro Tempore

EXHIBIT A: Policy Plan Land Use Plan (Exhibit LU-01) Revision



EXISTING GENERAL PLAN



PROPOSED GENERAL PLAN

N

Legend

- Business Park
- Mixed Use
- Open Space – Non Recreation
- Project Site

EXHIBIT B: Future Buildout Table (Exhibit LU-03) Revision

LU-03 Future Buildout Table

Land Use	Acres[2]	Assumed Density/Intensity[3]	Units	Pop[4]	Non-Residential Square Feet	Jobs[5]
Residential						
Rural	529	2.0 du/ac	1,057	3,863	-	-
Low Density[6,7]	6,274	5.9 du/ac (north of Riverside Dr) 4.5 du/ac (south of Riverside Dr)[7]	34,842	127,304	-	-
Low-Medium Density[6]	889	8.5 du/ac	7,197	26,363	-	-
Medium Density[7]	2,301 ~~2,291~~	18.0 du/ac (north of Riverside Dr) 22.0 du/ac (south of Riverside Dr)[8]	~~46,926~~ 47,150	~~152,030~~ 152,757	-	-
High Density	198	25.0 du/ac (north of Riverside Dr) 35.0 du/ac (south of Riverside Dr)	5,089	13,038	-	-
Subtotal	~~101,180~~ 101,190		~~95,433~~ 95,657	~~322,710~~ 323,437	-	-
Mixed Use						
• Downtown	132	• 60% of the area at 35 du/ac • 40% of the area at 0.80 FAR for office and retail	2,758	7,068	1,830,863	4,092
• East Holt Boulevard[8]	75	• 75% of the area at 30 du/ac • 25% of area at 0.80 FAR retail	1,693	4,336	655,222	546
• West Holt Boulevard[8]	1	• 75% of the area at 30 du/ac • 25% of area at 0.80 FAR retail	33	84	12,678	11
• Meredith	91	• 50% of the area at 40 du/ac • 50% at 0.35 FAR for retail uses	1,815	4,651	691,939	577
• Multimodal Transit Center	73	• 15% of the area at 60 du/ac • 60% of the area at 1.0 FAR office and retail • 25% of the area at 0.70 FAR Lodging	653	1,673	2,449,557	5,993
• Inland Empire Corridor	37	• 82% of the area at 10 du/ac • 18% of area t 0.35 FAR retail	300	769	100,455	84
• Guasti	86	• 30% of the area at 30 du/ac • 15% of area at 1.0 FAR retail • 30% of area at 0.70 FAR office • 25% of area at 0.70 FAR Lodging	777	1,991	2,012,077	3,848
• Ontario Center[8] *(South of Concours, East of Haven Avenue, West of Milliken, North of Interstate 10 Fwy)*	186	• 50% of area at 40 du/ac • 20% of area at 1.0 FAR office • 30% of area at 0.70 FAR retail	3,729	9,553	3,329,507	7,327

LU-03 Future Buildout Table

Land Use	Acres[2]	Assumed Density/Intensity[3]	Units	Pop[4]	Non-Residential Square Feet	Jobs[5]
• Ontario Center Arena[8] *((North of Concours, West of Milliken, East of Center Avenue, South of 4th Street*	169	• 75% of area at 40 du/ac • 10% of area at 1.00 FAR office • 15% of area at 0.80 FAR retail	5,076	13,006	1,621,435	3,417
• Ontario Mills	249	• 40% of area at 40 du/ac • 5% of area at 0.75 FAR office • 55% of area at 0.50 FAR retail	3,990	10,223	3,394,666	3,971
• Rich-Haven[2]	154	• 86% of area at 18 du/ac • 2% of area at 0.35 FAR office • 12% of area at 0.30 FAR retail	2,389	6,122	289,088	373
• Parkside	3	• 50% of the area at 35 du/ac • 50% of area at 0.80 FAR retail	52	132	51,440	129
• Eucalyptus/ Chino Airport[2]	105	• 40% of the area at 35 du/ac • 10% of area at 0.80 FAR retail • 20% of area at 1.00 FAR office • 30% of area at 0.60 FAR business park (industrial)	1,471	3,769	2,059,760	4,008
• Grove[2]	36	• 65% of the area at 35 du/ac • 25% of area at 0.80 FAR retail • 10% of area at 0.70 FAR Office	821	2,104	385,285	630
• Great Park[2]	~~305~~ 300	• 70% of area at 35 du/ac • 10% of area at 0.70 FAR for office • 20% of area at 0.30 FAR for retail uses	~~7,470~~ 7,340	~~19,141~~ 18,808	~~2,789,181~~ 2,740,699	~~4,930~~ 4,845
• Neighborhood Activity Hub[8] *(Mountain Village)*	8	• 50% of the area at 35 du/ac • 50% of area at 0.80 FAR retail	137	350	136,070	340
• Neighborhood Activity Hub[8] *(Mountain & Fourth)*	7	• 70% of the area at 50 du/ac • 30% of area at 0.80 FAR retail	251	643	75,008	188
• Neighborhood Activity Hub[8] *(Euclid & Francis)*	13	• 50% of the area at 30 du/ac • 50% of area at 0.80 FAR retail	190	487	220,912	552
• Neighborhood Activity Hub[8] *(Euclid & Walnut)*	16	• 75% of the area at 30 du/ac • 25% of area at 0.80 FAR retail	369	945	142,840	357
• Neighborhood Activity Hub[2,8] *(Euclid & Riverside)*	15	• 75% of the area at 35 du/ac • 25% of area at 0.80 FAR retail	394	1,009	130,662	327
Subtotal	~~1,762~~ 1,756	-	~~34,367~~ 34,238	~~88,058~~ 87,725	~~22,478,644~~ 22,330,162	~~41,698~~ 41,612

LU-03 Future Buildout Table

Land Use	Acres[2]	Assumed Density/Intensity[3]	Units	Pop[4]	Non-Residential Square Feet	Jobs[5]
Retail/Service						
Neighborhood Commercial[6]	248	0.30 FAR	-	-	3,238,367	8,832
General Commercial	385	0.30 FAR	-	-	5,033,395	5,605
Office/ Commercial	310	0.75 FAR	-	-	10,101,733	28,239
Hospitality	194	1.00 FAR	-	-	8,458,978	11,412
Subtotal	**1,136**		**-**	**-**	**26,832,472**	**54,088**
Employment						
Business Park	~~1,139~~ 1,145	0.50 FAR	-	-	~~24,816,271~~ 24,931,704	~~42,835~~ 42,987
Industrial	7,664	0.55 FAR	-	-	183,596,786	148,483
Subtotal	~~**8,802**~~ **8,808**		-	-	~~**208,413,056**~~ **208,528,490**	~~**191,318**~~ **191,470**
Other						
Open Space–Non-Recreation	1,200	Not applicable	-	-	-	-
Open Space–Parkland[6]	1,047	Not applicable	-	-	-	-
Open Space-Water	17	Not applicable	-	-	-	-
Public Facility	90	Not applicable	-	-	-	-
Public School	~~614~~ 604	Not applicable	-	-	-	-
Ontario International Airport	1,423	Not applicable	-	-	-	-
Landfill	137	Not applicable	-	-	-	-
Railroad	250	Not applicable	-	-	-	-
Roadways	5,364	Not applicable	-	-	-	-
Subtotal	~~***10,142***~~ ***10,131***	-	-	-	-	-
Total	***32,022***	-	~~***129,800***~~ ***129,895***	~~***410,768***~~ ***411,162***	~~***264,057,928***~~ ***261,709,056***	~~***299, 324***~~ ***296,028***

RESOLUTION NO.

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF ONTARIO, CALIFORNIA, APPROVING FILE NO. PGPA23-003, AN AMENDMENT TO THE ONTARIO PLAN 2050 POLICY PLAN LAND USE MAP TO CHANGE THE LAND USE DESIGNATION OF APPROXIMATELY 5.3 ACRES OF LAND LOCATED ON EUCLID AVENUE FROM MIXED USE TO BUSINESS PARK, AND MAKING FINDINGS IN SUPPORT THEREOF— APN: 1053-281-08 (PART OF CYCLE 1 FOR THE 2025 CALENDAR YEAR)

WHEREAS, RCCD Inc. ("Applicant") has filed an Application for the approval of a General Plan Amendment, File No. PGPA23-003, as described in the title of this Resolution (hereinafter referred to as "Application" or "Project"); and

WHEREAS, the Application applies to 5.3 acres of land generally located on Euclid Avenue, approximately 300 feet north of Edison Avenue, within the Euclid Mixed Use Specific Plan district, and is presently vacant; and

WHEREAS, the property to the north of the Project site is within the Euclid Mixed Use Specific Plan district and is an SCE Easement corridor. The property to the east is within the Euclid Mixed Use Specific Plan district and is currently occupied by agriculture and dairy uses. The properties to the south are within the Euclid Mixed Use Specific Plan district and are used for recreational vehicle storage, residences, as well as vacant land. The properties to the west are within the City of Chino, within a commercial zone and are occupied by commercial and industrial uses; and

WHEREAS, the Land Use Element of the Policy Plan establishes the Project area as a Mixed Use – Great Park (MU-Great Park) land use designation. The proposed Project necessitates a modification in the existing land use designation to accommodate business park and light industrial uses. As part of this conversion, the proposed Project aims to;

- Convert 5.3 acres of Mixed Use – Great Park (MU-Great Park) to Business Park (BP) located on Euclid Avenue, approximately 300 feet north of Edison Avenue.
- Maintain 128 residential units' capacity to comply with Senate Bill 330.
- Remove the Affordable Housing overlay on 5.3 acres Project site resulting in the reduction of 128 residential units.

WHEREAS, in compliance with Senate Bill 330, in order to maintain 128 residential unit capacity, the city is moving forward with a General Plan Amendment application (File No. PGPA24-003), which proposes amending 10 acres of land within the Esperanza

Specific Plan, from Public School to Medium Density Residential, resulting in an overall residential increase of 224 dwelling units, which results in a net gain of 96 units.

WHEREAS, the Project site is identified in the Housing Element Sites Inventory, and its removal requires adjustments to maintain Housing Element and Regional Housing Needs Assessment (RHNA) compliance. The Affordable Housing Overlay identifies the buildout of 128 residential units, which includes 64 Lower-Income units, 32 Moderate-Income units, and 32 Above-Moderate-Income units.

WHEREAS, on August 16, 2022, City Council certified The Ontario Plan 2050 Policy Plan (File No. PGPA20-002) update and certified Supplemental Environmental Impact Report (SEIR) in conjunction with The Ontario Plan 2050 Update (TOP 2050; File No. PGPA20-002). On October 26, 2023, the Applicant applied for a General Plan Amendment, requesting to modify the TOP 2050 Land Use Plan for 5.3-acre Project site from Mixed Use to Business Park: and

WHEREAS, Policy Plan Exhibit LU-03 (Future Buildout) specifies the expected buildout for the City of Ontario, incorporating the adopted land use designations. The proposed changes to Exhibit LU-01 (Official Land Use Plan) as depicted on Attachment A will require Exhibit LU-03 (Future Buildout) to be modified to be consistent with Exhibit LU-01 (Official Land Use Plan) as depicted on Attachment B; and

WHEREAS, the Application is a project pursuant to the California Environmental Quality Act — Public Resources Code Section 21000 et seq. — (hereinafter referred to as "CEQA") and an initial study has been prepared to determine possible environmental impacts; and

WHEREAS, the environmental impacts of this Project were previously reviewed in conjunction with File No. PSP22-001, an application for the Euclid Mixed Use Specific Plan for which an Environmental Impact Report — State Clearinghouse No. 2023020281 — (hereinafter referred to as "Certified EIR") was adopted by the City Council on August 20, 2024, and this Application introduces no new significant environmental impacts; and

WHEREAS, the City's "Local Guidelines for the Implementation of the California Environmental Quality Act (CEQA)" provide for the use of a single environmental assessment in situations where the impacts of subsequent projects are adequately analyzed; and

WHEREAS, the Application is a project pursuant to CEQA (Public Resources Code Section 21000 et seq.), and an initial study has been prepared to determine possible environmental impacts; and

WHEREAS, Ontario Development Code Table 2.02-1 (Review Matrix) grants the City Council the responsibility and authority to review and act on the subject Application; and

WHEREAS, the Project has been reviewed for consistency with the Housing Element of the Policy Plan component of The Ontario Plan, as State Housing Element law (as prescribed in Government Code Sections 65580 through 65589.8) requires that development projects must be consistent with the Housing Element, if upon consideration of all its aspects, it is found to further the purposes, principals, goals, and policies of the Housing Element; and

WHEREAS, the Project is located within the Airport Influence Area of Ontario International Airport, which encompasses lands within parts of San Bernardino, Riverside, and Los Angeles Counties, and is subject to, and must be consistent with, the policies and criteria set forth in the Ontario International Airport Land Use Compatibility Plan ("ALUCP"), which applies only to jurisdictions within San Bernardino County, and addresses the noise, safety, airspace protection, and overflight impacts of current and future airport activity; and

WHEREAS, the proposed Project is located within the Airport Influence Area of Chino Airport, within the City of Ontario boundary, and is subject to, and must be consistent with, the policies criteria set forth in Reference I, Chino Airport Land Use Compatibility Plan (CNO ALUCP), which applies only to jurisdictions within City of Ontario, and addresses the safety, airspace protection, and overflight impacts of current and future airport activity; and

WHEREAS, City of Ontario Development Code Division 2.03 (Public Hearings) prescribes the manner in which public notification shall be provided and hearing procedures to be followed, and all such notifications and procedures have been completed; and

WHEREAS, on September 23, 2025, the Planning Commission of the City of Ontario conducted a hearing to consider the Project, and concluded said hearing on that date, voting 6-0 to issue Resolution No. PC25-045 recommending the City Council approve the Application; and

WHEREAS, on November 4, 2025, the City Council of the City of Ontario conducted a hearing to consider the Project, and concluded said hearing on that date; and

WHEREAS, all legal prerequisites to the adoption of this Resolution have occurred.

NOW, THEREFORE, IT IS HEREBY FOUND, DETERMINED, AND RESOLVED by the City Council of the City of Ontario, as follows:

SECTION 1: ***Environmental Determination and Findings.*** As the decision-making body for the Project, the City Council has reviewed and considered the information contained in the previous Certified EIR and supporting documentation. Based upon the facts and information contained in the previous Certified EIR and supporting documentation, the City Council finds as follows:

(1) The environmental impacts of this project were previously reviewed in conjunction with File No. PSP22-001, the Euclid Mixed Use Specific Plan for which a Certified EIR was adopted by the City Council on August 20, 2024; and

(2) The previous Certified EIR contains a complete and accurate reporting of the environmental impacts associated with the Project; and

(3) The previous Certified EIR was completed in compliance with CEQA and the Guidelines promulgated thereunder; and

(4) The previous Certified EIR reflects the independent judgment of the City Council; and

(5) The proposed project will introduce no new significant environmental impacts beyond those previously analyzed in the previous Certified EIR, and all mitigation measures previously adopted with the Certified EIR, are incorporated herein by this reference.

SECTION 2: ***Subsequent or Supplemental Environmental Review Not Required.*** Based on the information presented to the City Council, and the specific findings set forth in Section 1, above, the City Council finds that the preparation of a subsequent or supplemental Certified EIR is not required for the Project, as the Project:

(1) Does not constitute substantial changes to the Certified EIR that will require major revisions to the Certified EIR due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified significant effects; and

(2) Does not constitute substantial changes with respect to the circumstances under which the Certified EIR was prepared, that will require major revisions to the Certified EIR due to the involvement of new significant environmental effects or a substantial increase in the severity of the previously identified significant effects; and

(3) Does not contain new information of substantial importance that was not known and could not have been known with the exercise of reasonable diligence at the time the Certified EIR was certified/adopted, that shows any of the following:

(a) The project will have one or more significant effects not discussed in the Certified EIR; or

(b) Significant effects previously examined will be substantially more severe than shown in the Certified EIR; or

(c) Mitigation measures or alternatives previously found not to be feasible would in fact be feasible and would substantially reduce one or more significant effects of the Project, but the City declined to adopt such measures; or

(d) Mitigation measures or alternatives considerably different from those analyzed in the Certified EIR would substantially reduce one or more significant effects on the environment, but which the City declined to adopt.

SECTION 3: ***Housing Element Compliance.*** Pursuant to the requirements of California Government Code Chapter 3, Article 10.6, commencing with Section 65580, as the decision-making body for the Project, the City Council finds that based on the facts and information contained in the Application and supporting documentation, at the time of Project implementation, the Project is consistent with the Housing Element of the Policy Plan (General Plan) component of The Ontario Plan. The Project site is one of the properties listed in the Housing Elements Sites contained in Tables B-1 and B-2 (Housing Element Sites Inventory) of the Housing Element Technical Report. With this amendment request, the Regional Housing Needs Assessment (RHNA) obligations for each income category will continue to be adequately accommodated by the City's RHNA obligation and the City retains sufficient capacity to meet the Lower Income and Moderate-Income RHNA obligations, as provided in an Administrative Housing Elements Site Inventory Amendment (Zoning Administrator Decision No. ZA25-034).

SECTION 4: ***Airport Land Use Compatibility Plan ("ALUCP") Compliance.*** The California State Aeronautics Act (Public Utilities Code Section 21670 et seq.) requires that an Airport Land Use Compatibility Plan be prepared for all public use airports in the State; and requires that local land use plans and individual development proposals must be consistent with the policies set forth in the adopted Airport Land Use Compatibility Plan.

(1) On April 19, 2011, the City Council of the City of Ontario approved and adopted the Ontario International Airport Land use Compatibility Plan, establishing the Airport Influence Area for Ontario International Airport, which encompasses lands within parts of San Bernardino, Riverside, and Los Angeles Counties, and limits future land uses and development within the Airport Influence Area, as they relate to noise, safety, airspace protection, and overflight impacts of current and future airport activity. As the decision-making body for the Project, the City Council has reviewed and considered the facts and information contained in the Application and supporting documentation against the ONT ALUCP compatibility factors, including [1] Safety Criteria (ONT ALUCP Table 2-2) and Safety Zones (ONT ALUCP Map 2-2), [2] Noise Criteria (ONT ALUCP Table 2-3) and Noise Impact Zones (ONT ALUCP Map 2-3), [3] Airspace protection Zones (ONT ALUCP Map 2-4), and [4] Overflight Notification Zones (ONT ALUCP Map 2-5). As a result, the City Council, therefore, finds and determines that the Project, when implemented in conjunction with the conditions of approval, will be consistent with the policies and criteria set forth within the ONT ALUCP; and

(2) On August 2, 2022, the City Council of the City of Ontario approved and adopted a Development Code Amendment to establish the Chino Airport ("CNO") Overlay

Zoning District ("OZD") and Reference I, Chino Airport Land Use Compatibility Plan ("CNO ALUCP"). The CNO OZD and CNO ALUCP established the Airport Influence Area for Chino Airport, solely within the City of Ontario, and limits future land uses and development within the Airport Influence Area, as they relate to safety, airspace protection, and overflight impacts of current and future airport activity. The CNO ALUCP is consistent with policies and criteria set forth within the Caltrans 2011 California Airport Land Use Planning Handbook. The proposed Project is located within the Airport Influence Area of Chino Airport and was evaluated and found to be consistent with the California Airport Land Use Planning Handbook and the CNO ALUCP. As the decision-making body for the Project, the City Council has reviewed and considered the facts and information contained in the Application and supporting documentation against the CNO ALUCP compatibility factors, including Safety, Airspace Protection, Overflight. As a result, the City Council, therefore, finds and determines that the Project, when implemented in conjunction with the conditions of approval, will be consistent with the policies and criteria set forth within the California Airport Land Use Planning Handbook and the Chino ALUCP.

SECTION 5: ***Concluding Facts and Reasons.*** Based upon the substantial evidence presented to the City Council during the above-referenced hearing, and upon the specific findings set forth in Section 1 through 4, above, the City Council hereby concludes as follows:

(1) The proposed General Plan Amendment is consistent with the goals and policies of The Ontario Plan as follows:

Policy Plan (General Plan)

Land Use Element:

- LU-1.4 Jobs-Housing Balance. We coordinate land use, infrastructure, and transportation planning and analysis with regional, county, and other local agencies to further regional and subregional goals for jobs-housing balance.

- LU-1.6 Complete Community. We incorporate a variety of land uses and building types in our land use planning efforts that result in a complete community where residents at all stages of life, employers, workers, and visitors have a wide spectrum of choices of where they can live, work, shop and recreate within Ontario.

- LU-2.1 Land Use Decisions. We minimize adverse impacts on adjacent properties when considering land use and zoning requests; and

(2) The proposed General Plan Amendment would not be detrimental to the public interest, health, safety, convenience, or general welfare of the City; and

(3) The Land Use Element is a mandatory element allowed for general plan amendments per calendar year and this general plan amendment is part of the first

amendment to the Land Use Element of the 2025 calendar year consistent with Government Code Section 65358; and

(4) The Project has been reviewed for consistency with the Housing Element of the Policy Plan component of The Ontario Plan, as State Housing Element law (as prescribed in Government Code Sections 65580 through 65589.8) requires that development projects must be consistent with the Housing Element, if upon consideration of all aspects, it is found to further the purposes, principals, goals, and policies of the Housing Element; and

(5) During the amendment of the general plan, opportunities for the involvement of citizens, California Native American Indian tribes (Government Code Section 65352.3), public agencies, public utility companies, and civic, education, and other community groups, through public hearings or other means were implemented consistent with Government Code Section 65351.

SECTION 6: ***City Council Action.*** Based upon the findings and conclusions set forth in Sections 1 through 5, above, the City Council hereby APPROVES the herein described General Plan Amendment, attached hereto as "Attachment A" and “Attachment B” and incorporated herein by this reference.

SECTION 7: ***Indemnification.*** The Applicant shall agree to defend, indemnify and hold harmless, the City of Ontario or its agents, officers, and employees from any claim, action or proceeding against the City of Ontario or its agents, officers or employees to attack, set aside, void, or annul this approval. The City of Ontario shall promptly notify the applicant of any such claim, action, or proceeding, and the City of Ontario shall cooperate fully in the defense.

SECTION 8: ***Custodian of Records.*** The documents and materials that constitute the record of proceedings on which these findings have been based are located at the City of Ontario City Hall, 303 East "B" Street, Ontario, California 91764. The custodian for these records is the City Clerk of the City of Ontario.

- - - - - - - - - - - - - -

PASSED, APPROVED, AND ADOPTED this ____ day of _____ 20___.

_____
PAUL S. LEON, MAYOR

ATTEST:

_____
SHEILA MAUTZ, CITY CLERK

APPROVED AS TO FORM:

_____
BEST, BEST & KRIEGER, LLP
CITY ATTORNEY

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

I, SHEILA MAUTZ, City Clerk of the City of Ontario, DO HEREBY CERTIFY that foregoing Resolution No. ____ was duly passed and adopted by the City Council of the City of Ontario at their regular meeting held _____, 20___, by the following roll call vote, to wit:

AYES: COUNCIL MEMBERS:

NOES: COUNCIL MEMBERS:

ABSENT: COUNCIL MEMBERS:

_____
SHEILA MAUTZ, CITY CLERK

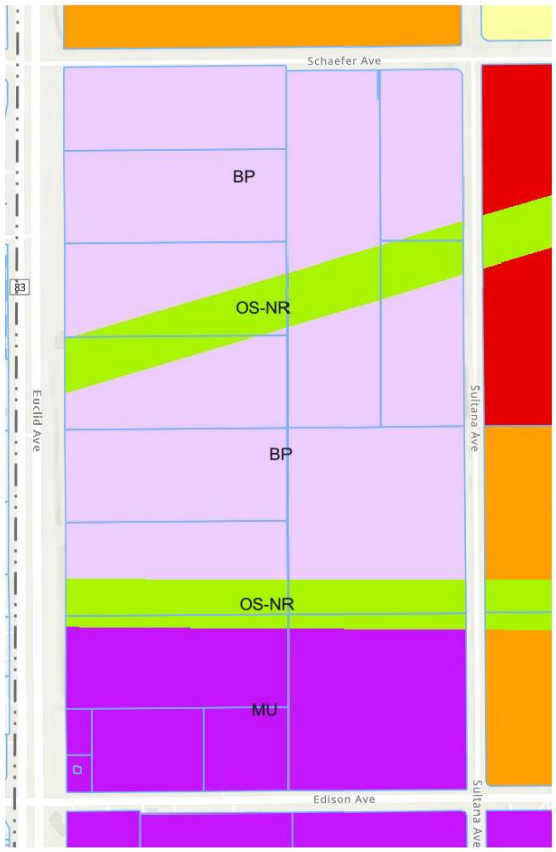
(SEAL)

The foregoing is the original of Resolution No. ____ duly passed and adopted by the Ontario City Council at their regular meeting held _____, 20___.

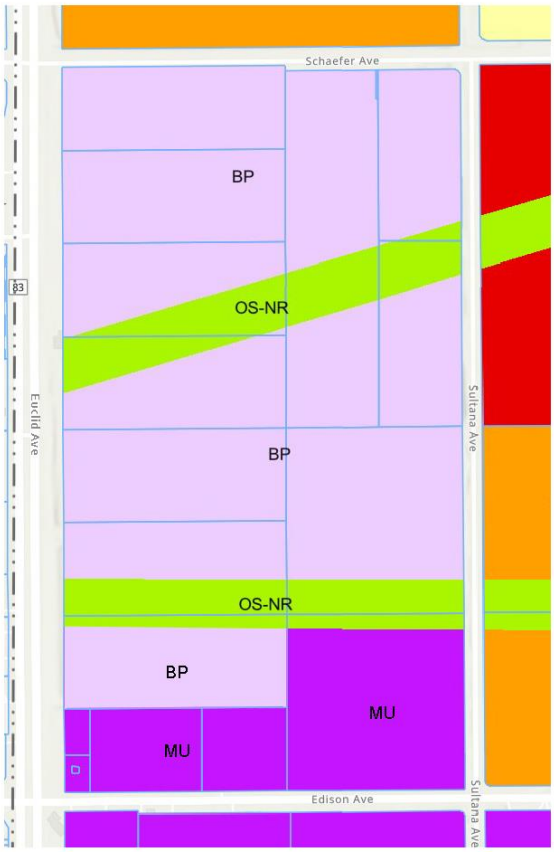
_____
SHEILA MAUTZ, CITY CLERK

(SEAL)

ATTACHMENT A:
Policy Plan Land Use Plan (Exhibit LU-01) Revision



EXISTING GENERAL PLAN



PROPOSED GENERAL PLAN

N

Legend

- Business Park
- Mixed Use
- Open Space – Non Recreation
- Project Site

ATTACHMENT B:
Future Buildout Table (Exhibit LU-03) Revision

LU-03 Future Buildout Table

Land Use	Acres[2]	Assumed Density/Intensity[3]	Units	Pop[4]	Non-Residential Square Feet	Jobs[5]
Residential						
Rural	529	2.0 du/ac	1,057	3,863	-	-
Low Density[6,7]	6,274	5.9 du/ac (north of Riverside Dr) 4.5 du/ac (south of Riverside Dr)[7]	34,842	127,304	-	-
Low-Medium Density[6]	889	8.5 du/ac	7,197	26,363	-	-
Medium Density[7]	2,301 ~~2,291~~	18.0 du/ac (north of Riverside Dr) 22.0 du/ac (south of Riverside Dr)[8]	~~46,926~~ 47,150	~~152,030~~ 152,757	-	-
High Density	198	25.0 du/ac (north of Riverside Dr) 35.0 du/ac (south of Riverside Dr)	5,089	13,038	-	-
Subtotal	~~101,180~~ 101,190		~~95,433~~ 95,657	~~322,710~~ 323,437	-	-
Mixed Use						
• Downtown	132	• 60% of the area at 35 du/ac • 40% of the area at 0.80 FAR for office and retail	2,758	7,068	1,830,863	4,092
• East Holt Boulevard[8]	75	• 75% of the area at 30 du/ac • 25% of area at 0.80 FAR retail	1,693	4,336	655,222	546
• West Holt Boulevard[8]	1	• 75% of the area at 30 du/ac • 25% of area at 0.80 FAR retail	33	84	12,678	11
• Meredith	91	• 50% of the area at 40 du/ac • 50% at 0.35 FAR for retail uses	1,815	4,651	691,939	577
• Multimodal Transit Center	73	• 15% of the area at 60 du/ac • 60% of the area at 1.0 FAR office and retail • 25% of the area at 0.70 FAR Lodging	653	1,673	2,449,557	5,993
• Inland Empire Corridor	37	• 82% of the area at 10 du/ac • 18% of area t 0.35 FAR retail	300	769	100,455	84
• Guasti	86	• 30% of the area at 30 du/ac • 15% of area at 1.0 FAR retail • 30% of area at 0.70 FAR office • 25% of area at 0.70 FAR Lodging	777	1,991	2,012,077	3,848
• Ontario Center[8] *(South of Concours, East of Haven Avenue, West of Milliken, North of Interstate 10 Fwy)*	186	• 50% of area at 40 du/ac • 20% of area at 1.0 FAR office • 30% of area at 0.70 FAR retail	3,729	9,553	3,329,507	7,327

LU-03 Future Buildout Table

Land Use	Acres[2]	Assumed Density/Intensity[3]	Units	Pop[4]	Non-Residential Square Feet	Jobs[5]
• Ontario Center Arena[8] *((North of Concours, West of Milliken, East of Center Avenue, South of 4th Street*	169	• 75% of area at 40 du/ac • 10% of area at 1.00 FAR office • 15% of area at 0.80 FAR retail	5,076	13,006	1,621,435	3,417
• Ontario Mills	249	• 40% of area at 40 du/ac • 5% of area at 0.75 FAR office • 55% of area at 0.50 FAR retail	3,990	10,223	3,394,666	3,971
• Rich-Haven[2]	154	• 86% of area at 18 du/ac • 2% of area at 0.35 FAR office • 12% of area at 0.30 FAR retail	2,389	6,122	289,088	373
• Parkside	3	• 50% of the area at 35 du/ac • 50% of area at 0.80 FAR retail	52	132	51,440	129
• Eucalyptus/ Chino Airport[2]	105	• 40% of the area at 35 du/ac • 10% of area at 0.80 FAR retail • 20% of area at 1.00 FAR office • 30% of area at 0.60 FAR business park (industrial)	1,471	3,769	2,059,760	4,008
• Grove[2]	36	• 65% of the area at 35 du/ac • 25% of area at 0.80 FAR retail • 10% of area at 0.70 FAR Office	821	2,104	385,285	630
• Great Park[2]	~~305~~ 300	• 70% of area at 35 du/ac • 10% of area at 0.70 FAR for office • 20% of area at 0.30 FAR for retail uses	~~7,470~~ 7,340	~~19,141~~ 18,808	~~2,789,181~~ 2,740,699	~~4,930~~ 4,845
• Neighborhood Activity Hub[8] *(Mountain Village)*	8	• 50% of the area at 35 du/ac • 50% of area at 0.80 FAR retail	137	350	136,070	340
• Neighborhood Activity Hub[8] *(Mountain & Fourth)*	7	• 70% of the area at 50 du/ac • 30% of area at 0.80 FAR retail	251	643	75,008	188
• Neighborhood Activity Hub[8] *(Euclid & Francis)*	13	• 50% of the area at 30 du/ac • 50% of area at 0.80 FAR retail	190	487	220,912	552
• Neighborhood Activity Hub[8] *(Euclid & Walnut)*	16	• 75% of the area at 30 du/ac • 25% of area at 0.80 FAR retail	369	945	142,840	357
• Neighborhood Activity Hub[2,8] *(Euclid & Riverside)*	15	• 75% of the area at 35 du/ac • 25% of area at 0.80 FAR retail	394	1,009	130,662	327
Subtotal	~~1,762~~ 1,756	-	~~34,367~~ 34,238	~~88,058~~ 87,725	~~22,478,644~~ 22,330,162	~~41,698~~ 41,612

LU-03 Future Buildout Table

Land Use	Acres[2]	Assumed Density/Intensity[3]	Units	Pop[4]	Non-Residential Square Feet	Jobs[5]
Retail/Service						
Neighborhood Commercial[6]	248	0.30 FAR	-	-	3,238,367	8,832
General Commercial	385	0.30 FAR	-	-	5,033,395	5,605
Office/ Commercial	310	0.75 FAR	-	-	10,101,733	28,239
Hospitality	194	1.00 FAR	-	-	8,458,978	11,412
Subtotal	**1,136**		**-**	**-**	**26,832,472**	**54,088**
Employment						
Business Park	~~1,139~~ 1,145	0.50 FAR	-	-	~~24,816,271~~ 24,931,704	~~42,835~~ 42,987
Industrial	7,664	0.55 FAR	-	-	183,596,786	148,483
Subtotal	~~**8,802**~~ **8,808**		-	-	~~**208,413,056**~~ **208,528,490**	~~**191,318**~~ **191,470**
Other						
Open Space–Non-Recreation	1,200	Not applicable	-	-	-	-
Open Space–Parkland[6]	1,047	Not applicable	-	-	-	-
Open Space-Water	17	Not applicable	-	-	-	-
Public Facility	90	Not applicable	-	-	-	-
Public School	~~614~~ 604	Not applicable	-	-	-	-
Ontario International Airport	1,423	Not applicable	-	-	-	-
Landfill	137	Not applicable	-	-	-	-
Railroad	250	Not applicable	-	-	-	-
Roadways	5,364	Not applicable	-	-	-	-
Subtotal	~~***10,142***~~ ***10,131***	-	-	-	-	-
Total	***32,022***	-	~~***129,800***~~ ***129,895***	~~***410,768***~~ ***411,162***	~~***264,057,928***~~ ***261,709,056***	~~***299, 324***~~ ***296,028***